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THE
ENGLISH CYCLOPÆDIA.

A New Dictionary of Universal Knowledge.



CONDUCTED BY CHARLES KNIGHT.

GEOGRAPHY.—VOLUME II.

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THE
ENGLISH CYCLOPÆDIA.

GEOGRAPHY.

BOHAIR.

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BOHEMIA (in German, Böhmen), also termed Böhme in many ancient records, derives its name from the Boii, who once occupied the parts about the sources of the Elbe and Moldau. It now constitutes a kingdom forming part of the empire of Austria, comprising Bohemia Proper; the margraviate of Moravia, and that small portion of the duchy of Upper Silesia which was not ceded to Prussia under the treaty of Hubertshurg in 1763 properly belong to it, but they now form a distinct province of the Austrian empire. The margraviates of Upper and Lower Lusatia also formed part of the Bohemian dominions, until the treaty of Prague in 1635 transferred them to the electorate of Saxony. The details which we are about to give will be confined to the territory generally known by the designation of Bohemia; which is an irregular quadrangle in the south-east of Germany, extending between 48° 33' and 51° 5' N. lat., and 12° and 16° 46' E. long.; it contains an area of 20,013 square miles, which is more than two-thirds of the area of Ireland or Bavaria. It is bounded N.W. by the kingdom of Saxony, N.E. by the Prussian province of Saxony, and by Austrian and Prussian Silesia, S.E. by Moravia, S. by the archduchy of Austria, and S.W. by the kingdom of Bavaria. The whole circuit of Bohemia is estimated at about 810 miles, of which 165 lie next to Prussia, 294 to Saxony, and 175 to Bavaria: so that 176 miles only of this circuit are skirted by other parts of the Austrian dominions.

Surface, Population, &c.—The kingdom of Bohemia is now divided into seven circles, which, with their respective areas and populations, are as follows:—

Circles.	English Square Miles.	Population in 1850-1.
Prague	2392	602,725
Budweis	3533	569,673
Eger	2861	560,732
Gitschin	3127	838,774
Böhmisoh-Leipa	1810	530,822
Pardubitz	2890	677,800
Pilsen	3600	629,374
Total	20,013	4,409,900

There are in the kingdom 289 towns, 278 smaller towns and places having markets, and 12,079 villages. The inhabitants are 220 to a square mile.

Bohemia is inclosed on every side by lofty and in parts wild and dreary mountains. On the west side, and from a point close upon the Fichtelgehirge, issue two ranges, the one taking a north-east and the other a south-east direction. The first of these ranges, which separates Bohemia from Saxony, and may be termed 'the left arm of the Sudetsch chain,' is known under the name of the Erzgehirge (Ore Mountains). It runs to the left bank of the Elbe between Tetschen and Schandan, and is neither precipitous nor of a wild character, but with few exceptions wooded nearly to its summit. Its ridges form an undulating line, here and there broken by gentle depressions. The short slope is towards Bohemia, and the longer one towards Saxony. The highest points of this range are the Schwarzwald, or Sonnenwibel, near Joachimsthal, 4125 feet (or according to Hallaschka 4005 feet only); the Lesser Fichtelberg, near Wiscenthal, 3999, or according to some 3709 feet only; the Kupferberg 2749 feet, towards the southern end of the range; and the Schneeberg, near Tetschen on the

BOHEMIA.

Elbe 2291 feet at the northern end of the range. The western and south-western borders of Bohemia are defined by the Böhmer-Waldgehirge (Bohemian Forest Mountains). The Sudetsch chain, of which the principal range is more peculiarly designated the Sudetengebirge (Sudetsch Mountains), extends from the right bank of the Elbe as far to the eastern side of Bohemia as Grulich. Certain portions of this range bear particular names; such as the north-western, called the Isergehirge (Mountains of the Iser), and that small portion lying next to the Elbe, which is called the Lausitzer Bergplatte (Mountain plateau of Lusatia).

In the last-mentioned quarter the loftiest summit on the side of Bohemia is the Tafel-fichte, which lies at the extreme point of the Bohemian frontier next to Silesia and Saxony, and according to Gersdorf has an elevation of 3780 feet. Commencing from the eastern side of the Iser, the frontier line between Bohemia and Silesia runs along the crest of the remaining and principal arm of the Sudetsch chain, termed the Riesengehirge (Giant Mountains), a name frequently applied to designate that chain in general. Seen from a certain distance this range describes a waving line, with a few elevated points, which present the appearance of having been cut short off at their upper extremities. The highest of these abrupt and naked summits is the Riesen, or Schneekoppe (Giant or Snow-cap), 5058 feet, upon which a circular chapel dedicated to St. Lawrence has been erected. Next in height are the double-capped Brunn or Boruherg, and the Great Sturmhaube (Tempest-hood); the former of which is 5000 and the latter 4700 feet above the level of the sea. The Sudetsch chain, which runs south-south-east to the vicinity of Grulich, is called the Glatz Mountains (Glatzischegehirge), the waving outline of whose occasionally cap-crowned ridge forms a pleasing object to the eye. Its highest point, though it belongs rather to Moravia than Bohemia, is the Grulich or Spieglitz Schneeherg; but the most elevated on the Bohemian side are the Deschnay, Hohekoppe, or Grenzkoppe, as it is also termed, which rises to the height of 3748 feet above the sea, and the Marienberg near Grulich, to which some assign an elevation of 4545 feet. The highest ranges of the Sudetsch Mountains consist of primitive formations, and are in some parts rich in ores: those of inferior height are composed of clay-slate and limestone, intermixed with beds of coal; and the offsets of lower elevation are formed in some parts of quartz and sandstone, and in others of grauwacké and hasalt.

A lower range runs along the south-eastern boundary of Bohemia, termed the Bohemian-Moravian Mountains, and forms a connecting link with the Glatz Mountains towards the north, and with the Mannhart Mountains in the archduchy of Austria towards the south. This range, which is of moderate elevation and gentle ascent, separates the basins of the Elbe and Moldau from those of the Danube and the March.

The range which runs nearly north-west and south-east, and forms the boundary-line between Bohemia and Bavaria and part of Austria, is known by the name of the Böhmer-Waldgehirge (Bohemian Forest Mountains), which is wholly of primitive formation, and characterised by naked and precipitous features and deep ravines. Towards Bavaria its slope is extremely abrupt, but on the Bohemian side the descent is gradual; and on this side the loftiest heights are the Heidelberg, whose summit forms a spacious plateau at an elevation of 4500 feet, the Kuhani, or Bouhin, 4213 feet high, and the Dreissesselberg (Mount of Three Seats), on the boundaries of Bohemia, Bavaria, and Austria, 3798 feet. This mountain range presents a

considerable obstacle to intercommunication between the inhabitants occupying the country on its opposite sides. Its western descent is very steep; the glens and valleys are narrow, rugged, and often swampy. Few roads traverse it. On the Bohemian side of the mountains the population is principally composed of Czeches: the German inhabitants are very few. Many rivers descend from this range—some of them go to the Danube and send their waters to the Black Sea; others fall into the Elbe and go to the North Sea. On the side of Bohemia the principal rivers are the Moldau, one of the chief sources of the Elbe, and two of its most considerable affluents, the Wottawa, with the Wolzka, and the Berounka. Metals are found in many parts of the range; gold occurs in small quantities; silver is more abundant, and worked profitably; lead and iron are largely wrought. Antimony, zinc, cobalt, and cinnabar are common. Coal occurs, but only in few places on the Bohemian side.

Bohemia is also intersected by several ranges of inferior elevation; the northern, called the Northern Hill, or Trapp Mountains, spreads in various directions; and the more southerly, called the Midland Mountains, which are arms of the Bohemian Forest chain, consist of the Brauna, Moldau, Euler, and one or two other ranges.

The interior of Bohemia presents an undulating surface, very frequently studded with high and pointed eminences, but with a general slope towards the centre of the country. The most extensive plains are in the provinces of Königgratz and Chrudim, from Neustadt to the Naasberg acclivities. The country is full of valleys and mountain passes, among which we may mention the delightful valleys of the Elbe and Beroun; but the deepest is the Riesengrund or Giant's Glen among the Giant Mountains.

Hydrography, Communications.—The whole of Bohemia being at a considerable elevation, its rivers rise either within or close upon its borders. The *Elbe* (the ancient *Albia*, or the *Labe* of the Bohemians) traverses the north-east part of the country. It originates in the junction of two brooks, the *White-water* and *Elbe-brook*, whose sources lie 10 miles apart in the Giant Mountains; it descends as an impetuous torrent into the hill-country, receives a multitude of minor streams in its course, and assumes a blood-red tint after heavy showers, which is particularly remarkable in the neighbourhood of Josephstadt and Königgratz. It forms in many parts a rich alluvium by the overflowing of its banks, and quits Bohemia after a course of about 190 miles at Herrnskrotchen, near Schandau, where it enters the kingdom of Saxony. Its sources are 4000 feet above the level of the sea, while its bed, at the point where it leaves the Bohemian territory, is not more than about 257 feet above it. Its principal tributaries within the borders of Bohemia are the *Moldau* and *Eger*. The *Moldau* rises from the Black Mountain (Schwarzberg), in the Bohemian Forest Mountains, close upon the confines of the Bavarian bailiwick of Wolfstein: it first flows south-east, and when it has reached Rosenberg, at the southernmost extremity of the kingdom, takes a northerly direction through the heart of the country, and falls into the Elbe near Malsch, after a short bend to the east. The *Moldau*, termed the *Witwa* by the natives, runs for about 230 miles before its junction with the Elbe: it generally runs between steep rocks, and at its confluence with the Elbe is nearly as broad as that river. From Budweis, where it becomes navigable, to Prague, its length is about 130 miles, and from Prague to Melnik about 18 miles. Its breadth at Prague varies from 250 to 286 paces; and the height of its surface, which is 1511 feet at Kromkau, declines at the bridge in Prague to about 559 feet. The *Eger*, called the *Chob* by the Bohemians, rises on the east side of the Fichtelberg in the Bavarian circle of the Upper Main, whence it soon after enters Bohemia and flows outward for about 80 miles until it joins the Elbe on the west bank near Theresienstadt. The minor tributaries of the Elbe are the *Anpa*, the *Erlitz* or *Ader*, which rises near Königgratz and skirts the principality of Glatz in Prussian Silesia for a short distance, the *Mettau*, which flows from the vicinity of Josephstadt, and the *Iser*, which descends from the south slope of the Giant Mountains, not far from Brandeis. The streams that join the Moldau are the *Luschnitz*, which flows from the neighbourhood of Melkstein, the *Wottowa* or *Watawa*, which flows from the Bohemian Forest Mountains, and for some distance first bears the name of the *Widra*, the *Sazawa* or *Cazawa*, whose source lies near Hrotischa, and the *Beroun* or *Berounka*, which rises near Königgratz. The whole drainage of Bohemia finds an outlet through the narrow pass of the Elbe at Herrnskrotchen. As this outlet, independently of its confined width, bears evident marks of violent disruption, and as every other side of Bohemia is walled in with mountains, it has been conjectured that the whole of Bohemia must at one time have formed an immense lake, which has been drained by a disruption taking place at the point where the Elbe ceases to be a Bohemian stream. Among the numerous falls of water in Bohemia the most interesting are those of the Elbe, of the Moldau across the Devil's Wall, and those in the vicinity of Neuwald.

Though full of small pieces of water, Bohemia has no lakes. There are several large swamps and morasses, particularly the *Servius* swamp (or *Gezera*), between Bräu and Partalberg, and the *Slatina* swamp near Doren on the Eger; a considerable portion of the first of these has however been drained and converted into pasture land.

The roads throughout Bohemia are generally well made, and kept in excellent order: the length of the public roads is upwards of 1700

miles. The only passenger railway in Bohemia is a portion of the great Austrian line described under *AUSTRIA*, which connects Vienna with Dresden, Berlin, and the other chief cities of Germany and the continent generally. This line enters Bohemia from Saxony near Bodenach and runs southward to Prague (80 miles), whence, under the title of the Prague, Olmutz, and Vienna railway, it runs nearly east to Böhm-Trubau (101 miles), where it turns southward to Vienna; a few miles south from Böhm-Trubau it quits Bohemia. At Böhm-Trubau, a loop-line which passes by Olmutz diverges eastward, and shortly afterwards quits Bohemia. There is also a line chiefly for minerals from Budweis southward to Linz and Gmunden; the carriages are drawn by horses, and passengers are not conveyed on that part of the line which belongs to Bohemia.

Geology, Mineralogy, &c.—The geological character of Bohemia has been sufficiently described under *AUSTRIA*. From Zippe's Survey it would appear that the whole of the mountains which inclose Bohemia are of primitive formation, with the exception of two points, the one in the north where the Elbe quits Bohemia, and the other in the north-west, about Braunau and Trautenau, which are of a later formation. A very extensive formation of sandstone is observed in the heart of the country; and there is one most remarkable mass, the *Steinwald*, near Aderbach, which is nearly 5 miles in length and above a mile in breadth. It stands at some points in compact masses, and in others is shaped into lofty columns, pyramids, cones, &c., forming immense labyrinths. In many parts again there are hills and mountains composed of a solid mass of basalt.

Bohemia contains large masses of quartz, grauite, and sandstone; precious stones, particularly the celebrated Bohemian garnet or pyrope, rubies, sapphires, topazes, chrysolites, amethysts, carnelians, chalcodones, and agates; limestones, beautiful marbles, porcelain earth, slates, potter's clay, between twenty and thirty species of serpentine, basalt, porphyry, &c. The mountain districts yield gold (though now but a small quantity) and silver, quicksilver, tin, lead, iron, bismuth, zinc, cobalt, arsenic, manganese, nickel, chrome, &c. Of salts Bohemia furnishes native alum, natron, several kinds of vitriol, and almost every variety of officinal salts from its mineral springs; and as common salt is extracted from some of the springs it has been inferred that beds of rock-salt exist in some quarters. Considerable strata of sulphurous slate, as well as coals, have been found, and in some directions peat-turf is dug; black-lead of good quality likewise frequently occurs. The country is extremely rich in mineral waters, and several of them are in great repute: of such as are publicly known there are upwards of 160. At the head of the ferruginous springs are the *Franzens Brunnen* near Eger, the three springs at Marienbad, and that at Giesshübl; among the alkaline springs are those of Carlsbad and Teplitz, one at Marienbad, and others at Bilin, Liebwerda, &c.; there are bitter waters at Sedlitz, Salschitz, and Püllna; sulphurous springs at Teplitz, Soberchan, &c.; aluminous and vitriolic springs at Steeknitz, Mochenau, Zlonitz, &c.; carbonic acid waters at Carlsbad; and saline springs at Schlan and in other places. The virtues of the springs of Carlsbad, as well as the beauty of the adjacent scenery, have placed that spot at the head of the baths of Germany, and acquired for it the designation of 'the Pearl of Bohemia.' The temperature of some of them at the moment of their first emission is not less than from 59° to 60° of Reaumur (about 165° of Fahrenheit); that of the springs of Teplitz is 30° (98° Fahr.); the *Franzens Brunnen* near Eger not more than 9° or 10° (54° Fahr.). A large quantity of mineral water is annually exported from the Bohemian springs.

Climate, Soil, Productions, &c.—The elevation of the interior of Bohemia and its remoteness from any coast, for it is nearly equidistant from the Baltic and Mediterranean, give it a clear and salubrious atmosphere and general constancy of weather. The climate naturally becomes keener and bleaker as the chains of mountains which encircle Bohemia rise in height. The regions about Gottesgab (God's Gift) in the Ore Mountains are considered the coldest in Bohemia, and there are few months of the year in which there is not need of fire; nor will grain ripen in them. In the Bohemian Forest range, where the snow frequently lies 12 feet deep, and does not disappear until the middle of April, as well as in those parts of the province of Budweis which are saturated with moisture, there are many districts in general covered with woods or forests which are not habitable. The mean temperature at Prague is 7 $\frac{1}{2}$ ° Reaumur (47 $\frac{3}{10}$ ° Fahr.), whilst on the elevated site of Reihberg it is not more than 4 $\frac{1}{2}$ ° (41 $\frac{1}{2}$ ° Fahr.). In the neighbourhood of Reichenberg, where the harvest is two or three weeks later than in the low country, the highest degree of heat has been found to be 12° Rea. (59° Fahr.), and the severest degree of cold 6° (18 $\frac{1}{2}$ ° Fahr.). The prevalent winds blow from west to some points north, and from west to some points south. These winds, according to Diack, invariably bring dry weather in winter but wet in summer; the more southerly their point of departure in summer the finer the weather. In winter it is precisely the reverse, they being usually accompanied by rains and thaws. On the other hand the nearer to the north their point of departure the more frequent and the more violent are the storms by which they are attended.

The soil of Bohemia varies considerably in productiveness, but it is nowhere entirely sterile except in certain parts of the Bohemian

Forest, on the Ore, and Giant Mountains, those lands along the banks of the Elbe, particularly from Kunitzerberge to Königgratz, which are coated with drift sand, and in some of the districts where swamps abound. The rest of the low country is in general rich and productive, particularly the province of Saatz. No soil in Bohemia is however more fertile than that which has been formerly the site of large sheets of water, its deep black loam being highly favourable to the growth of wheat, rye, and barley. Bohemia produces almost every description of grain and pod seeds, but no maize. The cultivation of the soil is however susceptible of great improvement. The land is divided into estates of vast magnitude; and the peasantry are held in servitude and derive little benefit from their labour, and consequently feel little interest in it. The quantity of arable land in 1846 was 6,105,995 acres; of meadow and garden ground 1,421,072 acres; of pasture land 997,575 acres; of vineyards 4462 acres; and of forests and woodland 3,758,987 acres. The quantity of wheat raised in 1846 was 1,234,126 quarters; of rye 2,999,345 quarters; of barley 1,703,687 quarters; of oats 2,834,169 quarters; and of potatoes 21,034,349 bushels. Among other productions flax is grown in every circle, but of various qualities, and hemp is raised in some few quarters; vegetables, nuts, liquorice-root, chicory, excellent hops, &c.; rape-seed is also largely cultivated for the sake of the oil. Fruit abounds in all parts except the more elevated districts; the vine is only cultivated along the valleys of the Elbe and Moldau. The finest orchards, or rather groves of fruit-trees, exist in the vicinity of Neustadt above the Mettau; whole woods of plum-trees are met with near Melchówek, Weltrus, and other spots. Bohemia is in fact a large exporting country for apples, quinces, dried plums, pears, cherries, &c., though less so than formerly. Bohemia is celebrated for an excellent kind of hops, of which the produce is considerable; those grown in the province of Saatz, and next to these the hops cultivated in the provinces of Rakonitz, Bunzlau, and Pilsen, are in highest esteem: a considerable quantity is annually exported. Beet is cultivated to some extent in order to meet the growing demand for the beet-root sugar manufacture. The border mountain ranges, from which however some of those which adjoin Moravia must be excluded, contain rich supplies of timber and fuel. Mosses, particularly the Iceland sort, herbs, grasses, and medicinal plants, many of them of rare occurrence elsewhere, are plentiful in the mountain regions.

Bohemia has a very superior breed of horses. This breed, though not of large size, has undoubtedly the advantage over that of any immediately adjacent country from its loftier stature and finer limbs: the number is about 150,000. The supply of horned cattle, amounting to about 250,000 oxen and 700,000 cows, is not adequate to the home demand. The native race is in general small and of inferior shape; and on account of the insufficient supply, large importations are made from Poland and Moldavia. The sheep, of which there are about 1,500,000, afford excellent wool. The stock of goats and swine is abundant. Poultry, particularly turkeys and geese, are reared everywhere; honey and wax are produced in all the circles. The stock of game has fallen off in those quarters where the population has increased; it cannot however be termed scanty, and Bohemia still possesses stags, deer, hares, wild hogs, pheasants, and partridges in abundance. Some of the wild animals, such as bears, wolves, and lynxes, continue partially to infest certain districts, chiefly those adjoining the Bohemian Forest Mountains. The fox, marten, polecat, weasel, and squirrel also inhabit the Bohemian woods. Birds of prey abound. Considerable supplies of fish are obtained not only from the rivers and brooks, but from the extensive ponds in various parts of this country; amongst them is the salmon, which finds its way from the North Sea into the Moldau and Wottowa. The mountain streams are full of trout; and eels and craw-fish are found in many rivulets. The Moldau contains a mussel from which pearls are extracted, which are also obtained in the Wottowa and White Elster, near Steingrun, in the district of Eger.

Manufactures, Trade, &c.—Bohemia is one of the most manufacturing countries in the Austrian territory; and the northern provinces, especially the parts adjacent to Reichenberg, Rumburg, and Trautenau, where the rawness of the climate or an indifferent soil is unfavourable to agriculture, are the principal seats of manufacturing industry. The glass of Bohemia has been in repute for its cheapness, lightness, and durability ever since the 13th century: in 1837 it employed 3500 families. In that year there were 75 glass-houses and 22 grinding and polishing mills. The chief seats of the manufacture are Silberberg, Adolphshütte, Libenau, Georgethal, and Defereck; the polishing is for the most part done at Leitmeritz. The best mirrors and enamelled wares are produced at Neuhorkenthal and Bürgstein. The cultivation and working up of flax constitutes a chief means of subsistence among the inhabitants of the highland districts. Many parts of the districts adjoining the northern and eastern ranges of mountains form one continued manufactory of linens, in which thousands of humble cabins perpetually resound with the noise of the jenny or loom; 500,000 hands at least (a considerable proportion at their leisure hours only) are said to be employed in the manufacture of yarn, and as many as 55,000 weavers in that of linen; above 1000 individuals depend on the making of tapes and ribbons, and 20,000 on lace-making. But this branch of manufacture is less productive than formerly, in consequence of the progress making in that of cotton. Much cotton-twist

of the inferior numbers is spun by machinery at and near Neumarketersdorf, Wernstätt, Rothenhaus, Joachimsthal, Schönlinde, &c.; but the higher numbers are imported from England and the archduchy of Austria. The weaving of plain calicoes is principally carried on about Leitmeritz, Bunzlau, Ellbogen, and Gitschin; the finer descriptions are manufactured in the same quarters, as well as at Prague; and cotton-printing, which has greatly advanced of late years, is best done at Cosmanos, Reichstadt, Jung-Bunzlau, and Prague. The number of pieces made throughout Bohemia is said to be upwards of 100,000, over and above what is produced by machinery. In 1848 there were 445,714 spindles and 8284 persons employed in cotton-spinning. About 18,000 persons are said to be employed in making hosiery. There are 500 bleaching-grounds, and many of them, particularly that at Landskron, are on an extensive scale. The cotton manufacture however, like most of the manufactures of Bohemia, is mainly upheld by the protective system of the Austrian government. The potash manufactories employ a large number of hands. Large quantities of worsted stuffs and woollens of an inferior quality are made. Reichenberg is the great seat of manufacture for the middling descriptions of Bohemian woollens. It has been estimated that the trade in wool and woollen manufactures affords subsistence to upwards of 70,000 individuals. Of silks the manufacture is inconsiderable, and it is almost wholly confined to Prague. Leather and manufactures from it give employment to many hands. The manufacture of elina has been brought to much perfection at Schlaggenwald, Ellbogen, Pirkenhammer, and in other places; and that of earthenware is carried on in several parts of the country. Iron ware is somewhat largely made; steel, cutlery, and needles are manufactured principally, and of the best quality, at Prague, Nixdorf, and Carlsbad. Bohemia also possesses copper and tin manufactories, but so little brass is made that it depends for its supply on the archduchy of Austria. The number of paper-mills exceeds 100. One-third at least of the population of Bohemia depend upon manufactures for the chief means of subsistence. The Imperial tobacco manufactory at Sedlitz supplies the whole country with tobacco. The manufacture of beet-root sugar, as already mentioned, appears to be on the increase. The total value of the articles manufactured in Bohemia in 1841 (the latest year for which we have an official return) was 14,168,000*l*.

Few branches of industry are more valuable to Bohemia than the working of its mines; and although the produce of the precious metals has declined, the whole annual supply of these mines, which is estimated at above 200,000*l*, has not fallen off in value. The quantity of gold and silver now principally got near Prizbram, Joachimsthal, Eule, and Balbin is but small compared with what was obtained in the 16th century, when the mines yielded as much as 1,090,900 marks, or about 9,917,300 ounces of silver, up to the year 1589 alone. Quicksilver has hitherto been found only in the form of cinabar; the copper-mines have ceased to be productive; those of tin (and it may be here observed that Bohemia is the only part of the Austrian dominions where it is found) have greatly declined. The lead-mines, principally situated about Prizbram, Mies, and Bleistadt continue to yield abundantly. The iron-mines, the richest of which lie in the districts of Harzowitz and Ginetz in the district of Beraun, and in that of Pilsen employ several thousand hands; but the article is inferior to the Styrian and Carinthian iron. Quarries are worked in every part of Bohemia; and there is scarcely a district in which lime is not prepared. Marble is obtained at Steinmetz; sandstone in several places; the Przilep, Breitenstein, and other quarries yield excellent mill-stones; large quantities of basalt are worked into form for building and paving at Parchen, Rodau, &c.; quartz of superior quality is got at Böhmisch-Aicha, Weisswasser, Giesshügel, and elsewhere. Among the precious stones found in Bohemia, the celebrated garnet, which is equal to that of the East in brilliancy as well as colour and hardness, is principally found at Swietlau in the province of Czeslau, and Dlaschkowitz in the province of Leitmeritz. The produce of the coal-mines has greatly increased of late years; and coal is in much greater demand in consequence of the increasing price of wood, particularly in the northern provinces. The southern parts of the province of Rakonitz, in particular, furnish a coal of very superior description. Graphite, or black-lead, is found near Krummaw and Swojanow, and is extensively worked; but is far inferior to the English. About 4000 cwt. of sulphur are annually obtained, and vitriol and sulphuric acid are prepared from the residue.

Bohemia, which possesses peculiar facilities for internal and external intercourse by means of the natural lines of communication of the Elbe and Moldau, carries on an active trade with the other parts of Austria, and with foreign countries. Its exports are chiefly of mineral products (principally glass), which are in value about one-fourth of the whole; of vegetable productions, the value of which is somewhat higher; and of animal products, particularly wool and quills. Prague is the centre of the chief commercial and money transactions, for which its situation peculiarly fits it. Much benefit has accrued to the country from the establishment of a periodical exhibition of native productions and manufactures, as well as the foundation a few years since of a society at Prague for the promotion of national industry.

Inhabitants.—We have stated that the population of Bohemia in 1850 was 4,409,900; in 1833 it was 3,932,000. About one-third of

the population live in towns, the remainder form the rural population. With the exception of the capital, Bohemia contains no town of the second or third rank, and very few even of the fourth, that is, which contain between 1000 and 15,000 inhabitants. The houses of the Bohemians possess in general few claims to elegance of structure, or even comfort in their arrangement; and there is scarcely a town which is not ill built and badly laid out. Places of any magnitude are usually constructed of stone, but here and there of slate; in the agricultural and mountainous districts the houses are rarely built with any other material than wood.

According to the Census of 1846 about 2,500,000 of the inhabitants of Bohemia (for the most part belonging to the central and eastern circles) are of Slavonian blood, and call themselves Czeches or Tschechs; they differ from every other class of Slavonians in the Austrian dominions, according to Professor Schnabel, from the superior antiquity of their literature and the greater suppleness and refinement of their dialect, both as it exists at present and as it existed in past ages. In common with the Slovaks and their brethren in Moravia they are descendants of the Lechi or north-western branch of the Slavonians, who were the first to cultivate and refine their native language. The Czeches are passionately fond of music and singing, and generally remarkable for intelligence and strength of memory. Next to this race the Germans, who are about 1,780,000, are the most numerous; they chiefly inhabit the districts bordering upon Prussia, Bavaria, and Saxony. In mechanical and mercantile pursuits they are superior to the Slavonian inhabitants; and their language has become that of the educated classes throughout the country. The Jews, about 70,000 in number, appear from the inscriptions on several ancient tombstones to have been settled in Bohemia as far back as the 1st century; their principal occupation is trading and money transactions: most of the brandy distilleries and many breweries are in their hands, and they generally rent the government potash works. At Prague there is a colony of Italians who settled there in early times, and are exclusively employed in trading.

The Roman Catholic religion is professed by the majority of the inhabitants. The secular clergy consist of the metropolitan archbishop of Prague, the three bishops of Leitmeritz, Königgratz, and Bielewiz, a titular bishop, and twelve prelates; and the affairs of the Bohemian Church are conducted by the metropolitan and the three above-mentioned bishops. In 1850-51 there were, according to the official returns, in Bohemia 4,100,592 Roman Catholics, 34,311 Protestants of the Augsburg Confession, 52,671 of the Reformed Lutheran, and 44 of other sects. It is proper however to add that the accuracy of these returns has been strongly impeached in Vienna itself, especially as respects the Protestants, whose number is said to be greatly underrated. Still it is quite certain that as far as Bohemia is concerned, the Protestants—though Bohemia was one of the birth places of the Reformation—are numerically inconsiderable. The Protestants are most numerous in the north-eastern parts of Bohemia; but there are none in the south-western.

The civil administration of the country is vested in a central government, subordinate to the higher authorities in Vienna; its seat is Prague, and its president is styled the superior burgrave. There is a prevalent placid over each of the seven circles. Judicial affairs fall under the superior cognizance and control of a court of appeal and bench of criminal justice in the same capital.

The system of education has been noticed under AUSTRIA: it will be enough to repeat here that there were in the kingdom of Bohemia, in 1847, one university at Prague, 3 schools of arts, 3 theological academies, 3 schools of philosophy, 22 gymnasia, and 57 schools for particular purposes—in all 89 upper schools; while the popular schools consisted of 50 boys' schools, 3511 lower schools, and 3521 adult schools—in all 7092. In Prague are an academy of arts and sciences, and an economic-patriotic society, which has done much for the improvement of agriculture.

(*Ueberrichts-Tafeln zur Statistik der Oesterreichischen Monarchie*; *Hemmerich's Bohemia*, *Austrian National Encyclopaedia*; *Hassell's Austrian Empire*; *Lichtenstein*, *Neumann*, *Schnabel*, *Malchus*, *v. Nieske*, *Olig*, *Reverer*, &c.)

BOII, a nation of ancient Gaul, which made various immigrations into Italy and Germany. The district whence they originally came is not ascertained (D'Anville, *Notice de l'ancienne Gaule*), but it would appear that they were near the Lingones and the Helvetii. They are mentioned as forming part of the first Gaulish emigration recorded by Livy, Justin, and others, which set off in quest of new lands, and under two chiefs, Bellococus and Segovocus, both nephews of Ambigatus, king of the Helvetii. Bellococus went over the Alps into Italy, while Segovocus crossed the Rhine into Germany, and penetrated to the skirts of the great Hercynian forest. The Boii would appear to have followed Segovocus, and to have settled in the heart of Germany, in the country called after them Boiohemum (Bohemia), from which they were afterwards driven away by the Marcomanni, a German nation, and withdrew south of the Danubius to the banks of the Enns (Inn). Bojodorum, now Innsbruck, took its name from them. The Boii are mentioned also as having immigrated into Italy, together with the Lingones and other tribes, by passing over the Pennine or Helvetic Alps. The epoch of this immigration is a matter of doubt: some believe it to have been contemporary with that of Segovocus

and Bellococus, and they place it as early as 600 years B.C., whilst others believe it to have taken place nearly 200 years after, and not long before the march of the Gauls against Rome. (Niebuhr's *History of Rome*.) The Boii crossed the Po, and settled in the country between the Tarus, the Silarus, and the Apennines, and they took possession of the Etruscan city of Felaina, afterwards called Bononia. The Boii were often engaged in war with Rome, and they obtained at times advantages over the Roman arms; but they were finally subjugated by Scipio Nasica, and part of their lands was taken from them. As they still continued restless, they were altogether removed by the Romans and sent across the Noric Alps, when they settled on the banks of the Dravus, near the Scordisci. Having afterwards engaged in wars with the Gete, they were almost entirely destroyed; and we find in Pliny (iii. 24) a vast tract between the Dravus and the Danubius called *'Deserta Bolorum'*.

We find the Boii engaged in the Helvetic immigration into Gaul in the time of Cæsar. Whether these were from some part of their tribe which had remained in Gaul, or whether they came back from Germany into Helvetia, is not known. After the defeat of the Helvetians the Adui begged of Cæsar that the Boii might remain among them, which being assented to, the Adui settled them in a district between the Ligeris (Loire) and the Elaver (Allier).

The Boii from Bohemia, who had settled on the banks of the Enus, became subject to the Roman empire, and formed part of the province of Vindelicia. During the decline of the empire they were exposed to the irruptions of the Marcomanni, the Thuringii, and other tribes who occupied their country, which afterwards took the name of Boioaria, or Boiaria, some say from the united names of the Boii and the Avari, a Pannonian tribe. From Boiaria the modern appellation of Bavaria is derived. (Aventinus, *Annales Bolorum*.) There was also a district in Aquitania called Boii, near the sea, in the neighbourhood of Burdigala (Bordeaux).

(D'Anville, *Notice de l'ancienne Gaule*.)

BOIS-LE-DUC, a fortified town, the capital of the province of North Brabant in the kingdom of Holland, is situated in 51° 42' N. lat., 5° 16' E. long., and has a population of about 23,000, including the garrison of about 3000 men. This town was founded in 1184 by Godfrey III., duke of Brabant, who possessed on the same spot a house in the middle of a forest in which he was accustomed to hunt, and hence the town has derived its name; Bois-le-Duc in French and *s'Hortogenbosch* in Dutch, signifying 'the Duke's Forest.' Henry, the son and successor of Godfrey, caused the forest to be cut down, and surrounded the town with walls. In 1579 the town separated itself from the states, and was besieged both in 1601 and 1603 by Prince Maurice of Nassau. In 1629 it fell into the hands of the Dutch after a siege of four months. The French defeated an English force near Bois-le-Duc in September 1794, and in the following month the place surrendered to Pichegru. The Prussians under General Bulow took Bois-le-Duc in 1814.

Bois-le-Duc is situated near the junction of the Dommel and the Aa. It is a clean and well-built town, about five miles in circumference, and contains many good streets and squares; it is intersected by canals, over which are upwards of eighty bridges. The town-hall, which stands in the principal square, is a handsome building, surmounted by a steeple with a fine chime of bells. The town contains six churches—four Catholic and two Protestant. The Catholic cathedral of St. John's is one of the finest gothic churches in Holland; its foundations were laid in 1280, and it was not finished until 1312: its roof is supported by 150 columns. The Protestants had the use of this church from 1629 till 1810, when it was restored to the Catholics (who are very numerous in the town) by Louis Bonaparte. The town contains an academy of painting, sculpture, and architecture, and a grammar school, in which Erasmus and Gravesande received instruction. Linen thread, woollen cloth, hats, brandy, glass, cotton prints, ribbons, pins, needles, and cutlery are manufactured in Bois-le-Duc.

BOJADOR, CAPE, on the west coast of Africa, 26° 12' N. lat. and 14° 10' W. long., forms one of the projecting points of the Great Desert, or the Sahara. It rises to a considerable height, and is the western extremity of the Jebel Kial, a rocky ridge which runs eastward into the desert.

The coast which extends northward to Capo Nun is one of the most dangerous on the whole globe, being so flat that one may walk a mile into the sea without being in water over the knees. Vessels consequently strike at a very considerable distance from the beach. Besides, this low coast is always enveloped in a lazy atmosphere which extends for many miles out at sea. The danger caused by the combination of such disadvantageous circumstances is still increased by the currents along the whole coast from the Straits of Gibraltar to Cape Blanco setting in towards the land with great force and rapidity. The trade-winds also which prevail in the Sahara, and generally in the sea to the westward of the Canary Islands, rarely blow in the channel which divides these islands from the continent, but are here replaced by a westerly or north-westerly wind; from which it will be evident that the dangers which here await the unwary navigator are of no common description. The unhappy sailors whose fate it is to be cast away upon this shore fall into the hands of the Moors, and have to undergo all the hardships of a most severe slavery in the desert.

The difficulties which oppose the progress of vessels near Cape Bojador was the reason why the Portuguese navigators in the beginning of the 15th century employed eighteen years in discovering the coast between Cape Nun and Cape Bojador. Though the former had been doubled in 1415, it was not till 1432 or 1433 that Gilianes succeeded in passing the second. The name Bajador is Portuguese, and means 'a round cape.'

(Barros, *History of Asia and the Indies*, i. 24; Rennell's *Investigation of the Currents*; Jackson's *Account of Morocco*.)

BOKHARA, a country situated in Central Asia between 36° and 42° N. lat., 63° and 70° E. long., was by the Greeks and Romans called Sogdiana or Transoxiana, and by Persian and Arabian authors Mawaralnahr. It is bounded N. by the desert of Kizil Koom and the khanat of Khokand, E. by Kunduz and Badakshan, S. by Cabul, and W. by the desert of Kharim, which extending on both sides of the Oxus joins the desert of Kizil Koom, and separates Bokhara from Khiwa. The area is estimated at 235,000 square miles, and the population at 2,500,000, of whom 1,500,000 are Uzbeks.

Surface.—Bokhara forms the south-eastern corner of that remarkable depression which extends northward to Saratov on the Volga in Southern Russia, and southward to the Hindu-Koosh. The surface of this extensive depression, which occupies all the countries to the north and east of the Caspian Sea and those surrounding the Sea of Aral on all sides to a great distance, is nearly a desert, the soil of which is commonly a stiff clay of great aridity, covered here and there by sandy hills of small elevation. Bokhara partakes of the disadvantages of such a soil, but being surrounded by high mountain ranges at a short distance on the east and south, it enjoys a considerable supply of water, by means of which the industry of the inhabitants has changed considerable tracts into fertile fields and beautiful gardens.

Neither the great range of mountains which borders the high tableland of the Chinese province of Thian Shan Nanlu on the west, and on our maps is called Bolor-Tagh (but ought to be called Tartash-Dagh), nor the range of the Hindu-Koosh, advances to the boundary of Bokhara. They remain at the distance of sixty miles and upwards from it; but some offsets of the Tartash-Dagh enter the country. Such are the Akh-Tagh (White Mountains), which advance to the neighbourhood of Samarcand north of the river Zar-afshan, and the Kara-Tagh (Black Mountains), which extend to the south of the same river about the same distance, if not farther, west. These ridges and a few others of less magnitude make at least one-fourth of Bokhara rather mountainous, and supply the remainder of it with the water necessary to agriculture. The remainder is an open plain, on which small isolated hills rise to the height of from eight to twenty feet, with a length varying from a few yards to one or two hundred yards. These hills as well as the plain on which they stand are composed of clay, covered with moving sand which also forms hills in some places, but these hills are of a different form and still lower. The plain is uncultivated except along the banks of the rivers, along which the fields and gardens extend from half a mile to ten miles in width.

Rivers.—The three principal rivers, along which perhaps nine-tenths of the cultivated lands are situated, run from east to west, and are the Zar-afshan, the Kashka, and the Oxus or Amoo.

The *Zar-afshan*, called also *Kohik* and formerly Sogd, rises in the high mountains where the Akh-Tagh and Kara-Tagh branch off from them at a distance of about two hundred miles east of Samarcand, and first traverses the valley formed by these two ranges. Near Samarcand it enters the plain, and between that place and the town of Bokhara it fertilises the Meeankal, the most populous, rich, and fertile district of the whole country. Before it reaches Bokhara it divides into two branches, of which the northern, called Vafkend, after having fertilised the country along its banks for many miles, is at last exhausted and lost in the clayey sand. The southern branch passes the town of Bokhara to the north at the distance of six or seven miles, then declines to the south, and terminates at a distance of about twenty miles from the Oxus in the lake of *Kara-kool*. This lake, which is about twenty-five miles in circumference, is surrounded on all sides by sand-hills. It is very deep and its water is salt, though its only feeder is a fresh river. It is connected with the river Amoo by canals of irrigation which terminate in the river near Chard-jooee.

The *Kashka*, or *Kurshee*, rises in the Kara-Tagh nearly in the meridian of Samarcand, and passes through Shuhr-i-Subz and Kurshee, below which it is exhausted and lost in the desert. The district of Shuhr-i-Subz yields rich crops of rice and cotton, and the neighbourhood of Kurshee is covered with gardens and orchards.

The *Oxus* (which is now called Amoo and Jihoon), after forming with its feeder the Khulum, a part of the boundary towards Badakshan and Kunduz, runs first westward, leaving the city of Balkh considerably to the south, and then towards the north-west, and enters the khanat of Khiva a little south of 40° N. lat. [BADAKSHAN; OXUS.]

The fertile lands along the Zar-afshan extend from Moodjan east of Samarcand to Chard-jooee, upwards of two hundred miles, and those along the Kashka probably more than sixty miles; along the Amoo they are not continuous, but frequently interrupted by uncultivated lands. The most fertile district in the basin of the Oxus is that

which surrounds the town of Balkh, where the river Balkh, a tributary of the Oxus, is divided into numerous canals. [BALKH.]

These cultivated tracts offer a very pleasing aspect. Few lands are better cultivated than these plains, covered with houses, orchards, and fields divided into small squares called 'tanab,' of which the edges are formed by a fine turf raised about a foot above the plain for the purpose of retaining the water which has been introduced into them. The numerous canals, as well as the roads, which are very narrow, have commonly rows of large trees planted alongside them. As the water of these canals does not run on the same level they form at their junction small falls, all which taken together render these tracts a very agreeable country.

Climate.—The climate is regular and constant. The summer commences at the beginning of March and lasts till October. In this season it does not rain: the thermometer rises in the cultivated grounds to about 90°, and in the deserts to 100°. The nights are cool. October is the first season of rain, which continues for two or three weeks. In November and December it begins to freeze a little, and sometimes a small quantity of snow falls; but even in the latter month some fruits, as melons, are left in the gardens. The coldest month is January, in which the thermometer generally falls to 27° Fahrenheit, and sometimes to 6°. Occasionally the snow covers the ground for a fortnight. The rains begin again in February, and last to the end of this month. They are followed by a considerable degree of warmth, and in a few days vegetation has attained its full vigour. The mildness of the climate shows that the surface cannot be at any considerable elevation; probably not more than 500 feet above the level of the sea. In winter and in summer violent storms blow more especially from the north-west, which raise a great quantity of fine sand, by which the atmosphere is so filled that it assumes a gray hue like a fog, and distant objects become invisible. In the desert travellers are not able to distinguish objects which are only a few steps distant. To these winds may be attributed the frequency of ophthalmia among the inhabitants. In other respects the climate is healthy.

Products.—The industry of the natives is most conspicuous in the cultivation of their lands. The larger and the smaller canals, both of which are numerous, must have required a good deal of labour when they were first made, and they are still kept up at a considerable expense. Besides this the agricultural labour is rather more difficult than in Europe. The irrigation of the fields can only be effected in winter, from December to the middle of March, and in summer when the rivers are supplied with water by the melting of the snow on the mountains. Even the Zar-afshan is dry for three or four months in summer.

Rice is only cultivated in the Meeankal and in Shuhr-i-Subz. Wheat is sown in autumn, and cut in July; and directly afterwards the ground is prepared for peas, which give a crop the same season. The other grains which are cultivated are barley and jawaree. As there are no natural pastures in Bokhara, trefoil and the jawaree are grown for green feeding. Of pulse, peas, beans, and haricots are raised in great quantity. Cotton, which forms one of the principal exports of this country, is carefully cultivated everywhere. Hemp also is grown, but only to produce an inebriating drug, called in India 'bang,' and from its seed oil is pressed. Oil is also obtained from the seed of cotton and sesamum. Silk is a staple article in Bokhara, and is raised in considerable quantities, especially along the banks of the Amoo.

On the low hills near Kurshee and Balkh is a small yellow flower called 'esbarnek,' which is used as a dye, and produces a better colour than the rind of the pomegranate. The creeping roots of the vine yield a colour that is dark-red, and is as much used as madder, which is also grown. Indigo is imported from India. Sugar is not grown, but a saccharine gum exudes from the camel's thorn, which is collected and used as sugar very extensively. Tobacco is cultivated in many places; that of Kurshee is the best. The vegetables raised are turnips, carrots, onions, radishes, brinjals, and a variety of greens; the beet-root is cultivated in extensive fields.

Bokhara is celebrated for its fruits, but more for quantity than quality. The orchards contain the peach, plum, apricot, cherry, apple, pear, quince, walnut, fig, pomegranate, mulberry, and grape. There are several sorts of grapes, and some of a very fine flavour. The raisins prepared here are not inferior to any in the world; but the wines of Bokhara have little flavour, owing to the defective mode of making them. Mulberries are dried like raisins, and a syrup is extracted from them as well as from grapes.

In the gardens great quantities of melons, pumpkins, and cucumbers are grown. Of melons there are two different species, and some of them grow to be four feet in circumference. A kind of molasses is extracted from melons: Bokhara appears to be the native country of this fruit.

The mountainous portion of the country yields timber, which is floated down the Zar-afshan as far as Bokhara and Kara-kool in rafts. In the plain only willows and poplars are found; the latter are used for house-building.

Animals.—Sheep and goats constitute one of the principal riches of Bokhara. The sheep have large tails. Sheep with a jet-black curly fleece is peculiar to the district of Kara-kool, and cannot be transplanted

to other places without degenerating. The skins of the male lambs are most highly prized, and the lambs are commonly killed a few days after their birth. The annual export of these skins amounts to about 500,000. The goats of Bokhara are the same kind as those of the Kirghis; they yield a shawl-wool only inferior to that from Tibet.

Camels are numerous, and high priced on account of the continued demand, all the traffic of the country being carried on with them. They shed their hair in summer, from which a water-proof cloth is made. The camel with two humps is frequent; it is lower than the dromedary, yet bears greater burdens by 140 lbs.; the one carries 640 lbs., and the other only 500 lbs. English.

Horses are brought from the desert of Kharizm or Desht Kowan, where the Turkomans have a very good breed, more remarkable for strength and endurance than beauty. The horned cattle are of moderate size, and not numerous. The Turkomans bring butter to Bokhara in sheep-skins. The oxen are large and strong, and are used both for saddle and burden.

The wild animals are few; there of a diminutive species, wild hogs, antelope, wild asses, foxes, wolves, jackals, and cats are most common. Bears are found in the mountains, and rats, tortoises, and lizards in the deserts, but no serpents. Of birds only eagles, hawks, cranes, plovers, water-fowl, and wild pigeons have been noticed. Fish abound in the Amoo and the lake of Kara-kool.

Minerals—Gold is found among the sands of the Amoo. All other metals are imported from Russia. Salt is dug out in masses in some parts of the desert, and on the banks of the Amoo, below Char-i-joone. Alum and brimstone are got in the neighbourhood of Samarcand, and sal ammoniac in the mountainous districts.

Towns, Population, &c.—The most remarkable towns of Bokhara are Bokhara, Samarcand, and Balkh. Besides these are Kurshee, which, according to Burnes, contains 10,000 inhabitants; and Kara-kool, to which Meyendorff assigns 20,000 inhabitants, observing however that it is smaller than Kurshee. There are some towns of moderate size in the Mowankal, but the rest are small, containing only from 100 to 500 houses.

Bokhara being situated between the two elevated table-lands of Asia, has frequently been invaded by the nations who inhabit each of them, and on each occasion a portion of the conquering nation has remained in the country and settled there. At present eleven different nations may easily be distinguished according to Meyendorff, namely, Uzbeks, Tajiks, Turkomans, Arabs, Persians, Mongols or Kalmaiks, Kirghis, and Kara-Kalpaks, Jews, Afghans, Loughis, and Gipsies.

The Uzbeks comprise by far the greater number of the inhabitants, and the country has been sometimes called from them *Uzbekistan*. They are the last of the nations who have subjected this country to their sway—they say that, before this event, they inhabited the countries about Astrakhan. About the beginning of the 16th century they invaded Turan. They are of Tartar origin. The characteristics of their face are a flattened nose, projecting cheek-bones, narrow eyes, and very little beard. The Uzbeks partly continue the erratic life which the whole nation led before its arrival in Bokhara; others are employed as officers by government; and a few apply themselves to agriculture, commerce, or the mechanical arts. These latter inhabit the large cities and their vicinity.

The Tajiks consider themselves as the aborigines of the country, and as the descendants of the ancient Sogdi and Bactrians. They are a wide-spread race in the East. Their body is stout and short, their complexion florid, and in features they resemble the European. The Tajiks are very industrious. They cultivate the soil, and apply themselves to commerce, manufactures, and all the mechanical arts. The merchants who visit Oranburg and the great fair of Nishnei-Novogorod are there called Bokharians, but they are Tajiks.

The Turkomans, Kirghis, and Kara-Kalpaks belong to the Turkish race. The Turkomans inhabit the desert plain to the west of the Amoo River, and acknowledge their dependency on the khan of Bokhara only when it suits their interests. The Kirghis and Kara-Kalpaks are few in number, and live north of the Zarafshan, and in the vicinity of Kurshee.

The Arabs and Persians settled here at the time when this country was subjected to the yoke of Hagedad. Many of the latter have also been brought to this country as slaves.

The Mongols and Kalmaiks settled here at the time of Tshingis Khan's conquest; some families also about 1770, when the Turgut Mongols abandoned Russia and emigrated to Sanguaria, or the Chinese province of Thian Shan Foku.

The few Afghans and Loughis in Bokhara are said to be the descendants of hostages which were brought here by the famous Timur when he subjected their respective countries. Both at present speak their own languages.

The Jews and Gipsies have settled here voluntarily.

The population as estimated by Meyendorff consisted of Uzbeks, 1,000,000; Tajiks, 650,000; Turkomans, 200,000; Arabs, 50,000; Persians, 60,000; Mongols, 20,000; Kirghis and Kara-Kalpaks, 6000; Jews, 600; Afghans, 600; Loughis, 2000; total, 2,670,000. He estimated the surface of the cultivated districts at about 100 square miles, and their inhabitants at about one million and a half, so that those tribes who live entirely a nomadic life would

amount to about a million. Burnes however estimated the whole population at only one million.

The mechanical arts are not neglected in Bokhara, and some commodities are even made for exportation. The most extensive manufactures are those of cotton and silk, and cloth in which both these materials are combined. The dye of all their manufactured goods is excellent. The Bokharians make excellent Morocco leather. Their swords are good, but much inferior to those of Persia.

The towns of Samarcand and Bokhara were some centuries ago famous as seats of learning, and were much resorted to by students from all the Mohammedan countries of Asia. At present the number of foreigners who live here for the sake of study is considerable: the madrasahs, or colleges, are numerous, though the instruction is now limited to the study of the Koran and its numerous commentaries. After having acquired this stock of learning, the students become muderriss or mollas. But the lower classes of the people are less instructed than in other Mohammedan countries, and the greatest part of them can neither read nor write. The Tajiks, who wish to employ their children in commerce, take greater care of their instruction than the other tribes. The children of rich people learn to read, write, and repeat the Koran by heart.

Two languages are spoken in Bokhara, the Persian and the Turkish, the former by the Tajiks, the inhabitants of the towns, and the latter instructed and richer portion of the Uzbeks. The Turkish language is general among the Turkomans, Kirghis, and the nomadic Uzbeks.

The government is despotic, but, as it is regulated on the laws of the Koran, the authority of the sovereign is controlled by the ulamas, or the corporation of priests and lawyers.

The khan of Bokhara is the most powerful of the princes of Turkistan, and maintains a standing army of about 25,000 men, of which only 4000 are infantry. But as a great portion of his subjects are nomadic tribes, who are always ready for military enterprises, and bound to send, if required, a certain number of horsemen, he may easily raise his army to 90,000 or even 100,000 men.

Dr. Wolf visited Bokhara in 1844 to ascertain the fate of Colonel Stoddart and Captain Conolly, who had gone on a mission to Bokhara, and were reported to have been murdered by the khan in 1843. Dr. Wolf reached Bokhara by way of Trebizond, Erzurum, and Teheran, and found that the report was true. He was himself detained a prisoner by the khan for several months. On his return to England in 1845 he published a narrative of his journey.

(Meyendorff, *Voyage d'Oranbourg à Boukhara*; Burnes, *Travels into Bokhara*; Berghaus, *Map of Iran and Turan*.)

BOKHARA, the capital of the khanate of Bokhara, is situated in 39° 48' N. lat., 64° 26' E. long. It is from eight to nine miles in circumference, and is said to contain 8000 houses and 70,000 inhabitants: Burnes estimates its population at 150,000.

The town is of triangular shape, and inclosed by a wall of earth about 24 feet high, and as wide at its base, but only 4 feet wide at the top. In this wall are eleven gates, built of bricks, with a round tower on each side, in which a small number of soldiers are stationed. The widest street measures about 7 feet, and the narrowest only 3 or 4 feet in width. The houses are built of sun-dried bricks on a frame-work of wood, and are all flat-roofed. They are arranged in the oriental manner, presenting towards the street a mere wall without windows, with a gate in the middle leading to a court-yard, round which the rooms are placed, which generally receive the light through the doors. The town is intersected by canals, which convey water from the Zarafshan. The water is afterwards distributed to 68 cisterns, each about 120 feet in circumference; but this distribution is made only once a fortnight. The palace of the khan stands on a conical hill with a flat top, and about 200 feet high. It is inclosed by a wall about 60 feet high, which has only one gate, opening into a large corridor. This corridor, formed by vaults which seem to have been built many centuries ago, leads to the top of the hill, where the edifices stand in which the khan and his court are lodged. They are composed of a mosque, the dwellings of the khan and his children, the harem, which is surrounded by a garden and concealed by trees, and a house in which the vizir of the khan performs the duties of his station; there are also lodgings for the guards and slaves, and stables.

The most remarkable edifices of Bokhara are the mosques, of which there are about 300 in the town alone. The principal mosque stands opposite the royal palace, on the other side of the great square called Segistan, and occupies a square of 300 feet. Its dome is about 100 feet high. On the front bricks of different colours are so disposed as to form different designs of flowers tied together, and others contain sentences of the Koran. The prevailing colour of these bricks is blue, but those of the inscriptions are white. Some mosques are only built of earth. Attached to the principal mosque is the minaret of Mirgharab, which is 180 feet high, and its base upwards of 70 feet in circumference. It diminishes in width as it rises, and is considered the finest monument of architecture in Bokhara.

Bokhara contains about sixty madrasahs, or colleges. Some accommodate upwards of 70 students, and some only 10; but the total number of students seems to be about 2000. These edifices are generally in the form of a parallelogram, two stories high, and

inclose a spacious court-yard. In each story are two rows of chambers, one having its windows and doors to the court-yard, and the other to the street. These chambers are sold to the students, who in this manner acquire a claim to a certain yearly maintenance from the college. The medresses have considerable revenues, the whole of the bazaars and baths of the city having been erected by pious persons and left for the maintenance of the medresses and mosques. The number of public baths, some of which are of large dimensions, is eighteen. Several vaulted chambers are built about a large basin filled with warm water. The fuel used is small shrubs brought from the desert.

As Bokhara is the most commercial town of Central Asia much has been done to facilitate the sale and transit of merchandise. There are fourteen caravanserais, all of them built on the same plan, though of very different dimensions. They are square buildings of two stories, inclosing a court-yard. The rooms round the court-yard are used as warehouses and let to the merchants. The bazaars are numerous and extensive, some of them being upwards of a quarter of a mile in length. In the shops with which they are lined on both sides every sort of merchandise is exposed to sale, with the exception of woven goods, which are sold in large edifices built for that purpose. Several of them, consisting of some hundreds of small shops, contain only the silk goods which are manufactured in the town, and others the cottons, linens, and brocades of India, Persia, England, and Russia.

The number of shops on the great square, or Segistan, is likewise considerable. Tents of different colours are filled with the more common manufactures of the country; but the greater part of the place is a market, in which the fruits and grain of the country and all the necessaries of life are exposed for sale. The active commerce which Bokhara carries on with all the neighbouring countries brings to this town the merchants of nearly all the nations of Asia. On the Segistan a stranger may converse with Persians, Jews, Turks, Russians, Kirghiz, Chinese, Turkomans, Mongols, Cossacks, Hindoos, and Afghans, besides the Tajiks and Uzbeks, the inhabitants of the town. The Tajiks compose by far the greater part of the inhabitants of Bokhara, amounting to three-fourths of the whole. They are merchants, manufacturers, and artists. The number of Jews and Hindoos settled at Bokhara is considerable.

No duties are levied on commodities exported, and only a small duty on imports, and this is paid only when the articles are sold. Bokhara has for many centuries been a place of extensive commerce, and its geographical position must always ensure it considerable advantages in this respect. It is the centre from which six commercial routes diverge; three towards the north lead to Russia and the table-land of Central Asia, and three towards the south connect it with Persia, Afghanistan, and India.

The road which leads to the high table-land of Central Asia runs from Bokhara along the banks of the Zar-afshan to Samarcaud, and thence northward over the mountains, passes the river, and then extends into the basin of the Sir-Deria (Jaxartes). Along this river it passes through the towns of Khoend and Khokand to Marghilan, and then in a south-eastern direction to Oush, from which place it leads by the mountain pass of Terek to Koksoo and Khashgar. The Bokharians take on camel-back to Khashgar woollen-cloth, coral, pearls, cochineal, brocade, velvet, fur (especially of otters and martens), leather, sugar, large looking-glasses, copper, tin, needles, glass, and some iron utensils. They bring back in exchange a great quantity of tea, china, some silk goods, raw silk, rhubarb, and silver. In this branch of commerce from 700 to 800 camels are employed.

Two roads lead to Russia; one on the east of the Sea of Aral, across the desert of the Kirghiz to Orenburg or Troisk; and the other down the valley of the Oxus, between the Aral and the Caspian, to Astrakhan. From the towns mentioned on the Russian frontier the goods are transported to the fair of Nishnei-Novogorod, where nine-tenths are sold. The Bokharians bring to Russia rhubarb, raw cotton, cotton goods, skins of martens, lamb-skins, fox-skins, dried fruits, silk goods (especially for morning dresses), carpets, Cashmere and Persian shawls, and tea; and take in exchange cochineal, spices, sugar, tin, sandal-wood, woollen-cloth, leather, wax, iron, copper, steel, small looking-glasses, otter-skins, pearls, Russian nankin, utensils of cast-iron, needles, coral, cotton-velvet, cotton-handkerchiefs, some brocade, glass, and a small quantity of linens and Indian muslins. They employ 3000 camels in this trade.

Three roads lead from Bokhara to Persia and Afghanistan—one to Meshed, the second to Herat, and the third to Cabul. The Bokharians bring to Persia a portion of the goods imported from Russia, besides raw cotton, silk, cloth of their own manufacture, woollens, spices, and rhubarb; they take back the common shawls of Persia used in Bokhara as turbans, girdles of a yellow colour, wooden combs, carpets, and turquoises. About 600 camels are employed annually in this branch of commerce.

The road to Cabul passes from Bokhara to Kursheo, and thence through a desert to the Amoo Deria, which it passes at Khojusah. Hence it turns eastward, and passes through Balkh and Khulm, from which latter place it runs southward along the river Khulm, till it enters the Hindu-Koosh. Before it reaches Cabul it traverses the valley of Bamecan. This road and its continuation through Pesh-

wur, Attock, and Lahore, connects Central Asia with India. The commerce along this route is entirely in the hands of the merchants of Cabul, and of the Hindoos of the Panjab and Shikarpore. They import shawls from Cashmere and Cabul, silken brocade, fine muslins, pearls and precious stones, and a great quantity of indigo; and export raw cotton, paper, iron, copper, glass, cochineal, and some of the goods manufactured in the country.

(Meyendorff and Burnes.)

BOLAN PASS. [AFGHANISTAN; BELOOCHISTAN.]

BOLBEC. [SEINE INFÉRIEURE.]

BOLCHOW, or BOLKHOV, the chief town of the circle of Bolchow, in the government of Orel, or Orlov, in European Russia, is situated at the confluence of the Nuga with the Bolchowka, feeders of the Oka, in 53° 26' N. lat., 35° 53' E. long., and has about 14,000 inhabitants. Though most of the houses are of wood the town is well built. Its foundation is of remote date, for it was an ancient family possession of the Russian sovereigns. It contains 22 churches, 14 of which are of stone and 8 of wood, a monastery, and the convent of Nova-Peterskoi. The town has manufactures of leather, soap, hats, shoes, gloves, stockings, &c., and carries on a brisk trade with the interior in hemp, rape-oil, tallow, hides, colonial produce, shoes, stockings, &c., together with fruit grown in the immediate neighbourhood.

BOLINGBROKE. [LINCOLNSHIRE.]

BOLIVIA, Republic of, South America, was originally called Upper Peru, and formed a portion of the viceroyalty of Buenos Ayres. Being separated from the more populous parts of Buenos Ayres by the desert of Chaco and a very rugged and dreary mountain region, it had little in common with that state, and it consequently soon separated from it after the subversion of the Spanish authority. The republic declared itself independent on the 6th of August, 1824, and assumed the name of Bolivia in honour of General Bolivar, on August 11th, 1825.

The northern boundary of Bolivia is formed by the parallel 10° S. lat. from the river Purus on the west, to the peninsula formed by the confluence of the rivers Sarare and Mamoro, thence called the Medeira, on the east. The most southern point is on the shores of the Pacific at the Bahía de Nuestra Señora, between Punta del Norte and Punta del Sur, about 25° S. lat. It consequently extends over 15 degrees of latitude, or upwards of 1000 miles from north to south. The most eastern part is contiguous to the river Paraguay, where after leaving Brazil it forms for some space the boundary between Bolivia and Paraguay, and extends to 57° 30' W. long. The most western portion of the republic borders on the Pacific at Punta del Norte, about 70° 30' W. long. Bolivia is bounded on the west for about 250 miles by the Pacific Ocean; the remainder of its western and north-western frontier is formed by the republic of Peru. It borders on the north-east and east on the empire of Brazil, except the most south-eastern corner, where it joins Paraguay. To the south of it extends the republic of Buenos Ayres, and where it approaches the Pacific that of Chili. Under the parallel of 22° the extent of the country from east to west may be about 750 miles, but towards the north it is less.

Surface, Population, &c.—The area of the republic of Bolivia is estimated at 318,750 square miles. The following table shows the area of each of the provinces, and also the population according to the semi-official estimate of 1843, the latest which gives the number of inhabitants in the several provinces: a more recent return gives the entire population as 1,330,000.

Departments.	Chief Towns.	Area in sq. miles.	Population.
La Paz	La Paz	39,950	300,000
Orúro	Orúro	8,500	80,000
Potosí	Potosí	31,875	200,000
Cochabamba	Oropesa	55,250	250,000
Chuquisaca	Chuquisaca	34,425	175,000
Santa Cruz de la Sierra	San Lorenzo	148,750	25,000
Total	318,750	1,030,000

As nearly the whole of this country is situated within the tropics it might be expected that its climate and productions would correspond to its geographical situation; but perhaps not more than one-half of its surface has a tropical climate. The other half is occupied by high mountain ranges, table-lands of great elevation, high valleys, and widely extending slopes. This mountainous portion of Bolivia belongs to the great range of the ANDES, under which head will be found a general description of it.

Where the Andes running from south to north enter Bolivia they send off at about 24° S. lat. a lateral branch to the east, which extends to a great distance, and separates the affluents of the Rio Bermejo from those of the Pilcomayo, both of which fall into the Paraguay on its right bank. This lateral mountain range, which constitutes the southern boundary of Bolivia and separates it from Buenos Ayres, does not rise to a very great height, but is extremely rugged and barren. The principal chain of the Andes here runs nearly south and north, and contains some peaks which rise above the snow line. The Nevado de Chorolque (21° 30' S. lat.) is said to rise to 16,548

feet. Up to this mountain the Andes seem to form a single and unvaried range from the southern extremity of Chili; but to the north of it at about 20° S. lat. there is an extensive mountain-knot called the Cordillera de los Lipas (19° 30' S. lat.); the mountains divide into two great longitudinal ridges, which run parallel to one another and bound an immense interalpine valley or table-land called the valley of the Desaguadero, which includes the great Lake of Titicaca. The western ridge, called the Western Cordillera, continues, as far as it lies within the boundaries of Bolivia, a due northern course, and contains near the boundary-line several snow-capped peaks, of which the highest, called Guatalliri, rises to 21,960 feet.

The eastern ridge, called the Eastern Cordillera, or Cordillera Real, separates from the mountain-knot north of Porco (19° 50'), and of Potosí (19° 34'). The metalliferous mountains which surround Porco may be considered as constituting its southern extremity, and the celebrated mountain or Cerro of Potosí also belongs to it. From this point the Cordillera runs north, inclining a little to the west, to the Nevado de Illimani (16° 40'). Between Potosí and this summit the highest part of the range attains an elevation of 16,037 feet. The Illimani forms a serrated ridge with four peaks rising to the height of 21,145 feet, or 4000 feet above the snow line. At this point the range somewhat changes its direction, continuing nearly due north-west, and forming an almost continuous line of snowy mountains till it joins the ridge called the Andes of San Juan del Oro and of Vilcanota, which between 14° and 15° extend nearly east and west, and again connect the two ranges of the Andes. In this portion of the Eastern Cordillera, in lat. 16° 10' is the Nevado de Sorata, 21,286 feet high. Both chains of mountains, with the intermediate valley of the Desaguadero, occupy a breadth of upwards of 330 miles to the north of 15°, but to the south of that parallel they are upwards of 300 miles in width. According to the investigations of Burghaus and Humboldt ('Zeitschrift für Erdkunde,' h. 12., and 'Ansichten der Natur,' Sabino's translation, l. 27.) the mean height of the ridge of the eastern chain of the Bolivian Cordillera, as determined by the passes, is 13,502 feet; of the western chain 14,896 feet; while the height of the highest summits or culminating points is, in the eastern chain, 21,286 feet; in the western, 22,350 feet; "consequently the ratio of the height of the ridge to that of the culminating point is, in the eastern chain as 1:1.57, and in the western chain as 1:1.54. This ratio, which is as it were the measure of the subterranean elevating force, is very similar to that which exists in the Pyrenees (= 1:1.43), but very different from the Alps, where the mean height of the passes is less as compared with Mont Blanc (= 1:3.06)."

The valley of the Desaguadero, which lies between two ranges, with a mean elevation above the sea estimated at 13,000 feet, runs in its southern portion nearly parallel to the meridian, but north of 17° lat. it forms an angle of almost 35 degrees with that line, running very nearly north-west-by-north and south-east-by-south. Not having any outlet towards the sea the rivers which descend into it are either lost in the sandy soil or empty themselves into the Lake of Titicaca at its northern extremity. This lake, the largest in the South American continent, occupies an area of about 4600 square miles, and its surface is 12,795 feet above that of the Pacific. In some places its depth has been ascertained to be 120 fathoms, but many parts are probably much deeper. It is remarkable that the watershed on the eastern part of the valley of the Desaguadero, and as it would seem also on the western, is not formed by the high ranges, but by two low lateral ridges distant from 30 to 30 miles from the lake, and generally rising from 500 to 1000 feet above its level. The waters collected between these lateral ridges and the high mountain ranges descend eastward to the plains traversed by the river Madeira and its upper branches; and westward towards the sea. The only outlet of the Lake of Titicaca is the river Desaguadero, which issues from its south-western extremity in lat. 16° 35' 10", and is a small stream when compared with the immense extent of the lake. Its depth however is considerable, but its velocity is scarcely two miles an hour. It runs southward, and forms near 19° a lake called Lago del Desaguadero, or Ullagna, in which it is lost. Its course between both lakes may be 180 miles.

The Lake of Titicaca contains numerous small islands, which rise directly from the water's edge to a considerable height. That from which it has taken its name, and which is known in the history of the ancient Peruvians as the place where Manco Capac made his appearance, is situated at the south-east extremity. Both the southern part of this lake, which bears the name of Laguna de Umamare, and the eastern shores, nearly in their whole extent, belong to Bolivia.

The climate of the valley of the Desaguadero offers many peculiarities. Being in its lowest parts upwards of 13,000 feet above the level of the sea, the heat is never great, nor is the cold very sensible, except during the night from May to November. This season, which is the winter, is extremely dry, the sky is cloudless, and neither rain nor snow is known to fall. But snow prevails and follows the rainy season, which in this valley begins at the end of November, and continues through the summer months to the beginning of April. During these months it rains nearly every day, more or less; but during the night the sky is clear, and no clouds are observed: snow falls only in November and April.

The vegetation of this valley has also a very peculiar character. There are no trees, but the lower districts, especially near the great lake, are covered with the most beautiful green turf where the land is not cultivated. The cultivation is limited to a few things; wheat, rye, and barley are indeed sown, but they do not ripen, and are cut green as fodder for the llamas. The plantations of quinoa (*Chenopodium Quinoa*, Linn.) are extensive, and also of potatoes, which are found growing wild in some more elevated places; these plantations extend to a considerable distance up the sides of the adjacent hills. There are no peculiar seasons for sowing or harvest, and the natives are continually occupied either in performing the one or the other operation. The country which extends between the ridges of hills and the high ranges contains for the most part undulating plains covered with a coarse grass, on which numerous herds of llamas are fed. Here also the guanaco, alpacas, and vicuñas feed in a wild state. Besides these no wild animals have been observed in the valley of the Desaguadero, except a peculiar kind of chinchilla, the *Lagotis Curieri*, and the lagotomus (the viscacha or biscacho of the natives), which in some places has so burrowed the soil as to render travelling on horseback unsafe. The Lake of Titicaca abounds in fish, and numerous birds visit it. The condor is frequently met with on the mountains. Among the spontaneous plants the rushes which grow along the banks of the lake deserve to be noticed, as the entire want of trees has compelled the natives to apply them to nearly as many uses as the bamboo is applied in India. With these rushes the natives build their huts, and make the boats and sails with which they navigate the lake; mats made of them are the bed of the poor, and serve in the houses of the rich as carpets.

From this valley six mountain passes traverse the Western Cordillera to the Pacific Ocean. Their highest points rise to nearly 15,000 feet above the sea, and consequently they are not inferior to the mountain passes of the Himalaya in elevation. The ascent to these passes from the valley is only 2000 feet, and the slope is gentle; but the descent to the sea is exceedingly rapid. The highest point of the great range being close on the maritime declivity of the Cordillera, and consequently at an inconsiderable distance, not exceeding 60 miles from the sea, the descent is extremely precipitate and abrupt.

That portion of Bolivia which extends between the Andes and the Pacific, in length 250 miles between San Taltal Point, the southern angle of the Bahía de Nuestra Señora, and the small river Loa, has been described under ATACAMA, by which name it is known. It is for the most part a barren waste, but there is fertile land along the narrow valleys and river courses. The coast about Bahía de Nuestra Señora is low and rugged; from thence to Jara Head the coast runs in a direct line for 52 miles, the shore being steep and rocky, and backed with hills from 2000 to 2500 feet high. Farther north is the spacious Bay of Mexillones, 8 miles across, and affording anchorage off the western side; but it is of little use as the shore is steep, and neither wood nor water is to be obtained. Thirty miles north-east from Leading Bluff, the northern headland of Mexillones Bay, is Cobija Bay, the only port of the republic of Bolivia. In this bay is the town of Puerto de la Mar, better known as Cobija, a poor place of about 1400 inhabitants; it is an inconvenient place for shipping as it is ill supplied with water, while vegetables even for the consumption of the inhabitants are brought from Valparaiso, a distance of 700 miles. North of Cobija Bay are several shallow sandy bays with rocky points. Algodon Bay, 28 miles from Cobija Bay, is the first place which affords any anchorage. About 10 miles farther is Cape San Francisco or Paquiqui, on which is an extensive bed of guano, which has been largely worked. Somewhat farther is Point Arena, near which is a fishing village; and 12 miles farther is the gully of the Loa River, which forms the boundary-line between Bolivia and Peru.

By far the greatest part of Bolivia is situated to the east of the Andes, and this portion may be divided into the mountainous district and the plains. The mountain district extends along the eastern side of the Andes, and is not of great extent to the north of 17° 40', because the slope of the Eastern Cordillera towards the plains is nearly as rapid as that of the Western towards the sea, and the branches which this chain sends off extend to no great distance from the principal range. But at about 17° 10' S. lat. a mountain range detaches itself from the Eastern Cordillera, which runs generally due east for upwards of 200 miles. This branch rises near the city of Cochabamba, above the line of perpetual snow, in the pointed peak called Nevado de Tinaira; farther eastward it gradually declines till it terminates on or near the banks of the Rio Guajal or Grande, at no great distance west of the town of Santa Cruz de la Sierra. This chain is commonly called the Sierra of Santa Cruz. Between this ridge and that forming the boundary-line towards Buenos Ayres, which we have already noticed, extends the mountainous portion of Eastern Bolivia. Its western boundary may be fixed at about 63° W. long. This country is traversed by many lateral ridges, which are offsets from the great chain of the Andes, and form extensive valleys. Many of these valleys sink slowly, and often maintain themselves for a considerable extent at nearly the same elevation. This circumstance, as well as the width of the valleys, renders them particularly fit for agriculture, and for the cultivation

of tropical as well as extra-tropical productions. Many persons have considered these valleys as the most fertile, and the most beautiful parts of South America. Here the slopes of the mountains are generally covered with fine trees to a great height. South of 20° however the valleys are narrower, and the ranges which inclose them are without wood, and nearly without vegetation.

Hydrography.—No part of America has a greater abundance of water than the region east of the Andes. The rivers which descend from the eastern declivities are very numerous and contain a volume of water which cannot be exhausted by irrigation. These rivers are among the most distant heads of the Amazonas and La Plata rivers. The Cordillera Real contains the sources of the greatest of the tributaries of the Amazonas—the Rio Madeira. This large river is formed by the junction of two considerable streams, the Rio Beni and the Rio Mamore, both of which descend from the Cordillera Real and unite their waters between 10° and 11° S. lat. The upper branches of the Rio Beni are the Rio Caca, the Rio Chuqueapo, and the Rio Quetoto. The Rio Quetoto, the most southern of them, rises where the Sierra de Santa Cruz detaches itself from the Eastern Cordillera, and taking a north-east and north course enters the plain, where it soon meets the Chuqueapo, which has its origin in the valley of the Desaguadero to the north-west of the Nevado de Illimani. The Chuqueapo, which is only prevented by a low ridge from entering that river, after having passed the town of La Paz, traverses the great chain (16° 55') through an enormous chasm. It then runs for nearly 100 miles through a fine valley and joins the Quetoto on entering the plain. After this junction the river continues its northern course, dividing the mountainous country from the eastern plains till it meets the Rio Caca. The Caca, under the name of Mapiri, rises likewise in the valley of the Desaguadero, at no great distance from the Nevado de Sorata towards the west, and running first north and then east, traverses by a deep chasm the Cordillera Real north of the Nevado de Yani, a high snow-capped peak. During a very tortuous course the Mapiri is joined by a great number of streams which descend from the eastern declivity of the same Cordillera, and by their union the Rio Caca is formed. This stream joins the united rivers Quetoto and Chuqueapo about 13° 30', and the river formed by their junction is called Beni, which name it preserves in its northern and north-north-eastern course to its junction with the Mamore. Thus the Beni brings to the Madeira all the waters from the eastern and from a portion of the western declivities of the Cordillera Real, as well as a portion of those from the Sierra de Santa Cruz.

The other great branch of the Madeira, the Mamore, rises under the name of Cochabamba in the western extremity of the valley which bears the same name, and is distinguished by its cultivation and its numerous products. It first runs east by south and afterwards due east, when being swelled by many small rivers it assumes the name of Rio Grande. It afterwards makes a very large semi-circular sweep, by which it arrives at the town of Santa Cruz de la Sierra, whence it runs north-west, and after uniting with the Chaparé at about 16° 30' receives the name of Mamore, and by degrees changes its north-west course into a north one. The Chaparé is formed by four or five streams descending from the northern declivity of the Sierra de Santa Cruz. Before the Mamore unites with the Itanez, a large river which rises in the western parts of Brazil, it receives the waters of the Yacuma, whose source is at no great distance from the banks of the Rio Beni, and which runs through an extremely flat country. The Itanez [BRAZIL] is increased before its junction with the Mamore by the river Ubahy, which rises in a lake called Laguna Grande, in the country of the Chiquitos, and is therefore also called Rio de Chiquitos. After the junction of the Mamore with the Itanez, the river continues its northern course till it meets the Beni near the north-eastern angle of Bolivia, from which point the river has the name of Madeira.

The waters which descend from the eastern declivity of the Andes south of 18° S. lat. go to the Pilcomayo, one of the principal branches of the La Plata River. The Pilcomayo rises on the southern declivity of the mountain knot called Cordillera de los Lipez, and running generally due east, is soon increased by numerous other streams, some of which are considerable, as the San Juan, which rises about 22° 30', and falls into the Pilcomayo from the south; the Paspaya, which rises in the neighbourhood of Potosi on the southern declivity of the Eastern Cordillera and soon becomes navigable; and the Cachymayo, which rises not far from the source of the Cochabamba, and traverses the beautiful and well-cultivated valley of Chuquisaca. After the junction with the Cachymayo, the Pilcomayo continues its eastern course for about 100 miles, when turning suddenly to the south it enters the desert called Grande Chaco, and leaves the territories of Bolivia.

The whole eastern portion of Bolivia, from the banks of the Pilcomayo and the frontier of Buenos Ayres to the junction of the Mamore and Beni, is one extensive plain, broken only by a few isolated ranges of hills which from east to west extend about 200 miles, and from south-east to north-west upwards of 700 miles. In the southern part of this plain lies the watershed between the affluents of the Amazonas River and those of the La Plata, but it does not appear to rise to any great height above the sea. This plain is principally watered

by the Beni, the Mamore, and the Ubahy, which in the rainy season, from October to April, inundate the country along their banks to a considerable extent. In many places there are lakes, and though none of them are very large, the exhalations, united with those from the inundations, render the climate excessively humid. This humidity, added to the heat which prevails all the year round, gives rise to many dangerous diseases, and renders this plain very unhealthy, especially for Europeans. This part of the republic has consequently been almost abandoned by the Creoles, though its great fertility would better repay the labour of the cultivator than any other district of the country. Immense forests of high trees cover nearly the whole of these plains, but their valuable products are neglected, except that a considerable quantity of cocoa is gathered by the natives and brought to the towns of San Lorenzo de la Frontera, La Paz, and Cochabamba. The plantations consist commonly of mandioc and maize, those of cotton and rice being rare, but all the other tropical productions might be cultivated with great advantage.

Climate, Soil, Productions.—The climate of the different districts has been noticed in our description of the surface. Rain never falls on the coast along the Pacific. In the valley of the Desaguadero, in the mountain region, and in the plains, the summer is the rainy season; but the rain is continual only in the plains. The mountains are subject to tremendous hail-storms; thunder-storms are also peculiarly severe in these elevated regions. In winter the traveller is subject to a temporary blindness called 'surumpi,' which is caused by the rays of the sun being reflected from the snow, and rendering the smallest ray of light absolutely insupportable. Earthquakes are very common along the coast of the Pacific, less so in the valley of the Desaguadero and the mountain region, but in the plains they have not been observed.

The scanty productions of the valley of the Desaguadero have been noticed. The few places on the coast which are cultivated produce no grain but maize, excellent fruits however grow, especially figs, olives, and melons, besides pomegranates, plantains, and algarrovas (*Prosopis dulcis*, Humb.), a kind of pulse, which grows to the length of a foot, with its seeds enveloped in a substance like cotton, which is eaten. It is of a sourish taste, but very cooling. Cotton, a little sugar-cane, and the *Arundo donax*, of which there are large plantations, are also cultivated.

The other portions of the republic, especially the beautiful vales watered by the Cochabamba and Cachymayo, are more fertile. As the levels which occur along their banks are at different elevations above the sea, they abound in all the fruits, grains, and other agricultural productions common to Europe and to tropical countries. Among the spontaneous products are cocoa, sarsaparilla, different species of vanilla, copaiba, balsam, and caoutchouc. The mighty forests which line the rivers abound in the finest timber for all purposes, especially for ship-building, and in trees which distil aromatic and medicinal gums. The plantain is found in abundance; and there is a species of cinamon called by the Creoles the Canela de Clavo, which only differs in the greater thickness of the bark and its darker colour from that of the East Indies. Cotton, rice, tobacco, indigo, sarsaparilla, copaiba, and other medicinal drugs grow abundantly east of the Andes. Throughout the valleys of the eastern slopes of the Andes, below the level of 8000 feet, vast quantities of the coca (*Coca erythrorhylon*), are grown. The plant grows wild, but it is also largely cultivated, the dried leaves being employed almost universally by the Indians of Bolivia and Peru as a narcotic. According to Dr. Weddell 9,600,000 Spanish pounds are annually produced in the district of Yngas alone, while nearly one-twelfth of the entire revenue of Bolivia is derived from the tax on coca.

Besides the animals peculiar to the valley of the Desaguadero, there are the tapir, the jaguar, the leopard, six or seven sorts of monkeys, and several amphibious creatures. Of domestic animals, there are horses, asses, and mules, but for sheep the climate is too warm. Great herds of horned cattle find abundant pastures on the banks of the rivers in the plains.

Among the birds have been noticed many different kinds of parrots, several species of turkeys, and a multitude of beautiful singing birds, as the thrush, the whistler, and the matico, remarkable for its plumage and the sweetness of its note.

All the rivers, but especially those of the plains, abound in fish.

Gold is found in abundance in many places, but especially on the eastern declivity of the Eastern Cordillera, where it is washed down by rivers which run between slate mountains in narrow ravines. All the waters descending from this range, which fall into the Beni or its branches, carry down gold sand, but more particularly the small river Tipuani, which falls into the Mapiri. The mines of Potosi have long been considered as the richest in the world for their produce of silver, but they are now little worked, which is also the case with other silver mines. Copper is abundant: at Corucuro, a small place about 70 miles from La Paz, enormous masses of native copper are found crystallised in the form of perfect cubes. This ore though it is said to contain seven-eighths of pure copper, is of scarcely any use, being found in very high mountains and at a great distance from the coast. Besides these metals there are ores of lead and tin; and salt-petre, brimstone, and salt.

Political Divisions.—The republic of Bolivia is divided into six departments:—

I. The department of La Paz extends over the northern half of that part of the valley of the Desaguadero which belongs to Bolivia. It contains also the Eastern Cordillera from the Nevado de Illimani northward, the numerous valleys which lie on the eastern declivity of that range, and that portion of the plain to the west of the Rio Beni. The lower part of the valleys and the plain are very fertile, but only a few spots are cultivated. The rivers bring down a great quantity of gold sand. It contains only one town of importance, the capital La Paz.

II. The department of Oruro lies between La Paz and Potosi; the Andes bound it on the west, the department of Chuquisaca lies on the east. It contains the southern part of the valley of the Desaguadero. In this valley is the capital Oruro, population about 5000; it stands nearly 13,000 feet above the sea, and contains several churches and convents. In the neighbourhood considerable silver-mines are worked. A road leading from Oruro to Potosi traverses the southern part of the Eastern Cordillera, and rises in the mountain pass of Tolapala to 14,075 feet.

III. The department of Potosi comprehends the most southern portion of Bolivia, namely, the whole of the coast along the Pacific, the country south of the valley of the Desaguadero, and the southern part of the mountain region as far north as the Pilcomayo River. Nearly the whole of its surface is covered with sand or barren mountains, but as it contains numerous mines of silver at Potosi and other places in the northern range, which have been long worked, the country about them is more populous than any part of the republic, except the valleys of the Cochymayo and Cochabamba. Except the capital, Potosi, this department contains no considerable place.

IV. The department of Cochabamba comprehends the greatest part of the rich and well-cultivated valley of the Cochabamba or Guapil, the Sierra de Santa Cruz, and the fine valleys which lie on the northern declivity of this chain. Every kind of agricultural produce is here grown in abundance, and in some of the rivers which fall into the Chaparé gold is collected. The capital of this department, Oropesa, contains about 16,000 inhabitants, and is the most industrious of the towns of Bolivia, the manufacture of cotton goods and of glass being carried on to some extent. Many of the dwelling-houses are large, and there are several convents and churches. It is situated at the western extremity of the department in a fine valley traversed by the Colorillo, a branch of the Cochabamba. The small town Cochabamba, from which the department has received its name, lies on the banks of the river Guapil, or Cochabamba.

V. The department of Chuquisaca, or Charcas, extends over the mountainous country between the rivers Puzpaya and Rio Grande de la Plata, in which the valley of the Cochymayo is comprehended in all its extent, and a great portion of that of Cochabamba. It contains some considerable mines, and is one of the most populous portions of Bolivia, on account of its fertility and the healthfulness of its climate. The principal town, CHUQUISACA, is the capital of Bolivia.

VI. The department of Santa Cruz de la Sierra is by far the largest, and extends over nearly the whole plain which constitutes the eastern part of Bolivia. The greater part of it is still occupied by independent tribes of Indians; and other districts, where the Croceas had formerly settled, have been abandoned on account of their unhealthiness. The capital, *San Lorenzo de la Frontera*, not far from the old town Santa Cruz de la Sierra, on the banks of the Rio Grande de la Plata, has only about 5000 inhabitants.

Inhabitants.—The inhabitants of Bolivia are composed of aborigines, and of people of foreign extraction. The aborigines form probably more than three-fourths of the population. They may be divided into those who speak the Quichua language and those who speak different dialects. The Quichua language prevails among all the inhabitants of the coast and of the valley of the Desaguadero. Agriculture had been adopted by them before the arrival of the Europeans, and even at present it is their principal if not their exclusive occupation, but it is practised in a very unskilful manner. They have been converted to the Roman Catholic faith, but retain some ceremonies of their ancient religion. The natives who do not speak the Quichua language inhabit the eastern declivities of the Andes and the plains extending to the east of them. They are divided into a great number of tribes who speak different languages: in the province of Moxos alone there are thirteen tribes. Some of them have been converted to the Christian religion; these wear a light dress of cotton, have fixed dwelling-places, and apply chiefly to agricultural pursuits. Some of them make excellent cotton-cloth, and in general they have an aptitude for mechanical arts. The Indians who inhabit the lower land below Reyes, and those on both sides of the Uchuy, as well as the Chiquitos, who occupy the country bordering on Brazil and Paraguay, still lead a roving life, live mostly on wild roots and fruits, and on game, and go naked.

The inhabitants of foreign extraction are either the descendants of Spaniards or of Africans and the mixed race. The descendants of the Spaniards are most numerous in the mining districts and in the valleys of the Cochabamba and Cochy Mito, where they may be said to compose the great bulk of the inhabitants; they are much less numerous on the coast and in the valley of the Desaguadero, and their number in the plains is very small. The people of pure African

blood are few in number, but the mixed races, which owe their origin to a mixture with negroes, are numerous on the coast; much less so in the mining districts; and in other parts very few of them are found. The bulk of the population is concentrated in two larger and several smaller valleys. Immense tracts consist of barren deserts, others though fertile are not cultivated, and nearly uninhabited.

Commerce, Manufactures.—No country perhaps is under greater disadvantages with respect to commercial intercourse with foreign countries than Bolivia, though possessing a coast of 250 miles, with several good harbours. The part which is contiguous to the coast is a sandy desert, which produces nothing fit for a foreign market, and it is separated from the rest of the country by a chain of high and nearly impassable mountains up to the parallel of Potosi. The only road which connects the coast with the internal districts of the republic runs on the comparatively level country along the shores, and passes to the valley of the Desaguadero by the pass of Leñas (19° 45'), which rises to 14,210 feet, and thence runs to Oruro and La Paz. But this road, like all others in this country, is only practicable for mules and llamas, and consequently does not allow the transport of very heavy or very bulky commodities. To go from La Paz to the more populous districts on the eastern side of the Eastern Cordillera, this high chain must be traversed by the pass of Pacuni (16° 33'), which rises to 15,226 feet. Another mountain pass which leads from Oruro to Chuquisaca, which rises to 14,700 feet, is called the pass of Challa (17° 40'). The difficulties encountered in travelling from the port of Cobija to Oruro are so great, that though the Bolivians have declared Cobija a free port, they hardly use it, and prefer importing the small quantities of foreign commodities for which there is a demand through Arica and Tacna. Few foreign commodities are imported into Bolivia. They are chiefly iron and hardware, with a few articles of finery, as silk, &c. The exports are nearly altogether limited to the precious metals, and to different kinds of woollens, made of the wool of the llamas and alpacas, and to hats made of the wool of the vicuñas. In June 1852, the navigation of the rivers of Bolivia flowing into the Amazonas and La Plata was declared free to vessels of all nations.

Being as it were excluded from foreign commerce the Bolivians are obliged to satisfy their wants by their own industry. The manufactures of cotton are the most extensive. The better kinds are made in Oropesa; but in many districts the Indians make great quantities, which are coarse though strong. Next to these are the woollens, made of the hair of the llamas and alpacas. The coarser kind, called 'hannasca,' is used by the lower classes for dress and likewise for blankets; the finer sorts, called 'cambis,' are embroidered with great care, and used as carpets by the rich. The best are made at La Paz and are very dear. At San Francisco de Atacama very fine hats are made of the wool of the vicuña, and at Oropesa very good glass is made. In some towns in the neighbourhood of the silver-mines they make vessels of silver-wire, which are not without elegance.

Government, Finances, &c.—In 1825, when Buenos Ayres had renounced its claim on Upper Peru, and the representatives of the country determined to form an independent state, they adopted a constitution proposed by Bolivar, according to which the executive power was to be placed in the hands of a president chosen for life, and the legislative was to consist of three bodies, the senate, the tribunes, and the censors. At the same time Bolivar was chosen president. In the following year a successful revolution occurred, and Bolivar's constitution was superseded. Since then there have been numerous changes, sometimes merely of dictators, but at others in the forms of government. The years 1847, 1848, and 1849 were consumed in civil war; and the country has been ever since in a more or less unsettled state. The legislative power is however still at least nominally vested in three bodies, the executive being in the hands of an elective president. Of the finances of the country we have no very distinct account. The national debt is said to amount to about 1,084,943*l.* (5,424,716 piastres), including the sum required to discharge the arrears of interest unpaid since 1847, but we believe that it does not include the whole of the sums borrowed by the treasury. According to a statement published by the government the revenue in 1850 amounted to 395,243*l.* (1,976,217 piastres), while the expenditure was 347,748*l.* (1,738,744 piastres). The standing army is limited to 2000 men. The country is ecclesiastically divided into the bishoprics of Cochabamba and Santa Cruz de la Sierra, but there is no established church.

(Pentland and Parish, in *Geogr. Jour.* vol. v.; Meyen's *Reise um die Welt*; Captains King and Fitzroy's *Sailing Directions for South America*, published by the Admiralty; Captain Basil Hall; Temple; Azara; Von Teubert, &c.)

BOLOGNA, the second city in the States of the Church, is situated in 44° 30' N. lat., 11° 21' E. long., 150 miles N. by W. from Rome, and 50 miles N. by E. from Florence, in a plain north of the Apennines, and between the rivers Reno and Savena, and has a population of about 75,000. A canal, called Naviglio, navigable for barges, connects Bologna with Ferrara, from whence, by means of the Po, the Adige, and the intermediate canals, the water communication extends to Venice. Bologna is a thriving city, with an industrious population; the higher classes, who consist chiefly of landed proprietors, are wealthy. Many noble families reside at Bologna, where they have fine palaces, some of which contain valuable galleries, and are decorated

with fresco-paintings by the great masters. The palace of the Podestà, in which Hentzius, son of the emperor Frederick II., and nominal king of Sardinia, spent in confinement twenty-two years of his life, and in which he died in 1272, contains the archives of the city. The Palazzo del Pubblico, a large structure, is the residence of the cardinal legate and the seat of the various courts of justice. In the square before it is a handsome fountain with the colossal statue of Neptune by Giovanni da Bologna.

Bologna abounds with churches, most of which are rich in paintings. The church of San Petronio, a magnificent though incomplete gothic structure, which was founded in 1390, has a meridian line traced on its pavement by the astronomer Cassini; the interior, which consists merely of nave and choir, is richly ornamented with sculpture; and the three canopied doorways of the unfinished façade are covered with marvellous clusters of beautiful bas-reliefs, representing the main subjects of the Old and New Testaments in stone. The central portal was completed by one man's hand—that of Jacopo della Quercia. Charles V. was crowned in San Petronio by Pope Clement VII. The cathedral of San Petro is rich in works of art. The church of San Domenico contains several fine monuments, including those of San Domenico by Nicolo di Pisa; tombs of Hentzius, of Taddeo Pepoli, of Guido and his pupil Elisabetta Sirani, of Count Marsigli, and other illustrious individuals. The adjoining convent is the residence of the tribunal of the Inquisition. The church of San Stefano, one of the oldest and most interesting religious edifices in Italy, consists of no less than seven churches united. One of these, dedicated to St. Peter and St. Paul, dates from A.D. 330, and all of them are decorated with Greek frescoes, oil-paintings, and works of ancient Christian art.

Bologna is surrounded by walls about six miles in circuit, and has twelve gates; except in the older quarters of the city the streets are tolerably wide, and most of them have low arcades on each side to shelter pedestrians from the sun or rain. In the centre of the city, near the Foro de' Mercanti, or Chamber of Commerce (a fine gothic structure, built in 1294) are two lofty towers, the highest of which, called Asinelli from the name of its founder, is 256 feet high; the other, Garisenda (which is alluded to by Dante in the 31st canto of the 'Inferno'), is only about one-half of the height of its neighbour, but inclines on one side about nine feet. The Asinelli is also a little out of the perpendicular, though in a much slighter degree. Both towers date from the 12th century.

The University of Bologna is the oldest and still one of the first in Italy. Its origin is stated to have been under Theodosius II., and it is said to have been restored by Charlemagne. We find it enjoying great celebrity early in the 12th century. It has the following classes,—theology, medicine, law, philosophy and mathematics, and belles lettres. The faculty of medicine has the most and the best filled chairs. The university is established in a noble palace (in which the Institute of Bologna has its apartments, library, and collection), built in the Strada San Denato by Cardinal Poggi in the 16th century. The building was purchased by the Senate of Bologna in 1714. The great linguist, Cardinal Mezzofanti, commenced his career as librarian to the University of Bologna. Annexed to the university are a museum, a botanical garden, an anatomical cabinet, and a library containing 80,000 volumes (20,000 of which were presented by Pope Benedict XIV.) and 4000 manuscripts.

Besides the library of the university, the city of Bologna has a public library, the legacy of Father Magnani, which occupies three rooms of the convent of San Domenico, and contains 83,000 volumes. The academy of the fine arts has a splendid gallery of paintings, chiefly of the Bolognese school, which was founded by Franco Bolognese, a follower of Giotto, in 1313; arrived at great eminence under Francesco Francia in 1535; and reached the culminating point of its fame under the Caracci and their illustrious pupils Domenichino, Albani, and Guido towards the end of the 16th and the beginning of the 17th century. The Roman and other Italian schools are each represented in the gallery by a few master-pieces. The Instituto delle Scienze, founded by Count Marsigli, has an observatory. The Philharmonic Lyceum, in which 100 pupils are maintained at the expense of the town, possesses a valuable musical library of 17,000 volumes, collected by Father Martini, a Bolognese composer of the 18th century. The College Venturoli, founded in 1825, is devoted to students of architecture. There is also a college for Spanish students, founded by Cardinal Albornoz; and another for Flemish students, who are sent here by the goldsmiths' company of Brussels. It was founded by John Jacobs, a Flemish goldsmith, and a friend of Guido. The Scuole Pie, or public school for the children of the poorer classes, is a fine building by the Bolognese architect Terribilia. The university was held in this building before it was transferred to the palace of the Institute above mentioned. The children are taught gratuitously Latin, arithmetic, singing, and drawing.

Bologna is an archbishop's see, and the series of its bishops ascends to A.D. 270, when St. Zama was its first bishop. St. Petronius, who lived about A.D. 430, was the tenth bishop of Bologna. Among the distinguished natives of the city are no less than six popes and nearly one hundred cardinals. The city and the province of Bologna are administered by a cardinal legate appointed by the pope. The court of appeal for the four provinces of Bologna, Ferrara, Ravenna, and Forlì sits at Bologna, and consists of six judges.

There are several manufactures of silke, paper, and pottery. The large sausages (mortadelle) of Bologna have a long established reputation, as well as its liqueurs, jams, and syrups. The people of Bologna are frank and fond of gaiety; the lower classes are noisy, and their dialect is the most uncouth and rough sounding in all Italy. The women are generally good looking. There is a casino, or assembly-rooms for the nobility, besides reading-rooms and private conversazioni. There are several theatres, at which some of the best performers of Italy are generally engaged.

Outside of the walls, the Campo Santo or cemetery contains many handsome monuments. On the hill called Della Guardia, about three miles from Bologna, is the handsome church of La Madonna di San Luca, which is joined to the town by a long arcade consisting of 635 arches. The once splendid monastery of San Michele in Bosco was sadly injured during the French wars, and its frescoes by the Caracci and others were nearly effaced by the hands of the soldiers.

Bologna occupies the site of the ancient *Felsina*, which was the principal city of the Etruscans north of the Apennines, and is traditionally said to have been founded by Ocnus, brother of Aulestes, the founder of Perugia. When the Gauls invaded Lombardy, the Boii, one of their tribes, crossed the Po, and established themselves in Felsina and the neighbouring country. Afterwards the Boii became involved in wars with Rome, and they joined Hannibal in his invasion of Italy. After the end of that war the Boii, with the other Cisalpine Gauls, were conquered by the Consul Scipio Nasica, and Felsina became a Roman colony B.C. 189. The name seems then to have been changed into *Bononia*, for it appears from Livy that the name Felsina was retained as late as B.C. 196. The Via Emilia, a continuation of the Via Flaminia, was carried from Ariminum through Bononia. In the civil war between Antony and the senate, Bononia was attached to the party of the former, and it was here that the Consul Pansa, defeated by Antony in the first battle of Mutina, died of his wounds B.C. 43. In the autumn of the same year the famous meeting took place between Antony and Octavius, in a small island formed by the river Rhenus (Reuo) between Bononia and Mutina.

A fire consumed great part of Bononia under Claudius ('Tacit.' xii. 58), when 10,000,000 sesterii were granted from the public treasury for rebuilding the town. On this occasion young Nero pleaded before the senate in favour of Bononia. ('Sueton.' Nero, vii.) In the 3rd century the first Christian church was built in Bononia, and dedicated to St. Felix, which was afterwards destroyed in the persecution under Diocletian, when Proculius, Agricola, Vitalis, and other Christians of Bononia suffered martyrdom. Bononia escaped with comparatively little damage the invasions of the northern barbarians. Alaric besieged but did not take this city. It also seems to have escaped the ravages of Attila. In the time of the Longobards Bononia formed part of the exarchate of Ravenna under the Eastern empire, until Liutprand occupied it with the rest of that province. Bononia was one of the towns given by Pepin, after his defeat of the Longobards, to the see of St. Peter. Under the church, Bononia was administered by dukes, probably of Longobard race. In the confusion of Italian affairs after the extinction of the Carolingian dynasty, the towns of the exarchate no longer recognised the dominion of the church, whose temporal sway was not acknowledged even at Rome itself. The bishops, and the various dukes and marquesses divided among them the dominion of the country. Under the Otthos of Saxony, Bononia, as well as the other cities of North Italy, obtained privileges and franchises as imperial towns governed by their own municipal laws. Under Conrad the Salic we find counts of Bononia, who administered justice together with the Missi of the emperor.

The municipal independence of Bologna was acknowledged by the emperor Henry V. in 1112 by a charter. The commune had the right of coining money. The citizens assembled in general comitia, and appointed their consuls, judges, and other magistrates. The country districts were subject to the town, the territory of which was at first extremely limited, being surrounded on every side by a host of feudal nobles, and by the domains of the churches and monasteries, which were independent of the jurisdiction of the town. By degrees however several of the surrounding nobles applied for the citizenship, and being admitted came to reside in the town. Others lost their territory in wars against the city, so that Bologna came to rule over a great part of Emilia, the country now generally called Romagna, which extends from Bologna to Rimini.

In the war between Frederick I. and the Lombard League Bologna joined the latter. It likewise fought against Frederick II., on which occasion the Bolognese took prisoner Hentzius, the natural son of the emperor, whom they detained in captivity till the time of his death. The war of the Bolognese against the Modeneses, who were of the imperial party, has been immortalised by Tassoni in his burlesque poem, 'La Secchia Rapita,' or 'The Rape of the Bucket,'—a title suggested by an incident of the war: the Modeneses cavalry having made a sudden dash into Bologna and carried away from one of the fountains a bucket, which was deposited as a trophy in the tower of Modena. The factions of the Guelphs and Ghibelines proved the ruin of the independence of Bologna. The Lambertazzi, the head of the Ghibeline party, being worsted in the city by the Gheremeli, the chief family of the Guelphs, were, after much bloodshed, driven away in 1274 with 15,000 of their partisans and dependents, men, women, and

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Government, Finances, &c.—In 1825, when Buenos Ayres had renounced its claim on Upper Peru, and the representatives of the country determined to form an independent state, they adopted a constitution proposed by Bolivar, according to which the executive power was to be placed in the hands of a president chosen for life, and the legislative was to consist of three bodies, the senate, the tribunes, and the censors. At the same time Bolivar was chosen president. In the following year a successful revolution occurred, and Bolivar's constitution was superseded. Since then there have been numerous changes, sometimes merely of dictators, but at others in the forms of government. The years 1847, 1848, and 1849 were consumed in civil war; and the country has been ever since in a more or less unsettled state. The legislative power is however still at least nominally vested in three bodies, the executive being in the hands of an elective president. Of the finances of the country we have no very distinct account. The national debt is said to amount to about 1,084,943*l.* (5,424,716 piastres), including the sum required to discharge the arrears of interest unpaid since 1847, but we believe that it does not include the whole of the sums borrowed by the treasury. According to a statement published by the government the revenue in 1850 amounted to 395,213*l.* (1,976,217 piastres), while the expenditure was 347,748*l.* (1,738,744 piastres). The standing army is limited to 2000 men. The country is ecclesiastically divided into the bishoprics of Cochabamba and Santa Cruz de la Sierra, but there is no established church.

(Portland and Parish, in *Geogr. Jour.* vol. v.; Meyen's *Reise um die Erde*; Captains King and Fitzroy's *Sailing Directions for South America*, published by the Admiralty; Captain Basil Hall; Azara; Von Teubner, &c.)

BOLOGNA, the second city in the States of the Church, is situated in 44° 30' N. lat., 11° 21' E. long., 160 miles N. by W. from Rome, and 50 miles N. by E. from Florence, in a plain north of the Apennines, and between the rivers Reno and Savena, and has a population of about 75,000. A canal, called Naviglio, navigable for barges, connects Bologna with Ferrara, from whence, by means of the Po, the Adige, and the intermediate canals, the water communication extends to Venice. Bologna is a thriving city, with an industrious population; the higher classes, who consist chiefly of landed proprietors, are wealthy. Many noble families reside at Bologna, where they have fine palaces, some of which contain valuable galleries, and are decorated

with fresco-paintings by the great masters. The palace of the Podestà, in which Hentzius, son of the emperor Frederick II, and nominal king of Sardinia, spent in confinement twenty-two years of his life, and in which he died in 1272, contains the archives of the city. The Palazzo del Pubblico, a large structure, is the residence of the cardinal legate and the seat of the various courts of justice. In the square before it is a handsome fountain with the colossal statue of Neptune by Giovanni da Bologna.

Bologna abounds with churches, most of which are rich in paintings. The church of San Petronio, a magnificent though incomplete gothic structure, which was founded in 1390, has a meridian line traced on its pavement by the astronomer Cassini; the interior, which consists merely of nave and choir, is richly ornamented with sculpture; and the three canopied doorways of the unfinished façade are covered with marvellous clusters of beautiful bas-reliefs, representing the main subjects of the Old and New Testaments in stone. The central portal was completed by one man's hand—that of Jacopo della Quarcia. Charles V. was crowned in San Petronio by Pope Clement VII. The cathedral of San Petro is rich in works of art. The church of San Domenico contains several fine monuments, including those of San Domenico by Nicolo di Pisa; tombs of Heutzius, of Taddeo Pepoli, of Guido and his pupil Elisabetta Sirani, of Count Marsigli, and other illustrious individuals. The adjoining convent is the residence of the tribunal of the Inquisition. The church of San Stefano, one of the oldest and most interesting religious edifices in Italy, consists of no less than seven churches united. One of these, dedicated to St. Peter and St. Paul, dates from A.D. 330, and all of them are decorated with Greek frescoes, oil-paintings, and works of ancient Christian art.

Bologna is surrounded by walls about six miles in circuit, and has twelve gates; except in the older quarters of the city the streets are tolerably wide, and most of them have low arcades on each side to shelter pedestrians from the sun or rain. In the centre of the city, near the Foro de' Mercanti, or Chamber of Commerce (a fine gothic structure, built in 1294) are two lofty towers, the highest of which, called Asinelli from the name of its founder, is 256 feet high; the other, Garisenda (which is alluded to by Dante in the 31st canto of the 'Inferno'), is only about one-half of the height of its neighbour, but inclines on one side about nine feet. The Asinelli is also a little out of the perpendicular, though in a much slighter degree. Both towers date from the 12th century.

The University of Bologna is the oldest and still one of the first in Italy. Its origin is stated to have been under Theodosius II, and it is said to have been restored by Charlemagne. We find it enjoying great celebrity early in the 12th century. It has the following classes,—theology, medicine, law, philosophy and mathematics, and belles lettres. The faculty of medicine has the most and the best filled chairs. The university is established in a noble palace (in which the Institute of Bologna has its apartments, library, and collections), built in the Strada San Donato by Cardinal Poggi in the 16th century. The building was purchased by the Senate of Bologna in 1714. The great linguist, Cardinal Mezzofanti, commenced his career as librarian to the University of Bologna. Annexed to the university are a museum, a botanical garden, an anatomical cabinet, and a library containing 80,000 volumes (20,000 of which were presented by Pope Benedict XIV.) and 4000 manuscripts.

Besides the library of the university, the city of Bologna has a public library, the legacy of Father Magnani, which occupies three rooms of the convent of San Domenico, and contains 83,000 volumes. The academy of the fine arts has a splendid gallery of paintings, chiefly of the Bolognese school, which was founded by Franco Bolognese, a follower of Giotto, in 1313; arrived at great eminence under Francesco Francia in 1585; and reached the culminating point of its fame under the Caracci and their illustrious pupils Domenichino, Albane, and Guido towards the end of the 16th and the beginning of the 17th century. The Roman and other Italian schools are each represented in the gallery by a few master-pieces. The Instituto delle Scienze, founded by Count Marsigli, has an observatory. The Philharmonic Lyceum, in which 100 pupils are maintained at the expense of the town, possesses a valuable musical library of 17,000 volumes, collected by Father Martini, a Bolognese composer of the 18th century. The College Venturoli, founded in 1825, is devoted to students of architecture. There is also a college for Spanish students, founded by Cardinal Albornoz; and another for Flemish students, who are sent here by the goldsmiths' company of Brussels. It was founded by John Jacobs, a Flemish goldsmith, and a friend of Guido. The Scuole Pie, or public school for the children of the poorer classes, is a fine building by the Bolognese architect Terribilia. The university was held in this building before it was transferred to the palace of the Institute above mentioned. The children are taught gratuitously Latin, arithmetic, singing, and drawing.

Bologna is an archbishop's see, and the series of its bishops ascends to A.D. 270, when St. Zama was its first bishop. St. Petronius, who lived about A.D. 430, was the tenth bishop of Bologna. Among the distinguished natives of the city are no less than six popes and nearly one hundred cardinals. The city and the province of Bologna are administered by a cardinal legate appointed by the pope. The court of appeal for the four provinces of Bologna, Ferrara, Ravenna, and Forlì sits at Bologna, and consists of six judges.

There are several manufactures of silks, paper, and pottery. The large sausages (mortadelle) of Bologna have a long established reputation, as well as its liqueurs, jams, and syrups. The people of Bologna are frank and fond of gaiety; the lower classes are noisy, and their dialect is the most uncouth and rough sounding in all Italy. The women are generally good looking. There is a casino, or assembly-rooms for the nobility, besides reading-rooms and private conversazioni. There are several theatres, at which some of the best performers of Italy are generally engaged.

Outside of the walls, the Campo Santo or cemetery contains many handsome monuments. On the hill called Della Guardia, about three miles from Bologna, is the handsome church of La Madonna di San Luca, which is joined to the town by a long arcade consisting of 635 arches. The once splendid monastery of San Michele in Bosco was sadly injured during the French wars, and its frescoes by the Caracci and others were nearly effaced by the hands of the soldiers.

Bologna occupies the site of the ancient *Felsina*, which was the principal city of the Etruscans north of the Apennines, and is traditionally said to have been founded by Ocnus, brother of Aulestes, the founder of Perugia. When the Gauls invaded Lombardy, the Boii, one of their tribes, crossed the Po, and established themselves in Felsina and the neighbouring country. Afterwards the Boii became involved in wars with Rome, and they joined Hauuibal in his invasion of Italy. After the end of that war the Boii, with the other Cisalpine Gauls, were conquered by the Consul Scipio Nasica, and Felsina became a Roman colony B.C. 189. The name seems then to have been changed into *Bononia*, for it appears from Livy that the name Felsina was retained as late as B.C. 196. The Via Emilia, a continuation of the Via Flaminia, was carried from Ariminum through Bononia. In the civil war between Antony and the senate, Bononia was attached to the party of the former, and it was here that the Consul Pansa, defeated by Antony in the first battle of Mutina, died of his wounds B.C. 43. In the autumn of the same year the famous meeting took place between Antony and Octavius, in a small island formed by the river Rheus (Reno) between Bononia and Mutina.

A fire consumed great part of Bononia under Claudius ('Tacit.' xii. 58), when 10,000,000 sesterii were granted from the public treasury for rebuilding the town. On this occasion young Nero pleaded before the senate in favour of Bononia. ('Sucton.' Nero, vii.) In the 3rd century the first Christian church was built in Bononia, and dedicated to St. Felix, which was afterwards destroyed in the persecution under Diocletian, when Proculus, Agricola, Vitalis, and other Christians of Bononia suffered martyrdom. Bononia escaped with comparatively little damage the invasions of the northern barbarians. Alaric besieged but did not take this city. It also seems to have escaped the ravages of Attila. In the time of the Longobards Bononia formed part of the exarchate of Ravenna under the Eastern empire, until Liutprand occupied it with the rest of that province. Bononia was one of the towns given by Pepin, after his defeat of the Longobards, to the see of St. Peter. Under the church, Bononia was administered by dukes, probably of Longobard race. In the confusion of Italian affairs after the extinction of the Carolingian dynasty, the towns of the exarchate no longer recognised the dominion of the church, whose temporal sway was not acknowledged even at Rome itself. The bishops, and the various dukes and marquesses divided among them the dominion of the country. Under the Othos of Saxony, Bononia, as well as the other cities of North Italy, obtained privileges and franchises as imperial towns governed by their own municipal laws. Under Conrad the Salic we find counts of Bononia, who administered justice together with the Missi of the emperor.

The municipal independence of Bologna was acknowledged by the emperor Henry V. in 1112 by a charter. The commune had the right of coining money. The citizens assembled in general comitia, and appointed their consuls, judges, and other magistrates. The country districts were subject to the town, the territory of which was at first extremely limited, being surrounded on every side by a host of feudal nobles, and by the domains of the churches and monasteries, which were independent of the jurisdiction of the town. By degrees however several of the surrounding nobles applied for the citizenship, and being admitted came to reside in the town. Others lost their territory in wars against the city, so that Bologna came to rule over a great part of Emilia, the country now generally called Romagna, which extends from Bologna to Rimini.

In the war between Frederick I. and the Lombard League Bologna joined the latter. It likewise fought against Frederick II., on which occasion the Bolognese took prisoner Hentzius, the natural son of the emperor, whom they detained in captivity till the time of his death. The war of the Bolognese against the Modeneses, who were of the imperial party, has been immortalised by Tassoni in his burlesque poem, 'La Secchia Rapita,' or 'The Rape of the Bucket,'—a title suggested by an incident of the war: the Modeneses cavalry having made a sudden dash into Bologna and carried away from one of the fountains a bucket, which was deposited as a trophy in the tower of Modena. The factions of the Guelphs and Ghibelines proved the ruin of the independence of Bologna. The Lambertazzi, the head of the Ghibeline party, being worsted in the city by the Gheremi, the chief family of the Guelphs, were, after much bloodshed, driven away in 1274 with 15,000 of their partisans and dependents, men, women, and

children. They however rallied in the towns of Romagna, where they were joined by Guido de Montefeltro, lord of Urbino, and made themselves to the very gates of Bologna. The Geronzi applied to the pope for assistance, offering to acknowledge him as legitimate lord of Bologna. Pope Nicholas III. accordingly sent a legate to Romagna to restore peace to that province, and through his mediation the Geronzi exiles were recalled. The pope was now acknowledged protector and sovereign of Bologna. In 1334 the pope's legate was driven out of the city on account of his tyranny, and soon after Taddeo de' Pepoli, a wealthy citizen, was proclaimed lord. He used his authority with temperance and justice and for the good of the commonwealth for twelve years, but after his death his two sons, not able to maintain their power, sold the town to the Visconti of Milan. The yoke of the visconti was hard and cruel, and after a long continued anarchy and much bloodshed Giovanni Bentivoglio was made first magistrate of Bologna in 1462, and he retained the chief authority over the state under the nominal high dominion of the papal see until 1506, when the army of Julius II. took the city and established the direct dominion of the church. In 1511 the sons of the late Giovanni Bentivoglio, supported by the French, regained possession of Bologna, where they remained until the following year, when, after the battle of Ravenna and the retreat of the French armies, the town surrendered again to Pope Julius, who built a castle to keep the town in awe. From that time till the end of the 18th century Bologna remained subject to the papal see, retaining however its senate, the members of which were appointed for life by the pope, and appointed in their turn all subordinate civil officers, and administered the finances of the commune.

In June 1796 Bonaparte entered Bologna, and drove away the papal authorities. In February 1797 Bologna became the chief town of the Cisalpine republic. On the establishment of the kingdom of Italy in 1801 Bologna became the capital of the department Del Reno. In 1814 it was occupied by the Austrians. In 1815 General Stefanini, in the name of Austria, restored Bologna and the other legations to the papal authorities. In 1831 an insurrection broke out at Bologna against the papal government, which was put down by an Austrian auxiliary force. Since the revolutionary movements of 1848 an Austrian Corps d'Armée has occupied the marches and legations, with Bologna for headquarters.

There are but few remains of antiquity at Bologna; some fragments of sculpture and a few inscriptions are preserved in the museum of the university.

(Malvasia, *Marmora Feltrina*; Montalbani, *Antichità di Bologna*; *Storia Anon.*; Leonardo Alberti, *Storia di Bologna*; *Dictionary of Greek and Roman Geography*; Murray's *Handbook for Central Italy*.)

BOLIGNA, LEGAZIONE DI, a province of the Papal State, is bounded E. by the province of Ravenna, N. by that of Ferrara, W. by the duchy of Modena, and S. by the central ridge of the Apennines, which divides it from Tuscany. Its length from south-west to north-east, from the mouth of the Reno above La Porretta (famous for its sulphureous baths) to the mountains of Ferrara beyond Malalbergo, is about 50 miles, and its greatest breadth from the Panaro, which divides it from Modena, to the Silara, which separates it from Imola in the province of Ravenna, is about 30 miles. The area of the province is 1292 square miles, and the population in 1843 was, including that of the city, 348,952. It is watered in its length by the Reno, which enters the Po near Ferrara, and by numerous torrents descending from the Apennines. The north-east part of the province near the Po is very marshy and subject to inundations, and the southern part is mountainous, but the middle part or plain of Bologna is very productive, and in a high state of cultivation. In the wet lands near the Po rice is grown. The lower hills also, and valleys at the foot of the Apennine chain, are well cultivated. Corn, wine, oil, fruit, all sorts of vegetables, hemp, flax, cotton, and silk are the principal products of the country. Timber is scarce. Pigs, bees, and silkworms are reared in great numbers; horses, mules, and oxen are not very numerous. The mineral products are marble, gypsum, and chalk.

The territory is divided into 240 communes or parishes, and has a number of large towns and market towns: the principal are Sant'Agapito, 1000; Barco, 5000; Borgo Panigale, 3400; Budrio, 1000; Castellazzo, 1000; Castel Guelfo, 2400; Castelnuovo, 3100; Castel S. Pietro, 1000; Crispellano, 3400; Crevalcore, 4800; S. Giorgio S. Piano, 1000; S. Giovanni Persiceto, 6700; Malalbergo, 4700; Medicina, 9000; Malibolla, 7000; Minerbio, 6000; S. Pietro in Casale, 4800; Porretta, 2200. Each of these numbers includes the whole population of the respective territory or commune. All the above towns are styled 'terro'; they are all parishes and market places, and many of them are surrounded by walls. They have each a municipal council composed of 24 or 18 members, taken equally among the nobles or chief proprietors, and the other half among the peasants or farmers. Seats in the municipal councils are hereditary, subject however to the qualification of holding immovables in the commune, within the commune, being past 24 years of age, and having a good moral character. Vacancies in the councils are filled by the proprietors themselves by majority of votes. The councils appoint the magistrates, and vote every year the municipal expenses, as well as the communal taxes and other means to provide for the same. This budget must be approved of by the legate, after which

it is printed and published. The council administers the communal property subject likewise to the inspection and approbation of the legate. This municipal system exists in all the Papal State.

The peasants of the province of Bologna are seldom proprietors, few even have leases, but they hold their farms from father to son by a tacit agreement, giving one-half of the produce to the landlord and paying half the taxes. They are sober, peaceful, and industrious. This metayer system prevails over most of the northern papal provinces, and also in Tuscany.

BOLOR or **BELUR-TAGH**, a name found on many modern maps, and applied to the extensive mountain range which separates the high table-land of Eastern Asia on the west from the deep depression which surrounds the Sea of Aral on all sides, and the Caspian on three sides. This name, we believe, is first found on some Russian maps made in the beginning of the last century, and rests on the authority of Marco Polo, the Venetian traveller, who says that after leaving Badakhshan, or Balascia, and traversing a country called Vocani (now Wakhan; see *BADAKHSHAN*), he arrived at the highest mountains in the world, and, having passed them, to the table-land of Pamir. Travelling from it in a north-eastern direction for forty days over a mountain region of great extent and elevation, he adds that this country was called Belor. Afterwards he arrived at Kashghar. The mountain range thus designated by the Venetian traveller lies between 40° and 35° N. lat. on both sides of the meridian 72° E. of Greenwich. It is described in this work under **TARTASH-TAGH**, the name by which it is now known among the natives. The Chinese map gives it the name of Tartash-i-liug.

BOLIGNA, a small and decayed-looking town in the province of Viterbo, is situated on the slope of a hill at a little distance from the north shore of the Lake of Bolsena, 56 miles N.N.W. from Rome, and has about 1800 inhabitants. Bolsena is near the site of the ancient Volsinii, one of the principal cities of the Etruscans, which maintained its independence after the rest of Etruria had been conquered. But the citizens of Volsinii having become addicted to indolence and pleasure emancipated their slaves, and entrusted them with arms for the defence of the town, and even admitted them into the senate. By degrees the liberti, or freedmen, becoming possessed of all the power in the state, tyrannised over their former masters, held their persons and property at their mercy, and violated the honour of their wives and daughters. The citizens secretly sent deputies to Rome imploring assistance. A Roman army under the Consul Fabius Gurgus marched against Volsinii and defeated the revolted liberti, but the consul was killed in the engagement. A new consul, M. Fulvius Flaccus, was sent from Rome, who after a siege took Volsinii, a.c. 266. Most of the revolted liberti were put to death, but at the same time Fulvius Flaccus razed the city which had so long withstood the power of Rome. He carried away the spoils, among which it was said there were 2600 statues. (Livy, v.) The inhabitants built themselves a new town in the neighbourhood. This new Volsinii is little noticed in subsequent history. Sejanus, the favourite of Tiberius, was a native of it. The Via Cassia passed through Volsinii. Among the few remains of antiquity at or near Bolsena are some ruins of a temple said to have been dedicated to the Etruscan goddess Nursia. Two ancient urns are in the vestry of the church of Santa Cristina, and in the square before the church is another urn with curious bassi-rilievi representing satyrs and bacchantes, and near it is likewise a large and elegant vase of oriental granite. In the neighbourhood are numerous sepulchres and tumuli, the remains of an amphitheatre; and large numbers of Etruscan vases, statues, and other relics have been found here in recent years. It is in the church of Santa Cristina that the miracle of the Bleeding Host is reported to have occurred in 1263, which furnished Raphael with the subject of one of his finest paintings in the Vatican.

BOLIGNA, THE LAKE OF, in the States of the Church, is situated in the delegation of Viterbo about the point 42° 35' N. lat., 11° 35' E. long. In shape it is nearly oval, and its circuit is about 27 miles. It is almost wholly surrounded by hills, which are covered with trees, vines, and gardens. To the south-east the town of Montefiascone rises on a conical hill a short distance from the lake, and from the summit there is a splendid view of the surrounding country. To the eastward, behind the town of Bolsena, is the calcareous ridge of Bagnorea and Orvieto, which divides the basin of the lake from the valley of the Tiber. South-west of the lake the country opens into the unwholesome plains which extend towards the sea. At this end the river Marta (Lartes) issues out of the lake, and after a course of about forty miles enters the sea near Corneto. The lake is subject to overflowings; it is in many places shallow near its borders, where it is covered with reeds and frequented by multitudes of water-fowl. The air around the lake is unhealthy in summer; its treacherous beauty conceals malaria in such fatal forms that a sail is never seen on its waters, and although the ground is cultivated to the very margin of the lake no labourer can with impunity sleep a single night on the field where he has worked by day. The lake of Bolsena abounds with fish; its large eels were celebrated in the time of Dante. ('Purgatorio,' xlv. 22.) Two small islands rise out of it, Isola Bassantina and Isola Martana. The hills that surround the lake of Bolsena are basaltic; but the rock in most places has a covering of rich mould, though in others it is bare and shows hexagonal prisms

ranged in all lines of direction. Judging from the form of the lake and the geological formation of the rocks immediately encircling it, many have regarded the Lake of Bolsena as occupying the crater of an extinct volcano. The country produces very good wine, both red and white, especially of the Museat kind.

BOLSOVER, Derbyshire, a village, formerly a market-town, in the parish of Bolsover and hundred of Scarsdale, is situated in 53° 13' N. lat., 1° 16' W. long., 24 miles N.N.E. from Derby, 146 miles N. by W. from London: the population of the parish in 1851 was 1611. The living is a vicarage in the archdeaconry of Derby and diocese of Lichfield.

At the time of the Domesday Survey, Bolsover was the property of William Peveril, who is supposed to have built the castle, the interior architecture of which is of the Norman period. The castle was in the possession of the barons in 1215, but was taken from them by assault for the king (John) by William de Ferrers, earl of Derby. The Earl of Riebmond (father of Henry VII.) died possessed of it in 1456, together with the castle of Hareston, both of which were granted in 1514 to Thomas Howard, duke of Norfolk, on the attainder of whose son it again reverted to the crown. Edward VI. granted it to Talbot, earl of Shrewsbury, in whose family the manor of Bolsover continued until the time of James I., when Earl Gilbert sold it to Sir Charles Cavendish. The old castle was in ruins long before. It was rebuilt by Sir Charles Cavendish, who appears to have exactly rebuilt the ancient Norman fortress, of which the lower walls are distinctly visible. It is even probable that the beautiful arches in the kitchen, servants' hall, and larder are those of the original structure.

As Bolsover Castle is an exceedingly interesting edifice, we shall notice it somewhat fully. The present castle may be described as an Elizabethan imitation of a Norman fortress, erected on the Norman foundations, and retaining the Norman character. The ancient fortifications surrounding the castle courts and yard have been rebuilt, and the whole is a remarkable specimen of an ancient fortress reproduced soon after 1600. It is a square, lofty, and embattled structure of brown stone, with a tower at each angle, of which that at the north-east angle is much higher and larger than the others. The castle stands on the brow of a steep and wooded hill, commanding one of the finest inland views in England. A noble terrace leads up to the great gates, through which the entrance is by a stone court. The great hall and pillar room are beautifully arched and supported by Norman pillars, and have been furnished with ornamental carving of the 16th and 17th centuries. Above these is a room called the Star Room, which has been fitted up by Mrs. Hamilton Gray as a library, and contains one of the finest private collections of Etruscan antiquities in England, with many beautiful specimens of old Italian carving. The remainder of the castle has been fitted with all the conveniences of a modern residence.

The first Duke of Newcastle built the riding-house and the magnificent range of buildings along the great terrace, now in ruins, but well preserved as a picturesque object. Here King Charles I. was several times entertained by the Duke, then Marquis of Newcastle. On one of these occasions the reception of that monarch and his queen cost the noble owner 14,000*l.* All the nobility of the midland counties were assembled on the terrace, and Ben Jonson composed the masque of 'Love's Welcome' for the festival. Previous to the banquet already mentioned the marquis had entertained the king at Bolsover in 1633, when he went to Scotland to be crowned. The dinner on this occasion cost 4000*l.* In the remains of this grand range of buildings there are a gallery 200 feet long, a dining-room 78 feet long, and two drawing-rooms 39 feet and 33 feet long.

In the early part of the civil war the castle was garrisoned for the king, but was taken in 1644 by Major-General Crawford, who is said to have found it well manned and fortified with great guns and strong works. During the sequestration of the Marquis of Newcastle's estates Bolsover Castle suffered much both in its buildings and furniture, and was to have been demolished for the sake of its materials, but was purchased for the earl by his brother, Sir Charles Cavendish. The noble owner repaired the buildings after the Restoration, and occasionally made the place his residence. It now belongs to the Duke of Portland, whose family derived it in the female line from the Newcastle Cavendishes. The mansion has long ceased to be even occasionally occupied by its owners, and is now inhabited by the Rev. John Hamilton Gray.

The village of Bolsover is pleasantly situated, together with the castle, upon a point projecting into a valley which surrounds it on every side except the north-east, where the separation has been made by a deep cut. In ancient times the whole village was fortified, having been surrounded on the level side by a deep trench and mound which still exist; while the steep banks under the village are crowned with four watch towers, and were probably once defended by walls. The village inhabitants are chiefly employed in agriculture. The parish church is of mixed architecture. The tower and the principal parts of the church are early English; the chancel pillars and piers are Norman. In a side chapel are two splendid monuments of the Cavendish family. In the village is a National school, with a commodious house for the master. There is also a fund for distribution among the poor, arising from the interest on a bequest of nearly 3000*l.* bank annuities.

BOLTON-LE-MOORS, Lancashire, a manufacturing town, parliamentary and municipal borough, and the seat of a Poor-Law Union, in the parish of Bolton and hundred of Salford, is situated on the banks of the river Croal, in 53° 35' N. lat., 2° 37' W. long.; 11 miles N.W. from Manchester, 197 miles N.W. by N. from Loudou by road, and 198 miles by the North-Western railway via Trent Valley: the population of the municipal and parliamentary borough which are co-extensive was 61,171 in 1851. Bolton is governed by 12 aldermen and 36 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Manchester. Bolton Poor-Law Union contains 26 parishes and townships, with an area of 43,829 acres, and a population in 1851 of 114,712.

The name of Bolton is involved in obscurity, though its affix of le Moors evidently points to a Norman origin. The manor was successively owned by the families of Mersbeya, Blunderville, Ferrers, and Pilkington. In the reign of Henry VII., the Earl of Derby became possessed of nearly all the land in the town of Bolton, which he held until part of it was confiscated during the Commonwealth. After several changes the manorial rights have become divided among several families, of whom the Earls of Derby and Bradford are the chief.

During the long strife between the Royalists and the Parliamentarians Bolton was garrisoned by the latter, and remained in their possession till 1644. Prince Rupert and the Earl of Derby attempted to take the town by storm, and after a first repulse, the Earl of Derby having collected his tenantry and levied new troops returned to the attack, and succeeded in dislodging the parliamentary forces, and obtaining possession of the town. It was soon after again surrendered to the Parliament; and after the battle of Worcester, the Earl of Derby being taken prisoner was condemned by a military tribunal at Chester, and sent under an escort to Bolton, where he was beheaded October 15th, 1651.

Bolton was formerly famous for its manufactures. Lelaud speaks of it as having a market for cottons and coarse yarns. The making of woollens appears to have been introduced by some Flemish clothiers who came over in the 14th century. Other branches of trade were introduced by the French refugee manufacturers, who were attracted by the prosperity of the neighbourhood; and the manufacture of cotton-cloth was improved, and in many of its kinds originated, by some emigrant weavers who came from the palatinate of the Rhine. The improvements in the machinery for spinning cotton gave an impetus to the trade, which has been gradually increasing ever since. Almost the first invention of importance was a machine which combined the principles of the spinning-jenny and the water-frame, and was called a 'mule,' by its inventor, Samuel Crompton, who lived at 'Hill in the Wood,' near Bolton, and who had to struggle for an existence, while his invention was enriching others. In the meantime Sir Richard Arkwright, another native of Bolton, who had risen from a very obscure condition, had established large factories in Derbyshire, where he carried the cotton machinery to the greatest perfection. The opposition made by the labouring classes in Bolton to the improvements in machinery has, at various times, driven the most lucrative branches of employment from that town to other places. The introduction of the mule and of the power-loom was not accomplished until they had enriched other communities for some time. After a while cotton-factories, filled with machinery upon the best principle, began to rise up in various parts of the town. Foundries and machine manufactories followed them, and a great extension was immediately given to the trading interests of the place.

The two portions of which the borough of Bolton consists are separated by a small river called the Croal or Crole, which rises at Red Moss in the hamlet of Lostock, and runs due west into the Irwell, dividing in its course Great and Little Bolton; the south side of it being the township of Great Bolton, and the north side the chapelry of Little Bolton. Though an ancient town, the streets of Bolton are wide and straight, and the houses are generally well built. The roads leading to and from the town in every direction are kept in good condition, and the principal entrances are good. The revenues derived from the rents of the inclosed portions of Bolton Moor property are now made available for the general improvement of the town.

Difficulties as to jurisdiction have occasionally occurred between the governing authorities of Great and Little Bolton. An Act of Parliament passed in 1850 defines the rights and liabilities of each body, and provides for the execution of several necessary improvements in the town. The town is lighted with gas.

The charter of municipal incorporation was obtained in 1838. The superintendent of police prepares annually a valuable statistical table relating to the social and mercantile progress of the town. The municipal revenue of the borough in 1849 amounted to about 6500*l.*

Among the places of worship in Bolton, the chief is the large parish church dedicated to St. Peter, which is of ancient date; it has a low tower, but has few pretensions to architectural beauty. The largest church in Little Bolton is St. George's, a brick building with a tower and a peal of bells. There are six other churches and chapels of the Establishment. Emmanuel church, built in 1838 at a cost of 2200*l.*, originated in a desire on the part of the parishioners

to present a service of plate to the vicar, who requested that the fund might rather be applied to the building of a church in the most desirable part of the town. There are numerous chapels for Independents, Wesleyan and Primitive Methodists, Baptists, Quakers, English Presbyterians, Roman Catholics, and Unitarians. The terra cotta church at Haugh, in Bolton parish, built in 1844, is an elaborate example of the decorated style, with a spire consisting of open-work tracery. The walls, spire, and ornamental details are all executed in terra cotta, formed of common fire-clay, and shaped in moulds expressly modelled for the purpose.

Bolton Free Grammar school, contiguous to the parish churchyard, founded in 1641 by Robert Lever, citizen and clothier of London, and united in 1651 with an old school, of unrecorded foundation, has an income from endowment of 4144 a year, besides two exhibitions of 60*l.* a year, and one of 5*l.* a year, each tenable for four years. The number of scholars in 1852 was 60. Among the masters who have presided over this school are Robert Ainsworth, the compiler of the Latin dictionary, and Dr. Lemprière, the author of the classical dictionary. The other public schools at Bolton are Hulton's Charity school, and Marsden and Popplewell's Charity school, both founded and endowed in the 18th century. There are several National, British, Infant, and Roman Catholic schools.

The public buildings include the town-hall, the exchange, market-house, baths, a temperance-hall, erected in 1839, assembly-rooms, theatre, barracks, &c. The cloth-hall is situated in Market Street. There are a mechanics institution, the Reform news-room, and a reading-room connected with the Sunday School Society.

Considerable sums are distributed to the poor from various bequests connected with the town, including Hulton's Charity, Parker's Charity, Gosnell's Charity, Crompton's Charity, Astley's Charity, Cooker's Charity, Appendell's Charity, Mort's Charity, Lomax's Charity, Greenhalgh's Charity, and Popplewell's Charity. There are a dispensary established in 1814; a clothing fund; a range of almshouses founded in 1840, and other benevolent institutions.

The cotton-mills of Bolton are numerous; and some of them are among the largest in the county, employing more than 100,000 spindles each. Main and fancy muslins, quiltings, counterpanes, and dimities are the chief kinds of cloth, but cambrics, ginghams, &c. are also woven. Formerly fustians, jeans, thickets, and similar fabrics were the principal articles made in the town, but these descriptions of cloth are now chiefly produced in the power-loom, as well as calicoes and dimities. The bleach and dye-works in the town and neighbourhood are among the largest in the kingdom; there are likewise a few print-works.

Attempts occasionally made to introduce the silk manufacture into Bolton have only been partially successful. The manufacture of steam-engines and machines is carried on to a large extent. The town is abundantly supplied with coal.

Bolton is well situated for intercommunication with other towns. There is a canal of 12 miles from Bolton to Manchester; and another of 6 miles from Bolton to Bury. There are railways which branch out from Bolton in six directions, to Liverpool, Leigh, Manchester, Bury, Blackburn, and Preston respectively.

BOMBAY, PRESIDENCY OF. Bombay is the seat of one of the three presidencies into which the British empire in India is divided. It is subordinate to the Governor-General of India, whose residence is at Calcutta. The territory under the immediate jurisdiction of the governor and council of Bombay is situated between 14° and 29° N. lat., 69° and 77° E. long.; and comprehends the following districts.

Bombay Island, with Ahmedabad, Kaira, Surat, and Baroch, north of the Island of Bombay; Darwar, Candeah, Northern Concan, Southern Concan, Poona, and Ahmednuggur, south of the Island of Bombay, with the recently acquired large and valuable province of Sind.

The population of this presidency, including Sind, is probably about ten millions and a half, but there are few materials for a correct estimate. Within the limits of the political supremacy but not under the direct rule of the East India Company, there are under the Bombay presidency about 60 native states, possessing an area of 57,375 square miles, with a population of 4,393,400. The aggregate annual revenue of these states is about 1,867,082*l.*; and the aggregate annual subsidy, tribute, or other payment made by them to the Company's government is about 184,299*l.* Their military resources include 12,623 cavalry, 77,972 infantry, and 349 artillery.

Among the population, which is composed of different races of people speaking different languages, and who up to a recent date have lived under different systems of religion, laws, and government, the greatest variety must necessarily exist. The number of resident Europeans in this presidency is smaller, as compared with its area and native population, than the number of Europeans in Bengal and Madras.

Government.—The Civil Establishment consists of a governor, first and second ordinary members of council, with provisional members to fill vacancies, a chief secretary with two under secretaries, secretaries for the departments classified as—judicial and general, revenue and finance, military and naval, with subordinate officers, and various officers of state. The Law Department is presided over

by a chief judge, and one puisne judge; the other officers and the divisions of the courts are similar to what has been described under BENGAL. The police is under a chief magistrate and a superintendent. The Ecclesiastical Establishment, for which there is a grant of 20,050*l.* annually, consists of a bishop, an archdeacon, a registrar, 7 chaplains, and 19 assistant chaplains. There are two chaplains of the Church of Scotland in Bombay, who are paid by the government; and allowances are made to Roman Catholic priests within the presidency. The East India Company in this way arranges for affording opportunities of religious instruction and worship to the soldiers and civilians in its employment. There are two ministers of the Free Church of Scotland in Bombay, and there are ministers of various Dissenting bodies in the town and throughout the presidency.

Education.—Government appropriates for educational purposes in the presidency about 12,500*l.* a year. There is a Sanscrit college with a limited number of students, which has 2000*l.* in addition. The chief obstacles in the way of establishing new schools are the small sums devoted annually by the government for educational purposes, and the difficulty of obtaining qualified teachers. The Bombay Board of Education has adopted a system somewhat different from that followed in the other presidencies. It has provided normal schools for the training of teachers, and requires that teachers should give instruction through the vernacular language. It looks for local assistance from the natives, and requires small fees from the pupils; but it assists in the building of school-rooms, furnishing books, &c. not only for the schools but for village libraries. The 'Elphinstone Native Educational Institution' is the principal establishment in Bombay, where about 600 scholars attend, about one-half of whom pay a fee. There are a few provincial English schools, and a considerable number of Government District Vernacular schools. There are also several village schools. There are two schools, founded in 1815 by Archdeacon Barnes, for educating the children of the European poor, in which 327 children are boarded and educated; they are mostly the orphans of soldiers. There is also the Grant Medical College, and a medical college founded by Sir Jemsetjee Jeejeeb, a Parsee, in connection with the hospital. The Scotch Church has a school in Bombay, and an Orphan Asylum for females. The Scottish Free Church has several schools. Both bodies avail themselves largely of the assistance of natives as teachers. Other religious bodies also contribute by their efforts to the spread of education. The managers of Charity schools are now empowered to apprentice the children under their charge, and magistrates of police have authority to bind those that fall into their hands, to learn trades and professions. Schools of industry have long been established at Bombay, for the reception of the destitute, and for the instruction in the improved practice of arts and handicrafts of all who care to resort to them.

A literary society has been established for many years in Bombay, and several quarto volumes of its transactions have been published. In 1819 the society became a branch of the Royal Asiatic Society of London. A geographical society has also been established at Bombay.

The military charges for Bombay presidency amounted in 1851-52 to 1,033,828*l.* The total receipts of the presidency for the year 1851-52 amounted to about 2,733,962*l.*; the disbursements to about 3,209,533*l.* The public debt of the presidency on April 30th, 1851, was about 1,346,658*l.*

During the year 1845-46 the amount expended on the construction and repair of roads, tanks, and buildings was about 20,000*l.*; during 1846-47 it was about 31,500*l.* Since that time, in addition to the ordinary outlay for such purposes, a special grant has been made for the construction of a mole and road at Kurrachee, in Sind. The total amount expended during fifteen years (1837-38—1851-52) on public works, comprising roads, bridges, embankments, canals, tanks, and wells, was about 579,174*l.*

In the Bombay presidency the revenue settlement is chiefly *ryotwar*. A new survey is now being made, and under it the lands are subdivided into fields of moderate size, so that each subdivision may be without difficulty cultivated by a farmer of limited means. The government assessment is laid separately upon each field, and leases are granted for 30 years, at a fixed sum, binding on the government for the full term: the cultivator having on his part the option of surrendering any one or more of his fields, or altogether putting an end to his lease at the close of any given year.

The imports into the Bombay presidency for five years (1845-46—1849-50) were as follows:—1845-46, 4,337,004*l.*; 1846-47, 4,157,912*l.*; 1847-48, 4,043,604*l.*; 1848-49, 5,713,413*l.*; 1849-50, 6,171,219*l.* For the corresponding years the exports stood thus:—6,204,955*l.*; 4,965,193*l.*; 4,379,943*l.*; 6,862,191*l.*; 6,435,777*l.* These amounts are exclusive of the port-to-port trade in India. The salt manufacture, which in India is so important, is carried on in the Bombay presidency by individuals, but subject to an excise duty of 12 annas, or 1*s.* 6*d.* per maund of 62 lbs., a similar duty being imposed on imported salt. The salt made in the Bombay presidency is procured by solar evaporation. The whole quantity sold wholesale and retail, or imported, in 1846-47 in the presidency amounted to 2,573,925 maunds of 82 lbs., or nearly 95,000 tons. The revenue derived from salt, including government sales, excise on private manufacture, and customs duty,

in Bombay presidency during five years (1845-46—1849-50), stood thus:—210,110*l.*; 177,756*l.*; 234,500*l.*; 210,685*l.*; 215,759*l.* Hitherto the chief cotton-field of British India has been in Guzerat, in the Bombay presidency. Of 165,665,220 lbs. of cotton exported from the three presidencies of India in 1849-50, the amount furnished by Bombay was 150,754,063 lbs. Of this quantity 105,637,028 lbs. were exported to Great Britain. Opium grown and manufactured within the territories of Bombay is subjected to a heavy duty, with a view to discourage its production. The cultivation of the poppy is stated to have ceased in the district of Ahmedabad in 1839, and nearly so in those of Kaira and Candesh. The production of opium has been prohibited in Sindh. The government purchase all that is produced in Bombay, and supply through the licensed retailers the quantity required for home consumption. The receipts from the opium revenue for five years (1845-46—1849-50) were as follows:—595,624*l.*; 606,863*l.*; 371,855*l.*; 887,506*l.*; 729,483*l.*

BOMBAY (the Island of) is situated on the western coast of Hindustan, off the shore of the Concan in the province of Bejapore. The 19th parallel of N. latitude passes nearly through the centre of the island. It lies to the south of the island of Salsette, a dependency of Bombay. The two islands are connected by a causeway, constructed in 1805 by Mr. Duncan, then governor of the presidency.

Bombay Island is little more than 8 miles long from north to south, and about 3 miles broad in its widest part. It is formed by two ranges of whinstone rock of unequal length, running parallel to each other on opposite sides of the island, at a distance of between two and three miles. The eastern range is about 7 miles long, and the western about 5 miles long; they are united at the north and south by belts of sandstone which are only a few feet above the level of the sea. The interior of the island was formerly liable to be flooded so as to give the whole the appearance of a group of small islands. This flooding is now prevented by the construction of several substantial works which keep out the spring-tides; but as the lower parts of the island are ten or twelve feet under high-water mark, much of the interior is, during the rainy season, reduced to a swamp. The site of the new town of Bombay is subject to this disadvantage, so that during the continuance of the wet monsoon the houses are separated from each other by water sometimes for seven or eight months of the year: this spot was recovered from the sea in the latter part of the last century.

The natural difficulties of the island must have prevented any settlement upon it by Europeans but for the advantages of its position for commerce, and its harbour, which is unequalled for safety throughout the British empire in India. This excellent harbour, on account of which the island received its name (Bom Bahia) from the Portuguese, is bounded N. and W. by the islands of Salsette, Bombay, and Colabba, or Old Woman's Island. Colabba is a small island or narrow promontory, naturally connected by a mass of rock, rising near the surface of the water, with the south-eastern extremity of Bombay, and now united to it by a causeway which is covered by the water at spring-tides. The cantonments for the European troops are situated on Colabba. East of the harbour, about four miles from Bombay, is Butcher's Island, and behind this the island of Elephanta, celebrated for its caves and temples, only five miles from the Mahratta shore. Three miles south of Butcher's Island, and five miles east from Bombay, is Caranja Island, on the west side of which is an extensive shoal. The entrance to the harbour thus formed is between Colabba and Caranja islands, or rather between the shoal just mentioned and a reef of rocks surrounding on all sides the point of Colabba, and extending about three miles to the southward. The channel between these is about 3 miles wide, and 7 to 8 fathoms deep. A sunken rock and a bank occur in the passage. There is a lighthouse built on the southern extremity of Colabba Island, 150 feet above the level of the sea, which may be seen seven leagues off the coast.

There is no other important harbour in British India where the rise and fall of the tides are sufficient to admit of the formation of wet-docks. The rise at ordinary spring-tides is 14 feet; occasionally it is three feet higher.

Arrian, in the 'Periplus of the Erythrean Sea,' says that this island was then called Kalliana, and that it was little frequented. It had previously been an established commercial port, but Sandanes, one of the sovereigns of Barigaza, prohibited any of the Egyptian trading-vessels from entering the harbour; and if any were compelled to do so by accident or stress of weather, a guard was immediately put on board, and they were taken to Barigaza.

Bombay was ceded by the Moguls to the Portuguese in 1530, and came into the possession of the English on the marriage of Charles II. with the Infanta Catharine of Portugal. By the marriage-contract the king was to receive 500,000*l.* in money, the town of Tangier in Africa, and the Island of Bombay with its dependencies, together with permission for his subjects to carry on a free trade with all the Portuguese settlements in India and Brazil. A fleet of five ships of war, commanded by the Earl of Marlborough, with 500 soldiers on board, was sent to receive possession of Bombay, where they arrived on September 18th, 1662. From some misunderstanding the Portuguese governor refused to complete the cession, and the fleet returned to England. This matter was not arranged between the two governments until 1664, when possession was taken in the name of the king

of England by Mr. Cooke, and Bombay has since that time remained in the possession of the English. The island was transferred to the East India Company in 1668: the deed of transference states that the island is "to be held of the king in free and common socage, as of the manor of East Greenwich, on the payment of the annual rent of 10*l.* in gold on the 30th September in each year." With the place itself the Company received authority to exercise all political powers necessary for its defence and government. In 1674-75 a mutiny broke out in Bombay, but was easily repressed, when the ringleaders were tried and executed, the Company then first exercising the power of enforcing martial law. Another insurrection in 1683 was more formidable, and occasioned so much annoyance to the government that it was deemed expedient to guard against any similar attempts in future by transferring to Bombay the seat of the Company's government in India, which had previously been placed at Surat. In 1687 the title of regency was given to the administration at Bombay, and unlimited power over the rest of the Company's settlements in the East was given to the governor.

Since the first occupation of the island by the English, the resident population has enormously increased. At that time it amounted to about 15,000. In 1716 the number was 16,000; in 1816 it was 161,550. Including the fluctuating population, which is at all times very great, it was estimated by Von Orlich in 1842 that Bombay contained 200,000 (which is of course almost altogether that of the city). Since that time it has augmented so rapidly that by the Census taken at the beginning of 1850 it amounted to 566,119, of which number about 296,000 were Hindoos, about 125,000 Mobammedans, and about 115,000 Parsees; there were 5088 Europeans, 7456 native Christians, and 1132 Jews.

The floating population is of a very mixed character, and consists principally of Persians, Arabs, Mahrattas, Carnatas, Portuguese, Indians from Goa, and a great number of sailors.

The property of the island is principally in the hands of the Parsee inhabitants, who are active and intelligent, taller, better formed, more athletic and of more handsome features than the Hindoos. The principal merchants on the island are Parsees, and it is usual for European houses of commerce to contain one or more Parsee partners, who supply a great part of the capital. These people wear the Asiatic costume, but they assimilate more than other eastern people to the customs of Europeans, and nearly the whole of them speak English; their children are taught the language, and many of them speak it as fluently as Europeans; at the same time they adhere most rigidly to their religious customs and observances. In the morning and evening they crowd to the shore, where they prostrate themselves in adoration before the sun. They deposit their dead in large cylindrical buildings, each 25 feet high, the interior of which is built up solidly with masonry to within 5 feet of the top, with the exception of a kind of well, 15 feet in diameter in the centre. The bodies are deposited between this well and the wall, and being only loosely wrapped in cloth, are speedily devoured by vultures. The bones are at intervals thrown into the well in the centre, from the bottom of which they can be removed through subterranean passages. The more wealthy of the sect have private tombs of similar construction.

The cocoa-nut-tree formerly grew very abundantly on the island, but the spots now capable of being cultivated will hardly yield a week's supply of provisions for the inhabitants, who are dependent upon the farmers and gardeners of Salsette, which island is well cultivated.

BOMBAY (the City of) stands principally on a narrow neck of land at the south-eastern extremity of the Island of Bombay, in 18° 56' N. lat., 72° 53' E. long. The fortifications are extensive, and would require a numerous garrison for their defence; towards the sea the works are extremely strong, but on the land side, supposing an enemy to have made good a footing on the island, they would offer comparatively little resistance. The houses within the walls are built of wood, with verandahs and sloping roofs covered with tiles. In 1803 a fire destroyed many houses; after which a great number of dwellings were built on a salt ground then newly recovered from the sea. Many of the dwellings are commodious, particularly in what is called the European quarter. The shops and warehouses are upon a large scale. The northern quarter of the fort, principally inhabited by Parsee families, is dirty and uninviting. The houses without the walls, occupied by the poorer classes, are built of clay, and thatched with palmyra leaves. The chief public buildings in the town are the cathedral, two Scotch churches, several Portuguese and Armenian churches, three Jewish synagogues, a number of mosques and Hindoo temples; the government-house, the custom-house, and other government offices. The largest Hindoo temple is that dedicated to Momba Devi, a short distance out of the town. There is likewise an hospital founded and endowed by Sir Jemsetjee Jeejeeb.

The barracks, arsenal, and docks are all within the fort. The docks although they are the property of the East India Company, are entirely under the management of Parsees, by whom merchant-vessels of 1000 to 1200 tons burden, frigates, and even line-of-battle ships are built. These docks were about forty years ago enlarged and improved under the superintendance of Major Cooper of the Engineers. The buildings are greatly admired for their architectural beauty; the slips and basins are calculated for vessels of any size. The teak-wood

used for building ships is very durable. Bombay being situated between the forests of Malabar and Gujerat, receives supplies of timber with every wind that blows. Some Bombay built ships, after being employed as traders during 14 or 15 years, have been bought by government and added to the naval force of the country, being then considered much stronger than newly built European vessels. The *Minden*, a 74 gun-ship, launched at Bombay in 1810, was constructed entirely by Parsees, without any assistance from Europeans, and since that time several frigates and line-of-battle ships have been built at these docks.

In addition to the trade with Europe and with China, a very great traffic is carried on by coasting vessels with all the ports on the western side of India, from Cape Comorin to the Gulf of Cutch. The vessels thus employed vary in size from 10 to about 200 tons burden, and nearly 500 of them are registered as belonging to the port. The articles which form the principal part of this trade from Bombay are European manufactures and the produce of Bengal and China, the returns being made in cotton-wool and cloths, timber, oil, and grain from the northern ports; and from the south, cotton, hemp, coir, timber, pepper, rice, and cocoa-nuts. The merchandise thus brought to Bombay is in great part re-exported in larger ships to different parts of Europe, to North and South America, to Canton, to the Arabian and Persian gulfs, and to the Bay of Bengal. The goods sent from India to China comprise principally cotton-wool, opium, metals, spices, dye-woods, and woollen goods.

Bombay receives from Persia raw silk, copper, pearls, galls, coffee, gum arabic, opal, myrrh, oilibanum, bdellium, asafoetida, dried fruits, berries, and ballion. The returns are grain, Bengal and China sugar, British manufactured goods, cotton and woollen, and spices. The merchandise sent to Calcutta from Bombay, in return for sugar, indigo, and rice, are timber, coir, cocoa-nuts, sandal-wood, and cotton.

Cotton forms the most important article of export from Bombay. It is received from the provinces of Gujerat and the Concan, from Malabar, Cutch, and Sindh. The shipments from England to Bombay consist of the usual assortment of British manufactures and metals; the returns for which are made in Persian raw silk, cotton-wool, spices, gums, and drugs.

Among the mercantile establishments conducted in Bombay are an insurance company, banks, a mint, &c. An experimental line of railway from Bombay, to or near Calian (a distance of about 40 miles), with a view to its extension to the Malajee Ghaut, was authorised in 1849. The East India Company grants the land that may be required, and guarantees to the East India Peninsular Railway Company a return of 5 per cent. on the capital for 99 years.

The seamen from the port of Bombay are considered to be the best among the natives of India. The western coasts of India are infested by numerous piratical vessels, and to keep these in check it has been necessary for the East India Company to maintain a considerable naval force at this station. The navy thus maintained is not for the exclusive benefit of Bombay, but for the protection of an extensive and profitable commerce from which every part of British India derives benefit. Bombay has been the chief Indian port connected with the establishment of steam communication with England. In 1837 three steam vessels made voyages from Bombay to Suez, and continued to run in 1838 and 1839. By the month of May 1843, there were eight steam-vessels employed on the Bombay and Suez route. In 1839 a plan was adopted under the united sanction of the Admiralty, the Treasury, and the East India Company, for a regular monthly transmission of mails by steam, by way of Alexandria and Suez; and this system has been since maintained.

(Hornell's *Memoir of a Map of Hindustan*; Mill's *History of British India*; Vincent's *Peregrin of the Erythraean Sea*, part ii.; *Parliamentary Returns on Public Works (East India)*, 1851; *Statistical Papers (India)*, 1853.)

BONA, a town and sea-port in the French possessions in North Africa, is situated in the province of Constantine, 85 miles N.E. from the city of Constantine, 270 miles E. from the city of Algiers, in 34° 53' N. lat., 7° 46' E. long., and has a population of about 10,000, of whom 6000 are Europeans. It lies on the west side of a bay in which there is good anchorage. The harbour which was formerly choked up with mud has been greatly improved by the French, and Bona now has regular steam communication with Algiers, Tunis, Marseille, and Cetta. The Seibooa, a considerable river, enters the sea about two miles to the south-east of Bona. Bona is built at the foot of a hill which rises to the north and north-west of the town, and which forms the extremity of a ridge that runs westward parallel to the sea, as far as the Gulf of Stora. The town itself is surrounded by a wall strengthened by square towers, and pierced by four gates. The chief defence of the place is Fort Cloigne, which is situated on the hill above the town. The streets are narrow and crooked, but great improvements have taken place since the French got possession of the town. New squares and markets, a theatre, and barracks have been built, coffee-houses and reading-rooms opened, so that the town is now much more French than Arab in its appearance. (Both for wearing apparel, tapestry, saddles and horse furniture are among the articles manufactured.) The exports include corn, wool, bees, wax, and coral. Previous to the French occupation in 1832 Bona contained only between 3000 and 4000 inhabitants.

Along the coast eastward of Bona were the French settlements of La Calle and Bastion de France, which France retained by ancient treaties with the Regency of Algiers for the protection of the coral fishery along this coast.

Bona is a corruption of the ancient name Hippon or Hippo; the Arabs call it *Bel-el-Areb*. The country about it is very fertile in corn and fruits. Between the town and the Seibooa is a marsh, which is crossed by two small rivers that flow into the Seibooa just above its entrance into the sea. This marsh is believed to have been the ancient harbour of Hippo Regius, the scanty remains of which town are seen about a mile and a half south of Bona. Of Hippo St. Augustine was bishop; the town was destroyed by the Kalif Othman.

BONAVISTA, or BOAVISTA. [CAPE VERDE.]

BONCHURCH. [WIGHT, ISLE OF.]

BONHILL, a town in the parish of Bonhill and district of Loventax or Lennox, Dumbartonshire, Scotland. The parish is divided in its length into almost equal parts by the south end of Loch Lomond, and the river formed by it, the Leven, from which the district derives its name, and which falls into the Clyde at Dumbarton. The population of the town of Bonhill in 1851 was 2327.

The town is situated on both banks of the Leven, about five miles above Dumbarton. A mile nearer this town and on the right bank of the stream is the thriving village of Alexandria, with a population of 3781.

The inhabitants are chiefly engaged in print-works and bleachfields on the banks of the Leven, the water of which, from its softness and purity, is peculiarly fitted for the processes of printing and bleaching. Coals, lime, and other articles required in manufactures are brought up the river in shallow broad-bottomed lighters. The extensive works on the river are generally the property of mercantile houses in Glasgow. The Leven is celebrated for its fine salmon and trout.

Besides the parish church of Bonhill there is a chapel-of-ease at Alexandria. At both places are chapels for Free Church and United Presbyterian Dissenters. There are also two chapels in Alexandria for Independents.

BONIFACIO, Town and Strait of. [CONSIDA.]

BONIN or ARZOBISPO ISLANDS, a group in the Japanese Sea, extend in a direction nearly north and south between 26° 30' and 27° 45' N. lat., the centre line of the group being in about 142° 15' E. long. The islands were named by Captain Beechey, who visited them in 1827. The northern cluster he called 'Parry's Group;' to the middle cluster, consisting of three larger islands, he gave the names respectively of 'Peel,' 'Buckland,' and 'Stapleton,' and the southern cluster he called 'Baily's Islands.'

The islands are of volcanic formation, and smoke is seen to issue from some of them: they are high, and wooded to the shores. The coasts are steep and craggy; in many places basaltic columns of a gray or greenish hue appear; olivine, hornblende, and chalcidony are found. The islands are surrounded with sharp rugged rocks, and often with coral reefs: the water around them is very deep. They are all uninhabited except Peel Island, on which a few Europeans and Malays have settled near Port Lloyd. The islands abound in the cabbage and fan palms, the former of which is an excellent vegetable, areca, panianus, tamanu of Otahcite, and various other trees: the sea also contains abundance of turtle, ray, eels, cray-fish, and a great variety of other fish, of the most beautiful colours. Of birds, there are brown herons, plover, rails, snipe, wood-pigeons, crows, and small birds; also a species of vampire bat, some of which measure three feet across the extended wings, with a body eight or nine inches in length. The islands are subject to earthquakes, and in winter to violent storms. The Bonin Islands abound in good harbours, and are frequently visited by whalers, who go to them for turtle, fish, and the cabbage palm.

The islands were visited in 1853 by Commodore Perry of the United States navy, who recommended the purchase of Port Lloyd as a stopping place for steamers between California and China. From the Commodore's dispatch the following notice of Peel Island is taken with slight alterations and omissions:—

"Port Lloyd is situated on the western side, and nearly in the centre of Peel Island. It is easy of ingress and egress, and may be considered a safe and commodious harbour, though of deep anchorage, ships usually anchoring in from 18 to 22 fathoms. The safest anchorage is to be found as high up the harbour as a ship can conveniently go, having regard to depth and room for awinging and veering cable. Wood and water can be obtained in abundance, though the former must be cut by the crew, and of course taken on board green. The water is obtained from running streams, and is of good quality. The few settlers still remaining on Peel Island raise considerable quantities of sweet potatoes, Indian corn, onions, taro, and a few fruits, the most abundant of which are water-melons, bananas, and pino apples; a few pigs and some poultry are also raised. For these they find ready sale to the whale ships constantly touching at the port for water and other supplies; they receive in exchange articles, of which ardent spirits are most acceptable to many of the settlers. The soil is of excellent quality for cultivation, very much resembling that of Madeira and the Canary Islands (the latter being in the same parallel of latitude), and consequently it is admirably adapted for the cultivation of the vine, and of wheat, tobacco, sugar-cane, and many other valuable plants. Of

sugar and tobacco the settlers already cultivate enough for their own consumption. Timber for building purposes is rather scarce, and would soon be exhausted if any increase of population were to call for the erection of many buildings. The best kinds are the tamana and the wild mulberry. The former is similar to the red wood of Brazil and Mexico, and is very durable." Commodore Perry caused the island to be explored, and a few animals placed upon two of the group. He also distributed garden seeds among the settlers, and secured a suitable spot for the erection of offices, wharves, coal sheds, &c. at Port Lloyd.

(*Navigacion Especulativa y Practica*, Manila; Beechey, *Voyage to the Pacific and Behring's Straits*.)

BONN, a town in the Cologne circle of Rhenish Prussia, is situated on a gentle eminence in a pleasant and fertile country on the left bank of the Rhine, 15 miles S. by railway from Cologne, and has 20,000 inhabitants, including university students and the garrison. It occupies the site of the ancient Bonna, a town of the Ubii, which became the head-quarters of a Roman legion, and, according to Antoninus's 'Itinerary,' was afterwards kept up as one of the Roman strong-holds on the Rhine. It rose ultimately to be a place of some note, and in the time of Tacitus was considered to be in that division of Gallia Belgica which was called Germania Secunda. According to Tacitus ('Hist.' iv. 20), the Roman troops under Herennius Gallus were defeated near Bonn by the Batavi under Claudius Civilis. Bonn is said to have embraced Christianity in the 88th year of the Christian era, in consequence of the preaching of Maternus, bishop of Cologne; it is known that Helena, the mother of Constantine the Great, about the year 316 built the church in this town, on the site of which the cathedral was afterwards built. In the year 355 Bonn was destroyed by an irruption of German tribes, and in 359 it was recovered and rebuilt by the Emperor Julian. In 755 Charlemagne crossed the Rhine at Bonn, in his second campaign against the Saxons; and in 881 it was almost ruined by the Northmen. In 1240 it was surrounded with walls and a ditch by the archbishop of Cologne, who conferred a variety of immunities upon it: from the year 1320 it was the constant residence of the archbishops of Cologne. The Emperor Charles IV. was crowned here in 1346, about which time it had risen into sufficient importance to conclude a treaty of defensive alliance with Cologne and other towns on the Rhine, when it undertook to furnish an auxiliary force of 500 men. During the thirty years' war Bonn was exposed to great sufferings and vicissitudes. In 1673 the French, who had possessed themselves of the place, were besieged in it by the prince of Orange and Montecuculi, and surrendered after a slight resistance: having regained possession of it fifteen years afterwards, they extended and greatly strengthened its defences. In 1689 it was taken by Frederick III., elector of Brandenburg, after a three months' siege; and in 1703 it was captured by the Duke of Marlborough, the operations of the siege having been conducted by the celebrated Marshal Coehorn. The fortifications were razed in 1717. In 1777 Maximilian Frederick, elector of Cologne, founded the academy, which was enlarged into a university in 1784. This university was dissolved by the French, and remained in abeyance while they held Bonn in Napoleon's time, but was re-established upon a more extensive scale in 1818 by the King of Prussia.

The town of Bonn has the Rhine for its eastern boundary: it is skirted on the south by the former electoral palace, and on the north and west by the cathedral, and a succession of gardens which stretch as far as the banks of the river. It has the appearance rather of a modern than of an ancient town, and though it cannot be termed a well-built place, for several of the streets are narrow and ill-lighted, its appearance at a distance, with its white palace, now the university building, the steeples behind, and the gardens all round it, is cheerful and pleasing. The air is at times bleak and cold, in consequence of the currents occasioned by the heights that hang over its low site, which is placed at the point where the Rhine emerges from between those heights; the evaporation from the river also renders the atmosphere damp. Bonn is nearly of a circular figure: the distance from the Cologne to the Coblenz gate does not exceed ten or twelve minutes' moderate walk. It contains above 1100 houses, built in a substantial manner, 23 public edifices, 8 churches and chapels, 9 mills and manufactories, and 5 gates. The inhabitants derive their subsistence chiefly from the university, from their fields, gardens, and vineyards. The chief manufactures in the town are cottons, silks, and sulphuric acid. The buildings without the gate are on the increase, and so disposed, under the direction of a board, as to be ornamental to the town. Among the open areas the market-place is the most spacious; but the square planted with trees next the Minster or Cathedral, and thence called the Minster-platz, is the finest: here is the monument of Beethoven, whose house is in the Bonngasse. There is no public edifice in Bonn to be compared with the Minster (dedicated to St. Cassius), an ancient gothic structure, probably of the 12th or 13th century. In the interior is a bronze statue of St. Helena, kneeling at the foot of the cross, as well as bassi-relievi in white marble, representing the birth and baptism of our Saviour. In the church of St. Remigius there is a fine altarpiece in oils, in which Spielberg the painter has represented the baptism of Clovis, king of the Franks, by the patron saint. The town-hall, which is on one side of the market-place, is a handsome edifice in the modern style, with a double flight of stone steps in

front. Bonn has also a gymnasium; it is the seat of the superior board of mines for Rhenish Prussia, and of two tribunals for civil and criminal affairs. Among other scientific associations it possesses an academy of naturalists and a society for promoting the sciences of natural history and medicine. Upon the re-establishment of the university the electoral palace at the southern end of the town was appropriated to its use. There are five faculties—Protestant theology, Roman Catholic theology, medicine, jurisprudence, and philosophy. There are attached to it forty professors in ordinary, and ten adjuncts. Besides the lecture-rooms, the university buildings contain a library of 100,000 volumes, a collection of Roman antiquities, an academy hall ornamented with frescoes, an anatomical theatre and museum, a cabinet of surgical instruments, a museum of natural history, geological collections, a philosophical apparatus, and an observatory. At a distance of less than fifteen minutes' walk from the town lies the country residence of the former electors of Cologne, Clemensruhe, near the village of Poppelsdorf, which contains collections in natural history, geology, &c., the chemical and technological laboratory, a gallery of paintings and engravings, and lecture-rooms, besides apartments for the accommodation or use of the officers and professors of the university. There are five elementary schools in the town, as well as a free-school for 300 poor children, an excellent library of scientific publications and a mineralogical collection attached to the board of mining, and several benevolent institutions. To the university is attached a botanical garden, and also an agricultural institute, which has an area of 120 acres devoted to its purposes, and a manufactory of earthenware and pottery at Poppelsdorf.

BONNETABLE. [SARTHE.]

BONNY. [BLAFRA; QUORRA.]

BOOLDUR. [ALEUTIAN ISLANDS.]

BOOM. [ANTWERP.]

BOONDEE, a principality in the south-east quarter of Rajpootana, under the protection of the Anglo-Indian government, between which and the Raja of Boondee a treaty was concluded in 1818. The area of the territory is 2291 square miles; the population is estimated at 220,100. The revenue is about 50,000*l.* a year, irrespective of the revenues of fendal grants and religious endowments. A tribute of about 4000*l.* is payable by Boondee to the Company's government. The military resources of Booudee comprise 1000 cavalry, 520 infantry, and 150 artillery, besides a police-force of 2000 men, and an irregular feudal force of 2500. The boundaries of Boondee are Kotah on the S. and E., Jeypoor and Onjara on the N., and Jajgbur on the W. [RAJPOOTANA.] (Mill's *British India; Parliamentary Papers*.)

BOONDEE, the capital of the above principality, in 25° 28' N. lat., 75° 42' E. long. The old town, which is nearly deserted by the inhabitants, and for the most part in ruins, contains some fine pagodas and fountains. The new town, to the east of the old town, is inclosed by high stone walls and connected with fortifications on a cliff behind the town, and commanding it. The greater part of the houses are built of stone, and are two stories high. At one end of the principal street stands an extensive temple, dedicated to Krishna, covered with groups of figures sculptured in rilievo; at the other end is the great palace of the raja, built on the side of the hill; the intermediate space is occupied by two rows of shops fantastically ornamented. At the lower end of the street, near the temple, are figures of the natural size, cut in stone, of a horse and an elephant—the latter raised on a pedestal. On the north-eastern side of the city is a lake which is supplied with water during the rainy season by another great lake artificially formed by embankments on the high ground. The pass through the hills north of the city is more than 6 miles long, and at three spots is defended by barriers. Near to one of these barriers is a summer residence of the raja, and some Hindoo temples. Adjoining the second barrier is the cemetery of the raja's family.

BOORHANPORE, a large and ancient city, formerly the capital of the province of Candeish, on the right bank of the Tuptee River, in 21° 19' N. lat., 76° 18' E. long.; 240 miles from Bombay, and 978 miles from Calcutta. This city is one of the best built in the southern part of Hindustan; the houses are generally constructed of brick, and are two or three stories high. Many of the streets are wide, and paved with stone; the market-place is a large and substantial building, but except the principal mosque the city is without architectural ornament. The mosque is of gray stone, with an extensive facade supported on arches, and it has two handsome minarets of an octagonal form; in front are a fine terrace and a reservoir of water. Boorhanpore, which had been made the seat of government for the soubah or viceroyalty of Candeish by Anurungzebe, was taken, together with the rest of the soubah, by the Mahrattas about 1760. The principal commerce of the place is carried on by a peculiar sect of Moham-medans known as 'Bohrahs,' but who call themselves 'Ismaeliah,' from one of the early followers of Mohammed. Many of them are very wealthy; their mosque and cemetery are about 2 miles from Boorhanpore. The Tuptee is here a narrow river, and fordable in the dry season. Water for the supply of the city is brought by means of an aqueduct from a distance of 4 miles, and is plentifully distributed through every street. The grapes which grow abundantly in the neighbourhood of the city, are said to be the finest in India.

BOORO, an island in the Eastern sea, situated between Celebes and

A *Salween* (Salween?) at 4° E. lat. 127° 30' and 127° 15' E. long. It is about 100 miles long from east to west, and its average width is about 14 miles. The inhabitants of the coast, who are Mohammedans, acknowledge the authority of the Dutch settlers, but are generally governed by their own chiefs, or 'oran cayas.' The inhabitants of the interior, who are known for the most part of very high mountains, are the aboriginal H. and subsist upon wild fruits and the produce of the chase, deer and horned pigs. At Cajalli or Booro Bay, in the north-east of the island, is Fort Defence, the settlement of the Dutch. This part is frequented by South Sea whalers for shelter during the winter, as well as to obtain wood and water, which are plentiful. The principal productions are rice, sugar, and various kinds of dye and medicinal woods, for which many Chinese vessels come to the island. The Cajapat tree is a native of Booro, and Cajapat oil is obtained in considerable quantity. The Booro Strait separates the island from Ambonia and Ceram. (Stavorina, *Voyages*, vol. I.; *Fleming's Voyage to New Guinea*; Porter, *Tropical Agriculture*.)

BOOTAN, or BHOOTAN, an alpine region in Northern Hindostan, bounded W. by the territories of the Raja of Sikkim, E. by an Assam mountain district, N. by Tibet, and S. by Bengal and Bihar. Bootan occupies the descent between the table-land of Tibet and the low plains on the banks of the Ganges, together with a narrow tract of country at the foot of the slope. The surface of Bootan is covered with masses of rocky mountains. The valleys, which are extremely narrow, are traversed by rivers which for many miles are a succession of cataracts and rapids. Bootan includes the southern diversity of the Himalaya range, and here on the boundary of Tibet stands the Chamalar which rises to a height of about 21,000 feet. The Soomoonang Pass, one of the highest of the passes over the Himalaya in this district, is 15,744 feet above the level of Calcutta.

The northern parts of Bootan, which belong to the alpine region, extend southward from the boundary of Tibet and along the southern slope of the Himalaya for about 10 miles. It appears that within these narrow limits the high land descends more than 10,000 feet. This rapid descent constitutes the character of the northern districts of Bootan; exhibiting different botanical features as the land descends. The rivers rush forth like torrents, foaming violently among huge masses of rock that obstruct their tortuous course, in which they dash from one side to the other. The spray rising from the numerous waterfalls leads the atmosphere with vapours, and renders the air extremely chilly, even in summer. The upper regions are uninhabitable, except during a few summer months.

Contrary to this inhospitable alpine region is the best cultivated part of Bootan, which occupies about one-half of the whole country. The mountains probably never, or rarely, attain the height of 10,000 feet, and they descend with gentle declivities. The sides and summits of the mountains are clothed with pines, fir, birch, aspen, maple, and oak. The valleys are open, and present many fertile spots, where fruit and cereals grow in great variety. Numerous villages, hermitages, and temples are distributed up and down the hills and along the banks of the rivers. The climate resembles that of the southern mountains of Nepal.

Before the rivers reach the low plains of Bengal, they still descend another slope, which is somewhat more than 10 miles sinks from upwards of 1,000 feet to less than 300 feet. Here the valleys are again deep and deep, and so narrow that the roads have been made on the side of high mountains along steep precipices. Agriculture in this district is confined to a few small spots. Cattle and hogs find abundant food in the spontaneous produce of the woods. This region is exposed to the hot south-west monsoon, and is unhealthy, having a tendency to produce fever.

To the south of the mountain region, and only divided from it by a few miles of gently sloping ground, extends the Tariyan, noted all over Bengal for its swamps and its unhealthiness. It belongs partly to Bootan. This region is an entire swamp. There being no outlet for the numerous streams which issue from the base of the mountains, the water becomes stagnant, and the ground laden with vegetation of every spongy rankness. An almost inexhaustible supply of timber is obtained from this region.

Travel in the Tariyan is performed by means of elephants; but in the mountainous parts, which have no carriage-roads, it can only be undertaken on horseback. Sometimes travellers must be carried over steep parts of the mountains on the backs of men. The natives have built a great variety of bridges adapted to the river and to the mountainous country, in each case, thus evincing no little ingenuity and judgment. The bridges are generally of timber, and if the width of the river is small, they are laid horizontally from rock to rock. Over the larger streams a triple or quadruple row of timbers, one row projecting above the other, and inserted into the rock, sustains two sloping sides, which are united by a horizontal platform; thus the centre is raised very much above the current, and the whole bridge forms nearly three times of an arch. The widest river of Bootan has an immense number of a number of iron chains, which support a matted platform, and the chains are stretched above parallel to the river, to support a matted border. Over deep chasms, two ropes, commonly of horse or goat and flexible color, are stretched from one mountain to another, and they are encircled by a hoop of the

same material. The passenger places himself between them, sitting in the hoop, and seizing a rope in each hand, slides himself along with facility and speed over a treacherous abyss.

The most considerable river of Bootan is the Tehin-tehien, which traverses the whole country from north to south, rising in the mountain-range between the Chan-elari and Mount Ghassa, and running by Tassindon; it receives the Pa-tehien and the Ho-tehieu, and after a turbulent course joins the Bramaputra near Rangamatt. Eastward and parallel to the Tehin-tehien is the Chann-tehien, formed by the confluence of the Ma-tehieu, Pa-tehieu, and Tahan-tehien; it enters the Bramaputra within the confines of Bengal. The rapidity of all the rivers of Bootan is far too great to allow of either navigation or irrigation.

In the hilly country the slopes are cut into stages, and the rice planted on them is watered by the descending streams, which are made to overflow the beds successively. The natives show much industry in the cultivation of their fields, which are always neatly dressed. Besides rice they cultivate wheat, barley, and a species of the polygonum of Linnæus, which produces a triangular seed, nearly the size of barley, and is the common food of the people in many places. The level tracts along the Tehin-tehien yield two crops in the year; the first, of wheat and barley, is cut in June, and the rice, which is planted immediately after, enjoys the benefit of the rains. Turnips, eschalots, cucumbers, gourds, and melons are cultivated.

Of domestic animals only horses, cattle, and hogs are kept. The horses are nearly all of a peculiar species, indigenous in Bootan. They are usually 13 hands high, and remarkable for their just proportions, uniting in an eminent degree both strength and beauty. They are commonly of a piebald colour, with various shades of black, bay, and sorrel upon a ground of the purest white. The chowry-tailed cattle, or yak (*Bos grunniens*) pastures in summer among the snow-topped mountains which constitute the boundary between Bootan and Tibet, and in the winter it descends into the deep glens farther to the south. Bees are common, and are managed with care.

There are no towns in Bootan, and the villages generally consist of not more than ten or twelve houses. Only the palaces of the lamas, or of the Daeb Raja, and the governors of the provinces, have any degree of importance. The fortresses are built on very advantageous sites, generally at the confluence of two rivers. The natives of Bootan, called by the Hindoos Bootecas, or Botiyas, are members of a very extensive Himalaya nation. They belong physiologically to the Chinese and Birman race. They are Buddhists; but in their religious ceremonies they differ widely from other nations. Their temples are almost square, in which the image of Buddha is preserved. They are never opened, and the whole divine service of the people consists in processions made round the temple, accompanied with the mystic words, "Om nna ni pad me hüm i" ("the jewel of the Buddhistic fulness is truly revealed in the Padma (Lotus) flower.") Near the temples are many tall flagstaves, which have narrow banners of white cloth reaching nearly from top to bottom, and inscribed with the same mystic words. The same words cut in relief are inscribed on tablets inserted in walls erected near the temples. The Bootecas consider the Dherma Raja as an incarnation of the Divinity, and he is their ecclesiastical chief as well as their sovereign. Being entirely absorbed in the contemplation of the Divinity, he takes no part in the internal or external affairs of the country, which are entirely left to the management of the Daeb Raja, except that the Dherma Raja appoints one member of the state council. This council consists of eight persons, without the assistance of whom the Daeb Raja can do nothing of consequence. The number of priests, called gylogas, amounts to upwards of 5000. Their principal duty consists in the study of the religious books, which seem to be numerous and full of metaphysical distinctions. They are bound to celibacy, and are not permitted to cultivate the ground; but they may enter into trade, and accept public offices. The Bootecas do not kill any animal, but they eat the flesh of those which have been killed by others, or have died. New-born children are washed the first day with warm water, and the following day they are immersed in a cold river. No religious ceremonies are observed on entering into matrimony. It is asserted that polygamy exists among the rich, and polyandry among the poor. The dead are burned, and the gylogas officiate on such occasions; the ashes are thrown into the river. On the house of the burned person flagstaves are erected, in order to accelerate the regeneration of the owner.

Bootan has little mineral wealth. Only iron and copper are found, and iron only is worked. Potter's-clay is obtained in a few districts. Some commerce is carried on by Bootan with all the neighbouring countries; the most important is that with Bengal and Tibet. The commodities for Bengal consist of Tanguin horses, linen-cloth, moschus, chowries, oranges, walnuts, and mungit (a kind of red colour); they are brought to Rungpoor, where they are exchanged for woollen cloth, coarse cottons, indigo, sandal-wood, assafetida, and splees, all of which articles are consumed in the country or sent to Tibet. The same commodities are sent to Nepaul and Assam, with the addition of rock-salt. Part of the commodities brought from Bengal are sent to H'luasa, in Tibet, with rice, wheat, and flour. Tea, gold, silver, and embroderies are received in exchange. The Bootecas import from Cutch Behar cattle, hogs, dried fish, betel, tobacco, and coarse cottons.

Commerce in Bootan is monopolised by the government, the governors of the provinces, and their officers.

(Turner's *Embassy to the Teshoo Lama, and Kishen Kant Bose, in Asiatic Researches*, vol. xv.)

BOOTHIA. [NORTH POLAR COUNTRIES.]

BOOTLE, Cumberland, a market-town and the seat of a Poor-Law Union, in the parish of Bootle and ward of Allerdale-above-Derwent, is situated in 54° 17' N. lat., 3° 20' W. long., 60 miles S.S.W. from Carlisle, and 278 miles N.W. from London by road. Bootle station of the Whitehaven and Furness railway is 361 miles from London by railway via Carlisle. The population of the parish in 1851 was 811. The living is a rectory in the archdeaconry of Richmond and diocese of Chester; but this part of the archdeaconry is to be hereafter transferred to the diocese of Carlisle. Bootle Poor-Law Union contains 12 parishes, with an area of 91,700 acres, and a population in 1851 of 6007.

Bootle is about two miles from the coast of the Irish Sea. The town, which is one of the smallest market-towns in England, consists of a long street of tolerably well-built houses. The chief building is the church, the oldest portion of which is probably Norman; the greater part is of early English date and style. The font which is of black marble is ancient and curious; on it is an inscription in Anglo-Saxon characters. There are a chapel for Independents, and a National school; the school-house was built in 1833 by Captain Shaw, R.N., who also left at his death in 1840 a sum of 300*l.* to keep the building in repair. The inhabitants of the parish are chiefly agricultural. A considerable trade is carried on in curing hams. The chief trade in provisions is with Liverpool. The market is held on Wednesday. There are fairs on April 5th and September 24th. The lofty mountain, Black Comb, celebrated for its vast extent of prospect, is in the vicinity of Bootle. At Seton, in Bootle parish, are some vestiges of a Benedictine nunnery. There are also remains of stone circles and other primeval antiquities.

BOOTON, or **BOÜTONG**, an island of the Eastern seas, lying off the south-eastern extremity of the island of Celebes, round the point, 5° S. lat., 123° E. long. It is about 85 miles long from north to south, and its average breadth is about 20 miles: it is separated from the island of Panjassang by a narrow but deep channel called Booton Strait. The island is mountainous and woody, but is well cultivated in parts, yielding abundant crops of rice, maize, yams, and the usual variety of tropical fruits. Fowls and goats are reared for food, and buffaloes are pretty numerous.

On the east side of Bootou is a deep bay, called by the Dutch 'Dwaal,' or Mistake Bay. There is danger in calm weather of ships being drawn by the set of the currents into this bay, in which case they can only get out again at the coming in of the west monsoon. South of Dwaal Bay is Booton Passage, which separates the island from the extensive and dangerous reef or bank on which the Tonkang-basi Islands lie to the eastward. To the west of Panjassang lies the island of Cambyna, next the mouth of the Bay of Bouy, and farther west is the island of Salayer, which is separated from the Macassar peninsula of Celebes by the Salayer Strait. To the south of Salayer lie the Touin and Schiedam groups, and between them and the Booton Passage the Tiger Islands, scattered over a reef 60 miles long by 50 miles wide.

The inhabitants are Mohammedans; those who reside on the sea-coast speak the Malayan language. The island has an independent government under its own king, who rules likewise over some of the neighbouring islands. The Dutch East India Company formerly maintained a settlement on the island, to which they every year sent an officer to destroy the clove-trees, under a treaty with the king of Booton, who received an annual payment of 360 guilders (about 30*l.*) as an equivalent for the privilege, and for the assistance which he bound himself to give them in destroying the trees.

(Stavorinus, *Voyages*; Forrest, *Voyage to New Guinea*.)

BOPPAUL. [BHOOPAL.]

BORDEAUX, an important seaport town in France, the capital of the former province of Guienne and of the present department of Gironde, stands on the left bank of the Garonne, 75 miles from the mouth of the estuary of the Gironde, in 44° 50' N. lat., 0° 34' W. long. It is 360 miles S.S.W. from Paris by the railway route through Orleans, Tours, Poitiers, and Angoulême, which is all finished except the section between the two last-mentioned towns, and this is rapidly approaching completion. Bordeaux is also 360 miles distant from Marseille by the railway now in course of construction through Agen, Toulouse, Carcassonne, Narbonne, and Cotte. A railroad 34 miles long, and running west from Bordeaux, connects it with La-Tete-de-Buch, a small seaport on the Bassin d'Arcachon; and from the La-Mothe station on this line a railway is in course of construction to Bayonne. The population of Bordeaux according to the Census of 1851 was 123,935, including the whole commune, which comprises little more than the city.

The city extends in the shape of a crescent about four miles along the river, which here bends with a rapid sweep from north-west to north-east. A magnificent bridge of 17 arches and 532 yards long joins the city to the suburb La-Bastide on the right bank of the river. The view of Bordeaux from this bridge is splendid. Opposite, at the entrance of the town, is the Porte de Bourgogne,

built to commemorate the birth of the grandson of Louis XIV. Along the river bank extends a broad causeway, a line of quays above three miles in length, and behind these a crescent of beautiful houses and stores, built of cut stone, and in the Italian style of architecture; while in the background spring up the numerous towers and spires of the churches and other public buildings of the city. Below the bridge the river increases to 300 yards in width, forming a large and safe harbour, which is capable of containing 1200 ships, and has from 19 to 39 feet of water at high tides. Vessels of 600 tons can load and unload at all times close to the quays. The greatest breadth of the town from the quays inland is about a mile; but towards the north and south the width is much less.

Bordeaux consists of an ancient and modern part, separated from each other by the Rue Chapeau-Rouge, which runs east and west and forms with its continuance the Rue de l'Intendance, one of the finest streets in Europe. To the south of this street lies the ancient part of the town, which consists of irregularly built squares and narrow winding streets: it contains but few handsome houses, though these are generally built or faced with cut stone. The northern part of Bordeaux, called the Quartier des Chartrons from the Carthusian convent which stood in it, was formerly a suburb, cut off from the rest of the city by the Château-Trompette, a citadel erected by Charles VII. and strengthened by Vauban in the time of Louis XIV. The citadel has been demolished, and its site is now occupied by the Place Louis-Seize (which was called for a time Place Louis-Philippe), and by several fine streets which connect the Quartier des Chartrons with the rest of the town. This part, which is well and regularly built, is the residence of the principal merchants. The town has extended towards the west and south also far beyond its ancient limits.

A distinguishing feature of Bordeaux is its 'Places' and its 'Places.' The former are wide streets lined with rows of trees, which form shady avenues on each side, and run through several parts of the town. The principal of them are the Cours d'Aquitaine, the Cours d'Albret, the Cours de Tourny, and the Cours du Jardiu-Public, which form a continuous boulevard two miles in length, round the most closely built part of the town. The Places are open spaces surrounded by buildings: in shape some of them are square, some circular, and others are more like our parks than squares, being of large extent, laid out in walks and planted with trees. Bordeaux contains 40 of these Places, the largest of which are the Place Louis-Seize and the Jardin-Public: these contain from 18 to 20 acres each, and are laid out in the manner described. The Place Tourny is at the junction of the Cours de Tourny and the Cours du Jardiu-Public; it is adorned with a fine statue of M. de Tourny, to whom Bordeaux is indebted for most of its modern improvements. The Place Dauphine at the southern end of the Cours de Tourny is of circular shape; the height and regularity of the buildings which surround it render it one of the finest Places in Bordeaux. The Place Royale is on the quay; its proximity to the bourse, the custom-house, and the port make it the rendezvous of foreigners and men of business. The Place de Richelieu is also on the quay; it stands between the Place Royale and the Place Louis-Seize, and is magnificently built.

Bordeaux contains many beautiful churches. The gothic cathedral of St.-André was built by the English in the 13th century. Its whole length is 413 feet; the choir which has a gallery and lofty clerestory windows is 193 feet long, 53 feet wide, and 85 feet high. The interior is lighted through painted windows, and embellished with sculptures and bas-reliefs. The southern façade is flanked by two unfinished towers which rise on each side of a triple and deeply recessed doorway decorated with a profusion of sculptures. The northern front has a similarly decorated portal surmounted by a splendid rose-window and galleries of beautiful stone-work tracery; and on each side of the doorway spring up two highly decorated gothic towers surmounted by elegant spires 262 feet high. When infidelity occupied the high places in France after the first revolution, the grand portal entrance at the western extremity of the nave was blocked up. A simple opening scarcely deserving the name of a door was made after the restoration of public worship, and still remains. This western portal dates from the 13th century, and is of great elegance. A grant of half a million of francs was made in 1853 at the instance of the emperor Napoleon III. to restore this western façade and render it worthy of the rest of the edifice.

A tower 200 feet high, called 'La Tour Peyberland,' from Archbishop Pierre Berland, who built it in 1440, stands at the east end of the cathedral, but apart from it, and serves it for a bell-tower. It was converted into a shot-tower during the first French revolution. Of the other churches the most remarkable are those of St.-Michel, built by the English in 1160, Sainte-Croix, St.-Seurin, Notre-Dame, and Des Feuillans. This last is now the collegio church; it contains the tomb of Montaigne. At the western extremity of the town is the beautiful church of the Chartreuse convent, the vineyard of which is now turned into a cemetery. There are two reformed chapels and a Jewish synagogue in Bordeaux. Among the other public buildings must be mentioned the former palace of the archbishops of Bordeaux, which, after often changing its destination since 1791, became the town-hall in 1836; the theatre, a beautiful structure in the Corinthian style, and the finest building of the kind in France; the bourse or exchange; the custom-house; the great hospital, situated

In the highest part of the town, and being the old fortress of 114, which is now used as a prison; the museum, in connection with which are the public library, containing 120,000 volumes and several valuable manuscripts; a museum of natural history and antiquities, picture gallery, an observatory, and schools of painting and design. The very vestige of the Roman in Bordeaux is the ruin of the amphitheatre, improperly called Palais Gallien (Palace of Gallienus). When the last revolution broke out, it was nearly entire; after that event the materials of which it was built were used for erecting a mass of houses in the arena. The arena was of the usual elliptic form, the major axis measuring 253 feet, and the minor axis 154 feet. The two gates at the extremities of the major axis are nearly square; they are 24 feet high and 20 feet broad.

Behind the palace already mentioned must be named the mint, the theatre, the public baths, the lunatic asylum, the lying-in hospital, the ship-building yards, the abattoir, the victualling office, the glass works, the tobacco and wine stores along the quays, and the departmental treasury and botanical garden near the cemetery at the west end of the town.

Bordeaux gives title to an archbishop, whose see comprises the department of Gironde; his suffragans are the bishops of Agen, Auch, Condom, Périgueux, La-Rochelle, and Luçon. Bordeaux has a bank, and tribunals of first instance and of commerce. It is the seat of a High Court of Justice and of a University Academy. In connection with the Academy there are a faculty of theology, a secondary school of medicine, and an endowed college. There are also several learned societies, schools of architecture, hydrography, navigation, botany, and natural history, and a large establishment for deaf-mutes. The town is the residence of a great number of foreign consuls, and the head-quarters of the 14th military division, which includes the departments of Gironde, Charente, Charente-Inférieure, Dordogne, and Lot-et-Garonne.

From its advantageous position for foreign commerce Bordeaux has great facilities for internal traffic. By means of the Garonne, the Dordogne, and their affluents, its commerce is extended over a great surface of the interior of France; and by the Canal-du-Midi it has communication with the Mediterranean, and is able to rival Marseille in the sale of colonial produce. Wine, brandy, and fruits are the chief articles of export. The Médoc or claret wines are sent chiefly to England and Russia; the inferior sorts to Holland and Germany. Large quantities of wine are also shipped to America. Other articles of commerce are—all kinds of broad-stuffs, hemp, flax, pitch and tar, cork, oil, salt provisions, hardware, metals, cotton-yarn, ship timber, and rigging. Ships are fitted out at Bordeaux for the whale and cod fisheries. The main factories of the town are jewellery and plated goods, lace, muslin, wollen stuffs, calicoes, hosiery, gloves, corks, soap, chemical products, medical instruments, &c. There are also several manufactures, refineries, breweries, gun-works, glass and china works, tobacco-factories, rope-walks, and dockyards. Colonial products, such as dyewoods, pepper, hides, tobacco, and rice are the principal imports. There is a regular service of packets from Bordeaux to the Havanna and the coast of Mexico.

Bordeaux occupies the site of the Roman *Burdigala*. The city having been destroyed by fire about A.D. 260 was rebuilt by the Romans. In the 6th century it became the capital of Aquitania Neustria. Of its state at that time Ausonius, who was a native of Burdigala, has left a description in his 'Clarus Urbes,' xiv. v. The splendour of the Roman Burdigala waned under the blighting sway of the Visigoths, who sacked it on their way to Spain, and held it till their defeat at Vouillé by Clovis, nearly a century afterwards, when they abandoned the town to the conqueror. Under Charlemagne it was governed by a count of its own, became again prosperous, and was in 1013 the capital of the duchy of Gasconne. Its prosperity attracted the Normans, who plundered and demolished the town; but early in the 10th century it was rebuilt by the dukes of Gasconne. On the union of the duchies of Gasconne and Guienne the dukes chose Bourdeaux for their seat, and Bourdeaux became the capital of a county. By the marriage of Eleanor of Guienne in 1152 with Henry of Normandy, afterwards Henry II. of England, Bourdeaux with all the north-west of France became subject to the English kings. In the reign of Edward III. it was the residence of the Black Prince for eleven years, and here his son Richard II. was born. On the decline of the English power in France the city submitted in 1451 to Count Dunois, and acknowledged the sovereignty of Charles VII. In the following year, on the arrival of the great Earl Talbot, the city revolted and joined the English; but after Talbot's fall before Castillon, Charles VII. in person invested Bourdeaux, which prepared for a siege, but yielded at discretion. At this time Charles erected the Bastion Tranchée and the Fortress of III. In 1549 the townsmen put in a petition on account of the oppressive gabelle, or salt tax, and demanded the governor Tristan de Monsema. The petition was not put down, and many of them perished with death. The petition, however, was not deemed sufficient. The constable Montmorency, at the head of an army, entered Bourdeaux, which he red him to surrender, through a breach made in the walls with his cannon, deprived the citizens of all their privileges, and committed other horrors casual one citizen to be hung for every tenth house in the town. The privileges of the town, which consisted

mainly of the right of self-government by a mayor and six jurats elected by their fellow-citizens, were restored in 1550 by a royal edict. In the religious wars of the 17th century Bourdeaux was the scene of many cruelties against the reformers. In the war of the Fronde it opposed the court party, and was twice blockaded; and by an edict issued in 1675 the parliament of Bourdeaux was removed to Condom, and subsequently to La-Beole, and troops were quartered among the citizens to curb their rebellious spirit. The parliament returned to Bourdeaux in 1690, and the city enjoyed repose and prosperity till the outbreak of the great French Revolution. On the territorial division of France after that event it became the capital of the department of Gironde. In 1814 the citizens, headed by the mayor, M. Lynch, advanced to meet the English troops, delivered to them the keys of Bourdeaux, and hoisted the white flag of the Bourbons. In 1815 however they refused to support the Duchess of Angoulême, who wished to make a stand at Bourdeaux against Napoleon. On the issuing of the ordonnances of Charles X. in 1830 Bourdeaux substituted the tricolour for the Bourbon flag before the news of the revolution at Paris had arrived.

The different forms of the name of Bourdeaux met with in old writers are Bourdeaux, Bourdeaux, and Bourdeaux.

(Vinot, *L'Antiquité de Bourdeaux*; Millin, *Voyage dans les Départements du Midi*; Devienne, *Histoire de Bourdeaux*; Malto Brun; Balbi; *Dictionnaire de la France*, 1845.)

BORDELAIS, a subdivision of Guienne in France, which was named from its capital Bourdeaux. It included the territory immediately adjacent to that city, the districts of Médoc, Les Landes de Bourdeaux, and many others, and extended on both sides of the Garonne, the Dordogne, and the Gironde. It was bounded N. by Saintonge, E. by Périgord and Bazadois, S.E. and S. by Les Grands Landes, and W. by the ocean. It is now included in the departments of GIRONDE and LANDES.

BORE, a phenomenon which occurs in some rivers near their mouth at spring-tides. When the tide enters the river the waters suddenly rise to a great height, in some rivers many feet above the surface of the stream, and rush with tremendous noise against the current for a considerable distance. Sometimes the waters do not subside till they have almost reached the limit of tide-water. As this swell does not occur in all rivers where there is a tide it is evident that it must be caused by some conformation of the banks or bed of the river, or by both combined. It seems to be necessary, in order that there should be a bore, that the river should fall into an estuary, that this estuary be subject to high tides, and that it contract gradually; and lastly, that the river also narrow by degrees. The rise of the sea at spring-tides pushes a great volume of water into the wide entrance of the estuary, where it accumulates, not being able to flow off quick enough into the narrower part. The tide therefore enters with the greater force the narrower the estuary becomes, and when it reaches the mouth of the river the swell has already obtained a considerable height above the descending stream, and rushes on like a torrent.

In England the bore is observed in some rivers, more especially in the Severn, Trent, Wye, and in Solway Firth. The most remarkable bores hitherto described are those of the Ganges and Brahmaputra. In the Hoogly branch of the Ganges the bore is so quick that it takes only four hours in travelling from Fulta to some distance above Hoogly town, a run of nearly 70 miles. At Calcutta it sometimes causes an instantaneous rise of five feet, which would occasion great damage among the smaller vessels if it did not run along one bank only, so that the barges on hearing the noise which precedes it can be safely brought to the other side of the river, or to the middle, where the swell is indeed considerable, but not so sudden as to endanger vessels which are skilfully managed. In the channels between the islands at the mouth of the Brahmaputra the height of the bore is said to exceed 12 feet, and it is so terrific in its appearances, and so dangerous in its consequences, that no boat will venture to navigate there at spring-tide; but it does not ascend to any great distance in this river, which is probably owing to the great width of the channel.

The phenomenon observed in the mouths of the Indus must be of the same kind. Burnes remarks that "the tides rise in the mouths of the Indus about 9 feet at full moon; and flow and ebb with great violence, particularly near the sea, where they flood and abandon the banks with equal and incredible velocity. It is dangerous to drop the anchor unless at low water, as the channel is frequently obscured and the vessel may be left dry. The tides are only perceptible 75 miles from the sea." The boats of Alexander Arrian experienced these dangerous tides in the Indus, and his historian Arrian is the first who has described them. ('Anab.' vi. 19.) The bore in the Gulf of Cambay and its tributaries is exceedingly high and rapid.

On the north coast of Brazil, especially on the shores of the provinces Pará and Maranhão, a similar phenomenon is observed in some rivers, and in the channel which extends between the coast and a series of islands from Cape Norte to the mouth of the river Macapá. This phenomenon, which is called by the Indians 'pororoca,' is particularly strong in the Araguari River, which runs into the sea near Cape Norte, and in the rivers Guama and Capim near Pará, and also in the river Beary in Maranhão, and according to some writers in the Amazonas. The description of the pororoca does not differ materially

from that of the here of the rivers in India, except that it rises to 15 feet, and forms three or even four swells, which follow in rapid succession.

(Rennell, *Hindostan*; Ayre, *Corografia Brasilia*; Burnes, *Ethersey*, and Jervis, in the *London Geographical Journal*; Eschwege, *Brasilien*.)

BORGNE LAKE. [MISSISSIPPI.]

BO'RGNO, an Italian appellation, which occurs in the name of several towns, is derived from 'burg,' which is said to have been first adopted by the Romans on the German frontiers of the empire to signify an assemblage of houses not inclosed by walls, Burgus or Burgum. It was afterwards applied to the fortified villages of the German soldiers in the service of Rome. The Germanic nations, in their invasions of Italy, introduced the appellation into that country, where it was generally applied to the houses and streets built outside of the gates of a walled town, corresponding to the Roman suburbia. The French fauxbourg had a similar meaning, being derived from *foris burg* or *foris burg*, a 'burg outside of the town.' Several districts in the Italian cities have retained their original name of Borgo, although they are now inclosed within the walls. The district of Rome which is between the bridge of San Angelo and St. Peter's is called Il Borgo. So there are several districts at Florence called Borgo, as Borgo dei Pinti, because they were originally outside of the city walls. There are however also towns standing by themselves which have the name of Borgo.

Borgo San-Donnino, a town in the Duchy of Parma, is situated 13 miles N.W. from the city of Parma, on the road to Piacenza. It was formerly a feudal castle of the house of Pallavicini, around which the town rose up; it now has 5000 inhabitants, some fine buildings, and an old cathedral. It is the chief town of the province of Borgo San-Donnino, which lies between the Taro and the Riglio, and has an area of 621 square miles, with a population (in 1851) of 132,036. Borgo San-Donnino is a bishop's see, and has a college, elementary schools for boys, and several manufactures. It stands on the ancient Amilian Way, and on the line of the projected railway from Bologna to Piacenza.

Borgo San-Sepolero, a city of Tuscany, 14 miles E.N.E. from Arezzo, the valley of the Upper Tiber. It originated in the 10th century with two pilgrims, who having been to Palestine brought back a piece of the stone of the Holy Sepulchre (San Sepolero), and built a hermitage on this spot. The fame of their sanctity attracted many people, and a number of houses were built, to which the name of Borgo San-Sepolero was given. The town was formerly inclosed by walls, which were shaken down by an earthquake; it is still defended by a citadel. It is a bishop's see and has a cathedral, several other churches, and a theological seminary; population about 5000. Borgo San-Sepolero was subject to the Holy See till 1440, when Eugenius IV. transferred it to Florence. It has produced a great number of eminent painters, whose works adorn the churches of their native city.

Borghetto, the diminutive of Borgo, frequently occurs as the name of small places in the States of the Church.

BORKUM. [AURIC.]

BO'RMIO (in German *Worms*), a town of Austrian Italy in the Valteline, is situated between two head streams of the Adda, and at the foot of the Ortler-Spitz, one of the highest summits of the Rhetian Alps. The famous road over the Stiller Joch, or Monte Stelvio, connecting the valleys of the Adda and the Adige, skirts the north-west flank of the Ortler in passing from Bormio to Glurns. This road, the highest point of which is 9000 feet above the sea, was constructed by Austria between 1819 and 1825. Bormio is a small town, numbering less than 2000 inhabitants. It was partly burnt by the French in 1799. The climate is cold. Some barley and rye and excellent honey are the principal productions of the neighbourhood, which affords also good summer pasture. The town has several churches: that of Sant' Antonio contains some good paintings. The mineral baths of San-Martino near Bormio are frequented by invalids from the Tyrol and the Valteline. In the Valfurva, east of Bormio, there are iron-mines and a chalybeate spring.

Bormio formerly belonged to the Swiss canton of Grisons; together with the Valteline and Chiavenna it was annexed to Lombardy by Napoleon I. in 1796.

BORNEO (called by the natives Pulo-Kalamantin), the largest island on the globe, with the exception of Australia, occupies the centre of the Indian Archipelago. It is bounded S. by the Java Sea; E. by Macassar Strait, which divides it from Celebes, by the Celebes Sea, and the Sooloo Sea; and N. and W. by the Chinese Sea, which is joined by the Balabac Strait to the Sea of Sooloo, and by Caramata Strait to the Java Sea. The island is divided by the equator into two nearly equal parts, though the most southern point, Cape Salatan, is only a little more than four degrees south of the equator, and the most northern point, Cape Sampanmanjo, extends a few minutes north of 7° N. lat. The most easterly point of Borneo is Kaniungan Point, which lies under the meridian of 119° 20' E.; the most western point is about one degree north of the equator and nearly under 109° E. long. The island is about 850 miles in its greatest length from north-north-east to south-south-west; and its greatest breadth is about 630 miles. The main mass of the island lies south of 2° 30' N. lat., and is about 550 miles long by 450 miles broad; to the north of this parallel a peninsula extends towards the north-east upwards of 300 miles in length and 120 miles in average breadth: consequently the area

of the whole island may be close upon 284,000 square miles. The population has been estimated at three millions; but it is needless to remark that nothing definite is known upon this head.

Coast-Line.—The eastern shores south of Kaniungan Point, the whole extent of the southern shores, and the western coast up to Cape Datu, on the western side of Sadong Bay, are for the most part low, and in some places marshy and alluvial. From Sadong Bay the coast runs in a north-east direction to Capo Sampanmanjo, which shelters Maludu Bay on the west. The navigation along this part of the coast used to be deemed perilous on account of the numerous islets and rocks that line it and the sudden squalls to which it is subject. The establishment of the colony of Labuan and the acquisition of the rajaship of Sarawak by Sir James Brooke have in recent years attracted British cruisers to this coast, and the perils of the navigation no longer seem to be very formidable. The coasts of the peninsula are in many parts held and rocky, and indented by several large bays, the principal of which are those of Maludu and Labok, long the haunts of the Lanun, Sooloo, and other pirates. It was in the Maludu Bay that Mr. Burus was murdered by the Lanuns a few years ago. Off the mouth of Maludu Bay lie the islands of Balambangan and Banguey. To the south of Labok Bay, but separated from it by Sandakan Bay, lies the peninsula and promontory of Unsoong, which is a great resort of the swallows, whose edible nests form an important object of commerce with China. The peninsula of Unsoong is said to be the most eastern point on the globe in which the elephant is found in its wild state.

Mountains.—Of the interior of Borneo very little is known. A Dutch expedition started from the south-west of the island in 1823 to take possession of the gold and diamond mines, and advanced about 300 miles inland without meeting any mountains of such an elevation as to prevent their progress. They came to a large lake called Danao Malayu, 30 miles long and 12 miles broad, somewhere in the interior, but they did not fix its site. Borneo has a grand mountain system, but little more is known of it than the general direction of the leading ranges. And of the interior of the country generally it may be said that we are almost entirely ignorant.

From Cape Datu, a remarkable headland on the west coast, a range of mountains (averaging between 3000 and 4000 feet in height) sweeps inland to a considerable distance from the shore of the Chinese Sea, and then runs to the north-eastward, increasing in height as it goes northward, and known under different names—the Krimbang Mountains, which bound Sarawak on the south; to the north of these the Batang Lupar Mountains, and then the Madi Mountains. Between this range and the Chinese Sea lies the extensive country of Borneo Proper, which occupies all the north-west of the island. Near 5° 30' N. lat. the axis of the range strikes the south-western corner of a large lake called Kini-Balu. The range here declines a little to the westward, and seems to be a little broken, but it soon resumes the northerly direction, and rises on the north-west side of the lake to an elevation of 13,698 feet in Mount Kini-Balu (Chinese Widow), the highest known point in Borneo; from this mountain the range continues northward to its termination in Cape Sampanmanjo. Near the parallel of 4° N. Mount Malu rises at a long distance from the main range (it is probably unconnected with it) to the height of 8000 feet. Numerous rivers flow across Borneo Proper from these mountains, the principal of which, proceeding northwards from Cape Datu, are the river of Sarawak, the Batang-Lupar, the Rajang, and the Kinnanis, all of which are navigable streams.

Mount Kini-Balu forms a conspicuous object to mariners along the north-west coast. At its base lies the Lake of Kini-Balu, which is 35 miles long and 30 miles broad, with an average depth of between five and six fathoms. The country east of the Lake and Mountain of Kini-Balu is occupied by the Maludu Dyaks. The extreme north-east coast is indented by the bays of Labok, Sandakan, and Gioug; the last two are separated by the peninsula of Unsang, which is traversed by the Kinihatangan Mountains, and along the northern base of these runs the Kinihatangan River into Sandakan Bay. Gioug Bay is of great extent, its western shore nearly touches 118° E. long. To the south of the Maludu country a large extent of territory belongs to the sultan of Sooloo.

The Madi Mountains seem to comprise a central knot whence lofty ranges run to the east and south-east dividing the rest of the island into distinct and extensive basins. One of these ranges runs east by south from Mount Beringin, near 2° 30' N. lat., and terminates in Kaniungan Point, separating the territory of Coti from the Beru country, which comprises the basin of the Pantai River. At a short distance south of Mount Beringin another lofty range, the Anga-Anga Mountains, springs from the Madi Mountains and runs south-east to the equator, which it strikes under 116° E. long., and thence takes a southern direction to its termination in Cape Salatan the most southern part of Borneo. This range separates the Dutch territory of Bangernassin from the territories of Coti, Passir, and Tanah-Bumbu which lie between these mountains and the strait of Macassar. The southern part of this long range, where it separates Bangernassin from Tanah-Bumbu, is called the Meratus Mountains. On the western side of the Anga-Anga Mountains is the extensive basin of the Banjar River, and to the west of that is the basin of the Great Dyaks River. At no great distance from the point where the range leaves the Madi Mountains it sends off a long offshoot called the

mountain range, which runs 1 40 N. lat., under the name of the Kamunting Mountains, run north-westward to Mount Malim, and then break up into numerous ramifications some of which extend westward to near 111° E. long., just above the bifurcation of the Simpang River. The country between the Kamunting Mountains and the great north-western range comprises the basins of the Simpang and Sambas rivers. It was up the former of these that the Dutch in the expedition of 1843 proceeded. The Sambas district lies immediately to the south and south-west of Sariwak, and like that port carries on a considerable commerce with Singapore.

Rivers.—The rivers of Borneo are numerous and many of them are of considerable size at their embouchures and are navigable for a considerable distance from the sea. We proceed to enumerate the most important of those that are known, commencing our survey as before with Sariwak and proceeding round the island northwards. The Sariwak coast extends from Cape Detn to the mouth of the Samarahan River. The chief river that enters the sea between these points is the Sarawak which rises in the north side of the Krimbang Mountains, passes the town of Kuching the capital of Sariwak, a little below which it divides into two arms, the more eastern of which, called the Maratoh entrance, falls into the sea in about 1° 20' N. lat., 111° 30' E. long. The other branch, called the Santabong entrance, reaches the sea at the peninsula of Sipang, on which is Mount Santabong 3713 feet high.

In Borneo Proper the *Balang-Lapar* rises in the mountain of that name and flows past the town of Patuman between jungly haiks, and enters the sea near 1° 25' N. lat., 111° E. long. Farther north-east are the Sarabas and Rajang rivers. The river Cadayan, near the mouth of which is Bruné the capital of Borneo Proper, enters the south side of a large bay, the eastern shore of which is skirted by mountains rising abruptly from the shore. This bay lies to the south-south-east of the island of Labuan.

The lake of Kimalalu lies between 5° 25' and 5° 58' N. lat., 116° 45' and 117° 15' E. long. It has an outlet northward into Meludu Bay. Besides this no less than three other outlets are conjecturally marked, namely, the *Pattan* which runs north-east and enters the sea about 6° 35' N. lat.; the *Kinibatangan* which runs east along the northern base of the Kinitatangan Mountains, and has its mouth in 5° 45' N. lat., 115° 35' E. long.; and the *Sibokko* which has a south-eastern course into Sulakan Bay: but it need not be remarked that this conjecture is very improbable, and we think it will eventually be found that the rivers just named, which certainly exist, have their sources in highlands near the shore of the lake.

In the territory of the sultan of Sooloo in the north-east of Borneo are the rivers *Sambakung* and *Atas* which enter the Sea of Celebes; and the *Balangan* which rises in the Anga-Anga Mountains, runs eastward passing the town of Bulungan on its left bank, and enters the sea in about 3° 10' N. lat., 117° 30' E. long.

The Beru country comprises the basin of the *Pantai* River which is formed by the junction of the Segu and the Kaley at the town of Gunung Tebar, situated on the left bank of the Segu, in 2° 10' N. lat., 117° 32' E. long. Near the junction is the town of Sambillong on the right bank of the Kaley. Both of these head streams flow from the Anga-Anga Mountains eastward, in which direction the Pantai continues to flow to the Celebes Sea, which it enters by several mouths a little north of 2° N. lat.

The *Coti* or *Djosa* River, which drains the territory of Coti, rises between the Anga-Anga Mountains and the eastern range that terminates in Kaulungan Point. It receives a vast number of tributaries on both banks in its course, which is towards the south-east. At a considerable distance from the sea the Coti divides into several arms including deltas and entering the sea between 0° 10' and 0° 50' N. lat. The town of Coti stands on the southern arm several miles above the embouchure. In the *Passeir* and *Tanah-Bumbu* territories numerous rivers flow from the Meratus Mountains eastward into Mamassar Strait and the Strait of Pulo Laut which separates the small mountainous island of *Pulo Laut* from the south-eastern angle of Borneo; but they are all of short course.

The Java Sea receives several considerable rivers from Borneo. The largest is the *Banjar* or *Darito*, the head stream of which rises in Mount Bundang in 0° 30' N. lat., 113° 30' E. long. The course of the river is eastward to 115° E. long., where it turns to the south, and running in this direction in a very tortuous course receives many small streams from either side. About 2° 40' S. lat., the Banjar divides into two arms, the principal of which enters the sea in about 3° 30' N. lat., 114° 25' E. long. The Dutch settlement of Banger-menda is on the left bank of this branch in about 3° 15' S. lat. The western arm called the *Marong* or *Little Dayak* River has its outfall about 3° 25' N. lat., 114° 15' E. long. The next river to the westward is the *Kapua* or *Great Dayak* River which flows south from the Kamunting Mountains and enters the sea about 3° 20' S. lat., 113° 50' E. long. The other rivers in order along the coast are the *Moplawi*, the *Nampit*, the *Pembuan*, and the *Kotta-Waringin*, all of which are named from towns near their mouths.

The country included between the Kamunting Mountains, the Anga-Anga Mountains, and the great north-western range is drained chiefly by the *Simpang* River, which rises in the Anga-Anga Mountains near 1° 10' N. lat., 114° 10' E. long., and flows west by south receiving

numerous tributaries. In the upper part of its course the *Simpang* traverses a country inhabited by nomadic tribes. Near 0° 10' S. lat., it divides into two branches, the *Kapuas* and the *Mantu*. The *Kapuas* flows first to the west then to the north-west, throwing off the *Ulak* which reaches the sea near 0° 25' S. lat., while the embouchure of the *Kapuas* is in 0° 2' N. lat. The town of Pontianak is situated on the left bank and near the mouth of the *Kapuas* in 0° 2' S. lat., 109° 20' E. long. The *Mantu* branch runs south by west and enters the sea in about 0° 53' S. lat., 109° 50' E. long.; in the embouchure is a large island on which are Mount *Majak* and Mount *Miaani*. The north channel between the island and the main is called the *Majak* River. The southern part of the delta of the *Simpang* forms a district called *Kubs*. To the south of the *Simpang* flows the *Paucan* River, which runs south-west from Mount *Malim* and enters the sea by an estuary (in which is the island of *Pajong*) in about 0° 50' S. lat., 111° 20' E. long. The *Sambas* district is drained by the *Sambas* River, which rises in Mount *Pandan* (0° 54' N. lat., 109° 35' E. long.), runs first north-east, then to the north-west, afterwards south-west, passing the town of *Sambas* on its left bank, and enters the sea by a wide estuary, on the left shore of which is an eminence called *Mount Pamankat*.

There are numerous islands off the south-western shore of Borneo, the principal of which are the *Natuna* and *Tambelan* groups, *St. Esprit*, *St. Barbe*, and *Daton* islands near the equator, the *Panumbangan* Islands nearly opposite the outfall of the *Simpang*, and the *Caramata* Islands which give name to the strait between Borneo and *Billiton* island.

Climate and Products.—The climate of this island, as far as it is known, is very hot and moist, especially along the coast, and among the wide-spreading forests which cover many parts of the country. In the districts situated on the western shores the wet season takes place during the south-east monsoon, from April to September; but along the Strait of Macassar, and in the Java Sea, it occurs with the north-east monsoon, from September to April. From a series of observations made near the coast during twelve months between the hours of 6 and 7 A.M., the average annual temperature at that hour is deduced to be 70° Fahr. And from a similar table giving the maximum temperature of each month at the same hour the average annual maximum temperature at the time of observation is 87° 6' Fahr. From this it may be inferred that the heat of midday is very great in the low countries, and that in marshy districts the climate must be unhealthy; but the higher parts of Borneo, especially towards the north-east, have a climate almost as temperate as Europe.

A country with a good soil and abundance of moisture, situated under the equator, must be extremely rich in vegetable productions. These include rice, sago, mandioc, cotton, sugar, camphor, cassia, pepper, cloves, nutmeg, opium, ginger, betel-nuts, cocoa-nuts, areca palm, a vast variety of timber-trees, sandal-wood, ebony, banana, bread-fruit, gutta-percha, upas-tree, sesamum; a vast number of oil-yielding plants, such as the *cayapanti*, which yields *cayeput-oil*; rattan and other plants used for making cordage; benzoin and other gums and woods used for frankincense; iudigo, safflower, arnotto, turmeric (which is used less for dyeing than as an aromatic for seasoning food), and several dye-woods, &c., &c.

The horticulture of Borneo comprises (besides several articles above enumerated) the calabash, the gourd, the pumpkin, the musk-melon, the water-melon, and a variety of cucumbers, yams, batatas; a great variety of fruits including lemons, oranges, citron, pine-apples, mangoes, mangustins, custard-apples, tamarinds, pomegranates, &c., &c.

Both sea and river fish abound, particularly the former. The numerous banks off this and the neighbouring islands afford the fish upon them such abundance of food, that no part of the world has a better supply of fine fish, especially where the shores are flat. The edible fish are here very numerous, among which the pomfret, the ciloap, and the sole are the most delicate. A great variety of fish is dried in the sun, and forms a considerable article of commerce; fish in this state is an article of as universal consumption among the Indian Islanders as flesh in cold countries. Some kinds of fish, especially shrimps, are pickled, and form an article of internal commerce under the name of *blanchand*; and the *tripang swala*, or sea-slug, is a valuable article of exportation to China. Among land animals are included the elephant, rhinoceros, leopard, buffalo, deer, wild hog, monkeys, horned cattle, a few horses, fowls and ducks, a great variety of birds, &c. Bees abound everywhere and vast quantities of wax are exported to China. The lac insect is found in the forests. Tortoises are very abundant on the northern and north-eastern coast; those found farther west are smaller, and the shell is thinner and less valuable. Tortoise-shells are exported to China, whence many of them find their way to Europe. Pearls and mother-of-pearl oysters are fished along the north-eastern coast, but they are not so much esteemed as those of the Sooloo Islands.

Population, &c.—The inhabitants of Borneo are either aborigines or foreign settlers. The former are divided into a great number of tribes. The *Dyaks* occupy the western and southern districts. The *Biajoes* and others, the peninsula extending to the north-east, and the *Tiroon* live on the eastern coast. In the interior are the *Kayan*, the *Dusun*, the *Marut*, and the *Tataoeli*; other tribes are the *Kadians*, the *Millanoros*, the *Dyak Darrat* (or *Land Dyaks*), and *Dyak Laut* (or

Sea Dyaks). The foreign settlers are Malays, Javanese, Bugis, Macassars, Chinese, and a few Arabians.

All the inhabitants, with the exception of the Chinese and Arabians, belong to one race, which is called the Malay race. Their persons are short, squat, and robust. The medium height of the men is about 5 feet 2 inches, of the women 4 feet 11 inches. Their lower limbs are large and heavy, and their arms rather fleshy than muscular. The face is of a round form, the mouth wide, the chin somewhat square, the cheek-bones are prominent, and the cheek consequently rather hollow; the nose is short and small, never prominent, but never flat; the eyes are small, and always black; the complexion is generally brown, but varies a little in the different tribes, the Dyaks inhabiting the interior of the island being fairer than those of the coast; the hair is long, lank, harsh, and always black. The languages of the different aboriginal tribes differ widely from one another, and they have it is said no literature.

The aboriginal tribes have not attained a high degree of civilisation. Agriculture however seems generally diffused among them, as well as the most necessary arts of life. They cultivate chiefly rice, and collect gold-dust and diamonds. They trade also in rattans, gutta-percha, and other products of their forests. Their dress consists only of a small wrapper round their loins. Their houses are wooden buildings, often large enough to contain upwards of 100 persons. In the construction of their boats and some of their utensils they display considerable ingenuity. These tribes though otherwise mild and simple have been accused of cannibalism. Some who live on the coast have embraced the Mohammedan religion, but the greater part are idolaters. Polygamy is in general use among those who are able to maintain many wives and large families. A portion of the Binjooos live constantly on the sea in small covered boats, and shift to leeward from island to island with the variations of the monsoons. Their fishing-boats, in which they live with their whole families, are of about five tons burden, and their principal occupation is the catching of sea-slugs, for which they frequently dive in seven or eight fathoms water.

The number of the Chinese settlers is considerable; and in Sambas especially they have of late years gained considerable influence by means of their secret societies, so as to embarrass the Dutch government considerably. In every part of the island where trade or industry is rewarded by security of life and property, some Chinese families are to be found. They follow the occupations of merchants, mechanics, and labourers; cultivate the ground, distil arrack, make sugar, search for gold-dust, and trade to the interior as well as on the coast. They are not rich, being too fond of good living, and addicted to gambling, opium, and merry-making.

The Bugis, who come from the island of Celebes, are remarkable among the nations of Southern Asia for their industry and activity. They chiefly apply themselves to trade, to the manufacture of Bugis cloth, and the working of raw silk into cloth. Many of them become comparatively wealthy, although they are generally poor when they arrive, but they are extremely economical and even penurious in their manner of living. These Bugis are very active seamen, and visit all the islands and countries round Borneo, in their light, cheaply-built, but often richly-freighted proas, many of which frequent the harbour of Singapore.

The Malays are the most numerous of the foreign settlers. They have formed a great number of small states along the coast, and subjected the Dyaks, whom they often treat with great cruelty. The interior of the country and portions of the coast also are in possession of the Dyaks.

The Dutch have possession of about one-half of the coast, and have extended their dominion far inland in some places, so that the rich gold and diamond-mines are in their possession. All the Dutch establishments are on the southern and western coast, and they govern the territories of the sovereigns of Bangermassin, Succadana, Pontianak, Mampava, Sambas, and Matan, and of some others farther inland. This great tract of country is governed by three Residents, established at Bangermassin, Pontianak, and Sambas, with two subordinate residences at Mampava and Landak. Around Sambas the area of the Dutch territory is given at 5269 square miles, with a population of 46,819 in 1849; the territory of Bangermassin is 54,203 square miles, with 304,076 inhabitants; and Pontianak, in the south-west, area 138,973 square miles, population 311,100.

In the Dutch territories there are three places of considerable trade, Sambas, Bangermassin, and Pontianak. Gold is found at six different places, at Ombak, Sangg, Larak, Banjar-laut, Sambas, Pontianak, and Montradak. The metal is found in alluvial deposits, which are channelled by the beds of numerous rivers, not usually above five or six feet from the surface. The principal diamond-mines are at a place called Landak, whence the diamonds of Borneo are called Landak diamonds. The mines, which are entered by perpendicular and lateral shafts, are worked by the Dyaks, but the gold-mines are mostly worked by the Chinese. The Bugis resident merchants are the great dealers in diamonds.

To the north-east of the Dutch territories and along the north-western coast, extends the kingdom of Borneo Proper, which extends from Cape Datu to the north of the river Kimanis. It contains a sea-coast of between 600 and 700 miles, and extends from 100 to 150

miles towards the interior of the island. The capital is Bruné. The intercourse between Borneo Proper and Singapore is considerable. From Sadong, on the western frontier, great quantities of antimony are brought to Singapore. The mountain which contains the antimony is about one day's journey from the coast. The sultan and a considerable portion of the population are Malays.

Borneo Proper has recently been the scene of a remarkable enterprise, which has brought this part of the island prominently before the world. Mr. James Brooke, a gentleman of independent station, sailed from England in 1838, in his own yacht 'The Royalist,' to investigate the islands in the Eastern Archipelago. With a crew of about 20 men, he arrived at Singapore in June, and at the coast of Borneo in August. He found that the part of the island at which he touched was governed by a raja, who was engaged in the province of Sarawak in the suppression of pirates. Mr. Brooke sailed up the river to Kuching, the capital of Sarawak, and being kindly received he got leave to explore much of the country, and discovered the mineral riches which it contains. Mr. Brooke returned to Singapore in the spring of 1840, but made another voyage to Borneo in August of the same year. He assisted the raja in his wars, and was promised the government of Sarawak, and in September 1841 he was installed in due form 'Raja of Sarawak.' Mr. Brooke, who built himself a house at Sarawak, and established a sort of court there, exerted all his influence to suppress piracy on the coast. In July 1842 he made a formal state-visit to the sultan, at the capital of Borneo, to endeavour to establish friendly relations with England. In the early part of 1843 Mr. Brooke went to Singapore, and shortly afterwards returned in the Dido, commanded by Captain Keppel, who was commissioned to assist in suppressing piracy in those seas. In June a strong party, composed of Europeans and natives, set out from Sarawak into the interior, and put down a formidable nest of plundering tribes. Captain Keppel soon after left Borneo for China; but on his return in July 1844 another expedition was led against hostile inland tribes, which was as usual successful. Keppel returned to England; but Sir Edward Belfour assisted in the proceedings at Sarawak; and Mr. Brooke received the appointment of agent for the British government in Borneo, in which character he had two interviews with the sultan of Borneo in the city of Bruné, with a view to conclude a treaty of peace and commerce between the two countries. In the autumn of 1845 Mr. Brooke aided the government officers in fixing on some spot as the location for a colony or British settlement off the coast of Borneo. After a careful examination of the small islands of Labuan and Balam-bangan, Mr. Brooke fixed on the former as presenting the greatest advantages. In the spring of 1846 a serious reverse occurred. Some of the discontented chiefs induced the sultan to plot mischief against the English; two native rajahs who had from the first been favourable to Mr. Brooke were murdered, and a plan was formed to poison Mr. Brooke himself. But prompt measures were taken: a squadron was sent from Singapore, and the hostile proceedings were put down. In 1847 Mr. Brooke went to England, where he was knighted, and had his title of 'Raja' recognised by the British government. He returned to Borneo as Governor of Labuan, and agent or representative of England at Borneo. On the night of July 31, 1849, the raja with a fleet of Sarawak prahus, and assisted by her Majesty's ship *Royalist*, the East India Company's steamer *Nemesis*, and three boats of her Majesty's ship *Albatross*, attacked and annihilated a fleet of 150 Dyak and Malay prahus and bangkongs at the mouth of the Serelias River. The prahus were manned by from 30 to 70 men each, who were chiefly Dyaks of the Serebas and Sakarran, with a few Malay chiefs among them; about 300 are said to have been killed; many were drowned in their swamped prahus, and only 2500 are said to have escaped to the jungle. The raja's boats after this action ascended the river and destroyed the villages along the Serebas. This fearful chastisement was inflicted upon these people, according to Raja Brooke, because they were pirates, and head-money was paid to those concerned in the action; but there are not wanting those who stoutly maintain that they were 'inoffensive traders,' and that the expedition was undertaken by the raja from ambitious personal motives.

The researches of the last eight years have shown that Borneo, at least in the province of Sarawak, is one of the richest and most fertile countries of the globe. Among the minerals are diamonds, gold, antimony, tin, iron, copper, lead, and coal; while the soil is of such various kinds, that it will grow almost every variety of vegetable produce. [SARAWAK.]

The commercial intercourse of Borneo with China is much more extensive than with Europe. Edible swallows'-nests, sea-slugs, aquilwoods, and camphor are exported to Canton, Amoy, Ningpo, and Shanghai. The Dutch carry on a most active commerce, exporting pepper, gold, and other products. The commercial intercourse of the west coast of Borneo, and more particularly of Borneo Proper and Sarawak with Singapore, has of late years become very considerable.

(Dr. Leyden, *Description of Borneo in the Asiatic Journal*; Crawford, *History of the Indian Archipelago*; *Asiatic Journal*; Stavroginus, *Voyages*; Captain Keppel, *Expedition to Borneo and Indian Archipelago*; Petermann, *Map of Borneo*, London, 1851.)

BORNEO (properly *Bruné*), the capital of the kingdom of Borneo Proper, in the north-west of the island of Borneo, is situated in 4° 56'

N. lat. 11° 41' E. long. on the left bank of the river Borneo or Chanyan, about ten miles from the sea, and is said to have a population of about 20,000. The mouth of the river is narrow, with a bar in front of it, on which however there is a considerable depth of water. Farther up the river has an average depth of six fathoms, and here the shipping has, consisting of prahu and Chinese junks, which trade to Singapore and China. The town, which is on low ground, contains a considerable number of houses, built on piles four or five feet high, which at the rise of the tides allow the water freely to pass under them.

Borneo is a place of considerable trade. Its commerce was formerly carried on with China, the Philippines, and the Sooloo Islands, but since the foundation of Singapore the Hugs merchants of Borneo often visit that port. The exports are rice, black pepper, camphor, cinnamon, bees' wax, sea-slug, turtle-shell, pearls, and mother-of-pearl, with tea, wrought and raw silk, and nankeen, the three last articles being imported from China. At Singapore they take in extensive cottons and woollens, opium, iron, arms, and ammunition. Under the weak and oppressive government of the sultans of Brund the town is said to have of late years decayed in importance, and numbers of the population are said to have removed to Labuan and Sarawak.

(*Asiatic Journal*.)

BORNHOLM, an island in the Baltic, belonging to Denmark, and attached to the province of Seeland, is situated about 99 miles E. from the island of Seeland (Sjælland), about 40 miles E. by S. from Ystad on the coast of Sweden, and about 50 miles N. E. from the island of Rugen. It is about 96 miles long by 12 miles wide, and including three islets to the north-eastward it contains an area of about 216 square miles, with a population of about 25,000, who are almost entirely of Danish extraction. Bornholm is a rocky and mountainous island; it is so walled in by precipitous cliffs and dangerous reefs that at certain seasons of the year the approach to it is extremely hazardous. A high range, called Almindlingen, which stretches across Bornholm from north to south, contains the Rytterknecht, the most elevated point in the island, about 500 feet in height. The Almindlingen is intersected by fertile valleys skirted with underwoods of oak. There is also a spacious moor, 'the Lyngmark,' in the interior, on which nothing will grow but low juniper and other wild shrubs, with some coarse grass; the inhabitants however use it as common pasture ground. The remainder of the island has a stony soil, partially intermingled with tracts of deep loam, and on three spots with drifting sand. Bornholm is watered by a number of rivulets, possesses some excellent springs, and has several sheets of water. Every spot is diligently cultivated. The climate is cold, but dry and healthy. Timber is scarce. The agricultural products are oats, rye, barley, peas, and some flax, hemp, hops, and potatoes. The live stock are small, but of good quality; their numbers are estimated at 9000 horses, 20,000 cows and ewes, and 25,000 sheep. Bees are everywhere reared; poultry, particularly ducks and geese, is abundant, and marine fowl are plentiful, but game is scanty. The coast abounds with fish, mostly salmon, haddocks, and small-sized herrings. Coal is raised for domestic use; quarries of sandstone and millstones are worked; marble, slate, and potter's-earth are found. The manufactures include woollens, pottery, bricks, tiles, and clocks and watches. The farmers are in general well to do; they are the owners of the lands they cultivate. The lands descend to the youngest son; but on the failure of male issue the eldest daughter, not the youngest, inherits them. The Bornholmers pay only half the taxes imposed on their fellow-subjects, but provide for the defence of the island out of their own resources. *Rønne*, in the south-west of the island, is the capital. It is a thriving place, with a small fortified harbour, from which steamers ply regularly to Copenhagen, calling at Ystad on the south coast of Sweden. The population exceeds 4000; they are chiefly employed in the fisheries, in the manufacture of woollens and tobacco, and in trading.

The other towns are *Næstø*, on the south-east coast, which possesses a good harbour and about 1700 inhabitants; *Ånkærby*, in the interior, which has a handsome black marble church, the finest in Bornholm, and about 400 inhabitants; *Halsø*, on the west coast, with an excellent harbour and about 700 inhabitants; *Scamby*, on the east coast, population about 900; and *Sandvig*, on the north-east point of the island, with about 200 inhabitants. The three small islands or rocks of *Cornese*, *Frøderiksholm*, and *Uraholmen*, are about 17 miles E. from the north point of Bornholm. *Christiansø* and *Frøderiksholm* are inhabited and fortified, and on *Christiansø* there is a lighthouse. The fisheries and the taking of the sea-fowl are very productive.

BORNOU, a kingdom situated nearly in the centre of North Africa, between 11° and 15° N. lat. 12° and 16° E. long. It is bounded N. by the Sahara and the kingdom of Kano, which extends along the north shore of Lake Tchad; E. by Lake Tchad and the river Shary; S. by the mountainous country of Mandara; and W. by the Federal Kingdom of Haoussa.

The surface is level, with only a few very gentle ascents and descents. The eastern parts along Lake Tchad are inundated in the rainy season, when the inhabitants are compelled to retreat farther to the west. But even the remainder of the country is partially subject

to inundations, the slow rivers and rivulets which intersect the country being unable to carry off the immense supply of water during the rainy season; and thus extensive tracts which skirt their banks on both sides are covered with water, and remain inundated generally for three months. The rivers have generally a short course; they fall either into Lake Tchad or into the Shary or the Yeou. The Shary has its source in the Mandara Mountains, and seems to form the boundary between Bornou and Begharmi for nearly the whole length of its course in the plains. Towards its mouth it divides into many branches and forms numerous deltoid islands; those which lie nearest to the mouths of these branches are complete swamps, and unfit for agriculture even during the dry season. The Yeou River rises in the hilly country of Houssa, near 10° E. long., where it is called Shoooum, and after having traversed in the first half of its course a country mostly covered with low rocky hills, it runs for the remainder of its course, which in general is in an eastern direction, through the extensive plain of Bornou to Lake Tchad.

The heat of Bornou is very great, but not uniform. The hottest season is from March to May, when there is no rain, and the thermometer sometimes rises to 105° and 107° at two o'clock in the afternoon. The prevailing southerly winds at this season are suffocating and scorching. In the night the thermometer sometimes falls to 86° and 88°. This hot season is followed by violent thunder and lightning, and rain sets in towards the middle of May. At the end of June the inundations of the rivers and lakes begin. In October the rains become less frequent, the air is milder and more fresh, and the weather serene; breezes blow from the north-west, with a clearer atmosphere. Towards the end of December and in the beginning of January the thermometer never rises above 75°, and in the morning it falls to 55°.

The only implement of agriculture is an ill-shaped hoe, made from the iron found in the Mandara Mountains. All the labours of the field devolve almost entirely on women. The most valuable products are maize, millet, sesua, some rice, a little wheat and barley, together with cotton and indigo, of which the two last grow wild close to Lake Tchad and in the overflowed grounds. The indigo is of a superior quality, and the dark-blue colour of their robes, or large shirts (the only dress the people wear) is probably not excelled in any part of the world. Bornou is almost entirely destitute of fruit-trees. Mangoes are only found in the southern districts near Mandara, and date-trees only to the north of Woodie, at the north-western angle of Lake Tchad.

The wealth of the inhabitants principally consists of slaves, bullocks, and horses. Black cattle are most numerous. The Shouas, who are of Arabic descent, and the ruling tribe on the shores of Lake Tchad, breed also many horses, and send to Soudan annually from 2000 to 3000. The other domestic animals are dogs, sheep, and goats; the common fowl. Bees and locusts are numerous; the latter are eaten by the natives. The beasts of burden are the bullock and the ass. There is a very fine breed of asses in the Mandara valleys. Camels are only used by foreigners or persons of rank.

The lion, the panther, a species of tiger-cat, the leopard, the hyena, the jackal, the civet-cat, the fox, and several species of monkeys, black, gray, and brown, are found in Bornou. Elephants are so numerous near Lake Tchad that herds of from fifty to two hundred are sometimes seen; they are hunted for the ivory as well as for their flesh. Other wild animals whose flesh is eaten are the buffalo, the crocodile, and the hippopotamus. The flesh of the crocodile is extremely fine; "it has a green firm fat, resembling the turtle; and the calipee has the colour, firmness, and flavour of the finest veal." (Denham.) The giraffe is found in the woods and marshy grounds near Lake Tchad; there are also autelopes, gazelles, hares, and an animal called kooriguu, of the size of a red deer, with annulated horns.

Partridges, grouse, wild ducks, and geese, snipes, ostriches, pelicans, spoon-bills, and the crane species abound. Guinea-fowl abound in the woods. Reptiles, especially scorpions, centipodes, large toads, and serpents of several kinds are very common.

Iron is found in the Mandara Mountains, and imported into Bornou, but in no great quantity. The best comes from Soudan, mostly worked up into good pots and kettles.

The inhabitants speak ten different dialects of Arabic. The Shouas, who inhabit the borders of Lake Tchad, are Beduins, and have preserved the Arabic nearly pure. They are the best troops of Bornou, and it is said that this country can muster 15,000 Shouas. The aborigines of Bornou, who call themselves Kanowry, have large unmeaning faces, with flat negro noses and mouths of great dimensions, with good teeth and large foreheads. Their dress consists of one, two, or three robes, according to the means of the wearer. Persons of rank wear a cap of dark-blue, but common people go bare-headed, and take care to keep the head constantly free from hair. They are Mohammedans, and less tolerant than the Arabs. They tattoo their bodies like the other negro nations of these latitudes.

The principal towns or cities are thirteen, among which the most important are Kouka, Angornou, the residence of the sheikh, and Birni, the residence of the sultan. These are all situated at a little distance from each other and from the west shore of Lake Tchad, between 12° 30' and 13° N. lat. Other towns are Old Birni, higher

up the Yeou, and Digoa and Affagay, on the route to the Maudara country.

The country is governed nominally by an absolute sultan, but the whole power is in the hands of the Arab sheikh, whose soldiers are well disciplined and armed, and he can if necessary collect an army of 20,000 men.

The commerce of this country is not great, but there is a considerable transit-trade across Bornou between Soudan and the Moors of Tripoli. The Moors bring different sorts of cotton and silk, a few woollen cloths, and various utensils of metal: they receive in exchange slaves, ostrich-skins, elephants' teeth, and raw hides. Strips of cotton, about three inches wide and a yard in length, are called gubhuck, and used as small coins in the retail trade; three, four, or five of these, according to their texture, go to a rattala, and ten rattala are equal to a dollar. (Denham.)

BORODINO. [Moscow, Government of.]

BOROUGHBRIDGE, West Riding of Yorkshire, a market-town and borough in the parish of Aldborough and lower division of the wapentake of Claro, is situated on the right bank of the Ure, in 54° 6' N. lat., 1° 24' W. long., 17 miles N.W. from York, 208 miles N. by W. from London by road, and 212½ miles by the Great Northern railway. The population of the township of Boroughbridge in 1851 was 1095. The living is a perpetual curacy, held with that of Dunsforth in the same parish, in the archdeaconry of Richmond and diocese of Ripon.

Boroughbridge owes its origin to the circumstance of the line of the Great North road having been diverted from Aldborough, through which it had previously passed, and carried over the river Ure by a bridge which was constructed at the spot where Boroughbridge now stands. After this Aldborough declined, while Boroughbridge gradually rose; the remains of old buildings in Aldborough supplying the materials for many of the new erections in the rival town. For about three centuries Boroughbridge sent two members to Parliament, but it was disfranchised by the Reform Act of 1832. In 1321 Edward II. defeated the Earl of Lancaster and the confederate barons in a battle fought at this place; the earl and other noblemen were taken prisoners, and afterwards executed. Many British and Roman coins and other antiquities have been found in the parish. In 1831 a beautiful tessellated pavement was discovered. The most striking remains are the Arrows [ALDBOROUGH], which are at a short distance to the west of the town.

Besides the chapel-of-ease there are places of worship for Wesleyan Methodists and Independents. There are a National school, an infant school, a subscription library, and a new-room. The chief business in Boroughbridge is the shipment of agricultural produce. The Ure is navigable as high as Ripon, six miles above Boroughbridge, for small craft, and several warehouses connected with its commerce stand on the right bank of the river. Boroughbridge communicates with Selby and Hull by the Ure and the Ouse; with Leeds, Wakefield, and the manufacturing districts by the Ure, the Ouse, and the Aire and Calder navigation. The houses in the town are neat and well built. In the market-place there is a fluted Doric column. The market-day is Saturday: several fairs are held in the course of the year; one in June, for hardware, has now become of little importance; the other fairs are chiefly for cattle.

BOROVSK. [KALUGA.]

BORROMEAN ISLES. [MAGGIORE, LAGO.]

BORROWDALE. [CUMBERLAND.]

BORROWSTOWNNESS. [LINLITHGOWSHIRE.]

BORSOD. [HUNGARY.]

BORTHWICK. [EDINBURGSHIRE.]

BORYSTHENES. [DNIIEPER.]

BOSCASTLE. [CORNWALL.]

BOSCO. [ALESSANDRIA.]

BOSJESMANS (literally 'Bushmen'), is the name which the Dutch colonists at the Cape of Good Hope have given to a wild and roaming race of people who live about the northern skirts of the colony and as far as the Orange River, without any settled habitations, and who do not rear cattle or constitute tribes like the Hottentots. The Bosjesmans are a branch of the Hottentot race which separated from the rest long before the establishment of Europeans in Southern Africa, and took to a wandering life in the northern and more inland parts of the country. Their language appears to bear some analogy to that of the Hottentots, although the Bosjesmans and the Hottentots do not understand each other. They have both the same clacking sound of the tongue, only the Bosjesmans have it stronger and more frequent, and they draw out more the ends of their sentences. They have the universally distinguishing features of the Hottentots—the same broad flat nose, long prominent cheek-bones, and yellow-brown hue of the skin; and their physiognomy has a similar expression to that of the Hottentots, only more wild and animated, owing to their insecure and wandering habits of life. They are neither husbandmen nor shepherds; they have no cattle or flocks, but kill wild animals with their arrows, catch fish, and also feed on locusts, snakes, ants' eggs, and insects, and upon roots and berries. They are capable of bearing hunger for a long time, and like other savages they eat voraciously when they fall in with plenty. The Bosjesmans are generally very lean and of a low stature, as if stunted in their growth. A sheep-skin fastened round the neck with the woolly part inside, a

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greasy leather-cap on the head, with their woolly hair smeared with grease and dust and tied in a number of knots hanging down, a jackal-skin fastened with a leather thong round the middle of the body, sandals of ox-leather bound round the feet, a bow and quiver with poisoned arrows, a gourd or broken ostrich-egg to fetch water, and two or three straw mats, which being placed on sticks form a sort of tent,—these constitute all their apparel, furniture, and utensils. They catch sea-cows in pits on the banks of the Orange River. They sleep in caves, or more commonly squat among the bushes, from whence their name. They do not associate in any considerable numbers, but wander about in small parties consisting of individuals of one family, or such as meet by chance. The advance of civilisation on all sides of them has had some effect upon the Bushmen, and many of them are now employed by the colonists of South Africa as guides and domestic servants, in which capacities they are said to behave well and faithfully. A small number of them are said to live in settled habitations on the north of the Orange River. Some of the Bushmen have been brought to profess Christianity.

BOSMERE and CLAYDON, a hundred in the county of Suffolk, which has been constituted a Poor-Law Union. Bosmere and Claydon hundred is bounded N. by the hundred of Hartismere, N.E. by that of Threading, E. by the hundred of Carlford, S.E. by the liberty of Ipswich, S. by the hundred of Sampford, W. by that of Cosford, and N.W. by that of Stow. The Poor-Law Union of Bosmere is not exactly co-extensive with the hundred; it contains 39 parishes and townships, with an area of 58,108 acres, and a population in 1851 of 16,351. The Union workhouse is situated in the parish of Barham, four miles from Ipswich; it has accommodation for 500 inmates.

BOSNA-SERAÏ, or SERAJEVO, the largest town in the province of Bosna in European Turkey, is situated partly in a plain and partly on the slopes of hills, 135 miles S.W. from Belgrade and 33 miles S.E. from Travnik. The population is estimated variously, some giving it at 40,000 and others at 60,000. The town stands on the Nigljask, a feeder of the Bosna. The old walls which encompassed it when it fell into the hands of Prince Eugene in 1697 are completely decayed, and it is now an open place; it is defended however by a citadel of considerable strength, upon the ramparts of which eighty cannon are mounted. This citadel is situated some distance to the east of the town, and is usually occupied by a numerous garrison. Bosna-Seraï contains 100 mosques, among which that of Chosren-beg with its clock (a great rarity in Turkish towns) best deserves notice; one seraï or palace, erected by the sultan Mahimud I., four Christian churches, three monasteries of the Miurite order, a number of madresses or schools, baths, and charitable institutions; two large bazaars, several market-places, and between 14,000 and 15,000 houses, mostly built of wood, with latticed windows. The town, which covers a large surface, is handsomely built, and has a gay oriental appearance from the number of minarets and steeples which embellish it. It was formerly the residence of the governors of the province; but the atrocities committed by one of them drove the inhabitants to revolt, and he was obliged to flee to Travnik, where his successors have since continued to reside. [BOSNIA.] The manufactures of the town comprise arms, copper utensils, iron-ware, woollen and worsted stuffs, morocco-leather, cottons, &c.: there are also several taneries in the town. Bosna-Seraï, being the staple mart for the whole province, is a place of considerable trade. Upon the promulgation of the Hatti Sherif of Gul Hanç, which constitutes the Tanzimat, or reformed constitution of Turkey, the Sipahis of Bosna exasperated by the fiscal regulations of the new system drove from the town the representative of the vizir, who resided in Travnik, and broke out into open rebellion in defence of their feudal privileges. Upon this the vizir Redjehi Pasha collected a force of 4000 regular soldiers, and defeated the revolted begs and sipahis, who were 20,000 strong, at the town of Vitez. The defeated sipahis shut themselves up in Bosna-Seraï, which was blockaded by the vizir and forced to capitulate.

BOSNIA, properly *Bosna*, the most north-western eyalet or province of Turkey in Europe, extends between 42° 40' and 45° 20' N. lat., 15° 50' and 19° 30' E. long. It is bounded N. by the Austrian Crownlands of Croatia and Slavonia, from which it is divided by the Save and the Unna, except at the extreme north-west of the province, which is formed by a mountainous projection 30 miles long and 15 miles wide, extending northward from the Unna to the Upper Kulpa and the source of the Petrinia. The province is bounded E. by Servia, from which it is divided for a long way by the Drina; S. by Albania, Montenegro, and Austrian Dalmatia; and W. by Austrian Dalmatia and Croatia. The form of the province is that of an irregular quadrilateral; the western side of which, from the Gulf of Cattaro to the most north-western point of Turkey, in the basin of the Kulpa, is 230 miles in length: the eastern side measures about 156 miles; the northern side, along the Save and the Unna, is 176 miles long; and the southern side, which is very irregular, measures in a straight line from the Ibar to the Gulf of Cattaro about 120 miles. The central part of the province, from the point where the Drina approaches 44° N. lat. to the southern extremity of the Prologh Mountains, on the western boundary, is only 103 miles broad. The area is about 24,000 square miles, and the population, according to the census or estimate of the Turkish government in 1844, was 1,400,000. The province touched the Adriatic at two points—namely, at the narrow

territory of Klack, behind the peninsula of Sabioncello, and at the mouth of the narrow valley of the Sutorina into the Bay of Cattaro, near the Austrian town of Castel-Nuovo; but the sovereignty of Travnik for these territories has been always disputed by Austria, and it was ceded to the latter power in 1853.

The province is very mountainous. The Dinaric Alps enter it on the west at the source of the Unna in Mount Sabor, and running from north-west to south-east, through the length of the province, and nearly parallel to the Adriatic, from which they are from 50 to 60 miles distant, form the watershed between that sea and the Sava. Numerous mountains from the main range divide the surface into a great number of secondary valleys and basins, generally of small extent, with the exception of the plain of Ljvno, which lies between the main range and the French Mountains on the south-western border. On the southern border the offshoot called the Plešivci Mountains separates Bosnia from Montenegro, while the crest of the Dinaric Alps, farther east, forms the dividing line on the side of Albania. The northern slope of the Dinaric Alps is still more rugged than the southern; it is less traversed into a far greater number of glens and valleys; and there is little level ground of any considerable extent, except in a few places along the lower courses of the rivers and on the right bank of the Sava. The streams too are very numerous on the northern slope, and the mountains in general are covered with magnificent forests and rich pastures, so that there are few countries of Europe which can vie with Bosnia Proper in beautiful natural scenery. But on the Adriatic slope the mountains are in most parts bare and rocky; the vegetation is checked in winter and spring by impetuous winds, and in summer by a scorching sun, the effect of which is but slightly alleviated by heavy dew, and with the exception of the Neretva and the Bosna the rivers are all small, and many of them disappear either partially or totally from view in their course through a calcareous soil.

The principal rivers of the province are the Drin, or Drina, and the Bosna (which gives name to the eyalet), the Verbitza, and the Unna, all feeders of the Sava; and the Neretva, which carries off the drainage of the Adriatic slope.

The *Drina* rises in the Dinaric Alps near 43° N. lat., and runs northward between the districts of Jeni-Bazar and Travnik to near 44° N. lat., whence to its mouth in the Sava, about 30 miles below Zvornik (the chief town on its left bank), it separates Bosnia from Serbia. It receives numerous feeders on both banks, and in its lower course is a deep and rapid river; in its sands particles of gold are found. The whole course of the Drina is about 180 miles in length, and it runs generally between high hills and mountains, with the exception of about ten miles above its mouth, where it skirts the plain of Orlovopolis. At the mouth of the Drina is the quarantine station of Itaca, on the Serbian side of the river; and on the Austrian shore of the Sava is a fortress also called Itaca.

The *Bosna*, from which the eyalet is named, is formed by several small streams that issue from Mount Ivan, a summit of the Dinaric Alps to the south of the city of Bosna-Seraï. It also runs or rather rushes northward, and for more than two-thirds of its course between parallel lines of hills "feathered with trees to their summits." It is crossed by a bridge at Zenitza, elsewhere by ferries or caucos. On emerging from the hilly region the Bosna traverses a plain in many parts marshy and boggy, and enters the Sava after a course of about 100 miles. The Bosna and the Drina are navigable some way above their mouths by heavy barges, and timber is floated down them to the Sava.

The *Verbitza*, *Verbica*, or *Verbas*, rises in Mount Vranja, on the northern slope of the Dinaric Alps to the south of Travnik, and near 44° N. lat. Its course is nearly parallel to those of the Drina and the Bosna, and forms the dividing line between the sanjaks of Travnik and Hercegovka to its mouth in the Sava, below Graliska, and about 60 miles W. from the mouth of the Bosna. It is a shallow stream. Its valley is fertile, well cultivated, and abounding in orchards.

The *Unna* rises in Mount Sabor, which lies a little east of Mount Dinar (1000 feet), the culminating point of the Dinaric Alps; it runs first to the north-west as far as Bilaca, where it sweeps round to the north-north-east, and at Novi, where it is joined by the Sanna, it reaches the frontier of Austria, along which it runs to its junction with the Bosna, about 35 miles west of Graliska. The Unna is said to be from 300 to 400 feet wide, and 6 or 7 feet deep, but is not navigable. From the mouth of the Unna the Sava runs for 120 miles along the north of the province, and in a direction of east by south. Along its course are magnificent forests and in parts swamps, which are caused by the frequent inundations of the river. The Sava is navigated by Austrian steamboats. The valley of the Sava is infested in summer and autumn by swarms of large sea.

A branch of the river just named the Western Morava and its feeder the *Ibar* rise in the north-eastern part of the province, the former in Mount Tabor and the latter near the junction of the Dinaric Alps with the Balkan, in Mount Scardus, now the Tohar-Dagh, to the north of Plovanje in Albania. The *Ibar* flows north-east, and on emerging from the Albania separates the Serbian sanjak of Krukhovatz from the Bosnian sanjak of Jeni-Bazar to its mouth in the Western Morava. It is a shallow stream, navigable everywhere except during the floods of winter and spring. The principal feeder of the *Ibar* is the Raczka, which passes the town of Jeni-Bazar.

The *Neretva* at first also has a northern course for a few miles below

its source; but soon entering Serbia it turns eastward as far as Krukhovatz, where, being joined by the Eastern Morava, the united stream flows northward through the centre of Serbia on its way to join the Danube.

The *Neretva* rises near 43° N. lat., and flows in a longitudinal valley between two parallel ranges of the Dinaric Alps, and in a north-west direction to Ostrochats (near 43° 50'), and then abruptly turning southward it passes Mostar, where it is spanned by an ancient bridge. Below Mostar the river bends rapidly to the south-west, and breaking through the Prologh Mountains crosses Austrian Dalmatia and enters the Adriatic by the channel of Neretva, behind the peninsula of Sabioncello. The valley of the Neretva is very fertile, but in many parts marshy and extremely unhealthy.

Bosnia has no lakes of any importance, the largest being the Mostarska Blato, west of Mostar. It contains a number of mineral springs, among which the baths of Novibazar and Budinir, and the acidulous waters of Lepenica or Kisliat, are most in repute.

Climate, Soil, and Products.—The climate is on the whole temperate. Winter however commences early and a great deal of snow falls, which lies on the lowlands for many weeks. In summer the heat is moderated by occasional heavy falls of rain. Wheat is harvested in July, and grapes are ripe in August. The air is generally healthy at all seasons except in the lowlands along the Sava, the Bosna, and the Neretva, where marsh fevers prevail in autumn and summer. The dry nipping Borra, or north-easter, is prevalent on the Adriatic slope especially.

The soil of Bosnia is in general of a rocky and stony nature, adapted rather for rearing cattle than raising grain; some parts of it however, particularly the plains and valleys near the rivers, are very productive. The level lands (where there are any) and the lower slopes along the rivers, especially in the valley of the Bosna, are very fertile, and in general well cultivated. In the basin of the Bosna the wheel-plough is used drawn by six oxen. Wheat, barley, maize, and rye are the chief corn crops. Peas, beans, flax, and tobacco are cultivated. Fruit is very abundant; the chestnut and mulberry are common. From the plum a species of brandy is made, and a luscious liquor, termed pekme, is extracted from the pear. The wines are strong and fiery, but owing to ignorance of the art of making them, they will not keep; the best are made in the environs of Mostar and Jeni-Bazar.

The highlands and mountains of Bosnia are so densely covered with forests as in many parts to form impenetrable wildernesses; the trees of which they are principally composed are the oak, beech, pine, fir, larch, and lime. The timber-trees are of the most magnificent growth, and if there were means of transit Bosnia could furnish ship-building timber for all the navies of Europe; as it is, large quantities are floated down the Drina, the Sava, and the Danube.

The Bosnian woods abound in wild animals—deer, boars, bears, wolves, lynxes, and foxes; and hunting is a favourite occupation. The breed of horses is strong and hardy; they are also admired for their beauty, but in most breeds the head is considered to be proportionally too large. Large herds of fine cattle are kept, and bullocks form a considerable article of Bosnian export. Buffaloes are fed in the sanjak of Jeni-Bazar. Many of the sheep have upright winding horns, and coarse knotted wool, and are of large size. Goats are common; swine are fed in vast numbers, and poultry is abundant everywhere. The rivers abound with fish. Much honey is made. Game is plentiful, and hawking a favourite sport.

The province of Bosnia abounds with minerals, but the Turks have not allowed the development of this source of wealth. Gold, silver, iron, quicksilver, lead, coal, and salt are found at various points. The mountains round Bosna-Seraï contain gold and silver; and in a forest near Travnik, the excavations of the celebrated gold mine of Hatuziza (literally signifying gold in the Bosnian tongue) are still visible. There are silver mines near Sreberniza on the Drina, Kruppa on the Unna, and Kamengrad within a short distance of the Verbas. Iron-mines are worked in the vicinity of Bosna-Seraï by gipsies, who have a number of smithies, in which horse-shoes, nails, locks, iron-pipes, and other wares are manufactured; some iron is also raised at Vakup, Stari Maidan, Kamengrad, and a few other points. A lead mine is worked in the neighbourhood of Zvornik. There are fine quarries of freestone and mill-stones, alabaster, and marble. The most remarkable of the salt springs are at Upper and Lower Tuzla in the valley of the Sprema, a feeder of the Bosna. The water is drawn from the wells, which are 50 feet deep, by means of a windlass and buckets and then boiled in small flat cauldrons.

Bosnia possesses some inconsiderable manufactures of leather and coarse woollen stuffs. Cannon-balls are manufactured at Kamengrad, and powder at Bihacz, Cetrovacz, and Banjaluka; fire-arms, swords, and small ware at Bosna-Seraï, Banjaluka, and Mostar. In Mostar Damascus blades also are made.

The exports of Bosnia comprise wool, honey, and wax, goats' hair, hides, morocco and other leather, timber and articles made of wood, worsted coverlids, soldiers' cloaks, horses, horned cattle, sheep, goats, swine, poultry, mineral water, pitch, and other domestic produce. The imports consist of linens, woollens, silks, cotton goods, glass-ware, flax, steel-ware, paper, tin, lead, copper, and iron-ware, quicksilver, drugs, indigo, colonial produce, &c. The principal seats of trade are Bosna-Seraï, Zvornik, Banjaluka, Mostar, and Berbir or Turkish

Gradiska. The roads are bad and almost impassable except for horses, as is the case throughout the Turkish territories. The principal and best road is that from Brod through Travnik, and thence to Bosna-Seraï and Constantinople.

The inhabitants of Bosnia are composed of Bosniaks, Serhs, Croats, Morlacks and Montenegrins (principally situated in the sanjak of Herzek), Turks, who are settled in almost every town, and likewise people exclusively the district of Kliucz in the valley of the Sanna, Armenians, a few Greeks, and lastly, Jews. About half of the population, including a large number of the Bosniaks and all the Turks are Mohammedans. The rest of the population is pretty equally divided into Catholics and followers of the Greek Church, the former slightly predominating. The number of Jews and Armenians is small.

The civil administration of Bosnia is on the same footing as that of the other eyalets of the Turkish dominion. It is governed by a Vizir, who resides at Serajevo, to whom the governors of the six sanjaks are subordinate. [TURKEY.]

Divisions and Towns.—The Eyalet of Bosnia includes, 1. *Turkish Croatia* which lies between the Verhitza and the Unna and forms the sanjak of Banjaluka. 2. *Bosnia Proper*, which comprises the territory between the Verbitza and the Drina, the Save and the crest of the Dinaric Alps, and is divided into three sanjaks: Travnik, Srebrenik, and Zvornik. 3. *Herzegovina or Herzek*, which lies to the south of the two preceding, and is sometimes called Turkish Dalmatia. 4. *Jeni-Bazar or Novi-Bazar*, which was taken from Serbia in 1815, and now forms a sanjak of Bosnia. The sanjak of Jeni-Bazar was formerly called *Rucsia* it is said from the Raesa or Raczka, a feeder of the Ibar.

1. In Turkish Croatia, also called *Kraina*, the chief town is *Banjaluka*, which is situated on the left bank of the Verhitza, 33 miles above its mouth in the Save, 45 miles N.W. from Travnik, and has about 8000 inhabitants. The town contains 40 mosques, several colleges, two baths, a large gunpowder manufactory, and several bazaars. It is defended by a strong citadel. *Bihacz*, 60 miles W. from Banjaluka, on an island in the Unna, is a small town of about 3000 inhabitants but of great importance for its fortifications and its position close to the Austrian frontier. Another fortress of great importance is *Gradiska or Berbir*, which is situated on the right bank of the Save, opposite to the Austrian fortress of Alt-Gradiska, 30 miles N. from Banjaluka. The fortifications consist of ramparts and a citadel. About 23 miles W. from Gradiska stands the fortified town of *Dubicza or Doubitza* commanding the passage of the Unna. The town was taken, after a long resistance, by the Austrians in 1788: population, 6000. *Jajca*, a walled town defended by a citadel, situated on the left bank of the Verhitza, and near its confluence with the Plieva, is a small town of about 3000 inhabitants. This was formerly an important place. A large quantity of saltpetre is manufactured. The town was taken after a strong resistance by Omer Pasha from the Bosnian insurgents in the spring of 1851.

2. In Bosnia Proper the chief towns are BOSNA-SERAÏ; TRAVNIK, population about 10,000, exclusive of the garrison which sometimes numbers 8000 men; *Srebrenik*, a small place 58 miles N.E. from Travnik, situated among hills which contain rich silver-ores; and *Zvornik or Ivornik*, which is built on a narrow strip of land on the left bank of the Drina, 55 miles N.E. from Bosna-Seraï, and has about 6000 inhabitants. This town is walled and further defended by a fortress situated on a steep hill above the town; it contains several mosques, Catholic and Greek churches, and carries on a considerable commerce with Belgrade. Some of the houses are large and surrounded by gardens. Large quantities of timber and fire-wood are floated down the Drina, the Save, and the Danube from Zvornik. There are silver-lead mines in the neighbourhood.

The towns just enumerated (with the exception of Bosna-Seraï) give names to the sanjaks into which Bosnia Proper is divided.

Among the other towns we notice the following:—*Bielina*, 20 miles N. from Zvornik, in the plain of Orlovopolie, in the north-east of the province, is a town of about 8000 inhabitants, the majority of whom are Turks. The houses are almost all built of wood. There are however a few good mansions, several mosques, and a large khan. To the west of the town lies a very hill well-wooded country. *Brod*, a fortress on the right bank of the Save, facing an Austrian town and fort of the same name in the military frontier. There is some trade between the two places in raw hides, wool, cotton, &c. *Upper and Lower Tuzla*, two adjacent towns, famous for their salt-springs, are situated near the Spressa, a small tributary of the Bosna, 53 miles N.E. from Travnik. Lower Tuzla is the larger, and has a population estimated at 8000. It is surrounded by old walls and a ditch. On a rising ground in the centre of the town is an old castle, now dismantled, which commands a fine view of the town and the wooded hills that inclose it. The town itself consists of an assemblage of dark wooden houses, relieved only by an old konak or palace, or by the white and slender minarets of the mosques. The insurrection of the Bosniak Turks in defence of their feudal privileges, which were invaded by the introduction of the Tanzimat, commenced at Tuzla in October 1850, by the insurgents seizing the arms and ammunition in the castle to be used against the sultan's troops. The country west of Tuzla is occupied by the high Tavornik range, which extends to the Bosna. Tuzla gives title to a Greek bishop. *Vranduk*, a small town of 2000 inhabitants, is important as commanding the valley of

the Bosna, and a defile to which it gives name in the mountains westward. It is defended by an old castle, which crowns a rocky promontory 300 feet above the river. In the late insurrection of the Mohammedan Bosniaks against the sultan, Omer Pasha fought two sharp actions with the insurgents near Vranduk.

3. In the sanjak of Herzegovina, or Herzek, the chief town is *Mostar*, which is situated on the Narenta, in 43° 22' N. lat., 17° 58' E. long., and has about 9000 inhabitants. It stands on both banks of the river, which are united by a stone bridge of a single arch. The houses are built of stone and roofed with slate. The town is inclosed by battlemented walls. It is famous for the manufacture of sword-blades and other warlike weapons. Cattle, hides, corn, wool, fruit, wax, and wine are the principal items in the trade of the town, which is considerable. *Frebigne*, 45 miles S. by E. from Mostar, is a small town, defended by a square court flanked by four towers. It gives title to a Catholic bishop. *Livno*, or *Uliuno*, a town of 4000 inhabitants, 50 miles N.W. from Mostar, is situated at the base of Mount Liubaska, and on the eastern side of a ravine, in the bottom of which the Bistritza a feeder of the Narenta flows. On the north-east of the town is a series of heights which join the plateau of Keupris, which lies on the south side of Mount Czernagora, and forms the most southern part of Turkish Croatia. Livno is defended by a wall flanked with towers, and also by a castle. The Bistritza is spanned at Lubno by a stone bridge of five arches, over which the road to the Austrian provinces is carried. The plain of Lubno, lying between the Prologh Mountains on the south-west and the main ridge of the Dinaric Alps on the other, is about 30 miles long and 8 miles wide; it is well watered by the Bistritza and some other streams, which are subject to considerable floods in winter and spring. The plain produces abundantly corn and pasture; the olive is cultivated; other fruits are scarce; horned cattle and horses are numerous.

4. In the sanjak of Jeni-Bazar the chief town is *Jeni-Bazar*, or *Novi-Bazar*, which is situated on the Raczka, a feeder of the Ibar, 130 miles S.E. from Bosna-Seraï, and has about 8000 inhabitants, many of whom are descendants of a colony from Ragusa. The town, which generally speaking is a filthy collection of hovels constructed with timber and mud, is commanded by a castle situated on a height in the centre. The mosques, 17 in number, and the shops in the bazaar, are the only objects worth naming besides the castle. An important market for various wares is held here, the situation being central between Albania, Serbia, Bosnia, and Montenegro. The neighbourhood of Jeni-Bazar is fertile and well cultivated. The Raczka and its feeders drive several mills. In the wars between the Serbs and Turks Jeni-Bazar was burnt by the former. The only other place worth mentioning in the sanjak is *Wischegrad*, on the Drina, which has about 3000 inhabitants, and is defended by a strong castle.

The eastern boundary of the sanjak of Jeni-Bazar runs along the Ibar to its mouth in the Morava; thence south-west for several miles along the crest of the Brusnik Mountains: it then sweeps round to north-west across the Slatibor Mountains and the river Morava, to the west of which it follows the Stolatz Mountains to near 44° N. lat., where it strikes the Drina.

The towns of Bosnia and of some other parts of Turkey are built round some commanding point which is occupied by a kind of fortress and generally by the houses of the Turkish part of the population; this central part of the town, corresponding to the Greek acropolis, is called in Turkish 'Kalé,' in Slavonian 'Grad.' Close round the Grad is built the trading part of the town, inhabited chiefly by Christians and Jews, and distinguished in Slavonian by the name of 'Varosh,' in Turkish 'Bazaar.' This part of the town is generally inclosed by walls and gates, which are shut at night. Outside these walls is the 'palanka,' or suburb, inhabited by the lowest orders, including the gipsies. The suburb is surrounded by a ditch and palisade. Some of the towns however have only two, some only one of these divisions, and they are then distinguished by the corresponding name. Outside and completely surrounding the town a considerable space is occupied by the cemetery.

The Bosnian villages, which are inhabited mostly by Slavonian Christians and in many instances by people of the same kin and name, are self-governing. They elect a Stareshin, or head, who treats with the administrative and fiscal officers of the sultan, directs the agricultural operations of the community, receives the contributions (levied on each head of a family in proportion to his income) for the purpose of paying the taxes imposed on the village, and decides petty differences among the peasantry. The Stareshin is assisted by an elected council, and if his conduct is not approved of he is deposed. In towns also the artisans form guilds, are governed by laws of their own decreeing, and obey a Starost, or elected chief, who is responsible for the guild to the authorities. In Bosna-Seraï the Starosts of the artisans and the Stareshins of the agricultural part of the population formerly possessed great privileges, the most singular of which was the right to force the vizir of the province never to remain more than three days within their walls, and the privilege of complaining if necessary against the vizir to the corps of Janizaries at Constantinople. In the new system of administration most of their immunities have been swept away, but the form still remains, and the respective sections of the population still elect and obey their Starosts and Stareshins.

Historical Sketch.—Bosnia was included in ancient Pannonia. The

Bosnia, who are mentioned in Byzantine history under the name of *Bosniaci*, were the first of the Slavish tribes that settled in the Eastern empire. They were governed by petty chiefs, frequently at war with one another. In the middle ages the country was tributary sometimes to Hungary, and sometimes to Serbia, until Twarkto, Ban of Bosnia, a brother-in-law of Louis, king of Hungary, was proclaimed in 1376 king of Bosnia, Rascia, and Pomorlia. He was defeated in 1389 by the Turks at the battle of Kosowo, and soon after became a vassal of the sultan, with whose territory Bosnia was finally incorporated in 1463, ten years after the capture of Constantinople. The Bosniak nobles, in order to retain their seigniorial rights and feudal privileges, renounced Christianity for the Koran, and some of the peasants followed their example. To the difference created by the feudal system between the lord and his vassals was now superadded that caused by the change of religion, which was greatly embittered by the fanatical intolerance of renegades and their descendants. In no other part of the Turkish empire was there such a wide chasm between the two classes of the population; and the history of Bosnia for now nearly four centuries presents a long continued oppression of the Christian *rayas*. The government of the late sultan Mahmud, desirous to extirpate the feudal system—the only obstacle to the amalgamation of the population—at last interposed to protect the Christians from their Mohammedan oppressors, who resenting the interference raised the standard of revolt. The insurrection was suppressed after much slaughter. In 1821 a vigorous but unsuccessful effort was made to destroy the power of the Sipahis, and from that time forward the province has been until very lately in a state of anarchy. In 1838-9 an energetic governor, Vedjili Pasha, was sent to Bosnia, and he commenced his government by announcing that the Christians should thenceforward be treated as the equals of the Mussulmans. The military begs and kapitani, whose offices had become hereditary, were removed, and civil servants nominated in their room. This change was first made in the sanjak of Banjaluka, but had not yet extended to the rest of Bosnia at the death of the sultan Mahmud—an event which re-animates the courage and the hopes of the Sipahis. But the promulgation of the *Hatt-i Sherif* of Oul Hadj, containing the *Tanzimat*, or reformed constitution of Turkey, and the annoyance caused by the fiscal arrangements inherent in the new system, drove the pashas (who had been previously exempt from taxes) to desperation. The representative of the vizir was driven from Bosna-Serai, and the vizir himself was dislodged from Travnik and obliged to take refuge in the mountains westward. But having collected the 4000 regular troops dispersed over the province he met the Sipahis, 20,000 strong, near the town of Vitez, and defeated them after a desperate struggle. The rebels retreated to Bosna-Serai, which was immediately blockaded by the vizir and compelled to surrender. The leaders were executed or banished. The country was pacified; but the new system was not yet established, nor were the feudal privileges forgotten.

The fiscal burdens fall chiefly upon the *rayas*: the Sipahis, as before stated, and all Mohammedans possessing property only in towns paid nothing. The tithes (which were paid upon all agricultural produce) and the customs were farmed, and the feudal chiefs generally became farmers, exacting more than their due from the *rayas*, who also paid the usual poll-tax. In case of insurrection in the province the farmer of taxes was exempted from payment to the central government, and accordingly the feudal chiefs had a strong interest in keeping the province in a state of revolt. The new system could not work well in such a state of things.

In 1841 Tahir Pasha was sent as governor-general to Bosnia, with instructions to make one great effort to establish the *Tanzimat*. After many artful intrigues to effect the recall of this able pasha had failed, the feudalist party broke out into open rebellion in Turkish Croatia in 1849. The vizir who marched against them to the Unna was defeated at Bihacz, and retiring to Travnik died of vexation and cholera. The sultan's government, then occupied with the affairs of the Hungarian rebellion, took no steps for the reduction of the Bosniak rebels till April 1850, when Omer Pasha made his appearance in the province, gained two battles at Vranduk on the Bosna, and signally defeated 15,000 rebels, who were entrenched on the hill of Vutshiak near Dobruca. After this defeat the chiefs fled to Austria, the Sipahis dispersed, and Bosnia Proper was reduced to obedience. But in the Kraina the struggle was more obstinate. The fortress of Jaicza had to be taken by Omer Pasha, after a skilful and brave defence; that of Gul Hissar, situated on an island in the Verbas was stormed by Omer Pasha in the spring of 1851. The submission of the districts of Banjaluka and Klisva followed these successes; but the rebels, who had taken to Kosaritzen, replied to Omer Pasha's proclamation that the *rayas* would never serve in the regular army, nor resign their feudal rights to the *Tanzimat*. At Kosaritzen accordingly they were again attacked and again defeated; and the district north of the Verbas was reduced to obedience. A short but interesting campaign followed on the Unna, in the neighbourhood of Bihacz and Krupa, and the masterly passage of that river in the face of a strong rebel force put an end to the rebellion.

Bosnia has no intercourse with Serbia except at one or two points: a strict quarantine is maintained all along the Serbian frontier.

(*Pennant's Travels in the Christian and the Turk*, London, 1658.)

BO'SPORUS, often incorrectly written BOSPHORUS, is a pure Greek word (*Βόσπορος*): according to mythological tradition it derives its name from the passage of Io over one of the straits so called when she was turned into a cow (Æsch. 'Prom.' 735); the Bosphorus as thus explained literally signifying 'the passage of the cow.' Two straits are mentioned by Greek and Roman writers under this name. One sometimes called the *Channel of Constantinople*, in Turkish *Boghas*, unites the Propontis, or Sea of Marmara, to the Black Sea. This narrow channel was often called the Thracian Bosphorus, by way of distinction from the other named the Cimmerian.

The Cimmerian Bosphorus, now variously named the Strait of Kassa, Yenikalé, or Kertech, is the narrow passage which connects the Palus Mæotis, or Sea of Azof, with the Black Sea. [AZOF.] A narrow slip of low and fertile land on the south-east margin of the Taurica Chersonesus, the modern Crimea, formed the ancient kingdom of Bosphorus. It extended about 60 miles in length, direct distance, from Theodosia or Theodosia, now Feodosia or Kassa, on the west, to Panticapæum or Bosphorus, now Kertech, on the Strait of Yenikalé. Both Theodosia and Panticapæum, the capital of this little kingdom, had good ports; and between them was Nymphæum, which also had a good harbour. Panticapæum was a Milesian colony. Besides the territory already described the Greek kings of Bosphorus possessed Phanagoria, now Tmutarakan, on the peninsula of Taman, which forms the eastern side of the Strait of Yenikalé; and finally they seem to have become masters of the whole Crimea. The quantity of grain brought from the Bosphorus to Athens was, according to Demosthenes ('*Contra Leptin.*') equal to all the corn imported from all other foreign places.

At a later date the kingdom of Bosphorus formed part of the dominions of the great Mithridates, who is said to have died at Panticapæum. It fell, with all the neighbouring districts, next into the hands of the Romans, who gave it to Pharnaces, the son of Mithridates. Pharnaces having invaded Pontus and exercised great cruelties towards the Roman citizens, was attacked by Julius Cæsar and defeated. He fled to his kingdom of Bosphorus, where he was immediately murdered, and his throne was given by the dictator to Mithridates of Pergamum (about a.c. 47). This kingdom of Bosphorus continued under the Roman emperors, but is only known to us from the occasional interference of the Cæsars in the nomination of a king, or in attempts to restore tranquillity. (Tacit. '*Annal.*' xii. 15-21.) A race of half Greek, half barbaric kings continued to possess the Crimea and the neighbouring coasts of the Black Sea at least to the time of the Antonines, and the kingdom of Bosphorus almost survived the Roman empire, and only expired under the ravages of the Huns.

The Thracian Bosphorus is about 17 miles in length, and at its narrowest part about 600 yards across. The general breadth varies from 700 to 1000 yards; opposite the Gate of the Seraglio, in Constantinople, it extends to 1640 yards. It has been often stated (after Pliny) that the opposite shores of the strait are within range of the human voice, and that from either shore the birds can be heard to sing and the dogs to bark on the other; but the statement is a very questionable one, although the human voice at shouting pitch may sometimes perhaps be made to bound across the strait. It is supposed that the Bosphorus has been formed by volcanic agency. The rocks on each side consist of trachyte, or trachytic conglomerate, protruding through slate and fossiliferous limestone: they contain copper and are therefore of a greenish colour. The strait is divided into seven reaches or bays by as many promontories, the projections on one side having a corresponding indentation on the opposite coast. The current takes a different direction in each of the seven reaches, and there are corresponding counter-currents in one half of the channel.

(Strabo; Raoul-Rochette, *Antiquités Grecques du Bosphore-Cimmerien*; *Dictionary of Greek and Roman Geography*.)

BOSSINEY with TREVENNA, Cornwall, a borough and market-town in the parish of Tintagel and hundred of Lesnewth, situated on the coast, in 50° 40' N. lat., 4° 42' W. long., distant 25 miles N. from Bodmin, and 231 miles W. by S. from London. The population of the parish of Tintagel in 1851 was 1084, of which number however the hamlet of Bossiney does not contain a tenth part. The living is a vicarage in the archdeaconry of Cornwall and diocese of Exeter.

The borough of Bossiney extends over a great part of the parish of Tintagel, and comprises about 350 English acres. The corporation had a charter from Richard, earl of Cornwall, brother of Henry III. Bossiney enjoyed the elective franchise from the reign of Edward VI. until the passing of the Reform Act, when it was disfranchised. Bossiney has a market on Thursday, and a fair, which is now held at Trevenna, principally for horned cattle, on the first Monday after the 19th of October. The town-hall is chiefly used as a school. Tintagel has become frequented as a watering-place, for which it is well adapted. The locality is very healthy. The scenery of the coast is exceedingly wild and picturesque. Bossiney is situated on a wild bleak part of the northern coast of Cornwall; but the town appears formerly to have been of some importance.

Nearly this place is the castle of Tintagel, supposed to have been the birth-place of the famous King Arthur. Built on a high rock that juts out into the sea, by which it is nearly surrounded, this castle must have been a place of considerable strength. In Leland's time a chapel seems to have occupied part of the site of the keep, which he calls the dungeon of St. Ulette, alias Ulianne. The church of

Tintagel is supposed by Lysons to have been appropriated to the abbess and convent of Fontevrault in Normandy, and having come into possession of the crown, to have been given by Edward IV. to the collegiate church of Windsor. The dean and chapter of Windsor are the patrons.

BOSTON, Lincolnshire, a seaport, market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Boston, wapentake of Skirbeck and parts of Holland, is situated near the mouth of the river Witham, in 52° 58' N. lat., 0° 2' W. long.; 36 miles S.S.E. from Lincoln, 116 miles N. from London by road, and 107 miles by the Great Northern railway. The population of the municipal borough in 1851 was 14,733; that of the parliamentary borough was 17,518. Boston is governed by a corporation consisting of 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Lincoln. Boston Poor-Law Union contains 28 parishes and townships, with an area of 97,250 acres, and a population in 1851 of 37,677.

The origin and ancient history of Boston are obscure. The great canal or drain, called the 'Car-dyke,' which extends 40 miles in length from the Welland, in the south of the county, near Lincoln, to the Witham, is generally attributed to the Romans. The 'Foss-dyke' is a continuation of the drain from Lincoln to the Trent at Yorksey, and appears to have been formed about the same time. The 'Westlode,' another ancient drain in the parts of Holland, carries off the upland waters, by its communication with the Welland at Spalding. The old sea-dyke is a great bank erected along the coast, in order to render the drains safe from the influx of the ocean. The county of Lincoln was included in the Roman province of *Flavia Cesariensis*, and there were several military stations in different parts of the county. Lincolnshire was a part of the kingdom of Mercia during the heptarchy, and Boston is believed to be the Yceau-ho or Icanhoe, at which, according to the Saxon Chronicle, St. Botolph built a monastery in A.D. 654, which existed till the county was ravaged by the Danes, A.D. 870.

Little worthy of notice is recorded of Boston during the early part of the Norman government. In the year 1204 when the 'quinziesimo' was levied (a duty which was raised on the fifteenth part of land and goods at the several ports of England), London paid the largest sum (836*l.*) of any port, and Boston was the second (730*l.*) in amount. A great annual fair was at an early period held at Boston; it was resorted to from Norwich, Bridlington, and Craven in the 13th century. Articles of dress, wine, and groceries formed part of its commerce. In 1281 part of Boston was destroyed by fire; and in 1286 a great part of the town and the surrounding district suffered from an inundation. It was one of the towns appointed by the statute of staple (27th Edward III.), where the staple of wools, leather, woolfells, and lead should be held. Many merchants from the important commercial towns of the Continent resided at Boston during this early period; it also ranked high as one of the seaports of the kingdom. The merchants of the Hansatic league established their guild here. At the time when Leland wrote his account of Boston (1530), the commerce of the town had begun to decline. Boston was still further reduced by the dissolution of the monasteries by Henry VIII., though that monarch made some amends by granting the town a charter of incorporation; it was thus made a free borough, and enjoyed many important privileges. Philip and Mary, in the first year of their reign, endowed the corporation with a rich grant of lands and messuages. This important endowment, rendered more valuable by subsequent Inclosure Acts, has given the corporation upwards of 500 acres of land. Queen Elizabeth granted the mayor and burgesses a charter of admiralty, giving them power to levy certain duties on ships entering the 'Norman Deepes.' In 1571 Boston and the surrounding district suffered much from a violent tempest, an account of which is given by Holinshed. During the latter part of the 16th century, and again in 1625, it was visited by the plague. In 1643 Boston was made the head-quarters of Cromwell's army. The principal men of the district favoured the cause of the Protector. In June 1643 Colonel Cavendish defeated the parliamentary troops at Douington, near Boston, and soon after Cromwell removed his quarters to Sleaford. During the 18th century the commerce of Boston continued to decline.

The Dominicans, or Black friars, were established at Boston in the early part of the 13th century: in A.D. 1288 their church was burnt in a riot; but they were afterwards re-established. The Carmelite friars had a priory at Boston, founded in 1301. The Augustine friars had an establishment at Boston, founded in 1307; the Franciscans, or Gray friars, had also one founded in 1332, under the wardenship of the monastery at York. The sites of these houses were granted to the corporation at the Reformation. Several associations, called 'guilds,' existed in the town, some of which seem to have had a mixed character. The monks are supposed to have been their first founders. The guild of St. Botolph was a fraternity of merchants, and appears to have had only mercantile objects in view. The guild of the Blessed Mary was one of importance, and in its purposes partly religious. Its hall is now used by the corporation for their judicial proceedings, public dinners, &c. The guild of St. Peter and St. Paul was a religious establishment, and had a chapel or an

altar in the parish church. St. George's guild was a trading community. The possessions of all these guilds were vested in the corporation of Boston when the religious houses were dissolved.

The portion of the town on the left bank of the Witham consists of one long street, called Bargate, the market-place, and some minor streets. On the right side of the river is another long street called High Street. The market-place is spacious, and the market is well supplied with cattle and corn from the inland districts. An abundant supply of water has been procured for the town under the powers conferred by an Act passed in 1847. Boston is well supplied with coal, by sea from the Tyne and the Wear, and by railway from Derbyshire and Yorkshire. The old poor-house, in St. John's Row, was built in 1730; the new Poor-Law Union workhouse was constructed in 1833.

The first stone of the present church of St. Botolph was laid in 1309, but the existence of a church at Boston is recorded as early as 1090. This church is one of the largest parish churches without transept in the kingdom. It is 245 feet long, and 98 feet wide within the walls. Its tower is one of the loftiest in the kingdom, being 300 feet high. The tower, which is visible at sea for more than 40 miles, is surmounted by an elegant octagonal lantern, which is a guide to mariners on entering the Boston and Lynn Deepes. In a chamber over the south door is the parish library, which contains several hundred volumes, among which are many valuable and scarce works on divinity; it was formed by Anthony Tuckney. The church has recently undergone extensive repairs and restoration.

The chapel-of-ease which was erected by subscription in 1822 is a perpetual curacy. A new church was built in Skirbeck parish in 1848 in addition to a former church in the same parish. There are places of worship in Boston for Independents, Wesleyan and Primitive Methodists, Baptists, Unitarians, and Quakers.

A Grammar school was provided for by the rich grant of Philip and Mary in 1554. The building was erected by the mayor and burgesses in 1567; it is in the Mart-yard, so called from the great annual fair having been held in it. The school had been almost closed for several years, when in 1850 the trustees obtained a new scheme. There are four masters who are paid from the charity estates: the head master's salary is 200*l.* a year, with a free house and other advantages. The number of scholars in 1851 was 94. The Blue-Coat school, established in the year 1713, by subscriptions and donations, is for the education of boys and girls. There are National and British schools. Laughton's Charity school was established in 1707. There are numerous Infant, Sunday, and other schools. The names of other charities sufficiently explain their object; such are the Dispensary, Bible Society, a Dorcas Charity, and the Poor Freemen's and Apprentices' Charities.

Boston has two subscription libraries; it possesses also a mechanics institution. A spacious court-house for county and other business was built about 1843 at a heavy expense. Salt-water baths were established at Boston about the year 1830; the walks and grounds belonging to them, which are pleasantly laid out, are open to the inhabitants of the town. Over the market-house is a suite of assembly rooms. The custom-house is a plain substantial building near the quay. There is a cast-iron bridge of elegant structure over the Witham; it has but a single arch, of 86 feet span, and its rise is only eight feet that the roadway over it is nearly horizontal. The cost to the corporation for this bridge and the approaches to it was 22,000*l.*

As the prosperity of Boston depended in a great degree on the Witham being navigable, considerable attention has been in past times directed to the removal of obstructions and the cleansing of the river. In 1720 a vessel of 250 tons could ascend to the town; but by the year 1750 the Witham had become so choked up as barely to allow a passage for a sloop of 40 or 50 tons at a spring-tide. Under the powers of Acts of Parliament subsequently obtained great efforts have been made to maintain the Witham in a navigable state; and Boston is now a port of considerable trade. Vessels of 300 tons burden are enabled to deliver their cargoes in the heart of the town.

The foreign trade of Boston is chiefly with the Baltic, whence are imported hemp, iron, timber, tar, and other commodities. The chief exports consist of corn, particularly oats, large cargoes of which are sent to London. The gross receipts of customs in the year ending 5th January 1851 amounted to 28,776*l.* The number of vessel registered as belonging to the port of Boston on December 31st 1852 was—under 50 tons 115, tonnage 4313; above 50 tons 54, tonnage 3539; with one steam-vessel of 18 tons. During 1852 there entered and cleared at the port, in the coasting trade, inwards, 755 vessels, tonnage 36,598; outwards, 522, tonnage 24,942: in the foreign trade, inwards, British vessels 12, tonnage 1630; foreign vessels 14, tonnage 1313; outwards, British 19, tonnage 1472; foreign 13, tonnage 1239.

The manufactures carried on within and around the town consist chiefly of ships, sails, canvase, sacking, iron and brass work, cooperage, ropes and cordage, leather, hats, bricks, whitening; there are also breweries and malthouses.

By means of the Witham and the canals connected with it Boston has a navigable communication with Lincoln, Gainsborough, Nottingham, and Derby, and by them with all the inland towns. The East Lincolnshire railway connects Boston with Louth, Grimsby, and other towns in the north; the Great Northern places it in connection with

London and the south; the 'loop-line' of the same company extends from Boston to Lincoln and Gainsborough while the Boston, Stamford, and Birmingham, and the Nottingham and Boston railways (if constructed according to the Acts), will connect Boston with the west.

Immense numbers of sheep and horned cattle are sold at the Boston market, and there are convenient areas in several adjacent parts of the town, where the cattle are fatted and penned during the time of sale. The drainage and inclosure of the neighbouring fens have materially increased the internal wealth of Boston by enabling it to bring to market very large quantities of agricultural produce.

Two interesting remains of antiquity exist near the town—the Kyme Tower and the Hussey Tower. Kyme Tower is situated about two miles east from Boston; it is of brick, quadrangular, and has an octagonal turret at its south-east angle containing a flight of about twenty steps. It is now the property of the Dean and Chapter of Westminster. The Hussey Tower is situated in the town, near St. John's Row, and is all that remains of a baronial residence of Lord Hussey.

(Reynolds, *Commentary on the Itinerary of Antoninus*; Tanner, *Notitia Monastica*; Thompson, *Collections for a History of Boston*.)

BOSTON, United States of America, capital of Suffolk county and of the state of Massachusetts, is situated in 42° 21' N. lat., 71° 4' W. long., 32 miles N.E. from Washington, at the bottom of Massachusetts Bay, on a peninsula above two miles long, and in no part more than one mile broad. The narrow isthmus by which the peninsula is joined to the mainland is called Boston neck, and the arm of the sea which washes the peninsula on its north and west sides is named Charles River.

Boston was founded about the year 1630 by the settlers established at Charlestown, on the shore of Massachusetts Bay, contiguous to Boston peninsula. Its Indian name was Shawmut, from the springs which were in the locality: it was also called Trimountain, from three lofty hills on and around which it is built. The name of Boston was given in compliment to the Rev. John Cotton, who had been a clergyman at Boston in Lincolnshire, from which place he was driven by the religious persecution to which the original settlement of the New England colonies must be ascribed.

The early settlers claimed, and by their voluntary expatriation took effectual means for securing the right of regulating their own church discipline and doctrine, but they did not learn the justice of tolerating religious systems different from their own; the very first court of election held in the colony passing a law by which none but church members could be admitted to any share in the government, or be capable of being chosen as magistrates or serving as jurymen.

The scheme of taxing America by the British Parliament met nowhere with a more decided opposition than in Boston. The Stamp Act was to come into operation on the 1st of November, 1765; but previously to that day serious riots took place in the streets of Boston; the building intended for the reception of the stamps was pulled down, and the lieutenant-governor was forced to quit the city. On the arrival of some consignments of tea at the port in December 1773, a party of the men of Boston, disguised as Mohawk Indians, proceeded on board the tea ships then lying at the wharf, and emptied the contents of every chest into the sea. The British Parliament in consequence passed an Act making the landing and shipping of goods at the town or harbour of Boston illegal, until full compensation should be made by the town to the East India Company, and until the king in council should be satisfied of the re-establishment of order in the town. A subsequent Act vested in the crown the appointment of all municipal and judicial officers; by a third Act, the governor was invested with power to send for trial to England all persons accused of offences against the revenue, or of rioting in the colony.

Early in the revolutionary war Boston became the scene of hostilities. In June 1775 a battle took place at Bunker's Hill, an eminence north of Charles River, between the Royalist forces under General Howe, who then occupied the town of Boston, and the Americans under General Putnam. The English after having been twice repulsed in their attempts at last succeeded in dislodging their opponents from their position, but with a loss of 1100 killed and wounded, including 99 officers. An obelisk has been erected on Bunker's Hill to commemorate the battle. In the following month General Washington arrived before Boston, which he continued to invest until the following February. He then commenced offensive operations, and having with a considerable force obtained possession of the heights of Dorchester to the south of Boston, and thrown up some works by which the town was commanded, the British general was forced to evacuate the town, which Washington entered on the 17th of March, 1776.

Boston consists of three parts—Old Boston on the peninsula, South Boston, and East Boston. Several bridges afford the means of communication in various directions from Old Boston. The largest of these are West Boston Bridge and the Canal Bridge; the former is 2754 feet long, rests on 180 piers, and is continued by a causeway 2433 feet long, the whole connecting the peninsula with Old Cambridge. Craigie or Canal Bridge, 2796 feet long and 40 feet broad, forms the communication with East Cambridge; the Western Avenue, a solid

structure of granite, filled in with earth, a mile and a half long, leads to Brookline, and constitutes a dam about 600 acres in extent, which affords by the flowing of the tide a great water-power. The bridges are well lighted with gas, and most if not all of them have a 'draw' in the centre to allow the passage of shipping. There are also several railway bridges or viaducts over the river. Boston is the centre of an extensive system of railway communication, reaching to Canada and the Mississippi. There are seven railway termini, or depots as they are called: the finest of these buildings is the Fitchburg in Causeway Street; it is built of stone. These seven depots are the termini of the great trunk-lines which a few miles from Boston throw off numerous branches. In November 1853 no less than 126 trains daily left the city. The Atlantic and St. Lawrence railway, now partly open, will when completed afford direct railway communication between Boston and Montreal; and another line running by Concord, New Hampshire, and Haverhill, forms a junction with one of the Montreal lines. From Boston the Middlesex Canal runs to the Merrimack River at Chelmsford.

With the exception of a spot in the south-western part of the city, called the Common, containing about 48 acres, planted with trees, furnished with seats, and forming a fine promenade and place of recreation for the residents, the Public Garden, a space of about 12 acres, and several open squares, the whole of the peninsula is occupied by buildings. Many of the best houses and public buildings are built of granite, many of the streets are paved with granite, and the city is often named by way of compliment 'the Granite City.' The older houses are of wood; those of later erection are generally of brick or stone. The city is lighted with gas. Those streets which remain as they were originally planned are narrow and crooked, and the old wooden houses in them are of small dimensions. In the modern part of the city the streets are wide and straight, and the houses spacious. The original inequality of the surface has been preserved, and there are numerous eminences which rise from 50 feet to upwards of 100 feet above the sea, giving a picturesque appearance to the town. Among the public buildings are the State House, in which the Legislature of Massachusetts holds its sittings; the County Court House; the City Hall, or Old Court House; Faneuil Hall, a brick edifice erected about 1740, named after the Boston merchant who presented it to the city, known as the 'cradle of liberty,' because in it were generally held the meetings preceding and connected with the revolution, and still the favourite place for public meetings for the citizens: the ball in which public meetings are held is 76 feet square and 28 feet high, with galleries on three sides supported by two ranges of Ionic columns; the Custom House, built in the form of a cross, and having fine porticoes in front; the Exchange, erected in 1842; the Massachusetts Hospital; the House of Industry; Quincy Market, a granite building 500 feet by 38 feet; the House of Correction; three theatres; a museum; two buildings of granite, which are used for concerts and lectures; and several halls belonging to different associations. The State House stands on an eminence called Beacon Hill, 110 feet above the level of the sea, commanding an extensive view of the bay and surrounding country. In the building is a fine statue of Washington. The Boston Athenæum has two large buildings, one of which contains a library of about 30,000 volumes; the other contains rooms for lectures, &c., and a picture-gallery. There are in Boston 100 places of worship, 15 belonging to Congregationalists; 12 to Baptists; 12 to Episcopalians; 11 to Methodists; 12 to Roman Catholics; 20 to Unitarians; and 6 to Universalists; and the remainder to various minor denominations. Some of the churches are handsome buildings. St. Paul's church in Common Street contains a monument to the memory of Dr. Warren, who was killed at the battle of Bunker's Hill. Franklin who was born in Boston has a monument erected to his memory in the old burying-place known as the Granary-ground.

South Boston, extending along the south side of the harbour for about two miles, contains about 600 acres regularly laid out in streets and squares. Near the centre of this division of Boston are the Dorchester Heights, 130 feet high.

East Boston is on an island which contains about 660 acres of land, with a large quantity of flats. Constant communication is kept up with Old Boston by a ferry. It is connected with Chelsea on the mainland by a bridge 600 feet long. East Boston has arisen within the last 20 years, and now has a population of 20,000.

The progress of the city will be seen from the following statement of the amount of its population at various dates from the beginning of the last century:—

Year.	Population.	Year.	Population.
1700	7,000	1820	43,298
1752	17,574	1830	61,302
1765	15,520	1840	93,383
1790	16,038	1845	114,360
1800	24,037	1850	138,788

It thus appears that in 1850 the population of the city was nearly six-fold its amount in 1800. Within a short distance of the city are numerous towns and villages, many of which have piers and landing-places, including Hingham, Hull, Quincy, Milton, Dorchester, Roxburg, Brookline, Brighton, Newton, Watertown, Cambridge, Charlestown, Chelsea, Malden, Medford, and Somerville. Indeed as a

metropolitan district Boston may be considered as extending nine miles around the Exchange, within which bounds the population in 1850 was 269,874. All the citizens are free, the constitution of the state having declared that 'all men are born free and equal,' which declaration was decided by the Supreme Court of Massachusetts in 1783, to be equivalent to the abolition of slavery. The city is governed by a mayor, 8 aldermen, and 48 common councillors. The General Court of Massachusetts meets at Boston twice a year, and the Supreme Courts of Judicature for the state are held there. The city has a court styled the police court for the city of Boston, consisting of three justices, and there is a municipal court consisting of one judge, who has cognisance of all crimes not capital committed within the city and the county of Suffolk. The judges of the police court hold a justices' court every Wednesday and Saturday.

Boston Bay or harbour is formed by numerous small islands, on one of which at the entrance is a lighthouse 65 feet high, with a revolving light. The harbour extends 14 miles from Point Alderton to Medford, and from Chelsea to Hingham is at least 8 miles wide, covering an area of 75 square miles. There is in general sufficient depth of water within the bay at all times of the tide to enable the largest vessels to reach the wharfs and docks, of which there are in all about 200. Contiguous to the wharfs and docks are extensive ranges of warehouses four or five stories high, and from 50 to 80 feet in breadth. Vessels lie here in perfect safety, from whatever quarter the wind may blow. The entrance to the harbour is so narrow as scarcely to admit two ships abreast; it is defended by Fort Independence on Castle Island, and Fort Warren or the Citadel on Governor's Island. For the protection of the external harbour there is a strong fortress on St. George's Island. Boston is the second commercial city of the United States. It has 32 banks. Its trade is very extensive both with foreign countries and with the southern states of the Union, to which it sends large supplies of salted meat and cured fish, as well as domestic and European manufactures, receiving in return cotton, rice, tobacco, staves, and flour. It has also a considerable trade with the western states. The tonnage of vessels belonging to the port amounted in 1841 to 227,608 tons, in 1842 to 193,502 tons, in 1850 to 320,687 tons, in 1851 to 343,308 tons. The aggregate burden of the ships built at the port in 1849-50 was 23,480 tons. The arrivals from foreign ports during 1850 included 2879 ships of 478,859 tons, and the foreign clearances 2839 ships of 437,760 tons. In 1849 the value of imports amounted to above five millions of pounds sterling: the exports were under two millions. The imports consist chiefly of woollen, cotton, linen, and silk manufactures, sugar, coffee, indigo, grain, flour, pork, hides, hemp, anthracite, and lead. The exports consist of fish and fish oils, salted meat, ice, soap, candles, paper, cordage, hardware, and furniture, with a small quantity of the cotton manufactures of the country. Besides the foreign trade there is a very large local and coasting trade. In the coasting trade 6100 vessels arrived at Boston in 1849, exclusive of sloops and schooners bringing wood, stone, and sundries which are not entered at the custom-house. Lines of packets ply to all the seaboard cities. There is a considerable trade with California. Several large steam-vessels form a regular line of communication between Boston and Great Britain, stopping at Halifax, and performing the voyage in some instances in about ten days.

Boston has an abundant supply of water from Cochituate Lake, formerly called Long Pond, about 20 miles from the Exchange. The aqueduct was opened in 1849. An elliptical brick conduit, 6 feet 4 inches by 5 feet, conveys the water to Brookline, more than 14½ miles, where is a pond of 22 acres, containing 100,000,000 gallons. Two parallel pipes, 30 inches in diameter, convey the water across Charles River. A large reservoir is on Beacon Hill, and another on Mount Washington in South Boston. Cochituate Lake extends over an area of 659 acres, and has a depth in some places of 70 feet; its elevation is 124 feet above tide-water in Boston harbour. It will be observed therefore that in case of fires (which on account of the numerous wooden buildings are far from unfrequent in Boston) the water needs no forcing. The fire-bells in the different wards of the city are electrically connected and strike simultaneously the number of the ward where a fire has broken out, so that the firemen know where their services are required.

Boston is generally regarded as the literary metropolis of the United States. Its literary, scientific, and educational institutions are indeed such as few cities of its size, even in the Old World, can equal. Besides the Athenaeum, already named, with its library, the Massachusetts Historical Society, the Boston Library Society, and the Columbian Library, have each good collections of books. The various public libraries of Boston include an aggregate of about 150,000 volumes. A noble library has just been founded in Boston by Mr. Bates of London, one of the eminent firm of Baring Brothers, and a native of Massachusetts. The Lowell Institute, founded by a Mr. Lowell, who died at Bombay in 1836, provides for the delivery of regular courses of popular lectures on science and art. The lectures, which are all free, are delivered in the winter months from October to April. The New England Museum is one of the most extensive in the United States. There are besides a Gallery of Fine Arts, an Academy of Arts and Sciences, a Mechanics Institution, a Society of Natural History, founded in 1830, which has small but well-arranged

collections, and other similar establishments, which are in general liberally supported. An interesting feature of the environs of Boston is the cemetery at Mount Auburn, opened in 1831, and occupying an area of 118 acres, laid out with considerable attention to the beautiful and picturesque in appearance. The cemetery contains numerous fine monuments, many of which are of marble. An elegant chapel has been erected in the grounds.

The public charitable and benevolent institutions of the city are numerous. Besides the Massachusetts General Hospital, already named, we may mention the Hospital for the Insane, and the House of Industry. The Institution for the Education of the Blind, established in 1833, is perhaps one of the best of its kind in the world. Besides being taught various branches of learning, the pupils are trained to industrial occupations, by which they may be enabled to procure the means of support for themselves in after life. The institution possesses a printing-press, at which have been printed, with the assistance of the pupils, several works in raised characters for the use of blind persons.

Great attention is paid to the education of the young in the state of Massachusetts, and particularly in Boston. The number of primary schools in the city is 41; of more advanced schools, 23. The school-houses are built and maintained, and the salaries of teachers, with all other expenses, are defrayed as a regular branch of the public expenditure, so that the schools are free to all. In the Primary schools of Boston in 1850 there were 11,376 scholars; in the Grammar schools, 9154; and in other schools, 471. The public Latin school, originally established in Boston by the first settlers in 1635, within five years after their landing, is considered as preparatory to the university, and has about 200 scholars under five teachers. The public High school, which provides instruction in French, mathematics, and other studies preparatory to a commercial career, is under the care of four teachers, and is attended by about 200 pupils. The head master of the Latin school and the head master of the High school receive each 2400 dollars, or about 500*l.* a year, being only 100 dollars a year less than the salary of the governor of the state. A normal school for girls has about 200 pupils, and qualifies every year nearly 100 teachers for schools attended by young children.

Harvard University, founded in 1638, the best endowed institution of the kind in America, is at Cambridge, 3 miles north-north-west from Boston. This college in 1851 had 20 instructors, 6342 alumni, and 293 students. The library contained 84,200 volumes. The Divinity school of the Congregational Unitarian body at Harvard University, commenced in 1816, had 2 professors and 23 students in 1849-50; the library contained 3000 volumes. The Law school had 3 professors and 98 students. The Medical school, founded in 1792, had 6 professors and 117 students.

The first Anglo-American newspaper, entitled 'The Boston News Letter,' was published in this city on the 24th of April 1704; it continued to be published during seventy-four years, and for fifteen years of that period was the only newspaper printed in the English colonies in America. The second of these papers in point of time was likewise printed in Boston. The third Boston paper, first published in 1721, was printed by James the brother of Benjamin Franklin, in whose name the publication was for some time carried on, in consequence of some difficulties in which James Franklin was involved with the government. Some of the earliest writings of Franklin were given to the world in the columns of this paper, which was called 'The New England Courant.' The number of newspapers printed in Boston in the present month (November 1853) is stated to be 13 daily; 13 semi-weekly; and 67 weekly, bi-weekly, and monthly. The first daily paper was published in 1813.

Numerous periodical works are published in Boston. Among these may be mentioned 'The North American Review' (quarterly), and 'The American Almanac and Companion,' a valuable work commenced in 1829, and conducted on the model of the 'British Almanac and Companion.' The principal English periodical works are regularly reprinted in Boston.

Various warlike establishments of the United States government are located in Boston harbour. Besides the fortresses mentioned above there are here an arsenal, an extensive navy yard, a dry dock, ropewalks, depots of cannon, arms, and naval stores, and hospitals for sick and infirm seamen.

The Massachusetts state prison, which is said to be well regulated, is situated in Charlestown. Only male convicts are received into this building. It appears that the profits derived from the labour of the convicts are sufficient to provide for the expenses of the establishment, and to leave a balance of profits.

BOSWORTH (commonly called MARKET-BOSWORTH, to distinguish it from Husband's Bosworth, in the hundred of Gartree), Leicestershire, a market-town and the seat of a Poor-Law Union, in the parish of Market-Bosworth and hundred of Sparkehoe, is situated in 52° 38' N. lat., 1° 24' W. long.; distant 13 miles W. from Leicester, and 106 miles N.W. by N. from London: the population of the township in 1851 was 1058. The living is a rectory in the archdeaconry of Leicester and diocese of Peterborough. Market-Bosworth Poor-Law Union contains 31 parishes and townships, with an area of 44,891 acres, and a population in 1851 of 13,516.

The town of Bosworth is pleasantly situated upon an eminence, in

the centre of a very fertile district, and contains several good houses. The manufacture of wood shingles affords occupation to many persons here and in the neighbourhood. The Albany Canal, which passes within a mile of the town, gives facilities for obtaining coal and other commodities. This canal is the property of the Millland Railway Company, and connects the line of traffic to and from the Ipswich and Barton railway with the Grand Junction Canal near Country. There are two annual fairs for cattle held at Bosworth on the 14th of May and the 10th of July. The market, chiefly for corn, is held on Wednesday. There is a rural police force in the parish. A county court is held in the town.

Bosworth church, dedicated to St. Peter, a large and handsome edifice of the 14th century, in the perpendicular style, was restored in 1843. The tower is surmounted with a lofty and well-proportioned spire. The interior contains some interesting monuments. There are places of worship for Independents and Baptists.

The Free Grammar school, founded by Sir Wolstan Dixie, lord mayor of London, in 1585, has an endowment which now produces about £1000 per annum. Sir Wolstan founded two fellowships and four scholarships at Emmanuel College, Cambridge, for the benefit of persons otherwise related to the Dixie family or educated at the school. Five additional scholarships were founded from the charity revenues by order of the Court of Chancery in 1835. Schools for girls and for boys under seven years of age have been opened in the four churches comprised within the parish, and also in the parish of Colby.

The decisive battle between Richard III. and the Earl of Richmond, which by the death of Richard after a sanguinary struggle terminated the long strife between the houses of York and Lancaster, was fought August 22nd 1485 on a plain commencing about one mile south of the town. This fine and spacious plain, which is nearly surrounded by hills, was formerly called Redmore Plain, from the colour of the soil; but since the battle it has been designated Bosworth Field, from the name of the nearest town. The plain, which is somewhat of an oval form, about two miles in length and one in breadth, was uncultivated at the time of the battle: timber has since been grown upon it, and nothing of its former appearance remains except the general form of the ground. The spot where Lord Stanley placed the battered crown upon the head of Richmond and hailed him king, is now known as 'Crown Hill.' Dr. Parr, who visited the spot in 1812, procured a subscription for the purpose of raising a suitable monument on the spot, for which he furnished an appropriate Latin inscription. Numerous relics of the battle have at different times been turned up in digging and ploughing the soil.

Several eminent persons have been born at Bosworth, amongst whom Simpson, the self-taught mathematician, occupies the first place. Dr. Johnson was for a short time usher in the Free school: in the same school Richard Dawes, the celebrated Greek critic, and Salt, the Abyssinian traveller, were educated. In the vicinity of the town is Bosworth Hall, the seat of Sir W. W. Dixie, Bart., a fine old brick mansion of the Elizabethan age and style.

BOTANY BAY is situated in New South Wales, in 31° S. lat., 151° 10' E. long. The entrance is little more than a mile broad, but the bay afterwards enlarges to about three miles in width. The great quantities of plants found there by the naturalist who accompanied Cook when this bay was discovered, induced him to call it Botany Bay. The bay is extensive, and good anchorage is found in from four to seven fathoms' water; but both on the north and south sides and on the bottom of the bay flats extend to a great distance from the shore, having only four or five feet water on them. Of the connection of Botany Bay with a penal settlement, see WALES, NEW SOUTH.

BOTHNIALA. (SUFFOLK.)

BOTHNIA, or **BOTTENA**, is a name which was given at some remote period to the countries on both sides of the Gulf of Bothnia as far south as the straits called the Quarken. It was formerly divided into Eastern and Western Bothnia, but the former has been ceded to Russia, and constitutes the greater part of the government of Uleaborg.

Western Bothnia constitutes with Lapland the most northerly portion of Sweden. It is bounded N.E. by Russia, from which it is divided by the rivers Muonio-Elf and Tornea-Elf; N. and N.W. by the range of the Kiölen (pronounced Tiölen) Mountains which separates it from Norway; on the S. it joins the Swedish provinces of Jämtland and Ångermanland, and the remainder of its boundary on the S.E. and E. is formed by the Gulf of Bothnia. It lies between 63° 30' and 59° 0' N. lat., 14° 20' and 24° 0' E. long., and has an area of about 62,500 square miles.

The plain which occupies the northern part of the province is the most extensive plain in Sweden. The lowest part of the plain runs along the boundary of Russia on the banks of the Muonio-Elf and Tornea-Elf. At the foot of the rocky range which divides it from Norway it is about 1300 feet above the level of the sea, and presents to the eye nearly a level surface covered with swamps and innumerable small lakes, with a few intervening hills of small elevation. The summits of the hills are covered with white rein-deer moss, and between the lakes are bushes of dwarf birch. The country then lowers rapidly, and the birch soon presents itself as a full-grown tree, and mingles with the pine (*Pinus sylvestris*); lower down grows the fir (*Pinus abies*).

About half way towards the gulf, and before the Muonio-Elf falls into the Tornea-Elf, the country is less than 400 feet above the sea, and is covered with forest-trees, except along the banks of the rivers, where agriculture has made considerable progress. Along both banks of the Upper Tornea-Elf are some hills of considerable height. These hills are immense heaps of iron-ore, nearly useless to man on account of their situation. The term 'elf,' a Swedish word meaning river, is generally affixed to the rivers of Bothnia. The Tornea-Elf rises in the lake of Tornea (Tornea-Tråk), which is imbedded in the rocky mountains of the Kiölen, and extends about 36 miles in length, with an average breadth of 10 miles, its north-eastern extremity approaching within 15 miles of a lake in Norway which communicates with the North Sea. From the lake of Tornea the river runs between hills of iron-ore, forming numerous rapids and small cataracts, with one remarkable cataract near its confluence with the Muonio, where the river in a distance of about 1000 feet descends 72 feet in perpendicular height. The Muonio, which through its whole course is the boundary between Russia and Sweden, is called in its upper part Kögånä, and is navigable for many miles above its mouth, though it has some rapids. Before the Tornea-Elf turns to the east to unite with the Muonio-Elf it sends off a branch to the right called the Tärende-Elf, which after a tortuous course of about 30 miles to the south joins the Calix-Elf, forming in this way a natural canal between two river systems. After the junction of the Tornea-Elf and the Muonio-Elf the united stream, bearing the name of the Tornea-Elf, continues to form the boundary between Russia and Sweden. The Tornea-Elf has a course of upwards of 230 miles, and falls into the northern part of the Gulf of Bothnia, a few miles below the town of Haparanda. This town, which is rising into importance, was founded in 1809. It possesses a good trade in fish, furs, iron, timber, tar, &c. A steamer sails between this place and Stockholm two or three times during the season.

The Calix-Elf rises at no great distance to the south of Tornea-Tråk in the Kiölen Mountains, whence it carries off the waters of four or five large lakes. It descends on the same plain to the south of the great group of iron hills, and runs nearly parallel to the Tornea-Elf east-south-east for about half its course. After receiving the Tärende-Elf it runs southward. It is less rapid than the other large rivers of Bothnia; it reaches the most northern part of the Gulf of Bothnia after a course of nearly 250 miles.

The country between the Calix-Elf and the Lulea-Elf forms the southern part of the plain, which may be considered as terminating near the banks of the Lulea-Elf, where stupendous rocky masses rise which skirt its banks as far as its confluence with the Lilla (Little) Lulea-Elf. These high rocks are called Norra Ananas. In the middle of the plain rises Mount Dunduri, which is never entirely free from snow. To the north of it lies another group of iron hills less extensive than that on the banks of the Tornea-Elf. These heights divide the plain into two portions different in character. Between it and the Kiölen range the country is covered with swamps, and here and there with rein-deer moss; the dwarf-birch is rarely met with. The country between Mount Dunduri and Norra Ananas, called Stora Maddus, is a swamp extending above 20 miles in every direction. The eastern portion of the plain is partly covered with forest-trees, and cultivated along the water-courses. Its soil is much inferior to that on the other side of the Calix-Elf, except where it approaches the sea.

The Lulea-Elf is the most rapid of the rivers of Sweden. Rising on the eastern declivity of the Kiölen Mountains it soon enters a succession of lakes situated at different levels and united by short channels, which are generally cataracts of considerable height. Some miles after the river has left the last lake its waters are narrowed by steep rocks on each side, and rush down 400 feet in the space of less than one mile. This remarkable cataract is called Niamelaskas (the Hare's Leap), where the vapours arising from the water are directly condensed and freeze in winter, forming a vault strong enough to afford a passage to hares. (Schubert's 'Reisen,' p. 362.) Farther down the river runs between two ranges of high rocks, and here the first solitary habitation is found about 120 miles from the boundary of Norway. It enters the Gulf of Bothnia about 2 miles below the town of Lulea after a course of 200 miles. It is navigable for only a few miles from its mouth. Its largest tributary, the Lilla Lulea-Elf, which likewise rises in the Kiölen Mountains, traverses a succession of seven large lakes extending upwards of 80 miles from west to east, and afterwards runs above 20 miles before it joins the Lulea-Elf. Its bed lies in a deeper valley; its banks are inhabited in several places. The town of Lulea contains about 500 inhabitants. An older town was built farther inland by Gustavus Adolphus, but in consequence of the sea having receded from it the present site was chosen for a new town.

The country between the Lulea-Elf and Skelleftea-Elf is nearly equally divided between mountains and plains. In this part the Kiölen range rises to its greatest height in Mount Sulitelma, and extensive ranges of it are always covered with snow. The ridges branching off from it eastward are divided by wide valleys, which in their upper parts are only covered with swamps and rein-deer moss. In their lower parts forests of pines, fir, and birch are frequent, and the habitations of men begin to appear, but the soil is generally unfit for cultivation. Along the water-courses the pasturo

is good. About 60 miles from the shore agriculture begins to be the principal occupation of the inhabitants, and villages are more numerous; but even here woods cover the greatest part of the country.

The Pitea-Elf rises in the extensive lake of Peskejaure, which is inclosed by high mountain rocks, and running through the mountainous country in a south-eastern direction, traverses many smaller lakes. Here it forms numerous rapids and some considerable cataracts. About 60 miles from the coast it turns due east and falls into the sea a little below the town of Pitea, after a course of about 180 miles. It is only navigable a few miles from its mouth. The town of Pitea occupies an agreeable site on the coast: the population is about 1200. The trade of the place is chiefly in timber.

The Skelleftea-Elf rises in the north-eastern declivity of the Nasa-fiäll, in which there are some mines of silver which for nearly half a century past have not been worked. In the mountainous country this river traverses some lakes, and receives the waters of others by narrow channels. In the plain it takes an east-south-eastern direction to its mouth below the church of Skelleftea. The rapids in this river are more numerous than in the others, but it has fewer cataracts, so that the salmon ascend nearly to its sources. The river is only navigable for a few miles above its mouth. Its course is about 180 miles. On the banks of this river the great plain of Bothnia ceases, the country south of it being entirely hilly or mountainous, with few level tracts. The hills inland rise into mountains, with declivities covered with forests consisting chiefly of pine, birch, and fir. The level tracts along the rivers afford pasture, and are sometimes cultivated. Agriculture is more attended to in the eastern and hilly parts of the country.

In the southern portion of Bothnia the mountains in the western districts form ranges rather than groups. Some miles north of 65° N. lat. a range branches off from the Kiölen chain, which running nearly east traverses almost the whole of the Scandinavian peninsula, terminating about 30 miles west of the mouth of the Umea-Elf. This range, called the Stötting-fiäll, approaches the snow-line; and though its summits are formed of barren rocks the sides are clothed with fir, birch, and aspen, and afford good pasture. To the north of this chain runs the Oran-Elf, a considerable river, rising at some distance from the Kiölen, and running nearly east and parallel to the Stötting-fiäll. It turns to the south-east where this mountain range terminates, and soon after enters Angermanland, where after a farther course of about 45 miles it falls into the sea between the villages of Angersjö and Lefvar. Its whole course may be upwards of 150 miles. To the north of the Oran-Elf runs the Umea-Elf, which rises in the Kiölen range about 66° N. lat. It first runs south, traversing some lakes; and then turns to the south-east, traverses the large lake of Stora Umea, is joined by the Wiudel-Elf, and falls into the gulf after a course in all of about 180 miles. The town of Umea, situated at the mouth of the river on its left bank, is the capital of Westerböthnia: its population is about 1500. It is the residence of the governor. In the neighbourhood are some mineral springs. The Windel-Elf, which rises in the Kiölen range about 66° 30' on the south declivity of the Nasa-fiäll and descends in a south-eastern direction with numerous bendings, is more free from cataracts than the other rivers of Bothnia, and a considerable part of it has been rendered so far navigable that timber and wood may be floated down.

Bothnia, extending on both sides of the polar circle, has of course a very cold climate, though it is much milder than other parts of the globe in the same latitude. Winter lasts in general eight months, from the beginning of October to the end of May, and the cold is very severe. It is followed almost immediately by summer, a few moderate days only intervening between the frost and a great degree of heat. In the beginning of June all traces of winter have disappeared, and the grain is sown. The great heat produced by the long days of eighteen or twenty hours, united to the moisture which has accumulated during the long winter, gives rise to a very rapid vegetation. Corn is sown and reaped in some places in the course of seven or eight weeks, and nowhere remains in the ground more than ten weeks. Nevertheless it is sometimes destroyed by night-frost, which generally appears about the 20th of August for three or four nights in succession. These nights are called 'iron nights,' and are followed by about six weeks of moderate warmth. The quantity of snow which falls during the winter is very great; but in summer rain is scarce. The rivers of Bothnia overflow the low tracts along their banks twice a year; the first time in the beginning of June, after the melting of the snow in the lower parts of the country; the second towards the middle of July, when a succession of long days has produced the same effect on the mountains. The latter inundation is more favourable to the growth of grass than the former, and enables the inhabitants to maintain a large stock of cattle during the eight winter months. The soil is of an indifferent quality, sandy and stony, except along the Tornea-Elf and Muonio-Elf, where it is rather good, especially towards the shores of the gulf. Along the shores of the Gulf of Bothnia the land is better.

Wheat is only cultivated at one place, in the most southern corner of the province, and here hardly a few bushels are annually obtained. Rye is grown nearly up to 66° N. lat., and oats and barley even to 68°.

Potatoes generally succeed very well; turnips and cabbages do not thrive.

Black cattle form one of the principal sources of wealth in the provinces, but the stock is limited by the scarcity of meadows; the pasture-walks however are extensive. Butter and hides, which are the principal articles of export, are sent to Stockholm. Horses are rather numerous, and of a middling size. Sheep are only found in the south districts, and their wool is coarse. The Laplanders have considerable herds of rein-deer, and live upon their flesh and other produce.

The inhabitants of the more inland districts gain their living chiefly by fishing in the lakes, which abound in many kinds of fish, as pike, tench, trout, but especially the *Salmo lavaretus*. The salmon ascends those rivers which have not high cataracts, and the number of fish taken is considerable.

The high plain between the Calix-Elf and Lulea-Elf, the upper parts of the mountains, and the higher valleys, are in general covered with rein-deer moss; the remainder of the district forms nearly an interminable forest, especially in the inland country. The most common trees are birch, pine, fir, alder, and aspen. The inhabitants have hitherto derived very little advantage from this vast treasure, owing to the rivers not being navigable. In some parts along the coast tar and pitch are made for exportation.

Three nations inhabit Bothnia, the Finlanders, the Laplanders, and the Swedes. The Finlanders have settled chiefly along the banks of the Muonio-Elf and Tornea-Elf. They apply themselves especially to the rearing of cattle, and are distinguished by their skill in the management of the dairy. The Laplanders inhabit the inland district, and conduct their herds of rein-deer in the summer to the upper valleys in the mountains, and even to Norway, but in winter they descend to the lower plains on the shores. Some of them have become agriculturists, and partly adopted the manners and customs of the Swedes. The Swedes occupy the country along the shores, and the valleys on the sides of the larger rivers. They occupy themselves nearly exclusively with agriculture, except a few families in the inland districts, who gain their sustenance by fishing in the lakes.

Bothnia with Lapland is politically divided into two läns, or districts, of which the south is called Westerbotten, or Umea Län, and the north Norrbotten, or Pitea Län.

(Buch, *Travels*; Schubert, *Travels in Sweden*; *Maps of Baron Hermelin*.)

BOTHNIA (the Gulf of), the most northern part of the Baltic Sea, extends from 60° to nearly 66° N. lat. Between 60° and 64° it lies due S. and N., but the remainder declines to the N.E. Its whole length is rather more than 400 miles.

Its entrance is formed by a strait called Alands Haf, which divides the Scandinavian peninsula from the Aland Islands that belong to the Russian government of Abo, a part of the ancient province of Finland. This strait is from 36 miles to 50 miles wide. North of it the gulf widens suddenly, the coast of Sweden trending to the north-west, so that before it reaches 61° it has attained a width of upwards of 240 miles, which breadth it preserves nearly to 62°. Farther north it narrows gradually, till near 64° it forms another strait, called the Quarken. That portion of the gulf extending from Alands Haf to the Quarken is called Bottniska Haffet (the Sea of Bothnia). At the Quarken the coast of Sweden is about 60 miles from that of Russia, but the straits are still farther narrowed by the Swedish island Holmoe and the Russian islands Walloe, so that the free passage is only about 25 miles wide. To the north of the Quarken the gulf preserves a width of from 50 to 60 miles for some distance, but it afterwards widens to about 100 miles, which breadth continues to its northern termination. The portion of it north of the Quarken is properly called Bottniska Wicken (the Gulf of Bothnia). The coasts south of the Quarken are rocky though not high on both sides of the gulf, but in general higher on the western side, where at a few places they rise to 60 feet and upwards. To the north of the Quarken the coasts are low and sandy, with the exception of a tract over the straits on the Russian side, where they are rocky but likewise low. The largest part of the coasts of this northern portion is formed by an alluvial deposit brought down by numerous rivers. There is no want of good harbours in the gulf; but the navigation is interrupted by the ice for five months in the year to the south of the Quarken, and for six months in the year to the north of it. The southern part of the gulf is however annually navigated by some English vessels, which export timber and naval stores. Swedish and Norwegian vessels also bring these articles to England. A kind of small herrings, called by the Swedes 'strömmings,' appears in summer in great numbers on the west coast of the gulf, especially south of the Quarken, when most of the inhabitants of the coast south and north of Hernösand are occupied in catching them. The greater part are dried, but a considerable portion undergo a fermentation in a closed cask, after having previously been a little salted, and exposed to the air for a short time. The fish thus acquires a sour taste, and is called 'sur-strömming.' Both the dried and sour strömmings are exported to the neighbouring countries, and are used by the lower classes in a great part of Sweden. [BAL TIC SEA.]

BOTHWELL, Lanarkshire, Scotland, a village in the parish of Bothwell, situated on the right bank of the river Clyde, in 55° 48' N. lat., 4° 5' W. long.; 3 miles E.S.E. from Glasgow, and 38 miles W.S.W.

from Edinburgh. The population of Bothwell parish, including the villages of Bellshill, Bothwell, Chapelhill, Holytown, Newarthill, and Uddingston, was 15,253 in 1851.

There are interesting historical associations connected with Bothwell and its vicinity. Edward I. occupied the castle for a few days in 1301; Edward III. made it his residence for about four weeks in 1336. Dr. MacCulloch says of this castle that it is perhaps the most magnificent ruin in Scotland; Wordsworth gives a striking description of it in a note to one of his poems. Its large and bold front to the south, with the circular towers at each end, rising from the steep and wooded banks of the Clyde, produces a grand and impressive appearance. On the opposite bank of the Clyde are the ruins of the ancient priory of Blantyre. The old church of Bothwell, which was used as a place of worship till 1826, is a gothic structure of the 14th century; it is roofed with large flags of stone. Bothwell Bridge was the scene of the memorable encounter between the Covenanters and the royal forces under the Duke of Monmouth in 1679. The roadway of the bridge was then only 12 feet wide; and in the middle of the bridge was a portal with gates. These have long been removed; and a very handsome new bridge has been erected. The road has also been much widened. Near Bothwell Haugh is a bridge over the South Calder, which some writers have supposed to be of Roman construction. The Roman 'Watling Street' went through this part of the country for several miles on the north-east bank of the Clyde. The parish church, a fine gothic edifice, with an elegant tower 120 feet high, erected in 1533, will accommodate about 1200 persons. There is a chapel-of-ease at Holytown; and there are in Bothwell parish several chapels belonging to the Free Church and the United Presbyterian Church. Extensive fields of coal exist in the parish of Bothwell; iron-stone is also found in considerable quantities. There are extensive coal-pits and iron-works, with several quarries of freestone, which give employment to many of the inhabitants. By the Caledonian and other lines of railway Bothwell has communication with Edinburgh, Glasgow, Aberdeen, and Ayr; and also with England. Agricultural pursuits are skilfully and successfully followed. The climate is salubrious, and the soil is fertile. Organic remains of an interesting description have been found in the neighbourhood. William Aiton, author of 'Hortus Kewensis,' was a native of this parish. Joanna Baillie, the eminent poetess, was born in Bothwell Manse, her father, Dr. Baillie, being minister of the parish.

BOTHWELL. [VAN DIEMEN'S LAND.]

BOTTESFORD. [LEICESTERSHIRE.]

BOTTESFORD. [LINCOLNSHIRE.]

BOTZEN. [TYROL.]

BOUCHAIN. [NORD.]

BOUCHES-DU-RHÔNE, a department in France formed out of Basse-Provence, is bounded N. by the department of Vaucluse, from which it is separated by the Durance, E. by the department of Var, E. by the Mediterranean, and W. by the Rhône, which separates the department from that of Gard. It lies between 43° 9' and 43° 50' N. lat., 6° 13' and 5° 40' E. long.; its greatest length is along the coast, where it measures in a straight line 70 miles, but following the windings of the coast 190 miles; its greatest breadth from north to south is about 40 miles. The area is 1985 square miles: the population in 1851 was 428,969, which gives 216¹/₂ to the square mile, being 41¹/₄ above the average per square mile for the whole of France.

Surface, Hydrography, &c.—The department takes its name from its situation about the mouths of the Rhône (Bouches du Rhône). The northern and eastern districts are hilly, being covered by the western acclivities of the Maritime Alps, which subside with gentle slopes into the basin of the Rhône, but bend out southward several calcareous ridges, which terminate abruptly. A ridge of low naked hills called Alpines runs along the Durance to its mouth in the Rhône. The hill ridges inclose numerous small basins, and from their bases plains of considerable extent stretch with gentle slope to the sea-shore. Along the shore are several lakes, separated from the sea by narrow spits of land with one or more openings. The shore to eastward is high and steep.

The rivers of the department, except those mentioned on the coast, are small. The Huvoaine rises in the department of Var, runs through a very fertile valley between the Sainte-Baume ridge on the north, and the Fioles Mountains on the north, and falls into the sea near Marseille, to which city part of its waters are carried by an aqueduct. A high plain between the Fioles and the Sainte-Victoire Mountains is watered by the Arc, which rises near St. Maximin in the department of Var, and running west past Aix falls into the shore-lake of Berre. This river is subject to inundations, which often cause great ravages; its waters are used for purposes of irrigation and as a moving power for machinery. From the highest point of the Sainte-Victoire Mountains, which have been so named to commemorate the victory gained by Marcellus over the Teutones and Cimbri, a ridge called Trévaresse runs south-westward and terminates in the stony plain of Crau. The river Touloubre rises from the same point, and flowing west past Villeneuve and Salon then turns south and falls into the shore-lake of Berre.

The west and south-west of the department is flat, low, and in many places marshy. At Arles the Rhône divides into two channels,

forming a delta, which is called Ile de la Camargue. One branch, called the Grand Rhône, runs to the south-east, and enters the sea below Tour St.-Louis, where it has commenced the formation of another delta. Tour St.-Louis was built about 130 years ago at the mouth of the river; it is now above three miles from the sea; and the new delta, consisting of the two *thays* or islands of Bigue and Béricle, have been formed within that period by the deposits of the river. The Grand Rhône contains numerous islands which greatly impede the navigation; but vessels making for Arles enter the Canals-des-Martigues, which forms the entrance to the shore-lake of Berre, and immediately opposite the lighthouse called Tour-de-Bouc passes into the navigable canal de-Bouc which runs across the plain of Crau, and nearly parallel to the river up to Arles. The other branch of the Rhône is called Petit-Rhône, which runs in a very winding channel into the Mediterranean, a little to the west of the ancient village of Les-Saintes-Maries, famous for its old battlemented church. This branch of the Rhône is but a small stream, and vessels making for the interior from western ports pass out of the Mediterranean into the Beaucaire Canal.

The *Camargue*, which is entirely of alluvial and deltoid formation, and which it is supposed had no existence in the time of Julius Cæsar, contains nine villages, a great number of country houses, and is divided into about 350 farms. Its whole area is about 136,000 acres, part of which is cultivated along the channels of the Rhône, and the greater part of the remainder is covered in winter and spring with rich pastures. The isle is protected from the inundations of the river by great dykes, and it is sheltered from the sea by hills of sand. The soil is a rich alluvium resting on a bed of sand, which in the lower grounds of the interior of the island is so strongly impregnated with salt as to affect the herbage and in some places prevent its growth. The interior of the island contains many reed-marshes, and large lakes, which have communication with the sea; the largest of these is the shore-lake of Valcares. All kinds of southern produce, corn, fruits, and timber are grown in the island; the vine, the olive, and the mulberry flourish; madder and wood are grown; and on its rich pastures vast numbers of sheep, cattle, and small horses are reared. The increase afforded by the flocks and herds of the Camargue is stated at 40,000 lambs, 3000 calves, and 3000 horses annually. The sheep are of the trashantantes or restless breed. They winter in the Camargue, and are driven in spring into the plains of Crau, where lambing takes place; in May they begin to ascend the Alps, whence they return to the Camargue about the end of October. The culture of rice was introduced into the Camargue from Lombardy in 1847 with great success. The isle abounds with water-fowl; locusts often do great damage to the green crops; and in summer the Camargue as well as the rest of the department is infested by mosquitoes. There is a lighthouse with a fixed light 123 feet high on the left bank of the eastern branch of the Rhône, in 43° 20' N. lat., 4° 40' 22" E. long.

Between the eastern channel of the Rhône and the shore-lake of Berre, the Alpines hills, and the sea, lies a vast triangular and arid plain called the Plain of Crau. Its surface is not level; nor is its slope towards the sea, but towards several points of the compass. Its highest part near Istres is 100 feet above the sea-level; and in various directions from this point the surface subsides into hollows, some dry, some filled with water. The central part of its area consists of a reddish-brown clay covered with shingle; but there are grassy and woody spots here and there, and its borders and lowest levels are cultivated with success by a system of irrigation maintained by a branch of the Craponne Canal which traverses the plain. The stones on the desert part of the Crau vary from the size of a pea to the bigness of a man's head; and under and between these there is some scanty vegetation, on which during the spring large flocks of sheep feed, turning over the stones with their muzzles as they advance. In the cultivated spots, besides common products, the vine, olive, mulberry, and other fruit-trees flourish.

The department contains several extensive salt-lakes, which communicate with the sea by natural channels or by canals. The largest of these is the shore-lake of Berre, which is 12 miles long and 40 miles in circuit. It is entered by the harbour of Tour-de-Bouc, which has a lighthouse and several strong defences. The lake contains vast quantities of eels and other fish. There are several small islands inhabited by a few fishermen along the coast; the most important are those of Ponègue, Ratoneau, and If, famous for its strong fortifications and its prison at the entrance of the port of Marseille. A little south-west of these is the Isle of Planier, on which there is a lighthouse.

Communications.—The department is crossed by several canals, the most important of which is the Craponne Canal, which has its summit level in the Durance, and by its branches communicates with the shore-lake of Berre and the Rhône. The Alpine or Boigelin Canal has its summit level in the Durance also, at Malletmort; it crosses the north-west of the department, and divides into several branches, which are distinguished by different names from the districts irrigated by them. The department is traversed by 5 royal and 15 departmental roads, which give a total of about 500 miles of continuous roadway. A railway passing through Berre and St.-Chamas runs in the department from Marseille to Arles. The aqueduct destined to convey a supply of water from the Durance to the city of Marseille

is one of the greatest works of the kind ever undertaken. It leaves the Durance at the north-eastern angle of the department; crosses highways, watercourses, and valleys; pierces three mountain ranges and several offshoots from them by tunnels; and reaches the boundary of the arid basin around Marseille at a height of nearly 500 feet above the sea. There are in all 73 tunnels, the total length of which is about 15 miles (three of them are each a league in length); and about 500 artificial constructions, including embankments, bridges, aqueducts, and cuttings. The greatest of these works is the bridge-aqueduct across the valley of the Arc, within five miles of Aix. This structure consists of three rows of arches, one above another; the piers of the two lower rows are built of cut stone, and measure 48 feet by 20 feet. The lowest row contains 12 arches, the middle 15, and the topmost, which supports the water-channel, 49 arches. Some of the stones used in the construction of the lower piers exceed 17 tons in weight. The total length of the aqueduct is 51 miles. The canal is 30 feet wide at top, 10 feet wide at bottom, and 7 feet deep. From the Durance to the edge of Marseille basin the fall is 125 feet, and it is said that this fall will admit of the delivery of 11 tons of water per second. This great work, which is not already finished, is rapidly approaching completion, besides furnishing Marseille and the numerous bastides or country houses round it with water, will afford a vast and ever-ready supply of water-power for driving machinery; and give means for irrigating a surface of nearly 25,000 acres of land, which for want of water during summer is like a parched desert.

Climate.—In December, January, and February the climate and face of the country are delightful. Frost and snow are rare. During the rest of the year the heat is very great, especially from July to the end of September. Rain seldom falls in summer, and then the scorching heat alternates with a violent cold dry wind called 'mistral,' from the north or north-west, which is very injurious to vegetation, and so impetuous as frequently to unroof houses and blow down trees. Except in the low valleys, the irrigated grounds, or in the neighbourhood of the marshes, vegetation in the summer season seems dead, and the whole surface of the ground is covered with dust. In the intervals of the mistral mosquitoes appear in countless numbers, and from these there is no respite night or day between the months of May and November. The people sleep under wire or gauze frames to keep off these restless enemies. Scorpions are not uncommon. The climate is generally healthy; but in the corn lands of the arrondissement of Arles there are many deaths among the labourers at harvest time, owing to the proximity of the marshes.

Soil and Products.—The surface of the department covers 1,270,330 acres, divided into 1,169,862 parcels. Of this area 530,000 acres are arable, 97,584 vineyards, 157,700 underwoods and forests, and 410,157 acres are heaths, marshes, and waters. Owing to the heat of the climate, the soil is in most places arid and parched, and produces nothing without irrigation. Corn is grown in large quantities only in the arrondissement of Arles. In 1846 the quantity of wine produced in the whole department amounted to 13,750,000 gallons, about one-half of which is used for home consumption, and the remainder is exported or converted into brandy. The white wines of Cassis and Ciotat, the red wines of Séon and St.-Louis in the arrondissement of Marseille, and those of Château-Begnard and Saintes-Maries in the arrondissement of Arles are the most esteemed sorts. The number of mulberry-trees for the production of silk exceeds a million. The olive is extensively cultivated, and the oils of this department are the best in France. Pomegranates, pistachios, almonds, figs, melons, citrons, capers, &c. are abundant. The cypress, myrtle, tamarisk, rose-laurel, and other odoriferous plants and herbs flourish. Great numbers of light active horses are reared; cows and goats are numerous; the number of sheep is stated at 700,000. These last are fed in the department only in the winter; during the rest of the year they pasture on the Alps. The cultivation of tobacco which had been prohibited was re-introduced in 1852.

Manufactures.—The manufacturing industry of the department is great. The most important products are brandy, soap, vinegar, soda, chemical products, broadcloth, leather, hats, and perfumes. There are several sugar-refineries, glass-works, tile and brick fields, silk, cotton, and tobacco factories, and important salt-works along the coast and on the several shore-lakes. The commerce of the department is very active with all the southern departments, with the Levant, the coasts of Africa and Spain, and the West Indies. The exports consist of the industrial products named, and dried fruits, cork, and colonial produce. The minerals include coal, iron, lead, marble, slate, gypsum, chalk, alabaster, and potters' clay. At Aix and at Camolus near Marseille there are mineral springs.

The department is divided into three arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Marseille	0	22	229,214
2. Aix	10	53	112,026
3. Arles	8	33	87,749
Total	27	103	428,989

1. In the arrondissement of Marseille the chief town is MARSEILLE, which is also the capital of the department. *Aubagne*, 10 miles E. from Marseille, is built on the slope and at the foot of a hill on the left bank of the Huveaune. Coarse woollens, china, pottery, brandy, leather, and paper are manufactured. The town has a large magnanerie, or establishment for rearing silk-worms; and there is a good trade in the wines of the neighbourhood and in dried fruits: population, 6208. *Cassis*, a small well-built town on the coast, has a harbour formed by a jetty. The entrance of the harbour is dangerous in rough weather, but within it is deep: it is defended by several batteries, and on the left of it there is a lighthouse with a fixed light 90 feet high, in 43° 12' N. lat., 5° 32' E. long. The town has a population of 2100, who are employed in the coasting-trade and in ship-building. *La Ciotat* is situated 20 miles S.E. from Marseille, in a district covered with plantations of the olive, the pomegranate, and the orange, and at the bottom of a bay on the western side of the Gulf of Lèques. The town is well built, and has a harbour defended by a castle on the left, and by batteries on the small island of Ile-verte. The harbour, which admits vessels of 300 tons, is formed by a mole on which there are two lighthouses. The coasting-trade in the wines, dried fruits, and white figs of the neighbourhood, ship-building, and the manufacture of cotton-yarn, give employment to the population, which amounts to 5902. *Roquevaire*, 14 miles E. by N. from Marseille, is on the Huveaune, and has a population of 4143. The environs of this town furnish the best white and red muscadine wine and grapes of the department. *Auriol*, an irregularly-built but rather pretty village, 3 miles N. from Roquevaire, has 5103 inhabitants, who manufacture woollens, soda, bricks, tiles, brandy, paper, and raise a good deal of silk. Mines of gypsum, coal, alabaster, and red ochre are worked in the vicinity. The town is ancient. Several Roman remains have been found in it.

2. In the arrondissement of Aix the chief town is AIX. *Berre* is a small well-built walled town on the north shore of the lake of Berre; it is a station on the Arles-Marseille railroad, and has a harbour and a population of 1926, who carry on a brisk trade in salt, made in extensive saltworks along the shore, which however render the site unwholesome. *Gardanne*, 7 miles from Aix, has 2609 inhabitants, who are chiefly engaged in the coal-mines, in the manufacture of brandy and tiles, and in the cultivation of melons and beet-root. *Itres* is on the south shore of the Lake Olivier, which is joined to the Etang de Berre by a canal. The town has a population of 3122. It is surrounded by old fortifications. *St.-Chamas*, a first-class station on the Arles-Marseille railway, is situated at the north-eastern extremity of the shore-lake of Berre, and near the right bank of the Touloubre, which is crossed by a bridge of Roman construction; it has a population of 2443, who trade in the produce of the country. *Lambec*, 13 miles N.W. from Aix, on the road to Avignon, has a population of 3587, who manufacture oil, soda, and soap. The town has also establishments for reeling silk. *Les-Martigues*, 25 miles S.W. from Aix, is situated on three islands united by bridges at the extremity of the channel which joins the harbour of Tour-de-Bouc to the Berre Lake. It is well built, contains a fine church, an hospital, and several good streets, and has a population of 7772. Its position on islands has obtained for it the name of 'Provençal Venice.' Its port is frequented by small craft from Arles and the coast of Genoa. The inhabitants are largely engaged in the tunny and pilchard fishery. *Salon*, 20 miles W. from Aix on the road to Arles, is situated in a fertile plain, irrigated by the Canal de Craonne, and has a population of 5617. It is irregularly built, but contains some good houses and two very ancient churches. There are oil-mills, soaperies, and establishments for leaching wax and reeling silk. *Trets*, an ancient town, 11 miles S.E. from Aix, has 3039 inhabitants, who manufacture brandy, tiles, and sugar-of-lead. A coal-mine is worked near Trets.

3. In the arrondissement of Arles the chief town is ARLES. *Château-Renaud* is 17 miles N.E. from Arles, on the left bank of the Durance. It takes its name from an old ruined castle on a hill above the town: the population is 4744. *Eyguières* is situated amidst olive-plantations near the Craonne Canal, and has 2920 inhabitants. *Orgon*, 22 miles N.E. from Arles, is built on the slope of a hill, the summit of which is covered with the ruins of an ancient castle. Between the hill and the Durance there is only room for the high road and the Boisgeline Canal to pass. The town has 2748 inhabitants, who are chiefly employed in agriculture. *St.-Remy*, 13 miles N.E. from Arles, stands in a plain covered with olive-plantations, and has a population of 5930. It is irregularly built, but contains many good houses of an ancient style of architecture. Wool, silk, and agricultural produce are the chief articles of trade. There are several Roman remains here. *Tarascon-sur-Rhône* (the Roman Tarasco), 10 miles N. from Arles on the left bank of the Rhône opposite Beaucaire, to which it is joined by a suspension-bridge, is a walled town defended by towers, and entered by three gates. It is commanded by an ancient castle, built on a rock above the Rhône. Tarascon is a well-built town. The ancient church of Sainte-Martha, the town-house, court-house, theatre, the two hospitals, and the barracks, are the most important public buildings. A tribunal of first instance sits in the town, which has also a college and a public library. Woollens, serges, silks, calico, vernicelli, soap, cordage, starch, brandy, bricks, tiles, and leather are manufactured. Small vessels for the river traffic are built. The

articles named, together with wine, oil, wood, coal, almonds, madder, teasels, medicinal plants, seeds, &c., form the items of a brisk trade. The town has about 10,000 inhabitants.

The arrondissement of Marseille forms the bishopric of Marseille. The rest of the department forms the archdiocese of Aix. The whole department is under the jurisdiction of the High Court and University Academy of Aix, and belongs to the 9th Military Division, of which Marseille is head-quarters.

(*Dictionnaire de la France*, 1815.)

BOUFARICK. [ALGERIA.]

BOUGAINVILLE ISLAND. [NEW GEORGIA ARCHIPELAGO.]

BOUGHTON, GREAT, Cheshire, a township and the seat of a Poor-Law Union, in the parish of St. Oswald and hundred of Broxton, one mile E. from Chester, and 182 miles N.W. from London by road. The Chester and Crewe railway passes through the parish: the population of the township in 1851 was 1164. The living of St. Oswald's is a vicarage in the archdeaconry and diocese of Chester. Great Boughton Poor-Law Union contains 100 parishes and townships, with an area of 97,109 acres, and a population in 1851 of 26,570. Great Boughton is becoming a suburb to the city of Chester. It contains some good residences. There is a National school at Great Boughton.

BOUILLON, the capital of the ancient duchy of Bouillon, now forming the western part of the Belgian province of Luxembourg, is situated near the French frontier on the left bank of the river Semois, and 14 miles from its junction with the Meuse, in 49° 48' N. lat., 4° 59' E. long.: population, 2800. The duchy is a hilly district lying in the middle of the Ardennes, and between the former grand duchy of Luxembourg and Champagne.

The town is small but neatly built. The castle of Bouillon, which was formerly thought to be impregnable, is built upon a steep rock overlooking the town: it has been recently repaired, and is now used as a military prison. The dungeons are hewn out of the solid rock.

The town and duchy of Bouillon were the hereditary possessions of Godfrey, the leader of the first Crusade and king of Jerusalem, which city he took in 1099. To provide funds for his expedition, Godfrey sold the duchy to Albert, bishop of Liège, subject to the right of redemption on the part of the vendor or his immediate heirs. Godfrey having died in the Holy Land, this sale became cause of dispute between his heirs and the bishop, each party having recourse to arms in support of their pretensions. After this petty war had been renewed at so many different times as to obtain for the duchy the name of 'the Debatable Land,' it remained for some time in the peaceable possession of the prince bishop of Liège. The bishop having taken part in the war against France, Louis XIV. caused the town and castle of Bouillon to be seized in 1672, and at the congress of Nimwegen in 1678 it was stipulated that France should retain possession until arbitrators to be appointed for the purpose should have decided between the claims for the duchy set up by the descendants of the heirs of Godfrey and the Bishop of Liège. In the meanwhile Louis had invested the family of La Tour d'Auvergne with the duchy. A descendant of that house, Philip d'Anvergne, a captain in the English navy, assumed in 1792 the title of 'Prince de Bouillon,' which he continued to bear until his death in 1816. The long-disputed territory was adjudged by the congress of Vienna in 1815 to the king of the United Netherlands, as duke of Luxembourg: in the division of that duchy, consequent upon the revolution of 1830, Bouillon fell to the share of Belgium.

BOUILLY. [AUVER.]

BOULAC. [CAIRO.]

BOULOGNE. [SWITZ, Department of.]

BOULOGNE-SUR-MER, a seaport town in the department of Pas-de-Calais in France, stands in 50° 44' N. lat., 1° 35' E. long., at the mouth of the Liane, which falls into the English Channel and forms the harbour. It is 170 miles distant N.N.W. from Paris by railroad through Amiens and Abbeville, and 29 miles from Folkestone on the coast of Kent: the population is said to exceed 30,000, about one-fifth of whom are English.

Boulogne occupies the site of the ancient *Gesoriacum*, which was in the territory of the Morini, a tribe of the Belgæ. (Mela, iii. 2.) It became, under the Romans, the chief port of embarkation for Britain. Some writers have maintained that Julius Cæsar embarked from *Gesoriacum* for Britain; but D'Anville and other high authorities identify the *Portus Itius* of Cæsar with Wissant or Wissant, a small town to eastward near Cape Grinez. D'Anville thinks it was at *Gesoriacum* that the tower was erected by Caligula, when he marched to the coast of Gaul in order to invade Britain; and according to Suetonius the emperor Claudius embarked here for that island. The port in Britain with which a communication was maintained was Rutæpiæ, now Richborough, near Sandwich. About the time of Constantine, the name of Bononia was substituted for that of *Gesoriacum*. In 1231 Philippe, son of King Philippe Auguste of France, caused new walls to be built, inclosing a smaller space than had been occupied by the Roman town. This inclosure was that of the upper town, at the eastern angle of which a citadel was built by the same Philippe. Boulogne had before this time been created into a county, of which Philippe had acquired possession by marriage. In 1541 the town was taken by Henry VIII., who added

greatly to its defences. Edward VI. restored Boulogne to France in 1550. The ramparts of the upper town are still standing; they are planted with a double row of trees, and command a view of the lower town, the sea, and in fine weather of the coast of England. The upper town is entered by three gates. The citadel is used as an armoury and barrack, and its vaults are converted into a powder magazine. Boulogne was in 1804 the central rendezvous of the army which Napoleon had assembled for the invasion of England. A Doric column erected on the cliff about a mile from the town was commenced by the grand army, but not completed till after the restoration of the Bourbons—an event which it was then made to commemorate. In 1841 it was restored to its original purpose, and surmounted by a statue of Napoleon 16 feet high. The height of the column, which is built of marble, is 164 feet.

Since the peace of 1815 Boulogne has much increased in extent and population. It is much resorted to as a bathing-place, and many English families have made it their permanent residence. The upper town is the most ancient part of Boulogne; it has for the most part narrow irregular streets, but good houses. A house in the street leading to the Calais gate is marked with an inscription as the deathplace of Le Sage, author of 'Gil Blas.' (The English poets Churchill and Campbell died in Boulogne.) The lower town, which is connected with the upper town by a long, wide, and well-built but steep street called the Grande Rue, extends down the slope of the hill to the river. This part is regularly built. There is also a large suburb called *Capécure*, on the left bank of the Liane. The lower town is larger, more populous, and more commercial than the upper town. The supply of water is by means of fountains, of which there are 5 in the upper town, and 12 in the lower. The town is well lighted with gas. There are promenades on the ramparts of the upper town; and there is an open space called the *Tintilleries*, on the north side of the lower town which is bordered with trees, and surrounded with new streets and elegant houses, inhabited very generally by English families. The sands are of considerable extent, and form an excellent promenade at low water.

Among the public buildings of the upper town are the town-hall, which occupies the site of the palace of the counts of Boulogne; the Bessroi, an ancient tower 140 feet high, commanding from its summit a fine view of the town and harbour; the court-house; the former episcopal palace, now used as a boarding school; and the prison. The finest building however in the old town is the cathedral of Notre-Dame, which was commenced in 1827, and is now completed. It stands on the site of the cathedral which was destroyed in the first revolution. In the lower town are—the hotel of the sub-prefect; the church of St. Nicholas; the building formerly a seminary for the priesthood, and now occupied by several institutions for the promotion of science; the barracks; the great hospital; a museum (in the Grande Rue) which contains collections of natural history and antiquities, paintings, casts, and also the public free library of 25,000 volumes. There are in Boulogne several churches; three convents, the nuns of which educate a vast number of young children, who attend the different schools under their direction; several Protestant chapels; an infant asylum; a humane society; several elementary schools under the direction of the Christian Brothers; a free school for navigation; and several boarding schools. Of places of amusement may be mentioned the theatre, and the splendid bathing establishment which contains music, reading, and card-rooms. Boulogne is the seat of tribunals of first instance and of commerce. The railway station is situated on the left bank of the Liane near Place Bellevue.

Boulogne is a tide harbour. The entrance to it is formed by two piers, of which the western extends 2204 feet into the sea, and the eastern 1640 feet. The depth of water between them is at high tides as much as 30 feet. Having passed this channel, vessels reach an inner basin surrounded by quays, which extend a good way up the Liane. Above the basin a considerable body of water is kept in the bed of the Liane by means of sluices for the purpose of cleansing the harbour. At low water the inner basin is empty, and vessels rest on the mud: it has lately been proposed to convert it into a wet dock. The entrance to the harbour is defended by forts and batteries. The trade of the town is considerable. The herring and mackerel fisheries call into employment a considerable capital, and several vessels are fitted out for the Newfoundland cod fishery. Coarse woollens, sailcloths, pottery, nets, and tules are manufactured. There are also a linen-yarn factory which contains 3000 spindles, glass-bottle works, rope-walks, gin distilleries, sugar refineries, tanneries, tile and brick works. The coasting trade is active. There is constant communication with London, Dover, and Folkestone by steamers. Boulogne is one of the principal ports for the passenger traffic between England and France: the number of passengers from and to England in 1849 and 1850 amounted to 64,997, and 86,415 respectively.

Several Roman antiquities including medals and tombs have been discovered at Boulogne. On a cliff to the left of the entrance to the port stood Caligula's tower. It was an octagon; each side is said to have been about 26 feet at the base, and it rose to the height of 125 feet. It had 12 stages or floors, and the diameter of the tower appears to have diminished 3 feet at each stage, so as to form so

many external galleries of a foot and a half in width; going all round the tower. On the top of the tower lights were placed, so that it served as a lighthouse to vessels navigating the channel. The tower was built with iron gray-stone, three tiers together, succeeded by a double tier of a yellow stone of a softer texture, and on this a double tier of very hard and red bricks. At the time of its erection it stood more than a bow-shot from the sea, but the cliff was so much excavated by the waves, and fell in so far, that the tower was at last undermined and overthrown in the year 1644. It had been repaired by Charlemagne in the early part of the 9th century; and when the English were in possession of Boulogne they surrounded this tower with a wall and towers, so as to convert it into a donjon or keep of a fortress. These walls and towers shared the fate of the original Roman work in being overthrown by the advance of the sea. The tower was named in the middle ages 'Turris Ordans' (supposed to be a corruption of 'ardens,' burning) or Ordensis; and the cliff in this direction is still spoken of as the Tour d'Ordre.

BOULONNAIS, a district in the former province of Picardie, which now forms the arrondissement of Boulogne, in the department of PAS-DE-CALAIS.

BOURBON, THE ISLE OF, is situated in the Indian Ocean, to the eastward of Madagascar. St-Denis, the chief town on the island, stands at its north-western extremity, in 20° 52' S. lat., 55° 57' E. long. From Point des Galets near St-Denis the island, which is in form an irregular oval, extends upwards of 40 miles to Point de la Table at the south-eastern extremity.

This island was discovered by the Portuguese navigator Mascarenhas in 1542, and at that time was not inhabited. It received the name of Mascarenhas or Mascareigne. The French in 1642 sent some criminals from Madagascar to it, and settled a colony in 1649, when they gave it the name of Bourbon, which at the beginning of the French revolution was changed into that of Réunion, and afterwards into Bonaparte and Napoleon. In 1815, on the restoration of the Bourbons, the island resumed its old name of Bourbon. After the revolution of 1848 it again received the name of Réunion.

Probably all the island owes its origin to volcanic-agency. The greater part of its surface consists of lava, basalt, and other volcanic productions, and on the remainder traces of such rocks are frequent. The island consists of two systems of volcanic mountains and rocks, and a kind of plain which divides them. The north-western mountains form the larger system and cover about half the surface of the island. Nearly in their centre rises a huge mass of lava with three inaccessible peaks, called the Salazies, whose absolute elevation is estimated by Bory de St. Vincent at nearly 1500 toises, or 9600 feet. The country surrounding this mass exhibits large tracts of lava or basaltic rocks of the most various description, and between them some basins or vales. The basaltic prisms are frequently disposed in regular columns, but these as well as the lava rocks are frequently split by deep narrow crevices. There is here an excellent mineral spring, the Salazie, at an elevation of 2861 feet. Another spring called the Cilaos or Silhaos is at an elevation of 3655 feet. The principal eminence on the island, the Peton des Neiges, or the Snowy Peak, is situated near the centre of the island and forms the crest of a bold rocky ridge dividing the Cilaos from the Salazie ridge of mountains. The rivers are only torrents, which descend from a great elevation. Sometimes they are nearly dry; at others they carry great volumes of water, which they pour down the steep declivities with incredible impetuosity. Their course is through extremely narrow gorges, and in deep beds. Between St-Denis and the 'hurled land' on the windward or north-east side of the island there are fifteen streams, of which the eight named as follows may be regarded as rivers:—The river of the East, the river of Marsoniers, the river of Rocks, the Dumas or Du Mat, the St-Jean, the St-Suzanne, the river of the Rains, and the river of St-Denis, which flows into the sea at a short distance west from the town. On the leeward side of the island are five streams, of which the river Des Galets and the river St-Stephen are the principal.

The shores of the island are rocky, but not generally very high, except along the south-west coast between St-Paul and St-Petre. In a few places a narrow heath separates the rocks from the sea; it is composed of pieces of basalt and broken lava, which have undergone trituration in the sea, and afterwards been thrown ashore, intermixed with some calcareous pebbles and shells.

The plains which separate the volcanic region in the north-west from that in the south-east district of the island, occupy perhaps one-third of the island. The two principal plains which extend across the island, the plains of the Kaffirs and of the Palmists, are divided by a rampart of volcanic rocks, and are at a considerable elevation above the level of the sea. From the south shores the country rises gradually for some miles, and then extends in a kind of uneven plain, called the plain of the Kaffirs. Its surface is a succession of small plains, rising above one another and intersected by hillocks. At the south extremity this plain is 3600 feet above the sea, but where it joins the plain of Cilaos towards the south-east volcanic region, its elevation may be nearly 5000 feet. To the north of it extends the plain of the Palmists, which rises to about 3000 feet. It is a perfect level, in the form of a circus, inclosed on all sides, except towards the shores on the north, by a nearly perpendicular

wall of mountains from 1500 to 2000 feet elevation, which are partly covered with high trees and rich vegetation: on the plain itself many trees are found, among which the species of palms abounds, from which it derives its name. The descent to the shore is somewhat longer than on the south declivity of the island. The traveller ascends from the plain of the Kaffirs to the south-east volcanic region by two other extremely sterile plains, those of Cilaos and of the Sands (aux Sables).

This volcanic region at the south-east extremity, which probably does not occupy more than one-seventh of the island, is called the hurled land (pays hrulé), from its soil being entirely composed of recent lava. There are few places in which signs of vegetation are seen. Nearly in its centre is the present crater of the volcano, which nearly every year changes its place over an extent of 5 to 6 square miles. This centre of volcanic agency is only from 8 to 9 miles from the south-west extremity of the island, and the high mountains near it are estimated to have an absolute elevation of about 8000 feet. In November 1823 the volcano was in a state of activity, and the summit of the mountain was visible above the horizon from a distance of nearly 100 miles.

A soil so arid as that of Bourbon could not maintain a vigorous vegetation if it were not continually supplied with sufficient moisture by the regular succession of land and sea-breezes. The first, blowing from the high mountains of the interior, are always cool, frequently cold; and in the gorges they blow with great force. It ceases at about 10 o'clock in the morning, and is succeeded by the sea-breeze, which brings with it fogs. These fogs are afterwards dissipated by the rays of the sun, and driven again to the sea. This circulation of the vapours produces a great humidity, and a considerable quantity of rain falls. But in despite of this humidity, the climate is one of the most pleasant and most healthy to be found. The mean minimum of temperature as ascertained by observations was 72° in 1818, and 71° in 1819; the mean maximum in 1818 was 82°, and the same in 1819. The mean temperature throughout the year in 1818 was 77°; in 1819 it was 76.75°. A considerable difference is observed between the temperature in the sun and in the shade, the difference amounting to nearly 50° Fahrenheit. The difference in length of the longest and the shortest day is about two hours and a half, the longest being 13 hours, 16 minutes, and the shortest 10 hours, 44 minutes. On June 12th and December 12th the sun rises at 38 minutes past 6, and sets at 22 minutes past 5 o'clock. During the winter the highest peaks on the island are covered with snow. Hurricanes which are generally very violent and occasion much damage occur twice or thrice a year.

Except in one or two places the interior of the island is not inhabited, and perhaps not habitable on account of the sterility of its soil. The cultivated ground extends only about five or six miles from the sea. Among the productions of the island are maize, mandioc, sweet potatoes, ignames, haricots, mangoes, mangosteens, strawberries, grapes, plantains, pine-apples, and custard apples. Vanilla and chocolate plants flourish; coffee and cinnamon grow well, although not now much cultivated, the attention of cultivators having been of late years chiefly directed to the production of sugar. Almost every variety of tropical fruits can be grown in perfection. In many parts of the interior, particularly at the feet of the higher mountains, are extensive forests of timber-trees. The sugar cultivation is now entirely carried on by means of Coolies from the Malabar Coast. Of these Indian labourers there are about 20,000 on the island. Many of those who were formerly slaves, and who were emancipated by the decree of the provisional government of the French Republic in April 1848, have squatted on patches of ground in various parts of the island, living on the produce of their small plots, from which they obtain often a very insufficient amount of provisions for the support of themselves and families.

There are very few European families on the island. The entire population was returned in 1841 as 106,682, of whom 65,993 were then slaves. We have no recent information of a definite character respecting the number of the population. The Governor resides at St-Denis, where the supreme courts of the island are held. The field force of regular troops amounts to about 2000 men, including upwards of 100 gens-d'arme who are employed throughout the island as a mounted police. There is also a considerable military force. Two great roads are carried round the entire circumference of the island, except where interrupted for a short interval by the rocky character of the coast. One of the roads follows the line of the sea-board; the other is a little inland. There are also many good roads in the interior, some of which pass along the sides of high hills and cross numerous ravines and river channels by bridges generally made of wood, some on the suspension principle, and others of more or less elaborate construction.

As the island does not produce much of importance besides sugar, which is raised for exportation, the inhabitants are obliged to import a considerable amount of provisions. Beef is brought from Mauritius, mutton and corn from the Cape of Good Hope, and rice with some gram from India. Wines and general merchandise are brought from France, and horses from the Cape.

The town of St-Denis has a population of about 8000. It has no harbour, and only an open and dangerous roadstead. There are two

piers: at one of these, which is secured by iron chains, passengers land from the boats, according to the pier by a ladder placed for the purpose, a process which as might be expected is often attended with danger. In other parts of the island however the nature of the coast is such that persons wishing to land must first jump into the water. The roadstead at St. Paul is perhaps rather better than that at St. Denis, but there is no other place round the island where vessels may obtain an anchorage. The town of St. Denis is neatly and regularly laid out at the foot and on the side of a hill which ascends with a gradual slope, affording facilities for drainage. The houses are generally constructed of wood, with a shingle roof. The public buildings include the Governor's house, the Palais de Justice, or Supreme Court of the island, three churches, the Central College, or Lycée Colonial, the military barracks and hospital, and a small theatre. A Roman Catholic bishop has been lately appointed to the island. The village of St. Andre is situated on the road from St. Denis to the Salazie spring. The valley in which the Salazie spring is situated contains a population of about 3000. The island of Bourbon is the only settlement which the French now possess between Africa and India.

(Bory de St. Vincent, *Voyage dans les Quatre Isles de la Mer Afrigue*; Thomas, *Essai de Statistique de l'Isle de Bourbon*; *Rough Notes of a Trip to Réunion, Mauritius, and Ceylon*, by Fred. J. Mouat, M.D., Calcutta, 1852.)

BOURBON L'ARCHAMBAULT. [ALLIER.]

BOURBON-LANCY. [SAÔNE-ET-LOIRE.]

BOURBON-VENDEE. [VENDEE.]

BOURBONNE LES BAINS. [MARNE, HAUTE.]

BOURBONNOIS, a district of Central France, one of the 32 provinces or military governments into which, before the revolution, that kingdom was divided. It was bounded N. by Berri and Nivernois; E. by Bourgogne; S.E. by Lyonnaise; S. by Auvergne; S.W. by La-Marche; and W. by Berri. Its greatest length was 92 miles, and its greatest breadth was 56 miles. It now forms the department of Allier, and the arrondissement of St-Amand in the department of Cher.

Moulins, on the Allier, was the capital. The other chief towns were Bourbon l'Archambault, Gannat, and Montluçon. [ALLIER; CHER.]

BOURBOURG. [NORD.]

BOURÉ. [BARBARA.]

BOURG, the name of several places in France, which are distinguished from each other by some surname, and will be found noticed in the following departments—AIN; ARDÈCHE; DRÔME; GIRONDE; INDRE; ISÈRE; LOIRE; LOIRE-INFÉRIEURE.

BOURGANEUF. [CRUSEL.]

BOURGES, a city of France, formerly capital of the province of Berri, now of the department of Cher, is situated at the junction of the Auron, the Yèvre, and the Yèvrete, which throw their united waters into the Cher. It stands in 47° 5' N. lat., 2° 23' 43" E. long., at a distance of about 70 miles S. by E. from Orleans by railroad: population, 22,826.

This city is built on the site of Avaricum, which was the capital of the Bituriges Cubi. Avaricum was besieged by Julius Cesar in the war against Vercingetorix, and taken by storm after a most determined resistance on the part of the inhabitants, who were all put to the sword without respect to age or sex. ('Bell. Gall.' vii. 13-38.) It was afterwards fortified by the Romans, and became at an early period of the Christian era the seat of a bishop. Towards the close of the Roman period it lost the name of Avaricum, which was taken from the Avara, now the Yèvre, and assumed that of Bituriges, from which the modern name is derived. In 475 the town came into the hands of the Visigoths, from whom it passed to the Franks, in consequence of the victory of Clovis at Vouillé. In the early ages of the French monarchy Bourges suffered much from the ravages of war, but it was repaired by Charlemagne, and afterwards by Philippe Auguste. In the disputes of the houses of Bourgogne and Orleans it stood a long siege directed by Charles VI. in person. In 1562 it was seized and garrisoned by the Huguenots, who were driven out of it by the royal troops on the 1st of September of the same year.

Bourges is divided into an old and a new town, the latter extending on every side round the former, which stands on a hill. The streets are crooked; and the gable ends of the houses, which are low and roofed with tiles, give the town a very homely aspect. Bourges was formerly surrounded by ramparts, which were defended by 24 towers. Some of the towers are still standing, but the ramparts have been levelled and converted into promenades. Within the circuit of the ramparts are several gardens and many open spaces laid out in walks and planted with poplars and limes. Many of the streets present only dead walls to the view; but within these are good mansions with court-yards and gardens. These mansions are inhabited chiefly by gentry of the old regime, a class of which Bourges possesses a greater number than perhaps any other provincial town in France.

Bourges formerly had a university of great repute, which was suppressed at the revolution, when the town suffered greatly from the excesses of that period. The cathedral of St-Etienne, which escaped the ravages of the revolution, is one of the noblest gothic edifices in Europe. It stands on the highest spot in the city; its west front, which is flanked by two massive towers, is pierced by five deeply recessed portals all richly ornamented, the central one presenting a sculptured representation of the last judgment. The edifice

is 370 feet long and 131 feet wide. The vaulted roof of the nave, which is 121 feet high and 40 feet wide, is supported by columns 55 feet high, and of great delicacy of workmanship. The interior is lighted through 59 magnificent painted windows, some of which are as old as the 12th century. The town-hall was formerly the house of Jacques Cœur, the richest subject of his time, whose treasures enabled Charles VII. to re-conquer the country from the English. This edifice is in the richest style of the architecture of the 15th century. The archiepiscopal palace is a building of great magnificence: the garden attached to it is used as a public promenade. The other remarkable buildings are the churches of Notre-Dame and St-Bonnet, the prefect's house built on the site of the old palace of the dukes of Berri, the former ecclesiastical college, now used for barracks, and the house of Louis XI., a beautiful structure of the Renaissance style.

Bourges is the seat of an archbishop whose see consists of the departments of Cher and Indre, and whose suffragans are the bishops of Clermont, Limoges, Le-Luy, Tulle, and St-Flour. The archbishop formerly took the title of patriarch and primate of Aquitaine. The bishopric of Bourges dates from A.D. 252.

Bourges is the seat of a High Court and a University Academy. It is also the head-quarters of the 19th Military Division which includes the departments of Cher, Nièvre, Allier, and Indre. There are in the town a public library containing 20,000 volumes, an ecclesiastical college, a theatre, several hospitals, a museum of antiquities, &c. In the neighbourhood there is a mineral spring. The chief manufactures are broadcloth, blankets, cutlery, saltpetre, jewellery and plate, beer, and leather. Of these articles, and of corn, hemp, wool, skins, and wood, the trade of the town consists. Triannuals of first instance and of commerce are held in the town.

BOURGOGNE (*Burgundy*), a former province of France, was bounded N. by Champagne, E. by Franche-Comté, S. by Beaujolais, and W. by Bourbonnois and Nivernois. Its length from Bar-sur-Seine to Mirebel, near Lyon, was 150 miles, and from Auxonne to Vezelay it measured 80 miles. Before the revolution it formed one of the most important governments of France. It was divided into several territories, of which the principal were—*Dijonnais* of which Dijon was the capital; the territory of *Montagne*, which had Châtillon for its chief town; *Bresse*, of which the capital was Bourg; the district of *Gex*, of which Gex was the capital; and the principality of *Dombes*, the chief town of which was Trévoux. Bourgogne now forms the departments of CÔTE-D'OR, SAÔNE-ET-LOIRE, YONNE, and part of those of AIN and AUBE. The capital of the province was Dijon. Bourgogne is very fertile, and is particularly famous for its wines, the best kinds of which are those of Volnay, Meursault, Romanée, Clos-Vougeot, Chambertin, Nuits, and Pomard.

This country was in ancient times inhabited chiefly by the *Edui*, a powerful Celtic tribe, whose capital was Bibracte, the modern Autun. In the division of Gallia under Augustus into four provinces it was comprised in Gallia Lugdunensis. Early in the 5th century the Burgundiones, a Vandal horde, established themselves in the country and founded a powerful kingdom, which was from them named Bourgogne. This kingdom did not coincide in extent with the province of Bourgogne, but was much larger, including also the basin of the Rhône, and part of that of the Loire, together with Savoy. About the year 1032 the kingdom of Burgundy, or of Arles, as it was then called, terminated, having come into the possession of Conrad, emperor of Germany. Somewhat later Burgundy was governed by hereditary dukes, the last of whom was Charles the Rash, who fell at the siege of Nancy in 1477. As he left no male issue the duchy, which was then nearly co-extensive with the province of Bourgogne, reverted to the crown of France, and has ever since belonged to that country. The history of Bourgogne belongs to another department of the 'English Cyclopaedia.'

BOURGOIN. [ISÈRE.]

BOURNE, Lincolnshire, a market town and the seat of a Poor-Law Union, in the parish of Bourne, wapentake of Aveling and parts of Kesteven, is situated on the road from London to Lincoln, in 52° 47' N. lat., 0° 22' W. long., 35 miles S. by E. from Lincoln, and 97 miles N. by W. from London. Spalding station on the Great Northern railway, which is about 9 miles from Bourne, is 93 miles from London: the population of the town of Bourne in 1851 was 2789. The living is a vicarage in the archdeaconry and diocese of Lincoln. Bourne Poor-Law Union contains 37 parishes and townships, with an area of 84,062 acres, and a population in 1851 of 22,435.

Bourne had in Saxon times a castle, which was the seat of a lordship of some note. A bourn or brook rises on the western side of the town, and after a circuitous route joins the Carradyke, which is navigable for small craft to Market-Deeping and Stamford. The church, formerly an abbey church, is in the Norman and early English style with two towers: of the towers, the one which is standing is ruinous. There are places of worship for Baptists, Wesleyan Methodists, and Independents. The endowed Grammar school, founded by Mr. Trollope in 1636, has an income from endowment of 30*l.* a year, and had 14 scholars in 1852. There are National schools for boys and girls, and a mechanics library. Bourne chiefly consists of four streets which diverge from the spacious market place. In the

centre of the market place is the town-hall, a substantial building erected in 1822 at a cost of 3600*l*. The quarter-sessions are held in this building. The streets are lighted with gas. A county court is held in Bourne. The population of Bourne is chiefly agricultural. There are breweries, malt-houses, and tanneries in the town. A tessellated pavement and some Roman coins have been dug up in the neighbourhood.

BOUSSU. [HAINAULT.]

BOW ISLAND (HE-OW), the largest of the coral islands in the Dangerous Archipelago, was discovered by Bougainville in 1768, who gave it the name of La Harpe; it was visited in the following year by Cook, who gave it the present name. It lies north-west and south-east, is very irregular in shape, and 30 miles in length, with an average breadth of 5 miles. The form is the same as that of other coral islands, confining within a low narrow band of coral, about a quarter of a mile wide, a spacious lagoon studded with knolls, and an average depth of about 120 feet between them. The windward (eastern) side is higher than the other, which, with the exception of a few clusters of trees and heaps of sand, is little more than a reef, over which the sea washes into the lake; but there is no passage even for a boat, except in one spot which may be entered by a large ship. This opening lies at the north end of the island, and is only 115 feet broad from reef to reef, with a coral knoll in the centre. Within the lagoon the anchorage is perfectly secure; the bottom is generally of a fine white sand. Water may be got by digging through the sand into the coral rock. Wood may also be procured, chiefly of the pemphis acidula, of a dark-red colour, and very hard; there are also cocoa-nut, palm, and pandanus trees. The lagoon abounds in shell-fish, particularly of the pearl-oyster kind. The inhabitants of the island are an indolent ill-looking race, with broad flat noses, sunk eyes, thick lips, and long bushy hair matted with dirt and vermin. Their stature is above the middle size, but they are generally crooked; their limbs are long, muscles flaccid, and their only covering is the maro round the waist. They appear to have been cannibals. They still show a partiality for raw food, in which state they devour fish, or turtle which are sometimes found on the shore. (Beechey, *Voyage to the Pacific and Behring's Straits*.)

BOW, STRATFORD-LE. [MIDDLESEX.]

BOYLE, county of Roscommon, Ireland, in the parish and barony of Boyle, a post-town and the seat of a Poor-Law Union, is situated in 53° 57' N. lat., 8° 16' W. long.; 108 miles W.N.W. from Dublin on the leading road to Sligo. The population in 1851 was 3483 exclusive of 872 persons in the Union workhouse. Boyle Poor-Law Union comprises 33 electoral divisions, with an area of 159,680 acres and a population in 1841 of 68,490, in 1851 of 47,805.

The town is built on both banks of the Boyle River, a mile above its expansion into Lough Key, and 10 miles west of its junction with the Shannon at Carrick-on-Shannon. Three bridges cross the Boyle, which here flows from west to east between steep banks and through a picturesque country. On the right side of the river is the more modern part of the town, containing the sessions house situated in a handsome area, of which one side is formed by a crescent, and remarkable for the neatness of many of the houses. In the older section of the town on the left bank of the river, the picturesque ruins of the Abbey of Boyle, and the manorial residence of the King family, now converted into a barrack, constitute the principal objects. The town is well-built, chiefly of limestone; but red sandstone is employed in the abbey and the public buildings. Lord Lorton's magnificent seat of Rockingham lies immediately adjacent on the banks of Lough Key. The town carries on a considerable retail trade in the supply of imported articles to the neighbouring districts of Roscommon and Sligo, and has a large market for corn and butter. The adjoining country has been much improved. The Irish Annals of Boyle, which have been published in Latin and English, commence A.D. 420 and terminate about the period of their compilation in A.D. 1245. The abbey is a structure of the latter end of the 12th century. Its remains are considerable. The nave is 131 feet in length by 25 feet in breadth, exclusive of the side aisles which have disappeared. The building was reduced to its present ruined state by the army of the Earl of Tyrone in 1595. Boyle returned two members to the Irish Parliament; it retains a manor court of small jurisdiction the only remnant of its former municipal privileges.

BOYNE, a river of Ireland, rises near Carberry, in the barony of Carberry and county of Kildare, whence flowing west not far from Edenderry in the King's County, it receives the waters of that portion of the bog of Allen lying immediately north of the line of the Grand Canal; thence turning to the north-east, it receives the Yellow and Milltown rivers out of the bogs extending from Croghan Hill to Tyrrell's Pass in the county of Westmeath. Soon after this it enters the county of Meath at Clonard, crosses the Royal Canal, and receives the Deel, a large stream flowing parallel to the Yellow River from Mullingar in Westmeath. The Boyne having now left the district of the bog of Allen, flows through the rich plains of Meath, receiving the waters of many small rivers, till passing Trim, where its banks are crowned with the lofty ruins of numerous abbeys and castles, it sweeps past the base of Tara Hill in a more northerly direction to Navan, where it meets the Blackwater, descending by a south-east course from the Lake of Virginia on the confines of Cavan. The

united rivers now become navigable at a distance of 25 English miles direct from the sea, and resuming a more easterly course by Slane and Oldbridge, proceed along the south part of the county of Louth to Drogheda, and thence to the Irish Channel, which the Boyne enters after a winding course of about 60 miles from its source. The navigation of the Boyne from Drogheda to Navan was effected by a company in 1770, and is now vested in the Irish Board of Works. The principal articles carried are coals, wheat, flour, and timber. The revenue is small, the tolls in 1850 being 463*l*. 9*s*. 9*d*. This amount is considerably less than that received in previous years, in consequence of the opening of the Drogheda and Navan branch railway, which runs near and almost parallel to the line of water-carriage. The rate of toll on the Boyne navigation was in 1850 considerably reduced to accommodate the traffic. The Boyne divides the county of Meath diagonally into two nearly equal parts. Its whole course through this county affords rich landscape scenery, the descent of the river being in general gradual, and the sloping banks abounding in historical interest. The river has been called the 'Boyne of Science,' from the number of monastic institutions on or not far from its banks, among which may be enumerated Clouard, Trim, Bective, Donaghmore, Slane, Mellifont, Monasterboice, and the various religious foundations of Drogheda. The Boyne however derives its chief interest from the important battle fought on its banks on the 1st of July, 1690, between the English army under William III. and the Irish under James II. An obelisk of grand proportions was erected in commemoration of it in 1736. It immediately faces the ford at Oldbridge, marking the spot where William received his wound on the evening before the engagement. It is 150 feet in height by 20 feet at the base. Oldbridge, although only a ford in 1690 had been the site of a bridge at a very early date, for its name, which indicates as much, is found in the patent rolls as far back as the reign of Richard II. The Boyne is also rendered famous in more ancient history by the invasion of Turgesius the Dane, who sailed up it with a fleet of Norsemen to the plunder of Meath A.D. 338. It is a deep and wide river at Drogheda, navigable for vessels of 250 tons, and would be capable of receiving vessels of much greater burden were the bar which now obstructs its entrance partially removed. The total descent of the river is 336 feet.

(*Statistical Survey of Meath*; Wilde, *Beauties of the Boyne and Blackwater*, Dublin, 1849.)

BOZOULS. [AVEYRON.]

BRABANT, DUCHY OF, formerly one of the most important provinces of the Netherlands, was bounded N. by Holland and Gelderland, E. by Gelderland and Liège, S. by Hainault and Namur, and W. by Flanders and Zealand.

Under the successors of Charlemagne, the dukes of Brabant were possessed of considerable power and influence over the rulers of the other Netherland provinces. Joan, eldest daughter of John III., the last duke of Brabant, bequeathed the duchy to Anthony, second son of Philip the Bold, duke of Burgundy; and by degrees, through intermarriages, inheritance, and purchase, the various Netherland provinces which composed the 'Circle of Burgundy' came under the dominion of the dukes of that name. At the death of Charles the Bold, the last of these dukes, whose daughter Mary was married to Maximilian, the son and successor of Frederick IV., emperor of Germany, Brabant passed under the dominion of the house of Austria. In 1516 Charles V., emperor of Germany and grandson of Maximilian, became king of Spain, and his Netherland dominions were united with the crown of Spain.

The religious persecution instituted in the reign of Philip II. against all who would not profess the Roman Catholic religion, caused the inhabitants of the seven northerly provinces to rise in defence of their liberties; and in 1531 these provinces were formed into an independent union under the title of 'The United Provinces,' Prince William of Orange being declared Stadtholder. The seven provinces thus allied stood anciently in the following order as regarded their rank:—Gelderland, Holland, Zealand, Utrecht, Friesland, Overijssel, and Groningen. To these were afterwards added, by conquest and under treaties, Drenthe and the 'Généralité-lands,' so called on account of their belonging to the States General of the United Provinces. In these Généralité-lands was included the existing province of North Brabant.

The remaining Netherlands provinces, including South Brabant, continued united with the crown of Spain until 1706, when after the battle of Ramillies they acknowledged for their sovereign Charles VI., afterwards emperor of Germany, and were thenceforward known as the Austrian Netherlands.

In the progress of these events the Duchy of Brabant was not only divided in the manner described into separate provinces, but it was also limited in extent by the erection of part of its territory into the province of Antwerp. In the course of the war which broke out in 1793 the whole were united to France. In 1806 the United Provinces were erected into a separate kingdom under Louis Bonaparte, who resigned his crown in 1810, when the territory was re-annexed to France.

At the Congress of Vienna the whole of the seventeen provinces of the United Netherlands, including both North and South Brabant, were erected into a kingdom under the King of Holland; but at the

revolution of 1830 South Brabant joined the revolt of the provinces which had formerly constituted the Austrian Netherlands, and it has since formed part of the kingdom of Belgium.

BRABANT, NORTH (Noord Brabant), a province of the kingdom of Holland, is bounded N. by the provinces of Holland and Gelderland, from both of which it is divided by the Maas; E. by Limburg and the Rhinish provinces of Prussia; S. by the Belgian provinces of Limburg and Antwerp; and W. by the Dutch province of Zealand. North Brabant lies between 51° 12' and 51° 50' N. lat., 4° 12' and 6° 0' E. long. Its area is 19,768 square miles, and the population on the 31st of December 1852 was 403,687, above 7-8ths of whom are Roman Catholics. The surface of the province is generally level, but on the north and west there is some rising ground; it is politically divided into three arrondissements—Bois-le-Duc, Breda, and Eindhoven; and into nineteen cantons.

The principal rivers of North Brabant are the Maas, which forms its north and north-eastern boundary, and the Dommel, which has its source at Peer in Limburg, enters North Brabant near the village of Valkenwaart, and flows north past Eindhoven to Bois-le-Duc, after which under the name of the Diezen it joins the Maas at Crevecoeur. At Bois-le-Duc the Dommel is joined by the Aa, which rises in the province of Antwerp; about four miles north-north-east from Turnhout, and enters North Brabant at the commune of Hoogmeide. The Mark or Merk has its source also near Turnhout, and running from south to north enters North Brabant near to Meerle; it falls into Hollands-Diep opposite the island of Goeree, having passed through the town of Breda. This province is also washed on the west by the channel which joins the East and West Schelde, and which separates the islands of Zealand from the continent; and on the north by the arm of the sea called Hollands-Diep, and its continuation the Biesbosch.

The principal towns are **BOIS-LE-DUC**, **BREDA**, and **BERGEN-OP-ZOON**; the more important of the other towns are here noticed.

Eindhoven, situated on the river Dommel, 19 miles S.S.E. from Bois-le-Duc, was formerly the capital of the province. It has a grammar school and manufactures of cotton, linen, woollens, and leather. Its grain market is considerable: population, 3000. **Geertruydenberg**, a small fortified town, 9 miles N.N.E. from Breda, on the south side of the Biesbosch, has a small harbour, salmon fisheries, and about 1700 inhabitants. **Grave** or **Graaf**, situated on the left bank of the Maas, 19 miles N.E. from Bois-le-Duc, is a fortified town, and is considered as the key of Gelderland, on the borders of which it stands. It was taken by the Duke of Parma in 1636, and submitted to Prince Maurice in 1602. It capitulated after a stout resistance to the French in 1794: population about 2500. **Helmond**, 8 miles E. from Eindhoven, on the Aa, is famous for its manufacture of damask napkins; it contains also manufactories of woollen, cotton, and linen goods: population, 2000. **Heusden**, a fortified town commanded by a strong citadel, is situated near the Maas, 8 miles W. by N. from Bois-le-Duc: population about 2000. **Oosterhout**, a large market-town 6 miles N.E. from Breda, has a population of 8000, manufactures of tiles and pottery, and a grammar school. **Tilburg**, 13 miles E.S.E. from Breda and the same distance S.W. from Bois-le-Duc, is a large town with about 14,000 inhabitants, who manufacture woollen cloths extensively. It is situated on the left bank of the Ley, a small feeder of the Dommel, and all round it are extensive heaths. **Willemstad**, built by William I., prince of Orange, on the Hollands-Diep, 16 miles N.W. from Breda, is also fortified: it has a good harbour and about 1900 inhabitants.

North Brabant, in common with all the Dutch provinces, has its particular States Assembly, the members of which are elected by the nobles, the towns, and the royal municipalities. This assembly meets annually; its functions are the regulation of local affairs and the imposition of provincial taxes.

BRABANT, SOUTH, the metropolitan province of the kingdom of Belgium, is bounded N. by the province of Antwerp; E. by those of Liège and Limburg; S. by those of Hainault and Namur; and W. by East Flanders. It lies between 50° 32' and 51° 3' N. lat., 3° 53' and 5° 10' E. long. The area of the province is 12677 square miles, and the population on January 1, 1849, was 711,332.

The province, which is almost uniformly level, except towards the south, contains 911,333 acres, and the greater part of the surface is cultivated or productive. The forest of Soignies, part of the remains of the great forest of Ardennes, is contained within the province, and occupies 29,611 acres. This forest is situated between Brussels and Nivelles, commencing about 2 miles to the south of Brussels and extending to beyond the village of Waterloo, a distance of 84 miles. The inhabitants are chiefly Walloons, who speak a dialect differing from both the Dutch and the Flemish, and akin to the Slavonic. The province is divided into three arrondissements—Brussels, Louvain, and Nivelles—which are subdivided respectively into 118, 110, and 104 communes.

The province is connected by canals and by high roads with the coast and the chief industrial sites of Belgium; railroads also cross it in various directions, connecting it and the capital with Liège, Malines, Antwerp, Ostend, and the French and Prussian frontiers.

The principal towns are **BRUSSELS**, the capital of the province and of the kingdom of Belgium, and **LOUVAIN**.

Among the other towns in the arrondissement of Brussels the following may be here noticed:—**Asseche**, a small town of 4000 inhabitants, is situated 8 miles N.W. from Brussels, on the high road to Ghent. It is famous for its sweet cakes, euphoniouly called in Flemish 'Suiker Kockjes.' **Hal**, 12 miles S. by W. from Brussels by the railway to Mons, is situated on the Senne and the Charleroi Canal, and has about 5000 inhabitants. It contains a beautiful gothic church, dedicated to Sainte-Marie, and celebrated for its miraculous image of the Blessed Virgin. The grand altar in this church, constructed of white marble, surmounted by a gorgeous tabernacle, and ornamented with beautiful sculptured bas-reliefs, the whole crowned by a figure of the pelican, a mediæval symbol of Christ, is said to be unequalled even in Belgium. In the baptistery the font of gorgeous brass is placed under a spire, adorned with statues and groups in high relief. The church was formerly dedicated to Saint Martin. **Lemnick**, 9 miles S.W. from Brussels, has a population of 2000. **Vilverde**, 6 miles by railway N. by E. from Brussels, is situated on the road to Malines, and has about 2700 inhabitants. There is a large penitentiary outside the town and in the vicinity are many pretty country seats, dotted along the broad canal that runs up to Brussels.

In the arrondissement of Louvain are the following towns:—**Aerschot**, 9 miles N.E. from Louvain, on the Demer, has a good corn-market, distilleries, and about 4000 inhabitants. **Diest**, a walled town a little farther east, also on the Demer, 16 miles E.N.E. from Louvain, has manufactures of woollen cloth and woollen hosiery, beer, and spirits, and about 8000 inhabitants. A great horse fair is held in Diest. The town was taken in 1705 by the Duke of Marlborough. **Grez**, 11 miles S. from Louvain: population, 2000. **Tirlemont**, 12 miles S.E. from Louvain by the railway to Liège, is a walled town entered by ancient-looking gates. The town is tolerably well built, the principal streets abutting on a large central square, in which are the church of Notre-Dame and the town-hall, the best buildings in the town. The church of Sainte-Germaine, which is built on a height, dates from the 9th century, and is one of the oldest churches in Belgium. The massive tower which surmounts it was erected in the 12th century. Outside the Maestricht gate are three large sepulchral barrows, supposed to be of very remote antiquity. The walls, which are above four miles in circuit, inclose a considerable space not occupied by buildings but as gardens, orchards, and fields; indeed the town was formerly much larger than it now is. Successive sieges and sacks during the Spanish wars in the low countries, and during the wars that immediately followed the first French revolution ruined it. Tirlemont was formerly a strong fortress; it was dismantled in 1804. The town stands on the Geete, a feeder of the Demer, and has about 9000 inhabitants, who manufacture woollen stuffs, hosiery, spirits, beer, soap, and paper.

In the arrondissement of Nivelles the chief town, **Nivelles**, is situated 18 miles S. from Brussels, and has about 8000 inhabitants. The town is well built, and contains a fine church dedicated to St. Gertrude, daughter of Pepin, who founded an abbey here, the superiresses of which were styled princesses, and enjoyed great privileges. The church contains the shrine of St. Gertrude and two pulpits of beautiful workmanship; under the tower there is a fine crypt. The smaller tower of the church contains the chimes; the hour is struck by a colossal figure of an armed knight. The cloister of the old abbey still remains. Fine linen, lace, woollen stuffs, paper, &c., are manufactured at Nivelles. Between Quatre-Bras, a place on the south border of the province where four roads meet, and Nivelles, is the estate presented by the King of Holland to the Duke of Wellington. **Genappe**, a few miles E. from Nivelles, is a small place with about 2000 inhabitants. Near it the Prussians captured Napoleon's carriage on the night after the battle of Waterloo. At **Quatre-Bras**, 5 miles S.W. from Nivelles, the Duke of Brunswick fell in the engagement between the French and the Allies, June 16, 1815. **Warre-on-the-Dyle**, 15 miles S.E. from Brussels, has 5000 inhabitants. Tobacco is cultivated in the neighbourhood of this town, which has several breweries and tanyards, and a good trade in corn and cattle.

The following places may also be mentioned:—**Tervuren** or **Tervuren**, a few miles E. from Brussels, is the site of the summer palace of the Prince of Orange. **Lacken**, or **Laeken**, is a beautiful village 3 miles N. from Brussels: near it is the country palace of the royal family of Belgium. **Waterloo**, famous for the defeat of the French (June 17-19, 1815), is a long straggling village 10 miles S. from Brussels, on the outskirts of the forest of Soignies. Near it is a vast mound, surmounted by a colossal lion, in commemoration of the great victory. **Brain-la-Léud**, a little S. of Waterloo, has 3000 inhabitants, large glass works, and woollen manufactures. **Tubize**, on the railway to Brussels, N.W. of Nivelles, has about 3000 inhabitants, who manufacture beer and woollen stuffs: there are valuable stone quarries in the neighbourhood.

BRACCIANO, Lago di. [ROMA, COMANCA DI.]

BRACKLEY, Northamptonshire, an ancient borough and market-town, and the seat of a Poor-Law Union, in the hundred of King's Sutton, is situated in 52° 1' N. lat., 1° 10' W. long., distant 20 miles S.W. by S. from Northampton, 63 miles N.W. by N. from London by road, and 68½ miles by the North-Western and Bletchley Junction railways. The livings are in the archdeaconry of Northampton and diocese of Peterborough. The population of the town in 1851 was

2157. Brackley sent two members to Parliament from the time of Edward VI. till it was disfranchised by the Reform Act. Brackley Poor-Law Union contains 29 parishes and townships, with an area of 53,762 acres, and a population in 1851 of 13,747.

Brackley is a town of considerable antiquity. It early possessed a large trade in wool. In the seventh year of Edward III. it was required to send up three merchant staplers to a council concerning trade held at Westminster. The town is built on a gentle acclivity on the left bank of one of the head streams of the Ouse—here a mere rivulet—over which the roadway is carried by a bridge of two arches. The principal street of Brackley is nearly a mile long; the houses are mostly constructed of unhewn stone. The town-hall is a handsome building erected in 1706 by Scroop, duke of Bridgewater. The parish church is an ancient edifice. St. James's church, which is regarded as a chapel-of-ease, was spoken of in Leland's time as an old church. There are places of worship in the town for Independents and Wesleyan Methodists. The Free Grammar school was founded about 1447 by William of Waynflete. There is also an Infant school. The chapel of an ancient hospital founded in the 12th century by Robert Bossu, earl of Leicester, is still standing, having been repaired about the middle of last century by Mr. John Welchman, who also left funds to provide a stipend for a service in the chapel every alternate Sunday. There are almshouses for six poor widows founded in 1663 by Sir Thomas Crewe. A county court is held at Brackley. There is a manufactory of boots and shoes; pillow-lace is extensively made. The market, of which the first distinct notice is in 1217, is now held on Wednesday for corn. There are nominally five fairs, but the only one of consequence is that held on St. Andrew's Day.

BRADFIELD, Berkshire, a village and parish, and the seat of a Poor-Law Union, in the hundred of Theale. The village is situated on the Pang brook, here called Kimberhead, which falls into the Thames at Pangbourn, in 51° 27' N. lat., 1° 7' W. long., 7 miles W. by S. from Reading, 45 miles W. by S. from London: the population of the parish in 1851 was 1216; of this number 222 were inmates of the Union workhouse. The living is a rectory in the archdeaconry of Berks and diocese of Oxford. Bradfield Poor-Law Union contains 29 parishes and townships, with an area of 66,635 acres, and a population in 1851 of 16,159.

The village is pleasantly situated; the inhabitants are chiefly agricultural. The church, which has some portions of the Norman and decorated styles, has been rebuilt and enlarged at the expense of the Rev. T. Stevens, the rector and lord of the manor, who has also erected an elegant gothic chapel for the inmates of the Union workhouse, and built and endowed a Free school. St. Andrew's College, founded in 1849, of which the rector of the parish is warden, is under the charge of a sub-warden, head and second master, with assistants, and had 36 scholars in 1852. It possesses 3 scholarships of 20*l.* a year for 5 years for sons of clergymen; and an exhibition of 30*l.* a year for 3 years at Oxford University. There are some parochial charities. The Primitive Methodists have a place of worship at Bradfield. In the neighbourhood are many excellent mansions.

BRADFORD, GREAT, Wiltshire, a market-town, borough, and the seat of a Poor-Law Union, in the parish of Great Bradford and hundred of Bradford, is situated on both banks of the Avon, in 51° 20' N. lat., 2° 14' W. long., distant 12 miles W. from Devizes, 100 miles W. from London by road, and 107 miles by the Great Western railway: the population of the town in 1851 was 4240. The living is a vicarage in the archdeaconry of Wilts and diocese of Salisbury. Bradford Poor-Law Union contains 8 parishes and townships, with an area of 19,680 acres, and a population in 1851 of 11,356.

The name Bradford is a contraction of the Saxon term Bradan-ford, or the 'Broad Ford,' the town having been built on both sides of the river Avon, where was a broad ford. The town was the site of a monastic institution founded by St. Adhelm, who was himself the abbot until appointed Bishop of Worcester in 705. Bishop Gibson says the monastery was destroyed by the Danes. In 954 the celebrated St. Dunstan was elected Bishop of Worcester at a synod held at Bradford. Bradford is mentioned among the towns which received from Edward I. the privilege of sending members to Parliament, a privilege which does not appear to have been exercised more than once.

Bradford is pleasantly situated: the banks of the river below the town abound in beautiful and picturesque scenes, and well-wooded hills rise in some places boldly from the margin of the river. There are here two bridges over the Avon, both of which are of very old date. The houses in Bradford are built with stone, but the streets are with few exceptions narrow. The older part of the town is on the right bank of the Avon, a portion of the buildings being arranged in three streets or terraces on the brow and slope of a hill which rises abruptly from the side of the river. The lower of the terraces is called the New Town. The town is lighted with gas.

The church, which stands at the foot of the hill, is a large and handsome edifice, partly Norman and partly of the transition period from early English to decorated; but the greater part is perpendicular. A neat district church in the perpendicular style was erected in 1840, and near it a substantial and commodious school was built, with a house for the master and mistress. There are in the town places of worship for Independents, Baptists, and other Dissenters; a

Free school, opened in 1712; National schools for boys and girls; a British school; and an Infant school. Two sets of almshouses, besides sundry small benefactions for the relief of the poor, have long existed in Bradford. In the town and neighbourhood are several interesting remains of ecclesiastical edifices.

The town has for many centuries been noted for its fine broad cloths, which have at all times formed its principal manufacture. A market for corn and cattle is held every alternate Tuesday, and a small weekly market on Saturday for provisions. Bradford possesses a savings bank. A county court is held in the town.

The prosperity of the place is much promoted by the Kennet and Avon Canal which passes by Bradford, and opens a communication by water with the cities of Bath, Bristol, and London, and with the towns of Trowbridge, Devizes, Hungerford, Reading, &c. There is a station at Bradford belonging to the Wilts, Somerset, and Weymouth railway, but it is not yet in use. An india-rubber factory has been established by Mr. Stephen Moulton, which promises to be of advantage to the town.

BRADFORD, West Riding of Yorkshire, a manufacturing town, parliamentary and municipal borough, and the seat of a Poor-Law Union, in the parish of Bradford and wapentake of Morley, is situated in a valley, in 53° 47' N. lat., 1° 45' W. long., 34 miles S.W. from York, 196 miles N.N.W. from London by road, and 219½ miles by the North-Western and Lancashire and Yorkshire railways. The population of the parliamentary and municipal boroughs, which are co-extensive, was 103,773 in 1851. Bradford returns two members to the Imperial Parliament. The town is governed by 14 aldermen and 42 councillors, one of whom is mayor. The living is a vicarage in the archdeaconry of Craven and diocese of Ripon. Bradford Poor-Law Union, which corresponds in extent and population with the borough, contains an area of 5708 acres.

Bradford is situated on a small brook which falls into the Aire. This town is mentioned in the Domesday Survey. In Saxon times Bradford formed part of the extensive parish of Dewsbury; it was afterwards included in the rich barony of Pontefract, which was in the possession of the Lacey. This powerful family had a castle at Bradford. The early history of the town is connected with that of its castle. Alice, the last of the Lacey, married the Earl of Lancaster; and Bradford, in common with the other possessions of her family, went to increase the estates of that duchy. During the civil wars between the Royalists and Parliamentarians, Bradford, which espoused the Parliament cause, held a severe contest with and twice defeated the Royalists. They were however themselves defeated by the Earl of Newcastle, on Adwalton Moor, with immense slaughter. After these wars Bradford made little progress for a long time, and trade was much depressed during the American revolutionary war. In 1812 a spirit of insubordination was diffused through the wide and densely-populated district of which Bradford is the centre, in consequence of the introduction of certain kinds of machinery; the riot of the 'Luddites' resulted, which ended in the conviction of sixty-six persons and the execution of seventeen. In 1825 occurred a strike for wages, which was protracted during ten months, at an immense expense to the trades' unions, and at a dreadful sacrifice of comfort on the part of the operatives, who were plunged into a state of poverty from which they were long in recovering. Since that time the history of Bradford has been one of continued prosperity, and it may be regarded now as the most rapidly advancing town in Yorkshire.

The parish church of Bradford, dedicated to St. Peter, was erected in the reign of Henry VI.; the tower is of later date. It is principally of the perpendicular style of architecture, but has no remarkable exterior attraction. Christ church was erected in 1813; its interior is commodious, but externally it is heavy; it was enlarged in 1828 and 1836. Other churches of recent erection in the town or vicinity are:—St. Jude's, erected in 1843 in the town of Bradford; St. Paul's, built in 1847 in Manningham township; St. James's, 1837, and St. John's, 1839, both in Horton township, in addition to an older chapel-of-ease in the same township; St. Paul's, built in 1841, in Bowling township; Bankfort, 1850, and Shelf, 1851. The number of places of worship belonging to Roman Catholics, Presbyterians, Independents, Baptists, Wesleyan and Primitive Methodists, Unitarians, Quakers, &c., in the whole borough, is about thirty. A neat Presbyterian chapel was built in 1849.

The academic establishment called Airedale College, at Undercliffe, adjacent to Bradford, is for the preparation of young men for the ministry in the Independent churches. This academy has been several times removed since its first establishment in 1665. It has been placed in connection with the University of London. Its endowments have been much enlarged by a benevolent lady of Bradford. The annual revenue from funded property amounts to nearly 500*l.* a year. It is under the care of three professors, one of whom is president. The number of students in 1851 was 22. The Baptists have a college at Horton which was established in 1805. Its income in 1848 was about 1200*l.*; the number of students was 26. The Wesleyan Methodists have one of their seminaries for the education of the sons of ministers at Woodhouse Grove, near Bradford; it was founded in 1812, and is said to have been found extensively useful. Its design is to "supply the children of ministers with an education suitable to

the station which their fathers held in society." The Grammar school of Bradford was in existence in the time of Edward VI. By the charter of 1663 it is called the 'Free Grammar School of Charles II. at Bradford.' The income from endowment is upwards of 400*l.* a year. The number of scholars in 1852 was 57. This school is one of those that have the privilege of sending a candidate for Lady Elizabeth Hastings' exhibitions at Queen's College, Oxford. There are in Bradford and its surrounding townships many National and British schools; also Industrial, Infant, and numerous other schools.

In 1844 a new infirmary was built at a cost of 10,000*l.*; it is a fine structure in the Tudor style. The dispensary, established in 1826, is liberally supported and well managed. Bradford has several minor charities for the sick and poor. There is a mechanics institution, with a good library and lecture-rooms. An Odd Fellows literary institution is well supported, and has a good library and news-room. There are two clubs in the town, a Conservative and a Reform club; both have news-rooms, and the former has a good library.

Bradford contains many good streets, and improved local arrangements are gradually being introduced. The town is lighted with gas, and water is supplied under arrangements made in accordance with the terms of Acts of Parliament passed in 1842 and 1845. The market, a plain but extensive building, was opened in 1824. The savings bank of Bradford is extensively used. The first English temperance society was founded in this town. The present Piece Hall was for many years used as a court-house for the meetings of the magistrates; but a new and ornamental building was finished about 1834 for the purpose of a court-house. The Piece Hall is like the cloth-halls at Leeds—a market for woven woollen goods. The fine light freestone employed in most of the buildings of Bradford helps to give a cheerful and clean aspect to the streets. The country to the north and west is open and picturesque, and is studded with the residences of the more opulent merchants and manufacturers.

The chief manufacture of Bradford and the neighbourhood is of worsted stuffs. The spinning of worsted yarn employs a great number of persons, and the stuffs are woven from the yarn. Woollen yarn for the manufacture of cloths, broad and narrow, is also spun and woven at Bradford in considerable quantities; but the worsted manufacture is the staple employment of the place, Leeds and its dependencies being the more immediate seat of the woollen manufacture. The stuffs manufactured in Bradford are chiefly dyed in Leeds, the proprietors of the dye-houses being among the largest purchasers in the Bradford market. Many of the woollen and wool merchants have lately left Leeds and opened warehouses in Bradford. Several of the large firms of Manchester and Huddersfield have also recently opened warehouses in this flourishing town. The central situation of Bradford, with reference to the other clothing towns, has probably been a chief cause of its recent and rather rapid advancement.

The iron trade has long flourished in the neighbourhood of Bradford; indeed it is supposed that the Romans worked iron mines near this spot. Mr. Hunter, the historian of Sheffield, mentions the "remarkable fact, that in the midst of a mass of scoria, the refuse of some ancient bloomery near Bradford, was found a deposit of Roman coin." There is an abundant supply of iron-ore and coal, both of excellent quality; and the well-known iron-works at Bowling and Low Moor are only a short distance from Bradford. At these foundries some of the most ponderous works in cast-iron are executed. Vast numbers of workmen are employed in the different departments of the establishments—from the raising of the ore and coal to the various marketable states of the metal. The principal merchants and manufacturers in Bradford are wool-staplers, wool-combers, worsted-spinners and manufacturers, worsted-stuff manufacturers, and woollen-cloth manufacturers. Several trades carried on are dependent upon the woollen and worsted trade, among which are the manufactures for combs, shuttles, and machinery. A septennial festival is held in Bradford in honour of Bishop Blase, to whom the invention of wool-combing is attributed.

As a seat of commerce Bradford possesses many facilities. By the Leeds and Liverpool Canal it has an unimpeded communication with Hull and the German Ocean, and with Liverpool and the Irish Sea. By the Aire and Calder navigation Leeds and the neighbouring towns are connected with Goole and Hull. The Leeds and Bradford railway places it in connection with the districts in the east and west; the Leeds and Thirsk railway gives it an outlet to the north; while the various branches of the West Riding Union railway connect it with Halifax, Huddersfield, Barnsley, and the whole of the West Riding manufacturing towns.

BRADING. (WIGHT, ISLE OF.)

BRADNINCH, or BRAINES, Devon, a decayed borough, formerly a market-town, in the parish of Bradninch and hundred of Hayridge, is situated in 50° 49' N. lat., 3° 26' W. long., 9 miles N.E. by N. from Exeter, and 163 miles W.S.W. from London by road. Here station on the Bristol and Exeter railway, which is about a mile from Bradninch, is distant from London 185 miles. The population of this parish in 1851 was 1834. The living is a perpetual curacy in the archdeaconry and diocese of Exeter.

The legal designation of the borough is Bradraia, otherwise Bradninch. The corporation claim to be a corporation by prescription. The governing body consists of thirteen masters, one of whom is

mayor. Bradninch sent members to one parliament in the reign of Edward II. Petty and quarter sessions are held regularly in the town. The church, dedicated to St. Denis, was built in the time of Henry VII., and is of the late perpendicular style. It has a handsome screen, erected in 1528. There are places of worship for Baptists and Wesleyan Methodists; a National school; and a parochial library. A new guildhall, a borough jail, and a court-house were built a few years ago. Bradninch has several times suffered from conflagrations. The fires which have frequently occurred in the town of Devonshire have been chiefly owing to the use of thatch in roofing dwelling-houses: slates is now very generally substituted. Bradninch has been very much improved since the last fire. The town is well supplied with water. About one half of the population is engaged in agriculture. Two paper mills and a small woollen factory in the neighbourhood give employment to some of the inhabitants. There are several charities in the town.

BRAEMAR. [ABERDEENSHIRE.]

BRA'GA. [ENTRE-DOURO-E-MINHO.]

BRAGANÇA. [TRAS-OS-MONTES.]

BRAHILOW. [IBRAIL.]

BRAHMAPUTRA, one of the largest rivers of Asia, and in many respects one of the most remarkable on the globe. The farthest branches of this river rise between 28° and 29° N. lat., and between 97° and 98° E. long. Here stands a snow-capped mountain range, which in the present state of our geographical knowledge must be considered the most easterly portion of the Himalaya range. The Taluka, the most northern of the sources of the Brahmaputra, has its origin in these mountains. At some distance from its source it joins the Taluding, a river not inferior in size, which descends from the mountains of Nambio (28° N. lat.), a ridge belonging to the Langtan chain, which latter divides the upper branches of the Brahmaputra from those of the Irawaddi. After the junction of the Taluka and Taluding the river continues its course to the south-south-west between high mountains, and flows impetuously over a rocky bed. After many windings the river issues from the mountains by a narrow pass, called Prabhu Kuthar, in which the river is about 200 feet wide, and runs with great violence. Near this pass, on the south banks of the river, is the Brahma-koond (Source of the Brahma), or Deo Pani, a place of pilgrimage among the Hindoos. It is merely a good-sized pool, 70 feet long by 30 feet wide, inclosed by high projecting rocks, from which two or three rills descend into the pool. From this place the river has obtained its sacred name of Brahmaputra, the 'offspring of Brahma,' though it is commonly called by the natives Lohit, or Lohitiya (Lauhitiya in Sanscrit, the 'red river').

After passing the Prabhu Kuthar the Lohit enters the valley of Upper Asam or Sadiyah, where, though conveying a great volume of water, the river is too much filled with stoues to be easily navigable. Near 27° 51' N. lat., and 96° 15' E. long., the river divides into two branches, of which the north and larger is called the Lohit or Buri Lohit, and the south Sukato: these branches unite again about 10 or 12 miles farther downward. The island thus formed is about 2 miles wide. Between Prabhu Kuthar and Sadiyah the river is increased by the confluence of several small streams, and of a larger one called the Noa Dihing. Nearly opposite the mouth of the Noa Dihing the Kundil joins the Lohit. On the banks of this small river stands Sadiyah, the capital of Upper Asam: the Lohit is here about 1200 feet above the level of the sea. Near Sadiyah the Lohit is joined by the Dihong, which brings down an immense volume of water; it is supposed that this Dihong is the same river as that which in Tibet is called Sampoo, or Yaru Tzangbotau.

After its junction with the Dihong, the Lohit flows in a south-west direction, and forms numerous islands, so that hardly in any place does the whole volume of its waters run in one bed. Here it receives on the south the Buri Dihing, a considerable river, whose origin is near the banks of the Noa Dihing. A few miles after this junction, the Lohit divides into two large branches, the northern of which is called Buri Lohit, and the southern Buri Dihing. These branches include the fertile island of Majuli, which extends from 94° 30' to 93° 40' E. long., about 50 miles in length, with an average breadth of 9 miles. Opposite this island the Buri Lohit is joined by the Suban Shiri, a river not inferior in volume of water to any of the tributaries of the Brahmaputra, except the Dihong. Into the Buri Dihing falls the small river Dikho, on which the present capital of Asam, Jorhath, is situated, and lower down, near the place where both branches reunite, the Dhuusiri, which rises at a great distance to the south in the territories of the Raja of Moonipore. After the Buri Lohit and the Buri Dihing have reunited and flowed down for nearly 30 miles in one channel, divided only at a few places by small islands, the Brahmaputra divides again at the town of Bishenath (93° 15' E. long.) into two large branches, of which the northern and larger retains the name of Lohit, and the southern is called Kullung or Kolong. The island inclosed by these two branches of the Brahmaputra extends in length upwards of 75 miles, with a width of 20 or 25 miles in the middle. The Kullung branch, after receiving the Deyong, reunites with the Lohit a few miles above Gowhatty. The Brahmaputra runs here with an undivided stream, and is hardly 1200 yards wide, which is its smallest breadth after its junction with the Dihong. Its stream is so exceedingly rapid, that in the rainy season vessels are obliged to wait for a strong

westerly wind, to enable them to stem the force of the current. Below Goalpara the Brahmaputra enters the plains of Bengal, where it is only about 120 feet above the level of the sea.

The general direction of the Brahmaputra from the western extremity of the island of Kullung to its entry into the plains of Bengal lies due east and west, and it preserves this direction still farther down to the town of Rangamatty. Below Goalpara it receives on the right the Tehin-tchien or Guddada, a considerable river which traverses the eastern portion of Bootan. Near Rangamatty the Brahmaputra declines to the south-west, and shortly afterwards takes a due southern course to 25° N. lat., where it begins to run to the south-east. Between 26° and 25° the first communication with the Ganges commences. A small branch of the Brahmaputra running due south falls into the Issamutty, a branch of the Teesta, which joins the Ganges near Jaffiergunge; and another water-course, which branches off from the Brahmaputra a little lower down, and is called Lobnee, falls into the ancient bed of the Ganges below Jaffiergunge.

The Brahmaputra continues its south-eastern course nearly to 24° N. lat., where it is joined by the Barak, or river of Silhet, which comes from the mountains of Tiperah. From this point of junction the Brahmaputra runs south-south-west, with large bends until it reaches the neighbourhood of Fringyazar, where its channel widens greatly. The Brahmaputra and the Ganges at present have separate embouchures, though they approach so near one another that their beds at some places are hardly two miles apart. Even after they have left the continent their currents are still divided, that of the Ganges running to the west of the island of Shabazpore, while the Megna (the name which the Brahmaputra bears below Fringyazar) sends its waters to the Gulf of Bengal by the channel between the islands of Shabazpore and Hattia.

The whole course of the Brahmaputra, as here described, may be estimated at 860 miles, of which 160 miles belong to its upper course east of the mouth of the Dihong, 350 miles to its middle course to Goalpara, and the remainder to its lower course to the island of Hattia. The Ganges runs 1360 miles, and therefore exceeds the Brahmaputra by near 500 miles; but the Brahmaputra carries down a much greater volume of water. It was found, in January 1828, that it discharged near Goalpara below the mouth of the Bonash, in one second, 146,188 cubic feet of water, while Rennell calculated that the principal branch of the Ganges in the dry season discharges only 80,000 cubic feet. The length above given is based on the assumption, supported by Julius Klaproth and other eminent geographers, that the Great Tibet river Sampoo empties itself into the Irawaddi; but if, as is now more generally believed, the Sampoo and the Dihong are the same river, and an affluent of the Brahmaputra, then it will increase the length of the last-named river by more than 1000 miles: a supposition rendered the more probable by the immense body of water brought down by that river.

(Rennell; Francis Hamilton; Klaproth, *Mémoires*; Neville and Wilcox in *Asiatic Researches*; Ritter, *Asien*; *Maps of Klaproth, Berghaus, and Wilcox.*)

BRAIDA. [ALBA.]

BRAIN-LE-COMPTÉ. [HAINAULT.]

BRAINTREE, Essex, a market-town and the seat of a Poor-Law Union, in the parish of Braintree and hundred of Hinckford, is situated on the high road from London to Norwich, through Bury, in 51° 53' N. lat., 0° 33' E. long., distant 11 miles N. by E. from Chelmsford, 40 miles N.E. from London by road, and 44½ miles by the Eastern Counties railway. The population of the town in 1851 was 2836; that of the parish of Bocking, which is contiguous to and usually associated with Braintree, was 3846. Braintree is governed by a select vestry of 24 parishioners, who as early as 1534 were styled governors and town magistrates. The living of Braintree is a vicarage, that of Bocking is a rectory; both are in the archdeaconry of Colchester and diocese of Rochester. Braintree Poor-Law Union contains 14 parishes and townships, with an area of 41,580 acres, and a population in 1851 of 17,576.

Braintree was constituted a market-town by King John. The growth of the place is to be ascribed to its situation on one of the high roads from London into Norfolk and Suffolk, and to the building of inns and lodging-houses for the reception of the numerous pilgrims to the shrines of St. Edmund at Bury, and our lady of Walsingham in Norfolk. At the Reformation this source of its prosperity failed; but the town and the adjacent village of Bocking obtained importance by the settlement of the Flemings who fled from the tyranny of the Duke of Alva, and established here the manufacture of baize and other light woollens, which for some time constituted the staple manufacture of the place, but is now entirely superseded by that of silk.

Bocking church and Church Street are one mile and a half from Braintree, on the north-east bank of the Pant or Blackwater. The two may be said to form one town, the main street of which covers two-thirds of the extent between Pod's Brook and the river Pant, and stretches about a mile. The streets are inconveniently narrow; and of the houses are of wood, and of considerable antiquity. Braintree church is large, built chiefly of flint, and mostly in the perpendicular style; the tower at the west end, which is early English, is surmounted by a lofty shingled spire of much later date. There

are places of worship for Independents, Baptists, and Quakers; two Endowed schools; and a mechanics institute. The town is partially lighted with gas. The manufacture of silk and crape is carried on to a considerable extent, employing about 1000 persons. There is a brush manufactory, and some trade is carried on in straw plait. There are several corn-mills on the Pant. The market is on Wednesday for corn, eggs, poultry, cattle, and live stock of all kinds. A fair is held in October which is much resorted to, and well supplied with cattle. A county court is held in the town. Some coins, sepulchral urns, and other Roman antiquities have been found in the parish. Braintree has been frequently ravaged by the plague. In the great plague of 1665-6, which continued in Braintree for upwards of twelve months, nearly 700 persons were attacked, of whom it would appear that not one in thirty recovered.

Bocking church is a spacious and handsome edifice, chiefly in the perpendicular style; the tower is lofty and well designed. The houses at Bocking seem of a better character than those of Braintree. At Bocking is an almshouse or hospital with an endowment from the benefactions of several individuals.

BRAISNE. [AISNE.]

BRAMBER. [SUSSEX.]

BRAMPTON, Cumberland, a market-town and the seat of a Poor-Law Union, in the parish of Brampton and ward of Eskdale, is situated in 54° 57' N. lat., 2° 44' W. long., 9 miles E.N.E. from Carlisle, 311 miles N. by W. from London by road, and 316 miles by the North-Western and Newcastle and Carlisle railways: the population of the town of Brampton in 1851 was 3074. The living is a vicarage in the archdeaconry and diocese of Carlisle. Brampton Poor-Law Union contains 14 parishes and townships, with an area of 95,520 acres, and a population in 1851 of 11,148.

Brampton is a very ancient town. The parish church, erected with part of the materials of the old church which was dismantled in 1788, is a neat and commodious structure. It was repaired and enlarged, and a tower added, in 1827. The chancel of the old church still stands, and in it the burial service is read on occasion of interments. The Presbyterian meeting-house was erected in 1722, and there are chapels for Independents, and Wesleyan and Primitive Methodists. There are National schools for boys and girls, a Congregational school, and an Infant school. The town-hall, a neat building of an octagonal form, was erected by the late Earl of Carlisle in 1817. The town is lighted with gas. The principal occupation is the weaving of checks and ginghams for Carlisle manufacturers. The collieries of the Earl of Carlisle afford some employment. There are several corn-mills near Brampton. The market, held on Wednesday, is well supplied with corn and provisions.

About two miles south from Brampton is a rock on which is a Roman inscription; the supposed date is A.D. 207. At the east end of the town is a lofty natural mount, the summit of which commands an extensive prospect. About two miles to the east is Lanercost Abbey, founded in 1116. The nave has long been used as the parish church. The rest of the edifice is in ruins. Naworth Castle, two miles and a half north-east from Brampton, the baronial mansion of the lords of Gilsland, now the property of the Earl of Carlisle, had been kept in a state of good preservation till 1844, when three sides of the quadrangle were destroyed by fire: it has been since restored, in excellent taste. The great baronial hall, which is in the gothic style, is 70 feet long by 24 feet broad.

BRAMPTON. [DERBYSHIRE.]

BRANCASTER. [NORFOLK.]

BRANDENBURG, the metropolitan province of Prussia, derives its name from the Mark of Brandenburg, the ancestral dominions of the reigning family; the Mark itself being indebted for its own denomination to the ancient town of that name. Its component parts, however, are not what they were in former days; for the Kurmark and the Alt-mark have been incorporated with the province of Saxony, and the northern parts of the Neumark have been united with Pomerania. In exchange for these, several minor circles, balliwicks, and other parcels of land, all of them once forming a portion of the districts of Wittenberg, Meissen, Querfurt, &c., in the kingdom of Saxony, are now comprised in Brandenburg. The province is bounded N. by Mecklenburg and Pomerania, E. by the provinces of West Prussia and Posen, S. by those of Silesia and Saxony and the Anhalt principalities, and W. by the province of Saxony and Hanover. It extends between 51° 10' and 53° 37' N. lat., 11° 13' and 16° 12' E. long. Its area is 15,534 square miles. The population at the end of 1849 was 2,129,022, of whom about 17,000 are Jews, about double that number Catholics, 14 Mennonites, and 100 Greeks; all the rest are Protestants of different sects included in the National Evangelical Church of Prussia.

The whole of Brandenburg is an almost uninterrupted plain, slightly elevated above the surface of the Baltic. Its soil is composed of river sand, in some quarters mingled with ferruginous earth, loam, or clay; and hence arises so great a diversity in its character that a general failure of crops is almost unknown, for a season unfavourable to one part is usually found proportionably beneficial to another. The more elevated and undulating parts of the surface are in the southern districts, between Frankfurt on the Oder and the Silesian frontier. The hills in this direction rise to between 300 and 400 feet in height;

they form prominent features in the midst of a wide and wearisome flat, and intermingling with numerous lakes, many of them lying in deep hollows, form landscapes of considerable variety. Although Brandenburg contains much fertile land, yet the surface is disfigured by many extensive heaths and moors, which are a collection of drift sand, the cultivation of which has baffled the utmost efforts of industry. The climate of Brandenburg is temperate, but exceedingly variable: the maximum heat of summer ranges between 86° and 88° Fahr.; the maximum of cold is indicated by 15° below freezing point. There are about 210 clear dry days and 155 damp and rainy days in the year.

The *Elbe* traverses the north-west of Brandenburg from Sandau to Dömitz, and receives on its right bank the Havel, Stepnitz, and Elde. The tracts of land lower than its surface, which abound in this quarter, are protected from inundation by dykes. The *Havel*, which is a channel for the efflux of the Boblitz and other small lakes in Mecklenburg-Strelitz, becomes navigable at Fürstenberg, below which point it enters Brandenburg; it then flows southward to Spandau; and thence taking a westerly direction through Potsdam and the town of Brandenburg, it turns to the north-west at Plauen, where it is joined by the canal of that name, skirts Rathenau and Havelberg, and falls into the Elbe by two arms, between Havelort and Quitzöbel. It passes through a low tract of country, in which sand, woodlands, and pasture-grounds alternate: its width at Oranienburg is 100 feet, and at Spandau 2000 feet, in consequence of passing through several lakes; below Brandenburg it narrows again to 200 feet, and at its mouth increases to 500 feet. A branch of it strikes off at Brandenburg and flows into Lake Plauen. The *Stepnitz* rises on the Mecklenburg frontier, and flows past Meyenburg and Perleberg until it reaches Wittenberge, where it falls into the Elbe. The *Elde* issues from Lake Plauen, and forms the boundary-line between Brandenburg and Mecklenburg, until it joins the Elbe near Dömitz in Mecklenburg. The principal tributary of the Havel is the *Spree*, which comes down from the Lusatian Mountains, and passes through Bautzen (north of which it enters Brandenburg), Kottbus, and Berlin in its course towards the Havel, into which it falls at Spandau. The Spree is 100 feet broad where it is joined by the Mühlrose Canal (which connects it with the Oder), and about 200 feet at Berlin, and it is navigable from Cossenblatt. The Rhin and Dosse, which rise on the borders of Mecklenburg, are also tributaries of the Havel, and useful for floating rafts and timber. The east of the province is drained by the *Oder*, which leaves the Silesian territory and enters the province a little south of Züllichau, winds north-westward past Crossen, Frankfurt, and Küstrin; quits Brandenburg to the north of Schwedt, above which it turns north by east, and enters the province of Pomerania. From Küstrin northward it divides into several branches, and forms a succession of islands. About twenty miles below Küstrin it separates into two large arms, of which the eastern is the more considerable; this arm, called the New Oder, rejoins the western arm or Old Oder north of Freienwalde, and is connected by a canal also with the Old Oder at a point lower down to the south of Hohenstaden, near which also a canal runs westward from the Oder to the Havel. Lowlands occupy a space above twenty miles in breadth between these two arms, and nearly the whole line of the Oder below Frankfurt is bounded on each bank by meadows and lowlands which are dyked in at many points. The lowlands along the Oder are occasionally skirted by high ground in the neighbourhood of Frankfurt and Freienwalde. There are bridges across the Oder at Crossen, Frankfurt, Küstrin, and Freienwalde. The chief feeders of the Oder in Brandenburg are—the *Bober*, which descending from Silesia enters Brandenburg at Naumburg, and flows north-west to Crossen, where it joins the Oder; its banks are flat, and the pasturage-grounds about it subject to inundations: the *Nrise*, which also descends from Silesia, enters the province below Muskau, pursues a northerly course to Guben, and falls into the Oder about fifteen miles west of Crossen; the lands along its banks are low meadow grounds; it is navigable from Guben downwards, and great quantities of fruit are sent by it to Berlin. The *Wartha* enters Brandenburg from the province of Posen, where it is 400 feet broad, passes Landsberg on its right bank, and flows south-west through the marshy districts of Warthabuch to Küstrin, where it widens to 600 feet, and is received by the Oder. It is navigable along its whole line in this province, and most of the lowlands upon its banks have been brought under cultivation. There are several smaller rivers in the province which are useful for commercial or manufacturing purposes. The slope is so gentle, and the fall in the water-courses in this province so inconsiderable, as to occasion the formation of a number of small lakes as well as the overflowing of large tracts of land near the rivers.

The *Plauen Canal* connects Brandenburg and the Havel with the Elbe, and shortens the distance between Berlin and Magdeburg by about fifty-five miles. The *Ruppin Canal*, which lies between the Rhin and Havel, unites Lake Ruppin with the Havel at Oranienburg; it is about twenty miles long, and is very useful for the conveyance of peat. The Havel and Oder are connected by the *Finow Canal*, which joins the Oder near Odersberg. Between the Spree and Oder there is the *Mühlrose or Frederick William Canal*. There are many other canals in the province. Brandenburg is much favoured by the water communication which exists between the Elbe, the Oder, and

the *Vistula*: this is effected by the line of the *Wartha* which falls into the *Oder*, by the flowing of the *Netze* into the *Wartha*, and by the connection of the *Netze* and *Vistula* through the *Bronsborg Canal*. There are a few mineral springs in the province, but only two of any note—that of *Freienwalde* and another near *Berlin*.

The principal productions of the province are corn of all descriptions, besides buck-wheat, vegetables and fruit, hay and clover, &c., flax, hemp, tobacco, a little bad wine, timber, the common domestic animals, game, fish, honey and wax, bog-iron, coals, lime, gypsum, peat, and potter's clay.

The majority of the inhabitants are of German descent; some are also of Wend extraction, and not a few of French. Most of the French are settled in Berlin; the Wend colonists, in number about 160,000, reside in Lusatia, the bailiwicks of Senftenberg and Fürstenwalde, and the circle of Kottbus in the New Mark; and in some few parts there are Herrnhuters and Memnonites, particularly at Berlin.

It has been estimated that the number of acres in Brandenburg under cultivation is about 7,000,000. Potatoes as well as other vegetables are raised in abundance, and the quantity of land employed as garden-ground is said to be 63,000 acres. More flax is produced than is sufficient for domestic consumption, but hemp is of limited cultivation. The crops of fruit are not adequate to supply the demand. The woods and forests are estimated to cover 3,300,000 acres; the sandy eminences and plains produce mostly firs and pines, but there are forests of oaks which yield a very superior description of ship-timber; the largest tracts of woodland lie in the districts north of the *Wartha* and *Netze*, in the New and Ucker Marks, and the southern and western districts of Brandenburg. Considerable quantities of tar and potashes are manufactured.

Great attention is paid to the rearing of cattle; the most thriving branch is sheep-breeding. The wool produced in the New Mark, the flocks of which constitute about one-third of the whole stock, is considered the finest in the Prussian dominions. Until of late years the breed of horses was but indifferent; much has however been done to improve it, both by the government and private individuals. The total number of sheep in the province exceeds two millions and a half. The greatest number of horned cattle are bred on the reclaimed grounds and in the marshes along the rivers, but the breed is indifferent and small in size. Swine are not reared in any considerable numbers; in 1801 they consisted of 298,189 heads, and in 1821 did not exceed 187,187. Much honey and wax is produced, particularly in the six Lusatian circles, the heaths of which afford abundance of flowers for the bee. The inland consumption is amply provided with fish, especially eels and crabs, but none are exported; and the woods and forests abound in game.

Brandenburg possesses considerable manufactures. The woollen manufactures, which are the most important, are established in most of the towns in the Old and New Marks and in Berlin. The manufacture of linens, chiefly of the middling and coarser sorts, is extensively carried on in the Lusatian districts and the circle of Frankfurt; that of silks and cottons is mostly confined to Berlin. There are large tanneries in several quarters, particularly in Kottbus and other towns in the circle of Frankfurt. Tobacco manufactories exist in most of the towns. Iron and steel ware and cast-iron goods are principally manufactured at Berlin. [BERLIN.] There are also iron smelting-furnaces, and their industrial products are plate-glass, porcelain, and earthenware; copper foundries, paper mills, gunpowder mills, and distilleries of spirits from potatoes, grain, &c.

The trade of Brandenburg is greatly favoured by the multitude of its navigable rivers and canals. The main outlets of this trade are through Hamburg by the Elbe, and through Stettin by the Oder. Berlin is the great centre of commercial enterprise; and next in importance to it is Frankfurt on the Oder, the fairs of which are still of considerable magnitude. Brandenburg, Guben, Havelberg, Küstrin, Landsberg, Potsdam, Prenzlau, Ratzenau, and Züllichau are also places of considerable trade. The province is traversed by several railroads which radiate from Berlin, and connect that city with Stettin; with Frankfurt, Guben, and Breslau; with the small Saxon states; with Leipzig and Dresden; with Potsdam, Brandenburg, Magdeburg, Hanover, and the Rhine; and with Hamburg.

Brandenburg is divided into two circles, Potsdam and Frankfurt. It is governed by a chief president, whose authority also extends over ecclesiastical matters, all establishments for education, the boards of medicine, military and civil works, and the department of mills. Brandenburg forms the third Military Division of Prussia; the fifth and sixth divisions (forming the 3rd corps) of the Prussian army, have their respective head-quarters at Frankfurt and the city of Brandenburg.

The circle of Potsdam covers an area of 8128 square miles. The chief towns are:—BERLIN, POTSDAM, BRANDENBURG. *Angermünde*, a small town of 4500 inhabitants, is situated on lake Münde, 41 miles N.N.E. from Berlin by the Berlin-Stettin railroad, on which it is a station. The town is the capital of a circle of the same name in the government of Potsdam. Its manufactures are hats, woollen-stuffs, linen, and tobacco. *Charlottenburg*, on the Spree, within a mile of Berlin, to which it is joined by a fine wide avenue lighted with lamps; it contains a royal palace and a magnificent park, in which is the mausoleum of Queen Louisa, who died in 1810:

the population is above 7000. *Luckenwalde* on the Nuthe, manufactures linen, woollen-stuffs, leather, scythes, arms, beer, spirits, &c., and has a population of 6300. *Prenzlau* on the Ucker (which rises in the Ucker-see and falls into the Stettiner-Haff) has some woollen factories, a good trade in corn, a gymnasium, and a population of 11,000. *Rathenau* on the Havel, 45 miles W. from Berlin, consists of an old town girt with walls, and a new town. The population amounts to 5500, and the industrial products comprise woollens, cotton, linen, leather, and optical instruments. *Neu-Ruppin* on the Ruppiner-see, which communicates with the Havel and the Elbe by means of the Rhin and several canals; the town is well built, contains a gymnasium, several linen factories, breweries, and a population of 10,000. *Schwedt* on the Oder, has a royal palace, starch, leather, and tobacco factories, and has a population of 7000. *Spandau*, at the influx of the Spree into the Havel, is strongly fortified; the citadel is built on an island in the Havel. The town is entered by nine gates; it contains four churches, an hospital, house of correction, and a manufactory of arms: woollens, linens, silks, pottery, beer, spirits, and leather, are the principal manufactures. The situation of this town on two navigable rivers, and on the railroad from Berlin to Hamburg, makes it a place of considerable trade: population, 6800. *Wittstock*, at the junction of the Glinz and the Dosse, has numerous woollen and linen factories, and a population of 6200. *Wrietzen*, a walled town, 33 miles E. from Berlin, not far from the Oder, has a population of 6000, who manufacture broadcloth, woollen hosiery, tobacco, and leather.

The circle of Frankfurt contains 7406 square miles. The principal town is *FRANKFURT*. *Guben*, a walled town on the Neisse, has a lyceum, manufactures of leather, woollen clothes, linen, hosiery, worsted yarn, and several water-mills, copper foundries, and a market for wool and cattle: population, 9800. *Königsberg* on the Rörke, a feeder of the Oder, contains a gymnasium, woollen and starch factories, tanneries, spirit distilleries, and a population of above 5000. *Kottbus* on the Spree, has a gymnasium, woollen and linen factories, white-beer breweries, and a population of 8316. It is defended by walls, outside of which are several suburbs. The town contains a royal palace, a college, and an orphan asylum. *Küstrin* is a strong fortress at the junction of the Wartha with the Oder, which is here crossed by a long wooden bridge. The manufactures of this town consist of woollens, hosiery, starch, brandy, and beer; it contains two churches, a gymnasium, an hospital, a bridewell, and a population of 6500. The French took Küstrin in 1806. *Landsberg*, a walled town on the Wartha, which has an orphan-house, a house of correction, wherein the inmates are instructed in the woollen manufactures, several spirit distilleries, paper-mills, tan-yards, a large corn and wool market, and a population of 11,500. Near this town, in the village of Vietze, are extensive iron-works belonging to the government.

BRANDENBURG, a town in the Prussian province of Brandenburg, stands in 52° 30' N. lat., 12° 32' E. long., at a distance of 38 miles W. by S. from Berlin by the railroad from Berlin to Magdeburg, and has a population of 17,000. It is situated upon the Havel, which divides the old from the new town; an island lies between them, on which stand the castle, cathedral church, and equestrian college. Between these two quarters of the town lies a swampy district, which, from the houses being built upon piles, is called *Venice*. Each town is surrounded by a wall, but the new town has a rampart in addition. The old town has five gates, besides a smaller outlet for foot passengers, and the new town four gates: the streets in the old town are narrow and crooked, but in the new town broad and straight. Brandenburg contains eight churches, a court of justice, a gymnasium, and several schools. On the island stands a cathedral of the 14th century and some other buildings of that date. The manufactures comprise broadcloth, linen, hosiery, paper, beer, leather, &c. Boats are built, and there is an active transit trade. Brandenburg was once the capital of the electorate of Brandenburg.

BRANDENBURG, ELECTORATE OF. The first known inhabitants of this province were the Suevi, a very warlike tribe. When the Suevi and the Longobardi invaded Italy in the decline of the Roman power, the Slavonians invaded and settled in Brandenburg. The Slavonians and the Franks subsequently contended for the possession of Brandenburg. In 789 it fell into the power of Charlemagne, under whom and his successors Brandenburg was governed by counts under the empire. Many contests took place between the Slavonians and their Frankish conquerors. In 1144 Albert, count of Anhalt, became the first margrav of Brandenburg. His line lasted till 1320, from which date till 1417 Brandenburg was in a state of anarchy. Frederick of Nürnberg was made elector of Brandenburg in 1417; and being a prince of ability he laid the foundation for the future prosperity of his dominion. Most of his successors ruled with judgment. Joachim II. introduced the reformed religion into Brandenburg in 1535. No interruption of the line took place until 1618, when the duchy of Prussia came into the same hands as the electorate of Brandenburg. From this date the history of the latter merges into that of the present kingdom of Prussia. [PRUSSIA.]

BRANDENBURG, NEW. [MECKLENBURG.]

BRANDON, Suffolk, a market-town in the parish of Brandon and hundred of Lackford, stands on both sides of the Little Ouse, or Brandon River, which here divides the counties of Norfolk and Suffolk, in

52° 26' N. lat., 0° 37' E. long., 43 miles N.W. by N. from Ipswich, 78 miles N.N.E. from London by road, and 8½ miles by the Eastern Counties railway: the population of the town in 1851 was 2022. The living is a rectory in the archdeaconry of Sudbury and diocese of Ely. The church has a Norman porch, and some other ancient portions. The Wesleyan and Primitive Methodists have chapels. The Free Grammar school, founded in 1646, has an income from endowment of 54l. a year, and had 20 scholars in 1852. There is a National school. The town possesses almshouses and other charities. The making of gun-flints is carried on to a small extent. There is a considerable trade in corn, malt, and timber. Thursday is the market-day. Fairs are held on February 14th, June 11th, and November 11th.

BRANDYWINE RIVER. [PENNSYLVANIA.]

BRAUNSBURG, in the government of Königsberg, province of East Prussia, is a walled town on the Passage, about five miles above its mouth in the Frische-Haff, 389 miles by railway N.E. from Berlin, in 54° 19' N. lat., and 19° 54' E. long., and has about 8500 inhabitants. It is divided by the river into the old and new towns. The Roman Catholic bishop of Ermeland has his residence here: the old castle is used in part for public offices. Braunsberg possesses a college, with faculties of Roman Catholic divinity and philosophy, a Roman Catholic gymnasium and theological seminary, a normal training-school, four Roman Catholic churches, one Protestant church, and three hospitals. Woollens, linens, and leather are manufactured. The trade of the town consists principally in yarn, ship-timber, and grain. The Passage is navigable from Braunsberg to its mouth. Braunsberg is the birthplace of Barou Trenck. A little to the west of it is *Frauenburg*, on the Frische-Haff, at the foot of a hill (the *Domberg*), on which the cathedral of the diocese of Ermeland and the residences of the members of the diocesan chapter are situated. It is an open town, with a population of 2400. Coperucius, who was a member of the chapter, and who died here in 1545, was buried in the cathedral. There are several memorials of him in the town.

BRAVA. [CAPE VERDE ISLANDS.]

BRAY. [BERKSHIRE.]

BRAY. [WICKLOW.]

BRAZIL, Empire of, comprehends the eastern portion of South America. Its most northern point, at the sources of the Rio Branco, nearly reaches 5° N. lat.; and the mouth of the Rio Oyapock, which divides it from French Guyana, extends nearly as far north. The most southern boundary-line cuts the Lake of Mirim, in 32° 30' S. lat. The most eastern projection, Cape Augustinho, is in nearly 35° W. long. Brazil extends west to the river Hyahary or Yavari, where its boundary-line falls in unknown countries, and probably passes 70° W. long. Its vast extent brings it in contact with all the countries of South America, except Chili and Patagonia. At its southern extremity it borders on the republics of Uruguay, Paraguay, and Corrientes, one of the members of the Argentine Confederation. It is bounded W. by Bolivia; N.W. by Peru and Ecuador; N. by British Guyana, Dutch Guyana, and French Guyana, or Cayenne. On the N.E. and E. Brazil is bounded by the Atlantic Ocean.

Area, Surface, &c.—The empire of Brazil extends about 2600 miles from north to south, and 2400 miles from east to west; its surface is variously estimated at from 2,500,000 to 2,750,000 square miles, or even more; an area above twelve times as large as that of France. The following table shows the provinces into which it is divided with the area and population of each, according to the latest and most trustworthy estimates; but it must be borne in mind that all the estimates hitherto published are very vague, and difficult to reconcile with each other; they must therefore be regarded only as rough approximations:—

Provinces.	Chief Towns.	Area.	Population.
Rio Grande de Sul . .	Porto Alegre	180,000	175,000
Santa Catharina . . .	N. S. de Desterro	50,000	70,000
San Paulo	San Paulo	200,000	340,000
Rio Janeiro	Rio Janeiro	50,000	700,000
Espirito Santo	Victoria	40,000	65,000
Bahia	Bahia	80,000	750,000
Sergipe	S. Christovão	30,000	200,000
Alagoas	Maceló	10,000	200,000
Pernambuco	Pernambuco	50,000	400,000
Parahyba	Parahyba	25,000	100,000
Rio Grande do Norte . .	Natal	30,000	70,000
Ceará	Fortaleza	35,000	180,000
Piahy	Oeyras	70,000	70,000
Maranhão	Maranhão	70,000	220,000
Pará	Pará	250,000	150,000
Alto Amazonas	Barrá do Rio Negro	400,000	100,000
Matto Grosso	Cuyahá	460,000	100,000
Goyaz	Goyaz	320,000	100,000
Minas Geraes	Ouro Preto	200,000	760,000
Total		2,550,000	4,750,000

The coast, which is probably little short of 4000 miles, presents various appearances. From Cape S. Maria in Uruguay to the Morro de S. Marta (about 31° S. lat.), an extent of upwards of 300 miles, the coast is low, sandy, and intersected by the outlets of numerous

lakes, which skirt the shores in all this extent, in which it trends from south-west to north-east. At the Morro de S. Marta, where it runs to the north, it begins to be rocky, but rises only to any considerable height to the north of the island of S. Catherina. From the island of S. Francisco it trends to the north-east, and from the harbour of Santos to Cape Frio it runs nearly due east; and thence to the Bay of Espirito Santo north-east. In all this extent of nearly 1000 miles the coast is rocky, and in some parts rather high; it has a great number of indentations and some good harbours, generally surrounded by flats of moderate extent. The most rocky and highest part is between Santos and Cape Frio.

From the Bay of Espirito Santo to Bahia de Todos os Santos, about 600 miles, the shores extend nearly south and north, and are in general low and level, especially between the mouth of the Rio Doce and the small river Buranhem; to the north of the latter it is somewhat higher, but generally level; towards Cape S. Antonio it sinks lower. Along this coast, in about 15° S. lat., at a distance of from 25 to 30 miles, extend the rocky banks of the Abrolhos; the coasting vessels commonly pass between them and the shores.

The coasts of the eastern projection of Brazil from Cape S. Antonio nearly to the mouth of the river Parahyba about 800 miles, are of moderate height, rising hardly anywhere above 30 feet, but they contain no harbours, except those formed by the mouths of the rivers. The remainder of the shore, from the mouth of the Parahyba to that of the Amazonas, is extremely low and marshy, a few sandy hills rising on it at great distances apart. In all this extent of about 700 miles there are few harbours.

To the north of the Rio Amazonas the coast is rather sandy and somewhat higher, though of inconsiderable elevation. Some parts are subject to a sudden rise of the sea at spring tides, which phenomenon is called *pororoca*. This coast extends about 400 miles.

The surface of Brazil is divided between upland and lowland, which probably occupy nearly equal portions, the upland extending over the eastern and central part, and the lowlands principally along both sides of the Rio Amazonas, with a smaller portion on the shores, and on the south-west border.

High mountains advance nearly to the shores between the Bay of Santos and Cape Frio. This range, the higher summits of which are hardly anywhere more than 20 miles from the coast, is called Serra do Mar (the Sea Range). The highest summits rise to about 3500 feet, and the passes over this range to from 2000 to 2500 feet. This range continues to the south, but south of the Bay of Santos it recedes to about 60 or 80 miles from the coast. It is here occasionally called Serra Cubatão, and runs first south-west and then south, to a point opposite the Morro de S. Marta, where at the sources of the Rio Uruguay it turns west, and advancing in that direction about 200 miles, terminates on the banks of the Rio Uruguay to the north of the junction of the Ibecuy-guaçu with it. From the south side of this west chain an elevated table-land of moderate height extends south between the river Uruguay and the shores, and continues in Uruguay Oriental, where it terminates near the vast mouth of the Rio de la Plata, with the Punta Negra and Cape de S. Maria. A few low hills rise upon it. This table-land may be considered as the most southern and narrowest portion of the upland of Brazil.

Another and higher range of mountains runs nearly parallel to the Serra do Mar, at a distance of about 40 or 60 miles from the sea. It begins to the north-west of the town of S. Paulo, where it is called Serra de Itagua, and advancing thence to the north-east it becomes higher, and is called Serra da Mantigueira. It afterwards turns north, and continues in that direction to the town of Ouro Preto, where it may be considered to terminate with Mount Itacolomi, being divided from the range extending farther to the north by a deep but narrow depression. It contains the highest mountains of Brazil, which are situated where it begins to run due north between the sources of the Rio Grande, the principal branch of the Paraná, and the Rio Preto, a small tributary of the Parahyba. The Pico dos Orgãos rises to 7700 feet, the Morro de Papagaio to 7400 feet, and another summit to 7800 feet. The Itacolomi is 6000 feet high. The passes across this chain rise to upwards of 3000 feet.

To the north of Ouro Preto the chain here called Serra Espinhaço again rises and continues to the north, declining by degrees some points to the east till it reaches the banks of the Rio de S. Francisco, which breaks through the chain, where it forms the cataract called *Cachoeira (fall) de Santo Afonso*. It is of considerable height in its south part, but does not attain that of the Serra Mantigueira; its highest summit, the Itambé, near Cidade de Serro, rises only to the height of the Itacolomi. In proceeding north it sinks considerably, and hardly any summit in the province of Bahia rises to 4000 feet, while the passes do not exceed 1800 feet. This chain remains generally 150 miles from the coast, but its effects in some places approach it within 20 miles.

North of the great cataract of Afonso the mountains, called here Serra Araripé or dos Cariris, rise again to a considerable elevation, and form between 7° and 6° S. lat. a table-land of considerable extent, from which several ranges of high hills are detached to the east and north, some of which terminate at no great distance from the shore between the Rio S. Francisco and the Rio Parahyba. The most considerable of these lateral ranges are the Serra Borboréua, which

separates the province of Rio Grande do Norte from that of Ceará, and the Serra Ibiapaba, which constitutes the boundary between Ceará and Piauhý.

From its south-west corner a mountain range of moderate elevation runs south-west along the Rio S. Francisco, and then west to the sources of the Rio Parahyba, where it turns north, and running in that direction at a distance of from 40 to 60 miles from the Rio Tocantins, terminates with a range of low hills at about 180 miles above the mouth of that river. Between the Sertão of Pernambuco and the province of Piauhý the passes rise to between 1200 and 1300 feet above the sea.

To the west of the range running north and south, and to that of the Serres Espinhaço, da Mantigueira, and de Cubatão extends the upland of Brazil far into the interior of South America, but it grows narrower as it runs west. Its northern boundary is indicated by the falls in the rivers which carry their waters to the Rio Amazonas. These waterfalls occur in the Tocantins, at about 3° 30' in the Xingú, at about 4° 20' in the Tapajós south of 5° S. lat., and in the Madeira south of 8° S. lat.: a line drawn through these points separates the lowlands of the Rio Amazonas from the upland of Brazil. On the south it extends to the Rio Iguaçu. This extensive space is properly a table-land of considerable elevation, but of an uneven surface. The mountain ranges which traverse it rise only to a comparatively small height above the plain.

The highest portion of the table-land seems to lie contiguous to the range of mountains which divides the upper branches of the Rio S. Francisco and of the affluents of the Rio Amazonas from those which fall into the Paraná and Paraguay. This extensive range, which has been named Serra dos Vertentes (the watershed range), begins about 60 miles south of Villa Rica, at the Serra da Mantigueira, between the sources of the Paraopeba, an upper branch of the Rio S. Francisco and the Rio Grande, an affluent of the Paraná (about 20° 30' S. lat.). It frequently changes its direction and makes numerous bends, but runs in general to the north-west and terminates at some distance from the confluence of the Mamoré and Beni (about 11° S. lat.). In different districts it has different names. Between the sources of the Rio Francisco and the Rio Grande it is called Serra Chnestra and Serra Marcella, and at the sources of the Tocantins Serra dos Pyrineos. These, the highest portion of the Serra dos Vertentes, rise to 3500 feet and upwards. The ranges farther to the west are lower. The Serra Seida divides the upper branches of the Araguay, a tributary of the Tocantins, from those of the Pardo, a confluent of the Paraná; and the Serra dos Paricis, the Tapajós from the Paraguay; and the north-west branch of the latter the Tapajós from the Guaporé. The latter ranges probably never attain 3000 feet. At the place where the Serra Paricis turns to the north it sends off a branch called Serra Agoapehy to the south-south-west, which, after a course of about 180 miles, terminates in the plains of Chiquitos in Bolivia.

That portion of Brazil which lying to the south of the Serra dos Vertentes borders on the west on the Serra Agoapehy, and on the east on the Serra Cubatão, is divided into two portions by a range of heights extending between 52° and 57° E. long. from the Serra Seida southward between the affluents of the Paraguay and Paraná. The country to the east of this range is the high table-land of the Paraná, that to the west the lowland of the Paraguay.

The lowland of the Paraguay, with the exception of the rather rapid descent of the inclosing mountains and a few hills or short ranges in the interior of the plain, presents nearly a level country, which declines imperceptibly towards the banks of the river Paraguay, where it terminates in swampy flats many miles wide. Near the rivers it is covered with high trees, but the intervening spaces are grassy plains of considerable extent, here and there interrupted by barren tracts. This immense plain, which, though situated in the centre of America, hardly attains an elevation of 1000 feet, is extremely hot and subject to long-continued droughts, which cause great mortality among men and cattle. The rains commonly begin at the end of October, and continue to April or May. They are accompanied by violent thunder-storms, and most abundant rains towards the end of the season, when they cause the rivers to overflow the adjacent low-grounds.

The principal river, and that which is the receptacle of all the waters collected in this plain, the *Paraguay*, rises on the top of the Serra Paricis in the Sete Lagoas (Seven Lakes), which are at a short distance apart, and communicate by narrow channels. Issuing from the last of these lakes the river flows through a swampy country in a north direction for a short space, when it winds round by the west and takes a south course. It descends from the range with a rapid course, receiving from the east and west a great number of small streams, until it arrives in the plain, about 150 miles from its source: but its course still farther down is broken in some places by low falls, which however cease at its confluence with the Sipotuba, its first considerable tributary, which joins it on the right bank. From this point its waters are deep, and navigable for vessels of considerable size. Farther down it receives on the right the Jaurú, which likewise rises in the Serra Paricis, and at about the middle of its course is joined by the Agoapehy, which originates in the Serra Agoapehy. Opposite the confluence of the Jaurú is a range of elevated land,

which ceases about 25 miles lower down, at a point called Escalvada (16° 40' N. lat.), where both margins of the river begin to be flat and low and interspersed with lakes. The low country extends to a great distance on both sides of the river; and of the lakes some are of considerable extent, especially three called Oberaba, Gahyba, and Mandiore, which lie on the right bank, and are from 10 to 15 miles in diameter. They are separated from the river by rocky cliffs, but united to it by narrow channels which divide the cliffs. In about 21° 20' S. lat. a chain of small mountains on both sides come close on the Paraguay, by which its waters are contracted, and flow with great rapidity in two channels, separated by a rocky island of considerable length. This place which is called Fecho dos Morros (the Barricade of Mountains), terminates the swampy and low margin of the river. At the end of the rainy season, when the rains are very abundant, and the Paraguay cannot carry them off by its narrow channels at the Fecho dos Morros, the whole of the low ground is laid under water, and forms a lake called Xarayes, nearly 700 miles in length and from 70 to 150 miles in width, covering a surface about as large as Lake Superior in Canada. In September however the waters are entirely carried off, and the whole surface is again laid dry. A considerable portion of the inundated land is covered with a kind of wild rice, on which innumerable flocks of water-fowl, especially of geese, feed. During its course through this low plain the Paraguay is joined on the left by two considerable tributaries, the Rio de S. Lourenço and the Tacuary. The S. Lourenço, which rises to the east of the upper branches of the Paraguay, is not inferior in length to the principal river, and runs in a south-western direction upwards of 400 miles, receiving about 100 miles from its mouth the Cujuba, which flows about 300 miles. Both rivers are navigated to a considerable extent. The Tacuary, whose whole course does not probably exceed 300 miles, rises with its numerous branches in the mountains east of the plain; and though its navigation is rendered difficult by numerous waterfalls, it facilitates the communication of the internal provinces of Brazil. At the Fecho dos Morros the Paraguay leaves Brazil and enters the republic of Paraguay.

The table-land of the Paraná, which extends on the east of the lowland of the Paraguay, is everywhere surrounded by mountain ranges. To the west is the chain which divides the affluents of the Paraná from those of the Paraguay, to the north the Serra dos Verteutes, to the east the Serra da Mantigueira and the Serra Cubatão, and to the south a range which (about 26° S. lat.) detaches itself from the Serra Cubatão and extends west along the Iguassú to the Salto da Vittoria. Only in the comparatively short space between this Salto of the Iguassú and the Sete Quedas of the Paraná the region is open towards the republic of Paraguay, from which it is separated by the Paraná.

The table-land of the Paraná is very uneven along its north-east and north border, where the offsets of the Serra da Mantigueira, Serra de Canastra, Serra de Marcella, and Serra dos Pyreneos extend many miles; but the remainder is a plain, presenting extensive levels, interrupted at great distances by hills of very gentle ascent and small elevation. The eastern and higher portion of the table-land is 2000 feet and upwards above the level of the sea. Trees occur only on the declivities of the mountain ranges and in the lower tracts along the course of the rivers: the forests cover probably less than one-third of the surface. The plains are overgrown by a coarse but nourishing grass, here and there intersected by low bushes and a few small isolated trees. They serve as pasture for the innumerable herds of cattle, horses, and mules, which constitute the riches of this portion of Brazil. Agriculture is principally limited to the culture of mandioc, maize, and different kinds of beans; rice is grown in some places, and the sugar-cane on the lowlands along the rivers. Pine-apples, as well as the fruits of Europe and the vine, thrive very well. Among the fruit-trees peculiar to this region is the jabuticaba (*Myrtus cauliflora*, Mart.), whose fruit gives a palatable wine. In the south district wheat and flax are grown with success. The variation in the temperature is greater than in those parts which lie near the equator; but neither the heat nor the cold is ever excessive. In the winter (from May to October) hoar-frost is only frequent near the mountains, and never occurs in the plains. The average heat is between 60° and 70°, and even in the summer it rarely rises above 80°. The rain begins in the eastern districts in October or November and lasts to April; it is most abundant in January, and then always accompanied by fog during the morning.

These abundant rains which last sometimes for days and even weeks without cessation feed a number of large rivers, which traverse the table-land from east to west, having most of them their sources in the ranges, which divide it from the shores: they all unite their waters with those of the Paraná. The farthest branches of that large river rise in the mountainous country, where the Serra da Mantigueira unites with the Serra da Canastra. The most distant branch is the Rio Grande, which, rising where the Serra da Mantigueira turns to the north, at first flows north and then north-west for a considerable space; afterwards it turns to the west and continues some hundred miles in that direction, declining somewhat to the south towards its junction with the Parnahyba. In this course it receives on the left bank three considerable tributaries, the Sapucahy,

the Pardo, and the Mogi, each of which descends through the plains from the south, and runs upwards of 200 miles. At the confluence with the Parnahyba the Rio Grande has already had a course of upwards of 500 miles, and then its name is changed into that of Paraná. The Parnahyba rises in the Serra dos Pyreneos, receives in its course the Corumbá, and joins the Rio Grande after a course of upwards of 350 miles. Many miles below this confluence the Paraná forms a considerable cataract, called Urubú Punga, and lower down it receives the Tieté, which rises at no great distance from the shores of the Atlantic in the western declivity of the Serra de Cubatão, and traverses nearly the middle of the plains. Its navigation is rendered very difficult by numerous rapids and waterfalls. Between the Urubú Punga and the Sete Quedas the Paraná receives two other large tributaries, the Pardo on the right, and the Parannapama on the left, both running about 300 miles. In this tract the Paraná forms many large islands, of which the largest are the Ilha Comprida (Long Island), upwards of 20 miles in length, and the Ilha Grande, which is not much less than 70 miles in length and of considerable width. The Ilha Grande terminates 4 miles above the Sete Quedas (Seven Falls). Below the southern extremity of the Ilha Grande the Paraná is nearly 4 miles wide, but at the falls the bed of the river is contracted to about 50 fathoms. The immense volume of the river is then divided into seven channels, formed by six small islands of rock, and precipitated down the ledges with a current of indescribable fury and awful noise. This cataract impedes all communication by water between the table-land and the countries below it. To the south of the Sete Quedas, the Paraná continuing to the south still receives a large tributary, the Iguassú or Iguaçá, which rises about 70 miles from the coast, and traversing a mountainous country forms at a short distance from its mouth the great cataract called Salto da Vittoria, and joins the Paraná after a course of nearly 300 miles. After this junction the river still runs south, then turns to the west, and unites with the Paraguay after a course of above 1000 miles. Its further course is described under ARGENTINE CONFEDERATION.

To the south of the table-land of the Paraná extends a smaller one of a similar description on both sides of the Upper Uruguay, which is called Campos da Vacaria (Cattle-Field), being destitute of trees and covered with fine grass, which renders it favourable to the rearing of cattle. The river Uruguay, which rises in the mountains near the coast, traverses it in all its extent, flowing west-north-west and west till it enters the plain of the Misiones.

The southern extremity of Brazil, which extends south-west of the Campos da Vacaria, contains two plains, one lying on the north-west along the river Uruguay, and the other on the south-east, extending for about 200 miles along the sea-shore, with an average width of about 60 miles. They are divided by a high ground of great breadth but of inconsiderable elevation, which is called Serra dos Tappes. The surface of the high ground extends in spacious and nearly level plains, here and there interrupted by small hills. This upper part is entirely without trees and covered only by coarse grass and bushes; but on the declivities and in the valleys formed by the offsets of the high ground many fine trees occur. The valleys are also the only places in which there is any agriculture, and this is nearly confined to the raising of wheat and maize.

To the north-west of this high ground extends along the banks of the Uruguay the plain of the Misiones, which received its name from the seven missions established here by the Jesuits.

The soil of the plain along the sea-shores is sandy towards the coast with a substratum of clay, and produces grass but no trees. Farther inland the soil is better, but the country is still without trees. The most remarkable of the numerous lakes on this coast is the Lagoa dos Patos (lake of the Ducks), which extends 150 miles in length from south-west to north-east, and 35 miles at its greatest width, so that it there occupies about half of the plain. It has sufficient depth for vessels of a middling size, but some very dangerous shoals. The water is salt in the southern part. It is the recipient of almost all the currents that traverse the plain, and receives about 12 miles from its northern extremity the Iacuy, a winding river, which rises on the southern extremity of the Campos da Vacaria, and drains a country adapted to agriculture. At the southern extremity the lake of Patos receives the Rio de S. Gonçalo, which is properly only the outlet of the lake Mirim. The southern part of the lakes Mirim and Mangueira belongs to URUGUAY. The lake of Patos discharges its waters into the sea by the Rio Graude de S. Pedro, which flows about 10 miles almost north and south, and is nearly 3 miles in width. The mouth of this river is full of shoals, which are the more dangerous as they are subject to be frequently changed by the tides.

This part of Brazil, extending between 28° and 33°, enjoys a temperate climate like that of Spain or Italy; the air is pure and healthy. In the valleys and on the plain frost very rarely occurs: on the high ground it is annually felt for one or two months; but as very little snow falls, the cattle find pasture all the year round. From May to October the rains are abundant.

The low country between the shores of the Atlantic and the first mountain range, from the Morro de S. Marta on the south to Cape S. Antonio, near Bahia, on the north, extends in some places 120

miles inland, as between the Rio Doce and the Bahia de Todos os Santos. In other places the mountains approach the sea within 15 or 30 miles, as between the Bay of Santos and Cape Frio. North of the Rio Doce a level country extends upwards of 80 miles inland, but to the west of Cape Frio the hills approach so near the sea that their lower extremity is washed by the high tides, and the traveller can only pass at low water.

Except the comparatively small tracts which have been cultivated by European settlers and their descendants, the sides of the mountains and the hills and plains are covered by interminable forests, extending even in the valleys along the banks of the rivers nearly to their sources on the high land. North of Cape Frio the trees and plants peculiar to a tropical climate are common, but south of it they occur less frequently. The soil is in most places of great fertility, and produces sugar, coffee, cotton, and cacao, mandioc, maize, and rice in abundance.

The rivers in this tract are very numerous, but have a short course, seldom exceeding 100 miles. They are generally navigable to from 30 to 60 miles inland. The banks of nearly all of them are skirted by low ground, which are inundated after the rains have begun. The rivers begin to rise in November, and the inundation ceases in the middle or towards the end of January: in some it lasts two months, in others only a fortnight. As the mouths of these rivers are commonly formed by a soft soil they are subject to many changes, which are produced by the variable winds and by the current prevailing on this coast. The largest of these rivers are the Parahyba, the Doce, and the Rio Belmonte. The waters brought down by the Doce preserve their freshness for a considerable distance into the ocean, and hence it has received the name of Doce (soft or fresh).

The Rio Belmonte, in traversing a mountainous range called Serra dos Aimores, is contracted by two high steep rocks, and descends on a sudden from a height of more than 120 feet with tremendous noise into a whirlpool: 15 miles lower down it has a little fall, after which it flows through a flat and wooded country to the sea, describing various windings, with a current rapid and wide, but of little depth. It contains many flat islands, and receives no considerable stream after it descends the fall. About 20 miles from the sea the Rio Belmonte is united to the Rio Patype, its nearest neighbour to the north, by a natural channel called Sala.

This country though mostly within the tropics enjoys a moderate climate. In Porto Seguro the medium heat, according to Freyreiss, is only 70½° Fahrenheit, but at Rio Janeiro 74°, which he attributes to the neighbourhood of the Rocky Mountains. At the latter place however the thermometer occasionally rises to 100°, 110°, and even to 120°. In summer (December, January, and February) the average heat at noon is 86°, and in the morning 72°; and in the winter (June, July, and August) it is 72° at noon, and in the morning 59°. Another peculiarity is the great humidity, which arises probably partly from the country being almost entirely covered with high trees and exuberant vegetation, and partly from the regular change of the land and sea winds. The sea winds commonly begin at noon, rarely sooner, more frequently at two o'clock, and blow till nightfall. In the other parts of the day the winds from the west prevail. The effect of this great humidity of the atmosphere is that the coast of Brazil has not such a regular succession of dry and rainy seasons as other tropical countries. No part of the year is entirely exempt from rain, though the winter is often dry and the sky cloudless; and the rains in the summer are generally very abundant, especially in January. In summer thunder is very frequent, and always accompanied with violent storms, which however never cause damage to be compared with that of the hurricanes in the West Indies.

The Serra Espinhaço, which bounds on the west the countries on the shore, divides them from the highest part of the table-land of Brazil. This extensive country, which extends west to the north branch of the Serra Parica, is an uneven plain, on which numerous hills, sometimes isolated, sometimes in groups, and sometimes in ranges, rise to a moderate height, commonly with a gentle ascent. Along the watercourses are depressions or valleys, but generally of small extent. The plain has an elevation of upwards of 2000 feet, and the hills rise above it only a few hundred, and perhaps never more than 1000 feet. The surface of the plain, as well as of the hills, is in some places covered with sand, and in others with bare sandstone rocks, but it is generally clothed with a coarse grass, bushes, and single standing trees. The valleys along the watercourse have a much more fertile soil, and here the high trees and thick foliage which cover the maritime districts occur again. These valleys are adapted to culture and for raising nearly all the products of the coast. The plains yield only pasture for cattle.

This plain is drained by four rivers of considerable extent, the San Francisco, the Tocantins, the Xingú, and the Tapajós. The upper branches of the *S. Francisco* rise on the north declivity of the Serra dos Vertentes about 3000 feet above the sea, and between 21° and 20° S. lat. They are principally two—the Paraopeba, and that more properly called the *S. Francisco*, which unite after a course of above 150 miles in about 19° 20' S. lat. The river then flows in a nearly due north direction to its junction with the Rio das Velhas (south of 17° S. lat.); but before reaching this point it forms the cataracts of Pirapora. The Rio das Velhas rises in the neighbour-

hood of Villa Rica, on the north declivities of the Serra Mantigueira, and runs upwards of 250 miles. From this point the *Francisco* continues to flow north with a slight declination to the east, and its current is much less rapid. It has here numerous windings, and is navigable down to Vargem Redonda, 300 miles below Ioazeiro where the navigation is interrupted by several falls. In all this course it is not joined by any considerable tributary, and on its banks there extend for about 250 miles salt steppes, in which the mineral appears in the form of an efflorescence, and is collected by the inhabitants. Not far from this place the river is narrowed by high rocky cliffs on both sides, runs with great rapidity, and forms several falls, of which the Cachoeira de Afonso, the most considerable, is said to be 50 feet in perpendicular height. The cataracts and rapids occupy a space of nearly 70 miles, and terminate at the Aldea do Caniude, whence a road leads to Vargem Redonda for the transport of merchandise into the interior of Brazil. From the Aldea do Caniude to its mouth the river runs still about 200 miles, and its navigation is not interrupted, but the current is rapid. Though a deep river in the interior of the continent, the Rio de S. Francisco enters the sea by two comparatively shallow mouths of unequal size, of which the north and the larger is nearly two miles wide, but with so little depth that only vessels of 60 tons burden can enter it at high water, and must wait for the full tides to go out. The inundations are considerable, especially above the falls. They fertilise the country, and are particularly favourable to the cultivation of the sugar-cane.

The *Rio Tocantins* is divided from the Rio de S. Francisco by a table-land, which towards the upper branches of the river, and also towards its confluence with the Araguay, is overtopped by groups of hills of considerable height. The upper branches of the Tocantins rise in the Montes dos Pyrneos and in the Serra Doirada, both portions of the Serra dos Vertentes. In the Serra Doirada rises the Urubú, which is considered as the true source of the river, and after a course of 70 miles joins the Rio das Almas, which is not inferior to it, and descends from the Montes dos Pyrneos. The river preserves the name of Rio das Almas to its confluence with the Maranhão, which joins it 90 miles farther down. The Maranhão rises in Lake Formosa, which is 15 miles in length and 2 miles in width, and flows to the west and then to the north. Hence the united river is called Maranhão to its junction with the Paratinga, about 140 miles lower down (12° 20'). The Paratinga is formed by the junction of two considerable rivers, the Paranaam and the Palma, the former of which flows nearly 300 miles. Hence the river is called Tocantins, and becomes navigable at the Porto Real de Pontal, where it is 374 fathoms wide. The number of its affluents lower down is great, but none of them is very considerable except the Rio Araguay, which joins it at about 5° S. lat. Before the Tocantins arrives at this point its navigation is interrupted by some cataracts between 7° and 6°, among which the most considerable are the Cachoeira de S. Bartolomeo or das tres Barras, and the Cachoeira de S. Antonio. After its junction with the Rio Araguay the Tocantins flows between rocks and cliffs, forming many rapids and small cataracts, and this part of its course is called the channel of Taniri. Issuing from this channel it has near Itaboca (3° 30') more considerable cataracts, which rise above one another like terraces, and then the river enters the low country skirting the Amazonas. Its whole course is in a northern direction: at about 1° 30' S. lat. it unites with the south branch of the Rio das Amazonas, and takes the name of Rio da Pará. At the point of junction is an island about 15 miles long, and low and flat, called Uararary, which divides the mouth of the Tocantins into two arms; of which the east is called Bahia de Marapatá, and the west Bahia de Limoeiro: the width of the river is here upwards of 15 miles. The Rio da Pará, which divides the island of Marajo or Ioanes from the continent, widens in its progress to the north still more, and may be above 60 miles where it falls into the sea (about 0° 20' S. lat.). The whole course of the Tocantins is at least 1500 miles.

The *Araguay*, the largest tributary of the Tocantins, rises on the north declivity of the Serra Sejada, about 18° S. lat., where it is called Bonito, which name is changed into that of Rio Grande, after it has united with the Rio Barreiros and Rio Cajapo. Its waters are lower down increased by those of the Rio Claro, Rio Vermelho, Rio Tizoiras, and Rio Crixá. All these rivers flowing from the south-east join the Araguay on the right, and neither of the last three runs less than 200 miles. About 30 miles from the mouth of the Crixá, the river divides itself in 12° 30' into two branches nearly equal, which re-unite in 9° 36', inclosing the island of S. Anna, perhaps the largest river island in the world. It is more than 200 miles in length, and of considerable width. The west arm preserves the name of Araguay, and the east takes that of Furo: barges generally go through the latter; but both contain small falls and rapids. The branch called Araguay receives about 40 miles north of the south point of the island of S. Anna, the Rio das Mortes, which runs nearly 300 miles. At about 6° the Araguay joins the Tocantins after a course of above 1000 miles.

The *Rio Xingú* rises in the Serra dos Vertentes somewhere about 15° S. lat. Between 6° and 4° S. lat. its bed is narrowed and traversed by a chain of rocks, and thus the cataracts are produced which occur in this part of the river. These rocks make the river form a large bend to the south and east, though in general the direction of its

course is to the north, with numerous windings; it joins the Rio Amazonas at Porto de Moz, where it is about 4 miles wide.

The *Rio Tapajos* is formed by the confluence of two considerable rivers, the Iruena and the Rio dos Arinos. The Iruena rises near the parting of the Serra dos Paricis, and the Serra Agoapehy, near 14° S. lat. It runs for upwards of 200 miles due north, and then inclines to the east to meet the Rio dos Arinos. The number of its affluents is very great, and at the confluence the Iruena is the larger river. The Rio dos Arinos rises farther to the east, near the sources of the Paraguay, and runs first north-east and then north to the junction with the Rio Preto, which is the only branch of the river at present navigated. After this junction the Rio dos Arinos flows north-west, nearly to its confluence with the Iruena, about 90° S. lat. Hence the united river is called Tapajos, and flows north-east forming two cataracts, the Cachoeiras de S. João da Barra and de S. Carlos. At the latter the course of the river is changed, and flows hence to the north-north-east. The largest of its cataracts, called Salto Grande, occurs at about 7° 30', and is said to be 30 feet in perpendicular height. Between 5° and 6° is another fall called Cachoeira de Marauhão, which likewise interrupts the navigation. The remainder of its course is through the low country along the Rio Amazonas. This river is joined by numerous tributaries, especially from the right. It falls into the Amazonas near Santarem, where it is about 4 miles wide.

On the banks of the Iruena, and west to the north branch of the Serra Paricis, stretches a sandy desert called Campos dos Paricis, the extent of which has not been ascertained. The surface is formed by long-backed ridges of sandy hills, parallel to one another, and divided by longitudinal valleys. The soil consists of sand so loose that beasts of burden can hardly proceed; and it is nearly destitute of vegetation, except where springs issue from the ground.

The table-land of Brazil is separated from the Andes of Bolivia by a large and extensive plain upwards of 1200 feet in height, and traversed by those streams which by their junction form the Rio Madeira. A small portion only of this plain belongs to Brazil—the country extending along the west declivity of the north branch of the Serra Paricis on both banks of the Rio Guaporé. A few scattered hills rise on the plain to a moderate elevation, and are separated by extensive level tracts, mostly covered with high forest-trees, and here and there intersected by a few barren districts without trees and with little vegetation.

The *Rio Guaporé*, called also Itenez, rises (14° 30' S. lat.) in the Serra dos Paricis, about 100 miles north-east of Matto Grosso, and at first runs south parallel to the Rio Jaurú, a tributary of the Paraguay. It then turns west and receives the waters of the Rio Alegre, a small but navigable tributary. In 1773 an unsuccessful attempt was made to unite this river by a canal with the Rio Agoapehy, which falls into the Jaurú. At the junction with this river the Guaporé turns to the north-north-west, and then to the west, where it is joined on the right by the large Rio Paraguay and the still larger Ubahy. At the confluence with the latter it turns north, and uniting itself to the Mamoré loses its name. The Guaporé runs more than 400 miles, and having only a few rapids and no cataracts is a navigable river.

The *Rio Madeira* is formed by the junction of the Rio Beni with the Mamoré (in 10° 22' S. lat.), which takes place about 100 miles below the confluence of the Mamoré with the Guaporé (in 11° 55' S. lat.). [BOLIVIA.] The Madeira runs in a north-east direction, with numerous windings, and falls into the Amazonas in 3° 24' S. lat., about 70 miles below Villa de Borba, after a course of upwards of 600 miles. After the junction of the Mamoré and Beni, it is 900 fathoms wide, and in its course in general preserves this width, with a considerable depth; its course however is interrupted by numerous cataracts. Below the union of the two principal rivers thirteen cataracts or rapids occur; and above it, in the Mamoré, five. They begin in 10° 37' with the Cachoeira da Bananeira, and terminate at 8° 48', with the Cachoeira de S. Antonio.

The north part of Brazil comprehends the greater portion of the plain of the Rio das Amazonas, one of the most extensive on the globe. This plain has been sufficiently described under AMAZONAS. It lies along both sides of that majestic river, from its wide mouth, near 50° W. long., to the confluence of the Ucayale, near 72° W. long., and consequently extends in this direction about 1500 miles. Elevations deserving the name of hills are rare, but the surface consists of a continual succession of extremely slight undulations, and to this peculiarity of its surface, joined to its tropical climate, it seems principally to owe the inconceivable luxuriance of its vegetation.

The tracts which skirt the banks of the river are generally low, and overflowed when the river rises. In many places the inundations are extended much farther inland by the channels which, in the dry season, bring down the water from the numerous lakes. But during the inundation these channels carry the water from the rivers to the lakes, and the low country in their vicinity is covered with water. All the tracts thus inundated are overgrown by an uninterrupted forest of trees of different size and species, with various bushes and underwood between them, and all these plants are tied together by numerous creepers, so that they form a vegetable wall, through which it is impossible to penetrate. The water-courses are the only roads which lead through this wilderness. That portion of the plain which is not

subject to inundations is likewise covered with interminable forests, but the trees are of more equal size, and without underwood, though here also the creepers are numerous. Occasionally some tracts of moderate extent occur, which are without trees, and covered with rich grass, intermingled with a few low hushes. Nothing however characterises this plain more strikingly than the incredible abundance of water. Brooks and ponds are of rare occurrence, for they enlarge immediately into rivers and lakes; and these rivers and lakes form along the banks of the larger rivers an interminable watery maze. This abundance of water, the softness of the soil, and the comparatively small inequalities of the surface, have made some phenomena common here which are rare in other countries. Such are the natural canals by which two rivers are united. Between the Madeira and the Rio Purus, its next western neighbour, two such natural water communications exist, at least 120 miles distant from one another. Others occur between other rivers. These natural canals unite also different river systems, as the Cassiquiare between the Orinoco and Rio Negro, and the canal of Cabuquera farther west, which, according to the information of the natives, unites the Uaupé or Uaupes, the principal branch of the Rio Negro, to the Guaviare, a tributary of the Orinoco. To the same peculiarities it is mainly to be attributed that many of the rivers, especially those running from the north to the Amazonas, send detached branches to the principal river, 100 miles and upwards before they entirely unite with it.

As to the rivers which drain this plain, we have already noticed the Tocantins, Xingú, Tapajos, and Madeira. To the west of the last, and nearly parallel to it, flow some considerable rivers: the Purus, the Coary, the Tefé, the Iurua, the Itahy, and the Hyabary or Yavary. These rivers, which run from 600 to 800 miles, have not been explored, and the country through which they flow is nearly unknown; but according to the information of the Indians it does not seem that they are interrupted by cataracts. The rivers which drain the plain on the north of the Rio Amazonas belong partly to the republic of Ecuador, as the Pastaza, the Tigre, the Napé, and Putumayo or Iça, and partly to Brazil, as the Yapurá or Yapura and the Rio Negro. About 100 miles from the mouth of the Yapurá begins the canal of Avatiparaná, which lies from north-east to south-west, and joins the Rio Amazonas nearly 200 miles above the mouth of the Yapurá. In this canal the water flows from December to June north-east from the Rio Amazonas to the Yapurá, and from June to August south-west from the Yapurá to the Rio Amazonas. The large island formed by this canal and the rivers is traversed by other canals, which are subject to a similar change of current. The *Rio Negro* originates in a swampy country about 2° 30' N. lat., and 70° 30' W. long., and runs first north-east and afterwards south-east about 200 miles, when it is joined by the canal of Cassiquiare, which comes with a rather rapid course from the Orinoco. Hence it runs with numerous windings nearly due south till it is joined from the west by the Rio Uaupé or Uaupes, which rises in one of the eastern branches of the Andes, and flows in a generally eastern direction for nearly 500 miles before its junction with the Rio Negro near the equator, between 67° and 68° W. long. From this junction the Rio Negro flows first east and then south-east, presenting in this part of its course rather the appearance of a succession of lakes united by comparatively narrow channels than that of a river. It sometimes enlarges to 12, 15, or even 20 miles in width, and sometimes narrows to a mile or a mile and a half; its current is generally very slow and not disturbed by rapids. Above 200 miles from its mouth it is joined by the Rio Branco, whose principal branch, called Uraricoera, originates in the Serra Parime, at no great distance from some of the branches of the Orinoco, and flows east till it joins another considerable branch, the Tacutú, which rises near the sources of the Rupunuri, a tributary of the Essequibo, and flows a considerable distance north parallel to the Rupunuri. The Tacutú afterwards turns south by a bold bend and joins the Uraricoera. Both branches have probably a course of more than 200 miles before their junction. The united river called Rio Branco, runs about 400 miles in a south direction, and has only a few rapids; cataracts however occur in the Tacutú. About 50 miles below the mouth of the Rio Branco, a canal branches off from the Rio Negro called Carapuhuanu, which lies in a south-west and south direction, and passing through the Lake of Cudaya, sends its waters to the Rio Amazonas by the Cudaya canal, about 100 miles above the principal mouth of the Rio Negro. The whole course of this river may be from 1200 to 1400 miles.

No large rivers traverse the north plain east of the Rio Negro. The Oriximina, or Rio das Trombetas, and Gurupatuba are the most considerable. The great plain of the Rio das Amazonas, which even on its extreme borders hardly anywhere exceeds the elevation of 600 or 700 feet above the sea, and extends on both sides of the equator, differs in climate considerably from other tropical countries. The dry and rainy seasons are here not so distinctly marked as in Asia or Africa; nearly every day exhibits both. The nights are cloudless, but between nine and ten o'clock clouds begin to appear on the horizon, and in the afternoon rain falls, frequently in torrents accompanied by thunder and lightning and sometimes by fierce hurricanes. The rains however are less regular and abundant from August to October. They increase during the month of November and are accompanied with more violent thunder-storms; the rains generally

continue in equal abundance to the end of March. Frequently however they are interrupted by a drier season in January and February, which is called *veranico* (fore-summer), and then they continue more abundant to April and May. The east wind is by far the most prevalent. The trees are never without leaves; for while they are shedding the old ones, new ones are already forming. Most of the trees and plants, especially those which are peculiar to a tropical climate, bloom between November and March, and bear fruit between June and September.

All the rivers traversing the plain inundate the adjacent low tracts of marshy land, but the inundation does not take place in all of them at the same season. [AMAZONAS.]

On the north of the Rio das Amazonas, the plain extends to Macapá, opposite the island of Caviana, which lies in the principal embouchure of the river; on the south it includes the lower course of the Rio Tocantina, and extends to the series of hills which run at a distance of about 50 miles from its banks on the east parallel to its course. To the east of these hills lies another and more novel plain named after the Parnaíba, the largest of the numerous rivers by which it is watered. It measures from north to south upwards of 600 miles, and from west to east more than 400 miles. Its surface rises frequently to hills of some hundred feet elevation, which spread out into spacious table-lands. The south portion of the plain, which is more level, is covered with fine soft grass, interspersed here and there with bushes and a few high trees. This district is well adapted for the rearing of cattle. The north part has a much greater portion of high trees, but they form forests of only small extent, which are separated from one another by large plains destitute of trees, overgrown with grayish high grass and a few bushes. The lower districts of this part are favourable to the growth of cotton, the soil being rather dry and sandy. The climate of this plain is hot; the thermometer rises in summer above 100° and sometimes to 110°. The rains begin in October, and increase gradually to February, when they are most abundant; they terminate early in May.

The Parnaíba originates in the most southern angle of the plain, near 10° S. lat., and traverses it in a diagonal line from south-west to north-east and north. Having no falls and only a few rapids, it is navigated by vessels of from 15 to 40 tons to its junction with the Rio das Ilhas, up to which place the European settlements on its banks are numerous. It empties itself into the sea by five mouths, the most remote of which are 30 miles apart. But as these mouths are not more than 2 to 4 fathoms deep, only vessels of moderate size can come up to the town of S. João de Parnaíba. Its whole course is nearly 600 miles; and, with the exception of the Francesco, it is the largest river that enters the sea between the Rio de la Plata and the Amazona.

The eastern boundary of this plain is formed by the Serra Ibiapaba or Ilybiapaba, from which extends east the mountainous country that forms the projection of Brazil and terminates with the capes of St. Roque and Augustinho. It resembles, in some respects, the table-land of Brazil; but the mountain plains are of less extent, and the valleys occupy proportionally a much greater part of the surface. Besides this, the tops of the mountains and their declivities are clothed with trees, while the low tracts are covered only with coarse grass and low bushes. Numerous rivers traverse this country, but their course is comparatively short; they have also very little water, and are, consequently, not well adapted for navigation. Though the weather is more changeable here than in other parts of Brazil, it rains less; the rainy season begins only in January and terminates in April. In this season vegetation is vigorous and rapid, but from August to December the country resembles a dusty desert. Sometimes, and as it appears in decennial periods, there is no rain at all, and then both men and animals die of hunger and thirst.

Cape Augustinho (Augustin) in 8° 20' 41" S. lat., and 34° 58' W. long., is one of the most eastern points of Brazil. About 300 miles from this cape, the great equatorial current, which traverses the Atlantic near the line, divides into two branches, of which the northern and by far the larger part runs along the north coast of Brazil to the mouth of the Rio das Amazonas, and hence along Guyana to the West Indies. This, called the Guyana current, combined with the trade-winds, which along these shores constantly blow from the east, renders the voyage from the northern parts of Brazil along this shore to the provinces south of Cape Augustinho so tedious, that it was, before the establishment of the mail steamers, more easy for the inhabitants of this part to communicate with Europe and North America than with the southern provinces of the empire. The south branch of the equatorial current is called the Brazil current; the character of these currents and of the monsoon connected with them is fully described under ATLANTIC OCEAN.

Agriculture, Productions, &c.—The climate and soil have been noticed in describing the several great natural divisions of this vast country. The cultivated lands in Brazil bear a very small proportion to the whole surface, but the proportion of cultivated land is steadily increasing. Except in the vicinity of the larger towns, the farms occur at great distances from one another, even in the neighbourhood of the sea, and still more so farther inland. They are nearer one another in the east district of the table-land of the Paraná, about S. Paulo in the mining district near Villa Rica, and along the river

Parnaíba in the provinces of Piauí and Maranhão. Agriculture is still generally carried on in a very rude manner.

The aborigines of Brazil were not entirely unacquainted with agriculture, but it was limited to a few articles. They planted maize, bananas, aipis (*Manihot aipi*, Pohl), mandioc, and capsicum. Since the arrival of the Europeans and Africans the cultivated plants have largely multiplied, but still the cultivation of those which were grown by the aborigines is the most extended. The mandioc, of which different species are cultivated (*Jatropha manihot*, Linn.), is grown in every province except that of Rio Grande do Sul. Maize is grown all over the country. In low and hot places the milho cadete, a species with smaller grains, is commonly cultivated; it yields 20-fold. The milho do sorra, with larger whitish grains, is grown in the valleys of the table-land, especially in Minas Geraes, and yields 150-fold. Two crops are annually got, one in September and the other in May: the first is the most abundant. Rice is extensively cultivated on the plains as well as on the mountains, but especially in the provinces of Maranhão and Pará. The cultivation of wheat has been attempted in different districts, but not with much success, except on the table-land of the Paraná and the plains of Rio Grande do Sul, whence considerable quantities are brought to Rio Janeiro. The banana is cultivated in the low plains and valleys along the coast and in the plain of the Amazonas. Potatoes succeed in Rio Grande do Sul and in Minas Geraes; and sweet potatoes succeed wherever there is a good sandy soil. The cara, a root similar to the sweet potato, and superior in flavour, is less productive. The inhame (*Phoenix dactylifera*, Linn.) is likewise cultivated for its root, which, as well as its leaves, is eaten by men and pigs. Various kinds of beans are also cultivated.

The vegetables of Europe do not generally succeed well, being often destroyed by the ants and other vermin; leeks however are an exception. None of the trees or plants cultivated in Europe for oil are found in Brazil. The inhabitants cultivate the sesamum (*Sesamum orientale*), which was brought from the East Indies, and different kinds of the castor-oil plant. Lamp-oil is got from the fruit of a forest-tree called andiroba (*Carapa gujanensis*, Aubl., *Xylocarpus*, Schreb.), which is common in some districts, especially in the plain of the Amazonas. A species of palm (*Encarpus distichus*, Mart.), which gives an excellent oil for the kitchen, grows on the north coast. The coca-plant (*Erythroxylum coca*), which is used by the aborigines as a narcotic, is cultivated on the banks of the Yapurá, as in Peru. The maté-plant, which produces the tea of Paraguay, is a shrub which is cultivated in the provinces of Rio Grande do Sul and of S. Paulo.

Coffee, which was introduced into Brazil about seventy years ago, is now grown in most of the maritime provinces, more especially in Rio Janeiro, the southern districts of Minas Geraes, and in Bahia, and its culture is extending every year. The sugar-cane is most extensively grown in Bahia and along the banks of the Rio S. Francisco; in other districts of Brazil the cultivation of the sugar-cane is less attended to, but from most of the maritime provinces a certain quantity is exported. The growth of cotton has increased very largely. It may be grown as far as 31° S. lat., but is only cultivated to any great extent from 15° S. lat. to the equator. In Pernambuco the cotton is gathered in July and August, in Maranhão in October, November, and December. On the banks of the Amazonas there are two trees, the mungaba and the samauma (*Eriodendron samauma*, Mart.), which produce a kind of cotton that is used to make felts and mattresses. Tobacco is less cultivated than formerly; but considerable quantities are still exported to Africa and to Europe. The best is grown in the Reconcave of Bahia, especially at Cachoeira and S. Amaro. Indigo was formerly much grown, but the cultivation has almost entirely ceased; little is exported, and that is of inferior quality. Ginger and the curcuma were once cultivated and exported from the north coast, but both articles are now neglected. In modern times the pepper-tree, the cinnamon-tree, the clove-tree, and the muscat-tree have been planted near Rio Janeiro and Pará, and the three first seem to succeed at Pará. The first trial with the tea-tree failed at Rio, but the plant is now cultivated successfully in the Botanic Garden at Ouro Preto, where several acres are devoted to its growth. A considerable quantity of tea is manufactured, and sells in the market for about the same price as that imported from China. Tea-plantations have also been formed in several places in the province of San Paulo.

The immense forests which cover the plain of the Rio das Amazonas supply various articles of export. Cacao is gathered very extensively, as well as cloves, cinnamon, vanilla, sarsaparilla, caoutchouc, Brazil-nuts, and different balms, as copaiba and copal. What most strikes the attention of the naturalist in these vast forests is the great diversity of vegetation which they contain. In the words of the most recent traveller, Mr. Wallace, "The forests of the Amazonas are distinguished from those of most other countries by the great variety of species of trees composing them. Instead of extensive tracts covered with pines, or oaks, or beeches, we scarcely ever see two individuals of the same species together, except in certain cases, chiefly among the palms." ('Travels on the Amazon,' p. 436.) The forests on the coast produce different sorts of timber, and woods for the making of furniture and dyeing. The fruits of Europe which succeed best in Brazil are figs, oranges, pomegranates, quinces, and a small sort of lemons. Vines bear abundantly in the neighbourhood of Bahia as

well as in the plain of the Rio das Amazonas, and produce ripe grapes twice a year, in June and in December. Pine-apples are sometimes found wild in the forests near Pará, but they are cultivated in the districts north of 30°, and near Pará attain an extraordinary size, with an exquisite flavour.

About a hundred varieties of palms are found in Brazil. They abound in the northern provinces, and perhaps every one of the numerous species may be applied to some useful purpose. The most useful is the coco-palm (*Cocos nucifera*, Linn.), which is common along the coast between 10° and 20° S. lat., and principally valuable on account of the 'cairo' or outer part of the fruit, of which ropes of great strength are made. The Coco de Denté, or oil-palm (*Elæis Guineensis*, Linn.), which has been brought from Africa, grows not only like the coco-tree on the coast, but also to a considerable distance from the shore, and yields an oil which is used for lamps and culinary purposes. The leaves of the piaçaba-palm (*Attalea funifera*, Mart.), which grows wild between 10° and 20° S. lat., are an excellent substitute for hemp, which does not succeed in these parts of Brazil. Cables made of these leaves are much preferred to those made of cairo, being three times as strong.

A singular feature in the vegetation of Brazil is the leafless parasite plants. "They are all comprehended under the general name of 'timbo'; they serve for basket-work, and are beaten into tow. Their juice is used in tanning: being bruised and cast into the lakes and rivers, they stain the water with a dark colour, and intoxicate or poison the fish. These plants twist round the trees, climb up them, grow downwards to the ground, take root there, and springing up again cross from bough to bough and tree to tree, wherever the wind carries their limber shoots, till the whole woods are hung with their garlanding, and rendered almost impervious. The monkeys travel along this wild rigging, swing from it by the tail, and perform their antics. This vegetable cordage is sometimes so closely interwoven that it has the appearance of a net, and neither birds nor beasts can get through it. Some are as thick as a man's leg, their shape three-sided, or square or round; they grow in knots or screws and every possible form of contortion. Any way they may be bent; but to break them is impossible. Frequently they kill the tree which supports them; and sometimes they remain standing after the trunk which they have strangled has mouldered in their involutions." (Southey.)

Of the native vegetation of so extensive a country as Brazil it is impossible to give any exact idea without going into numerous details for which this is not the place. Those who are desirous of making themselves acquainted with this subject will find the most valuable though still very incomplete sources of information to be the following:—Auguste de St. Hilaire's 'Voyage dans l'intérieur du Brésil'; the 'Travels' of Martius and Spix, and of Prince Maximilian of Wied Neuwied; the 'Pflanzen und Thiere des tropischen America, ein Naturgemälde,' of Dr. C. F. Ph. von Martius; the 'Aperçu d'un Voyage dans l'intérieur du Brésil, la Province cisplatine et les Missions dites du Paraguay,' by Auguste de St. Hilaire, published in the 'Mémoires du Muséum,' vol. ix.; Gardner's 'Travels in the Interior of Brazil'; and Wallace's 'Travels on the Amazon and Rio Negro,' 1853.

As so small a proportion of Brazil is cultivated, and by far the greatest part consists of extensive plains, very thinly wooded and frequently without trees, the pastures are extensive, and one of the principal sources of wealth is in the domestic animals. The best pastures are to the south of 20° S. lat., in Rio Grande do Sul, San Paulo, and the southern districts of Minas Geraes. The herds of horned cattle are here immense, and their produce, consisting, besides live stock, of hides, jerked beef, tallow, horns, and horn-tips, is exported in great quantities. As soon as the animals are skinned the hides are spread on the ground, slightly salted, and dried in the sun. The flesh is cut into thin slices, salted, and dried in the air. Thus prepared it is called 'Carne seca do Sertão,' 'Passoca,' or 'Carne charquada,' and is carried from the southern provinces to the northern, where it is consumed by the poorer classes, and especially by the negroes. Butter is made in San Paulo, and cheese in Minas Geraes, but neither is good. By far the greatest part of the cattle live nearly in a wild state, and are not milked. Cattle-hair is exported from Rio Grande do Sul.

Horses are numerous in the southern provinces, but less so in San Paulo than in Rio do Sul. The number annually exported to the north is vaguely estimated at about 50,000 head. They are of a middling size, from 12 to 14 hands high, but strong, lively, and swift. Those reared in Espirito Santo, and called 'Campos' horses, are beautiful animals, and last longer. Even near the equator, in the province of Pará, good horses are reared. Mules are only reared in the southern provinces, but in great numbers. The sheep are in little repute, the meat being ill-flavoured and the wool of indifferent quality. Goats are more numerous, and kept for their milk. Hogs are kept in great numbers. Monkeys are among the wild animals used for food by the Indians. A great number of monkeys live in the forests along the Amazonas, where Spix observed twenty-five different species, some of very small dimensions, and there are doubtless several other species.

Other wild animals, many of which are used for food, are different species of the anta or tapir, the porcupine, the nasca, deer, the Brazilian hare, armadillos, the great and small ant-eaters, several kinds

of sloths, didelphyss, pacas, and agoutis, and the wild boar. Besides these there are hyaenas, jaguars, ounces, tiger-cats, coatis, squirrels, rats, &c., and two or three kinds of bats, the vampires and the *quadrira*, which stick to domestic animals in the night-time, and suck their blood. Of birds Brazil possesses a wonderful variety. The largest bird is the American ostrich or emu, which is found in numerous flocks on the table-land, and is caught for its flesh and eggs as well as for its feathers, of which different articles are made, as fans, &c. Among birds of prey the king-vulture and the harpy-eagle, which are found in the whole district of the lower Amazonas, are the most remarkable; there are also many varieties of eagles, hawks, kites, and owls. The other birds are more remarkable for the beauty of their plumage than their voice. The most beautiful are the toucans, the tanagras, the numerous species of the parrots, chattering, and ravens of different colours, as also the Balearic crane, different shrikes, kingfishers, wood-peckers, and humming-birds. Many varieties of birds are suitable for food, and especially the different kinds of pigeons, which are caught by stepping grain in the poisonous juice of the mandioc-root.

The numerous lakes at the southern extremity of Brazil in the province of Rio Grande do Sul are at certain seasons covered with water-fowl, especially geese and ducks; this is still more the case with the numerous lakes in the plain of the Amazonas, where the Indians kill great numbers of storks, cranes, ducks, &c.

Fish must be considered as one of the most important sources of wealth to Brazil. Whales, which in the southern hemisphere approach much nearer to the equator than in the northern, and come as far as 15° S. lat., formerly yielded considerable profit, but this branch of industry has much declined. Farther south, on the coast of Rio Grande do Sul, the *Physeter macrocephalus* (Linn.) is frequent, and yields spermaceti in abundance. Among the fish caught along the coast the garopa is the most important. It attains the length of from 12 to 20 feet, and is very well tasted. It is most abundant along the shores of the province of Bahia, where great quantities are annually caught and exported. But the quantity of fish in the Amazonas and its large tributaries as far up as the cataracts is truly astonishing. Mr. Wallace found 205 species of fish in the Rio Negro alone, and these he says he is sure "are but a portion of what exist there." It is to be observed, too, that most of the fishes of the Rio Negro are different from those found in the Amazonas; indeed "in every small river and in different parts of the same river distinct kinds are found." In many places the inhabitants, Indians as well as European settlers, gain a considerable portion of their subsistence by fishing, in which the Indians display much ingenuity. The larger fish are salted and dried, and in this state consumed by the lower classes; from the smaller fish oil is extracted. The largest species are the pirarucu (*Sudis pirarucu*, Spix), which for size and quantity may be compared with the cod of our seas, and the pirarara (*Phractocephalus bicolor*, Agass.). The dolphiu (*Delphinus Amazonicus*, Spix) is not found towards the mouth of the Amazonas, but occurs farther up the river. It is from seven to eight feet long, and is caught by the natives for the oil which is extracted from its fat; the flesh is hard and has a disagreeable taste. The lamantiu or manati (*Manatus Americanus*, Cuv.) was formerly found even in the smaller rivers along the coast between Rio Janeiro and Maranhão. It is now sometimes seen in the Rio do S. Francisco, but is common in the Amazonas and its northern larger affluents. From its resemblance to an ox it is called by the Portuguese peixe-boi (ox-fish), and by the Spaniards vaca marina (sea-cow). In the Rio Amazonas, according to D'Orbigny, it is sometimes 20 feet long, and weighs from 70 to 80 cwt. One fish often yields 480 or 500 gallons of oil, and its flesh, which resembles fresh pork, is excellent. Mr. Wallace, however, states that he saw none exceeding seven feet in length. Sausages are made of it, and sent to Portugal as a delicacy. It is a very peaceful animal, and rapidly decreasing in numbers. Its greatest enemy is the alligator, of which there are several species in the rivers and lakes of Brazil.

There are several species of turtles in the Rio Amazonas, but that called *Tartaruga graude* (*Emys Amazonica*, Spix) is most common. Its flesh generally weighs from 9 to 10 lbs. The farms in the neighbourhood of the river have places well fenced, in which they are kept and killed as they are wanted. On some sandy islands of the Rio Amazonas, as well as the Madeira, Rio Negro, and Yapurá, the turtles lay their eggs when the water is lowest: the eggs are gathered, broken, and by means of a slow fire reduced to a fat substance, called 'Manteiga de Tartaruga,' which is extensively used all over Brazil. About 20,000 pots of this fat, each containing 60 lbs., are annually made, and several thousand persons are occupied in its preparation.

Snakes are common in Brazil, and some are of great size, but the number which are poisonous, according to Freyreiss, is not very large. Lizards are very numerous.

The insects of Brazil are remarkable for the beauty of their colours, and their size, especially the butterflies, in respect to which Brazil is unrivalled both as regards numbers and beauty: Mr. Bates obtained 1200 species in the valley of the Amazonas. Some of the insects are very destructive to fruits or furniture, as the ants, of which one species is fried and eaten as a delicacy. The variety of *Coleoptera* is very great; but with the exception of the extraordinary harlequin-beetle and the gigantic *Prioni* and *Dynastes*, they are generally of small size and

little brilliancy of colour. Persons, more especially Europeans, who have just arrived in Brazil, suffer much from mosquitoes, sand-flies (*Pulex penetrans*), and some kinds of *Cnecops*. The scorpion, which sometimes attains a length of six inches, the scolopander, and some kinds of caterpillars, especially those of the family of *Bombyces*, cause swellings and excessive pain.

The domesticated bee of Europe is not known in Brazil; but Martins has enumerated more than thirty species of wild bees, nearly all of which are without stings, and it is supposed that some of them could be domesticated. Gardner, however, during his four years' travels in Brazil, only saw one attempt made to do so, and that was by a Cornish miner in the Gold District. In the province of San Paulo the nopal-tree grows, and the inhabitants collect cochineal. Several attempts have been made to introduce the silk-worm, but hitherto we believe without success.

The mineral wealth of Brazil is considerable. Gold is found on both sides of the Serra dos Ventos, from the Serra de Mantigueira to the north branch of the Serra dos Parisis, for a distance of about 200 miles, but farther on the north than on the south side. It is found, more or less, in almost all the rivers which form the upper branches of the Francisco, Tocantins, Araguay, and Guaporé, but by far the greatest quantity has been collected in the affluents of the Francisco. The greatest quantity has been obtained by washing the sand from the bed of certain rivers, or the alluvial deposit on their banks. It is only in comparatively recent times that attempts have been made to work the mines in the mountains. Before the beginning of the last century the quantity of gold obtained was inconsiderable, but it increased rapidly. The greatest quantity was found between 1753 and 1763, and from that time it continued to decrease, mainly owing to the better portion of the auriferous sand having been exhausted, and to the amount of capital required to work the veins in the mountains on a regular system. British capital has within the last few years been employed with considerable success, and the mines at Congo Soco, near the Villa de Sabará, on the banks of the Rio das Velhas, a tributary of the Rio de S. Francisco, at Coceas, at Morro Velho, and elsewhere, are the result of British enterprise. Iron is very abundant: in some places, as at Minas Geraes, there are whole mountains of ore; according to St. Hilaire, it may be regarded as inexhaustible, but up to the present time it has been worked on an extensive scale only in two or three places. Copper was once worked to a considerable extent. No silver has been found, and only slight indications of tin and quicksilver. Platinum occurs on the banks of the Rio Abaceté, a tributary of the Francisco, and in some other places. Lead and cobalt are more common. Arsenic, bismuth, antimony, and manganese are found.

No country probably is richer in diamonds than Brazil, but hitherto they have only been found in the rivers. The most western streams in which diamonds have been discovered are some of the upper branches of the Paraguay. The diamond district, of which the Cidade Diamantina is the centre, or the district of Tejuco, where by far the greatest quantity of diamonds has been found, is situated under 18° S. lat., and comprehends both sides of the Serra de Espinhaço. It is traversed by the Rio Lequetinhonha, an upper branch of the Rio Belmonte; the small rivers of the western part of the district fall into the Francisco. In this district about 10,000 persons are dependent upon the collection of diamonds. The searching for stones, formerly a monopoly of the government, is now free to all. To the south-west of this district, on the Abaceté and Indaia, both of which join the Francisco on the left bank, between 18° and 19°, there is another diamond district, in which some of the largest diamonds known have been found; but the search here has been long abandoned. In the plain of the Rio Paraná diamonds are found in the Tabagi, which falls into the Paranapanema, a tributary of the Paraná. The value of the gold and diamonds of Brazil has however become inconsiderable compared with its other products. The yellow topazes found near Villa Rica are much esteemed. Amethysts and other precious stones are found in Minas Geraes.

Brazil could not maintain its immense stock of cattle if the people were obliged to buy salt, without a supply of which the animals will not thrive. The table-land does not contain rock-salt, but a great number of small patches occur on the surface covered with a salt efflorescence, which the cattle lick up. These patches, which generally do not exceed a few square yards, double the value of an estate. In other places salt-springs occur, and serve the same purpose. There are also salt steppes, which resemble those on the high land of Iran in Asia. Two of them are very extensive; one runs, on both sides of the Francisco, between 7° and 10° S. lat., from the Villa de Urubá to the Villa de Ioaçairo, with an average breadth of from 80 to 100 miles; the other is situated near the western boundary of the empire, between the Paraguay and the Serra de Agaçopy, beginning on the banks of the Jurua, and extending in a south-western direction for a great distance. In both districts the surface is slightly undulating, and the salt which appears on the surface after the rains is extracted by washing the earth, and leaving the water to evaporate. In some places, along the Francisco and in the province of Ceará, large caverns occur, the soil of which is impregnated with saltpetre. In other places, more especially on the Rio de Lequetinhonha, alum is found in abundance.

Inhabitants.—The inhabitants of Brazil consist of aborigines and of foreigners, who have settled here in the last three centuries. The aborigines are divided into a great number of tribes, but they so far resemble one another in figure, complexion, and habits, as to appear to belong to the same race. They are of a middling size and of slender make. Their complexion is a shining light copper colour, which sometimes passes into a yellowish-brown; their hair is black, lank, and rough, their eyes are small, dark brown, and placed a little oblique; their cheek-bones are prominent. All these characters indicate a resemblance to the race which inhabits the eastern parts of Asia. They have little hair on the chin. It is remarkable, that though these tribes agree so well in their external characters, they have all a different language, even if a tribe consists of only a few families, which is sometimes the case. It is true that most of these languages contain some common roots, but the relationship is not so close that one can be easily understood or learned because another is known. These tribes are still in a very low state of civilisation, but they are not unacquainted with agriculture, and with scarcely an exception cultivate the ground and plant the two kinds of mandioe, bananas, and a species of palm-trees. They have likewise divided their hunting-grounds, and marked these divisions by boundaries. Still they derive the greater part of their subsistence from the chase, the wild fruits of the forest, and from fishing. In some tribes the men and women go naked, in others the women have some clothing. The number of these savage tribes probably exceeds 200; many of them, however, consist of only one or two families. This is particularly the case with the tribes in the plain of the Amazonas to the north of the river, where the people live in a completely isolated state, and at great distances from one another. To the south of that river the tribes are much more numerous, and often consist of several thousand individuals.

All the aborigines, who lead an independent and roving life, are called in Brazil Indianos Bravos, or Genticos, in contradistinction to the Indianos Mansos (Domesticated Indians), who have settled among or in the neighbourhood of the Europeans. Of these domesticated Indians, there is a very considerable number, especially on the coast. They were brought together by the Jesuits, and induced to settle in villages, called in Portuguese aldeas, where they were accustomed to agricultural labour. But on the suppression of that order, the Indians left their abodes and returned to the woods, where they now cultivate a piece of ground, hardly sufficient to give them a bare subsistence, and employ their time chiefly in fishing and hunting. Their huts are better than those of the savage tribes, and they profess Christianity.

The foreign settlers are either Portuguese, or negroes from Africa who have been brought over as slaves, and for the most part are still in a state of slavery. The Portuguese and the negro have intermingled with one another, and with the aborigines. The descendants of Europeans and negroes are called Mulattos; those of Europeans and aborigines, Mameluccos; and those of the negroes and Indians, Caribocos. The offspring of the mulattos and negroes, who are called Cubras, are also very numerous. The descendants of the negroes are called in Brazil Creoles. The Mameluccos are valued for their quiet disposition and their honesty.

The whole population of Brazil is estimated at from four to five millions; but the different independent aboriginal tribes, which still possess more than half the surface of the country, are not included in this account. It is conjectured that the whites number less than a million; the negroes about two millions, of which number more than three-fourths are slaves; and the mixed races and Indians somewhat more; but, as we pointed out before, all the statements hitherto published respecting the population of Brazil, whether of the entire empire, of the several provinces, or of particular towns, are mere estimates, and generally founded on very insufficient data.

Political Divisions.—Brazil is divided into nineteen provinces, of which fifteen are situated along the coast, and four in the interior. Along the coast, beginning from the south, are the following provinces:—

1. S. Pedro do Rio Grande do Sul comprehends the sandy plain that stretches along the shore from the boundary of the republic of Uruguay to the Rio Mambituba, a small river which enters the sea south of the Morro de S. Marta, and also the whole country between this plain and the Rio Uruguay. This province is rich in cattle and horses, produces the grains of Europe, and rice, as well as most European fruits; vines also succeed very well. In the most northern districts along the Rio Uruguay there are a few feeble tribes of independent Indians. S. Pedro, the only harbour of this province, is situated near the mouth of the Rio S. Pedro, and is formed by a sandy tongue of land. As vessels cannot approach near the town of S. Pedro which contains nearly 4000 inhabitants, and carries on an active trade with Rio Janeiro, they remain at a place called S. José. *Porto Alegre*, the capital of the province, situated on a bay formed by the Rio Jacuhy, is well built, and contains an hospital and several schools. The population in 1845 was about 10,000.

2. S. Catharina comprehends the hilly country along the coast between the Rio Mambituba and the Rio Sahy, which separates it from S. Paulo, and also the island of S. Catharina: it lies between 29° 20' and 25° 50'. Here the grains and fruits of Europe are cultivated together with those of a hotter climate. There are some good

harbours on the coast, but the most frequented is that formed by the island of S. Catharina. The island of S. Catharina is above 30 miles long from north to south, and from 4 to 8 miles wide; its surface presents a succession of hill and dale, and a great part of it is covered with fine trees; it abounds with water, and has some fine lakes; the climate is temperate, and the air salubrious, so that it is sometimes resorted to by invalids. It is separated from the mainland by a strait, which in its narrowest part, where it is formed by two projecting capes, is not more than 200 fathoms wide. These capes divide the strait into two large ports, almost equal in size, and both very safe. The north and larger port is 10 miles wide, and deep enough for ships of war; it is one of the best ports in South America. *Nossa Senhora do Desterro*, the capital of the province, is on the west side of the island upon a bay, a little to the east-south-east of the narrowest part of the strait. It has about 4500 inhabitants, and contains the residence of the president of the province, an hospital, an arsenal, &c. Some small manufactures of linen and cotton cloth, and of pottery are carried on. Many spermaceti whales are taken in the strait, and the oil is prepared in several places of the island and the adjacent mainland. *Laguna*, population about 1000, on the continent, has a harbour for coasting vessels, and exports grain, timber, and fish, which abound along this coast. *S. Francisco*, near the boundary of the province of S. Paulo and on an island, has also a harbour for smacks, and exports grain and a great quantity of timber and cordage.

3. S. Paulo extends over the greater part of the plain of the Paraná, namely, that part of it which lies on the east of the Rio Paraná, and over the Campos da Vacaria, and the sea-coast from the Rio Sahy, to the bay called Angra dos Reys. On the table-lands cattle and horses are raised in great numbers, and grain, mandioc, and rice are cultivated and exported. On the coast, sugar, tobacco, cotton, and a little coffee are raised. The west districts, along the Rio Paraná, from the mouth of the Rio Tiete to that of the Iguaçu, are still in possession of independent tribes. This province has many harbours for coasting vessels, and some thriving towns along the coast. *Iguape*, population 7000, stands on a good harbour; it exports great quantities of rice and timber. *Santos*, the port of the town of S. Paulo, to which an excellent road leads over the mountains, is on the north side of an island called S. Vincente, in the Bay of Santos, and has a harbour capable of receiving men-of-war. It has 8000 inhabitants, and carries on a very considerable trade, especially in sugar. On the same island, but on the south shore, is the town of *S. Vincente*, population 600, the first establishment of the Portuguese in Brazil and long the capital; it is now only inhabited by fishermen. *S. Sebastião*, farther to the east, is on the strait of Toquic, which is more than 2 miles wide, and separates the island of S. Sebastião from the continent. The town has a harbour for coasting vessels, 3000 inhabitants, and exports timber and grain. Besides the capital, S. PAULO, which contains 12,000 inhabitants, there are four other considerable places in the interior, *Itu*, S. Carlos, Sorocaba, and *Corytiba*. *Itu*, or *Hitu*, on the Tieté, is the centre of the most fertile and populous district in the province. The town contains two churches, two convents, several schools, an hospital, &c., and with the surrounding district about 10,000 inhabitants. *S. Carlos*, formerly *Campinas*, is a large town situated on the border of the plains, and is a principal station of the muleteers and others carrying on the intercourse between the coast and the interior: population about 5000. *Sorocaba*, situated on a hill to the west of S. Paulo, has 10,000 inhabitants, and considerable trade in cattle and grain. Coffee and tobacco are cultivated to some extent in the vicinity. In its neighbourhood is the Morro de Arasoçaba, which is several miles in circuit, and consists entirely of iron-ore. *Corytiba*, on the north skirts of the Campos da Vacaria, with the surrounding district, has a population of 12,000 mostly dependent on agriculture; some coarse woollens are manufactured: it sends the produce of that country to the coast.

4. Rio Janeiro, comprehending the coast between the western extremity of the bay, called Angra dos Reys, and the mouth of the Rio Cabapuána, extends from 50 to 60 miles inland. To it belongs the greatest portion of the Serra do Mar; and the Serra de Mantigueira stretches along its western boundary. It is mountainous, but contains also extensive valleys. The grains of Europe do not thrive in this province; but rice, mandioc, and maize are extensively cultivated. Coffee is raised to a greater amount than in any other province, and cotton is also largely raised. It has some excellent harbours, especially those of Rio Janeiro and of Angra dos Reys. The latter is formed by two islands, *Ilha Grando* and *Marumbaya*, lying in a parallel line with the coast, and contains some excellent roadsteads. Two of its three entrances are from 5 to 8 miles wide, with a depth of about 30 fathoms. The port-town of *Angra dos Reys*, on the mainland opposite the *Ilha Grande*, was once a more important place than at present. It contains three churches with convents attached, and about 3500 inhabitants. *Paraty*, near the mouth of the harbour of Angra dos Reys, is a small town, but is a somewhat busy place, being the port of the singularly fertile plains of Paraty-Merim, Bananal, and *Mambucaba*, from which are exported the finest sugar, coffee, and fruits. The town is regularly built, and contains three churches. Distilling is carried on largely. The town and suburbs contain nearly 10,000 inhabitants. This province does not contain any other considerable town except Rio Janeiro, the capital of Brazil. [RIO JANEIRO.]

5. *Espirito Santo* extends from the Rio Cabapuána to the Rio Belmonte along the coast, and from 60 miles to above 100 miles inland. Some districts are hilly, but the greater part of the province consists of extensive low plains. A small portion of it is under cultivation, and produces sugar, cotton, rice, mandioc, and maize in abundance. Fish abound along the whole extent of the coast. The west districts are occupied by the independent aborigines, among whom the *Botocudos* are distinguished by their bravery and cannibalism. Along the coast are the islands called the *Abrolhos*. There are some harbours, but only fit for trading vessels. *Victoria*, or *Nossa Senhora de Victoria*, the capital of the province, is on the west side of an island 15 miles in circumference, in the large bay of *Espirito Santo*, which is deep enough for frigates, and has safe anchorage. The town contains 6000 inhabitants, who carry on an active commerce in the produce of the country. *Caravellas*, the most commercial town of *Espirito Santo*, is opposite the *Abrolhos*, on the river *Caravellas*, which is only an arm of the sea extending 10 miles inland, of considerable width and very deep; but the entrance is only accessible to small vessels. The town, which contains above 3500 inhabitants, exports chiefly mandioc-flour, rice, and fish, the garoupa being taken in great numbers near the *Abrolhos* and the reef extending east of them. *Porto Seguro*, near the mouth of the small river *Buranhen*, is a considerable place, with a good but not deep harbour. The town-house was once a Jesuits' college; its church is one of the oldest in Brazil. Its inhabitants are principally occupied in the garoupa fishery.

6. *Bahia* extends from the Rio Belmonte to the Rio S. Francisco about 480 miles, and on the average about 200 miles inland. By far the greater part of its surface is mountainous. With regard to its climate and productions it may be divided into three districts of very unequal extent. The first, comprehending the southern coast up to point *Mutta*, or the Bay of *Camamu*, and extending inland about 90 miles, is called the *Beira-Mar*, and has an abundance of running water with a fertile soil, on which mandioc, rice, maize, sugar, cotton, and coffee flourish; but the climate is humid and unhealthy. In this part there are few European settlements. The inhabitants are mostly of the mixed races, but there are some native tribes. Rice is the chief article sent to Bahia. The *Beira-Mar* contains immense forests of valuable timber, as yet almost untouched by the woodman. The second district, known as the *Reconave*, lies north of the former; it extends round the *Bahia de Todos os Santos*, or *All Saints' Bay*, to *Cape S. Antonia*, and from 20 to 30 miles inland. The climate of the *Reconave* is healthy, the soil is fertile, and there is abundance of water; and these with its commercial advantages have rendered the *Reconave* the most populous district of Brazil. Villages and farm-houses are frequent, and there are between 20 and 30 small towns. The capital of the province, *BAHIA*, lies near the northerly entrance of the bay around which the district is situated. Between the entrances to the bay lies the island of *Itaparica*, which is 23 miles long from north to south, and 10 miles across in the widest part. The soil of the island is fertile; and it is planted with cocoa-palms, mangoes, jacks, vines, which bear three times a year, oranges, quince, and other fruits of the south of Europe. It has also a whale fishery, cord manufactories, and distilleries; and about 16,000 inhabitants, of whom nearly half live in and around the port-town of *S. Gouçalo*. The surface of the *Reconave* is hilly or gently undulating, with wide open plains, watered by the *Paraguaçu*, the *Itapicura*, the *Iaguaripe*, and several smaller streams. Great quantities of sugar, tobacco, and cotton are raised for shipment from Bahia. Rice, mandioc, and numerous fruits and vegetables flourish; and along the coast are whale and other fisheries. The third district, which is very different from the other two, consists of the mountains, and the *sertões*, or dry open plains on the backs or between the ridges of the mountains. These plains afford in ordinary seasons rich pasturage, but they are subject to occasional droughts which cause much mortality among the cattle. In the narrow valleys mandioc, fruits, vegetables, and some cotton are raised, and a few villages have been built; but the larger part of the district is only inhabited by Indian tribes. As has been seen, the soil of this province is extremely fertile, and a good deal of care has been bestowed upon its cultivation. The principal products have been enumerated. In indigeous trees and plants it is very rich. Timber trees affording wood of great beauty and value are very abundant, as well as those whose wood is used in dyeing. There are numerous palms, some of which attain a prodigious size: the cocoa-palm and the *passaiba*, the bark of which supplies cordage and cables, are among the most valuable. The *cashew-ut*, and the *nayha-tree*, which yields a sweet nut, are very abundant. Among mediæval plants are *ipeacuanha*, Jesuit's bark, *jalap*, *tamarinds*, *Brazil-root*, *curcuma*, and *betony*. Among trees producing gums are the *copal*, *dragon's-blood*, *mastic*, and *copaiba*. The metals once formed a considerable portion of the wealth of this province, but they are now of very little importance. Mines of gold, silver, copper, iron, and antimony exist, but they are not worked. Saltpetre occurs, but it is not collected. The capital, *BAHIA*, is noticed under its title. *Cachoeira*, on the *Paraguaçu*, is a busy and flourishing town situated in the midst of the chief tobacco district of the *Reconave*; some coffee is also grown in the neighbourhood. The population of the town and district is about 15,000. Near this town copper mines

where some were found; in one of which a piece 1660 lbs. in weight was found, being the largest piece of native copper ever discovered. *Maragogyppe*, in the valley of the Iguaçu, an affluent of the Paraguaçu, though but a small town is of some importance as the centre of the sugar district, which extends for five or six miles north of the town, and contains above 20 plantations. *Ilheos*, at the mouth of the river of the same name, was founded in 1535; it has a good deal of trade, and contains nearly 3000 inhabitants. *Niterói*, a town some miles south of Ilheos, has also some local importance. *Camamu*, at the mouth of the Bay of Camamu, population 2000, is a busy port-town; the exports are chiefly of timber and rice. *Jacobina*, on the left bank of Itapicuru, near its confluence with the Orua, is the centre of a busy agricultural district, celebrated for its tobacco: population together about 10,000.

7. *Serecipe del Rey* comprehends the country to the north of the river Rio Real, as far as the embouchure of the Francisco, and 140 miles inland. Its surface is a plain, with the exception of a few hills; but the west portion is considerably higher than the east, which is covered with forests, intermingled with patches of cultivated ground. The west country is generally stony, with few woods or fertile tracts, and is very deficient in water. It supplies only very indifferent pasture for cattle. In the east district the plantations of sugar, cotton, and tobacco are numerous. The harbours are formed by the mouths of the rivers, which are neither large nor deep. *São Christovão*, or as it is commonly called *Serecipe*, population 3000, the capital of the province, is situated near the river Paramopama, an arm of the Rio Vazabarrá, 18 miles from the sea: coasting vessels come up to the town. It has manufactories of sugar and tobacco, and some tan-pits. *Estancia*, population about 3000, 18 miles from the sea on the Rio Real, carries on an active commerce in the produce of the country.

8. *Alagoas*. This province has been already described. [ALAGOAS.] The present capital is *Maceió*, or *Matsayo*, the seat of government having been removed there from Alagoas. The town consists of a single street of white houses, ranged along the beach at the back of the harbour of the same name, which is formed by a coral reef, and affords good anchorage. The town contains four churches, a government house, a theatre, and about 6000 inhabitants. The chief exports are sugar, cotton, hides, and Brazil-wood, but the products of the province are chiefly sent to Bahia and Pernambuco for shipment. Some lace is made at Maceió.

9. *Pernambuco* consists of two parts, one on the coast, and the other on the table-land. The latter is distinguished by the name of *Sertão de Pernambuco*. The country along the shores extending between the river Una and Goyanna is in general flat, but farther inland it presents a succession of hill and dale, intermixed with some level grounds of considerable extent. Where it approaches the *Sertão* the surface is stony and sterile. The *Sertão*, which extends along the left bank of the Rio S. Francisco, between the province of Bahia and Goyaz, as far as the Rio Carinhenha, an affluent of the Rio S. Francisco (near 15° S. lat.) is a portion of the table-land of Brazil, and comprehends the greater part of the salt steppes already described. Other portions however afford excellent pasture for cattle, and on the banks of the river the plantations of cotton are increasing. Sugar and cotton, and other common productions of tropical climates are cultivated, and dye-wood is got in the forests, nearly 100 miles from the sea. Close to the mainland and about 30 miles north from Pernambuco city is the island of *Itamaracá*, celebrated for the fertility of its soil, its salt-works, and its fisheries. The island is about 20 miles long and 2½ miles broad; it contains two or three villages, several churches, a theatre, and about 8000 inhabitants. Vast quantities of cocoa-nut palms grow on the island; sugar, rice, and mandioc are also raised. The numerous harbours along the coast of Pernambuco are only adapted for small craft, except those of Catuama, Recife, and Tamandara. The port of Catuama is at the north entrance of the strait, which divides the island of Itamaracá from the continent, and near the north part of the coast. Recife is the harbour of the town of Pernambuco; and the port of Tamandara lies about 30 miles south-west of Cape S. Augustinho. The last named is the best, and capable of holding large vessels, being four and five fathoms deep at the entrance, and six fathoms within. Besides the towns of Recife and Olinda, which compose the town of Pernambuco, there is *Goyanna*, population 5000, at the junction of two rivers, 15 miles from the sea, which exports considerable quantities of cotton. It contains five churches, an hospital, and some other public buildings, and is the seat of civil and criminal courts. Some factories have been established here.

10. *Parnahyba do Norte* extends about 60 miles along the coast from the Rio Goyanna to the Bay of Marcos, and 210 miles at its greatest width from east to west. More than two-thirds of its surface have an arid soil and are not cultivated. The cultivated lands are in the vicinity of some rivers and on the mountain ridges, which are generally covered with trees and have a strong soil. The principal products are sugar, cotton, mandioc, maize, and tobacco, with excellent fruits. Its few ports can only receive small vessels; but from Cape Branco a reef extends nearly 18 miles north, between which and the beach there are nine and ten fathoms of water, in which vessels can ride in safety. *Parnahyba*, the capital of the province, popu-

lation 15,000, is on the right bank, 10 miles above the embouchure of the river of the same name, which, though about three miles wide at its mouth, allows ships to ascend only for three miles; nothing but smacks can come up to the town, the commerce of which is the produce of the province is considerable. In the town are government and other warehouses, the president's palace, the treasury, a handsome edifice, several churches and convents, an arsenal, and an electoral college.

11. *Rio Grande do Norte* extends along the coast from the Bay of Marcos to a range of hills called the Serra of Appody, by which it is separated from Ceará, and it runs 100 miles inland. Its surface is generally uneven and hilly; at a few places it rises into mountains; forests, however, are rare and of no great extent, but they produce very fine Brazil-wood. The climate is healthy; in general the soil is dry, and best adapted to the cultivation of cotton; but mandioc and maize are raised abundantly; the sugar-cane and rice are also cultivated. Along the Appody River near the boundary of Ceará and elsewhere, are several salt-lakes, from which great quantities of excellent salt are extracted. The few harbours of this extensive coast are not deep. *Natal*, population about 10,000, the capital of the province, is advantageously situated on the right bank of the Rio Grande, near two miles above its mouth. It has also an easy communication with the inland districts, the river being navigable for large barks near 40 miles. It carries on a considerable export trade in timber. The Island of Fernando de Noronha, 3° 30' S. lat., about 250 miles east-north-east of Cape S. Roque, belongs to this province. It is 10 miles long, generally hilly and stony, with a few small portions of land capable of cultivation. Convicts are transported here.

12. *Ceará* or *Seara* extends from the Serra Appody to the Serra Hibiapaba, which terminates between the rivers Camucim and Paruahyba. In hills not far distant from the sea, and separates it from Piauly. It is computed to measure from north to south above 300 miles. The surface of this province is generally uneven, but the valleys are wide and not deep; the elevations are not great, except towards the south and west boundary-line. The soil is in general sandy and comparatively unfruitful, except on the sides of the mountains, where it is rich and covered with forests. In the lower districts grain and mandioc are cultivated. Along the rivers cotton is grown. The district about the upper branches of the Rio Jaguaribe, the principal river of the province, is the most fertile and populous. Ceará is celebrated for its cattle, of which large numbers are reared. The chief exports of the province are hides, cotton, and dye-woods. The country often suffers much from long droughts. The descendants of the aborigines are numerous, especially in the less fertile districts. The shores, which in some parts are steep, in others flat and sandy, have no ports except for small coasting vessels. *Fortaleza*, formerly *Ceará*, population about 3000, the capital, is situated near the beach about 7 miles north-west of the mouth of the river Ceará. It has no harbour and very little commerce. There are few public buildings, but the town is said to be improving in appearance. *Aracaty*, on the Jaguaribe, 8 miles above its mouth, is the most commercial and populous town in the province. It contains four churches, and 5000 inhabitants, and exports cotton and hides in large quantities. The tide, which runs 30 miles up the river, facilitates the navigation. *Sobral*, not far from the bank of the Camucim, the second town in commerce and population, is about 70 miles from the sea. Its port is *Grauja*, on the left bank of the Camucim, 20 miles from the sea. *Icó*, situated on the plain east of the Rio Jaguaribe, or *Salgado*, is the most important town in the interior. It consists of three principal streets, and several smaller ones, and contains four churches and nearly 5000 inhabitants. It is the chief mart for the interior of the province.

13. *Piahy* has only a coast of about 60 miles between the Serra Hibiapaba and the mouth of the Rio Parnahyba, which river divides it from Maranhão; but it extends 400 miles inland to the source of that river. This province is only hilly on the boundary-line of Ceará and Pernambuco; it is particularly adapted to the breeding of horses and cattle, the pastures in the southern portion of the plain of the Parnahyba being extensive and excellent. Besides cattle and horses, cotton is exported, and, in addition to other grains, rice and mandioc are particularly cultivated. Silver, lead, and iron exist, but are not worked to any extent. Salt is found and manufactured largely. Independent tribes still exist in the south district, between the rivers Parnahyba and Gorguea. It has no port, except that formed by the east mouth of the Rio Parnahyba, called *Iliguassu*. *Ocyras*, the capital, is situated in a circular valley on the small river Mocha, which, 3 miles lower down, falls into the Caninde, a tributary of the Parnahyba. It is a small town with 3000 inhabitants, and contains the provincial house of assembly, three churches (two of them unfinished), a jail, hospital, barracks, and the ruins of the Jesuits' college. *Parnahyba*, population 3000, lies on the *Iliguassu*, the east and most considerable branch of the Parnahyba, 15 miles from the sea, and carries on an active trade in hides and cotton.

14. *Maranhão* comprehends the western portion of the plain of the Parnahyba, extending along the coast 350 miles from the western mouth of the Rio Parnahyba to that of the *Turyassu*, and nearly 400 miles inland. It is more hilly than Piauly, especially in the south districts, but towards the sea extremely productive in rice and

cotton, which are exported in large quantities. A considerable part of the province is still covered with the primeval forests which abound in valuable timber. Iron, lead, and antimony exist, but have not been turned to much account. The southern and central districts and most of the western, forming together perhaps half the province, are still occupied by independent tribes. It has some good harbours, the best of which are the bays of S. José and of S. Marcos, formed by the island of Maranhão, which is 20 miles long from north-east to south-west, and 15 miles in its greatest width. To the west of the Bay of S. Marcos, the shores are skirted by a series of small and low islands up to the Bay of Turyvassu, the limits of the province on the side of Pará. Besides the capital, S. Luiz de Maranhão [MARANHÃO], it contains two considerable places, Alcantara and Cachias. *Alcantara* stands on rising ground on the west of the Bay of S. Marcos; it has a port capable of receiving large coasting vessels, is a large well-built town, and carries on a considerable trade in the produce of the country. In the vicinity are several salt-works. *Cachias* is situated on the Itapicurú, where that river begins to be navigable for large barges, in a district which is productive in cotton. It was a thriving town before a rebellion which broke out in the province in 1839, during which it suffered severely, having been for some time in possession of the insurgents. Its population is now probably not above 6000.

15. Pará extends west from the Rio Turyvassu, nearly to the island of Tupinambara, along the south bank of the Amazonas; and farther to the south to the east banks of the Rio Madeira; thus comprehending a large part of the plain of the Rio das Amazonas, and also considerable portions of the table-land; nearly the whole of it is still in the possession of independent tribes, the European settlements being very small and at great distances from one another. They occur almost exclusively on the banks of the Rio das Amazonas, and at or near the mouth of its larger affluents. Cultivation is in a very backward condition, and millions of acres of the most fertile land in the world are left in their natural state. Rice, cotton, sugar, and hides are exported. One of the most important articles of export is caoutchouc, which is sold as it is obtained from the trees and manufactured into shoes. Cacao, sarsaparilla, cloves, Brazil-nuts, and various substances for dyes form considerable articles of export. The fisheries of the coast and the rivers afford employment to many persons. The capital PARÁ is situated on the Pará, a wide river formed by the confluence of the Tocantins with the Tagipurú or southern arm of the Amazonas. *Braganza*, population 5000, stands on the Caytá about 20 miles from the sea. It is an old town and a considerable place; the port is often resorted to by the coasting vessels which navigate between Maranhão and Pará. *Cameta*, or *Vizoa*, the most considerable town next to Pará, is situated on the left bank of the Tocantins, above 30 miles from its mouth. It has considerable trade with Pará and the province of Goyaz: with the surrounding district, which is remarkably fertile, it has nearly 20,000 inhabitants. *Santarem*, near the mouth of the Tapajós, is the depôt of the numerous articles of commerce collected in the forests around it and farther up the Amazonas; it is also visited by barges which navigate towards the country farther west: population of the town and suburbs 10,000. To this province belongs the island of Marajó, or Ilha dos Joannes, the largest island of Brazil, extending above 90 miles from north to south, and at least 120 from east to west. It contains about 10,000 square miles: the population is under 20,000. The north shores are washed by the sea, the west partly by the principal branch of the Rio Amazonas and partly by the canal of Tagipurú, which unites the great river to the Rio das Bocas, a fresh-water bay, at the eastern extremity of which the Tocantins has its embouchure. This bay and the Rio de Pará inclose the island on the south and east. Its surface is level, and its own numerous rivers, some of which have a course of 70 or 80 miles, inundate, in the rainy season, considerable tracts on the west and south side. About one-half of the island, consisting of that part which borders on the ocean and the Rio de Pará, is nearly without wood and pastured by great herds of cattle and horses or cultivated; the other half is covered with high trees and abundance of underwood.

16. Alto Amazonas is a new province formed out of those parts of the province of Pará and the former province of S. José do Rio Negro, which lie to the north of the Amazonas; it includes consequently the whole of Brazil north of that river, frequently called Brazilian Guyana. This wide tract is almost entirely occupied by independent tribes. The few European settlements only occur on the sea-coast and on the banks of the Amazonas and the Negro rivers. *Barra do Rio Negro*, the capital, is situated on the left bank of the Rio Negro, and contains with the suburbs about 6000 inhabitants. It has some trade in Brazil-nuts, sarsaparilla, coffee, cocoa, and tobacco, which are raised in the neighbourhood. *Macapa*, population 5000, is at the mouth of the canal of Braganza, the principal branch of the Rio Amazonas, opposite the archipelago of islands which that great river forms here. It is a considerable town with a fortress, and carries on an active commerce in the produce of the country. *Montalegre*, situated on a small island in the river Gurupatuba, 7 miles from its junction with the Amazonas, is a considerable place, and has some trade: the population of the island is about 4000. *Oydon*, formerly *Panzia*, population of the district 6000, is near the east mouth of the

Rio Oriximina, which joins the Amazonas. In this place, at the distance of about 700 miles from the sea, the Amazonas runs in one channel, about 900 fathoms wide, and up to this point the tide ascends. It has some commerce chiefly in cotton and cocoa. *Tabatinga*, on the Amazonas, situated near the boundary-line of Ecuador, is a very small place. The island of Tupinambara belongs to this province. It lies near the right bank of the Amazonas, east of the Rio Madeira, and is above 150 miles long. Between it and the mainland on the south is a large, deep, and navigable channel, called canal de Iriariá, into which many rivers empty themselves. When the Madeira is swollen, the current runs through this channel east; but in the dry seasons it runs partly in the Madeira, and partly to the Amazonas, by different mouths. The island is low and covered with impenetrable woods. Nearly in the middle it is divided by a narrow strait called the Furo dos Ramos, which unites the Iriariá with the Amazonas.

17. Matto Grosso (Great Forest) occupies the centre of South America. It comprehends the greater portion of the table-land between the Madeira and the Araguay, the tributary of the Tocantins, the portion of the plain of the Upper Madeira belonging to Brazil, the plain of the Paraguay, and the west portion of the table-land of the Paraná, up to the banks of that river. A great portion of the table-land north of the Serra dos Vertentes seems to be a desert of little value, of which the Campos dos Paricis are the worst part; and no Europeans are settled here. The table-land of the Paraná is better, and has extensive pastures; but it is still possessed by the independent Indians, more especially the Cajapos. But on the river falling into the Paraguay there are numerous European settlements, though they are generally small. Diamonds and gold are found in many places; which circumstance gave rise to the settlements, though the mines at present are poor or neglected. The low country on both sides of the Paraguay is mostly occupied by the Guaicurus. On the plain of the Upper Madeira, along the banks of the Guaporé, there are also many European settlements: gold abounds here; but the greater part of the country is possessed by independent tribes. *Cuyabá* was made the capital of the province in 1820 in place of Matto Grosso; it is situated near the banks of the Rio Cuyabá, an affluent of the Rio de S. Lourenço, which is a tributary of the Paraguay, and is noted for the quantity of gold which was found here in the beginning of the last century. *Cuyabá*, though the seat of the provincial government and an episcopal city, is in appearance merely a village of poor houses. It has about 3000 inhabitants. *Matto Grosso*, formerly *Villa Bella*, a considerable town, situated near the Guaporé, has 15,000 inhabitants; some important mines are in its neighbourhood. *Villa Maria*, on the east bank of the Paraguay, in a very fertile country, is a thriving town.

18. Goyaz occupies the centre of the Brazilian table-land, including the basin of the Tocantins to its confluence with the Araguay and the countries on the east bank of the Araguay, together with the hilly country on the Parnahyba, an affluent of the Paraná. European settlements are common only on some of the upper branches of the Tocantins and Araguay, where gold was found in abundance. There are a few small settlements along the Tocantins up to its confluence with the Araguay; but by far the greater portion of the country is in possession of independent tribes; among which the Cajapos on the Parnahyba and the Chevates between the Tocantins and Araguay are the most numerous. *Goyaz*, formerly *Villa Boa*, the capital, situated on the Rio Vermelho, an affluent of the Araguay, in a country rich in gold, contains the governor's palace, seven churches, and some other public buildings, and about 7000 inhabitants. *Nossa Senhora do Pilar*, a considerable place near the ridge which divides the affluents of the Tocantins from those of the Araguay, is in the neighbourhood of some rich gold mines. *Natividade*, a town 35 miles from the east bank of the Tocantins, population about 2000, is the most commercial place of the province: it sends its produce to Bahia. It contains four churches, but, as is so common in the Brazilian towns, they are, though old, unfinished.

19. Minas Geraes comprehends the east and, as it appears, most elevated portion of the Brazilian table-land along the upper course of the Rio de S. Francisco, together with the most northern part of the table-land of the Paraná. Almost every kind of metal is found in this province. It is rich in gold, iron, copper, and diamonds; lead, manganese, quicksilver, chrome, arsenic, platinum, bismuth, and antimony are also found. In iron the province is perhaps richer than any other part of the world. Gold is found, particularly in the upper branches of the Francisco and its two affluents, the Paroapeba and Rio das Velhas; the mines are chiefly worked by English companies. Diamonds are found in the Iquetinhonha and Abaeté. The countries about these rivers are well settled by Europeans, except the Abaeté; but a large portion of the province is possessed by Indian tribes. Topazes, aquamarines, garnets, amethysts, tourmalines, and chrysoberyls are found chiefly in Minas Novas. Coffee, sugar, cotton, maize, and tobacco are raised in considerable quantities, but the agricultural resources of the province are but imperfectly developed. Vast herds of cattle are pastured on the uplands. *Ouro Preto*, formerly *Villa Rica*, the capital of the province, is situated near the Serra Itacoluni, in the midst of mountains rich in gold: it has 8000 inhabitants. *Ouro Preto* is one of the best looking cities in the

interior of Brazil. In form it is compact: it has six churches, one or two of which are very handsome; the palace of the provincial government, a spacious and well-built edifice; a college, and other public buildings; and some of the private houses are of a superior class. In the vicinity is a botanic garden, in which several acres are devoted to the successful cultivation of the tea plant. *Marianna*, at no great distance farther to the east, has also considerable mines in its neighbourhood, and 5000 inhabitants, but has little business. It contains the residence of the bishop and a theological college. *S. João del Rey*, on a small river which unites with the Rio Grande, the principal branch of the Paraná, has about 5000 inhabitants. In its vicinity are some mines, but it derives more importance from the road between S. Paulo and Villa Rica passing through it. *Sabará*, on the Rio das Velhas, is a long dull town of about 5000 inhabitants; it contains several churches, the streets are wide and well paved, and some of the houses are large and handsome, but it has little trade. In its neighbourhood are considerable gold mines, among which are the rich mines of Congo Soco, and Cuyabá; but by these there are commonly villages which supply the ordinary requirements of the miners. *Cidade Diamantina*, formerly *Tejuco*, the capital of the diamond district, is situated on an acclivity of a lofty mountain, about 4000 feet above the level of the sea, and on the upper part of the small river S. Antonio which falls into the Iquetinhonha: it has about 6000 inhabitants. It is a well-built place, contains three or four handsome churches, and several public fountains. The shops are good and well stocked, and in the city and suburbs are many excellent and costly houses with rich gardens. In the same neighbourhood is *Cidade do Serro*, formerly *Villa do Principe*, which is nearly as large as *Cidade Diamantina*, and like it stands on the slope of a mountain; but it is a much poorer and less populous place.

Commerce, &c.—The manufactures of Brazil are quite in their infancy and of the rudest kind. The Brazilians are not merely unskilful in mechanical pursuits but averse to their practice, and comparatively few European mechanics have settled in the country. Cotton is spun, but only of coarse kinds. There are a few iron-works. The making of india-rubber goshes is carried on to a considerable extent by native workmen in Pará, and the export is of some consequence to the province. The manufacture of various articles for home consumption is also carried on, but not to any great extent. In the towns various ordinary handicrafts are of course practised.

The scarcity of the means of inland communication prevents the provinces of *Matto Grosso* and *Goyaz*, which lie at a great distance from the sea, from bringing their agricultural produce to any market, and their export is consequently limited to gold and diamonds. *Minas Geraes*, which is connected by tolerable roads with Rio Janeiro, Bahia, and S. Paulo, and also enjoys the advantage of an easy navigation on the middle course of the S. Francisco, exports its gold and precious stones, and also coffee and cotton. The provinces along the coast generally possess good harbours, or can easily reach them. The maritime intercourse of the several provinces has been greatly facilitated by the introduction of powerful government mail steamers.

The foreign commerce of Brazil is more extensive than that of any other country of America except the United States. The vessels of all nations are admitted on the same conditions, and their cargoes pay the same duties. The most important articles of exportation are—coffee, of which the quantity annually exported is valued at nearly 3,000,000*l.*, about half of it being sent to the United States; sugar, which amounts to upwards of 1,500,000*l.*; and cotton, the value of which is at least 750,000*l.* The exportation of cocoa, tobacco, rice, tapioca, hides, tallow, horns and horn-tips, mahogany, cedar, rosewood and other valuable timber, dye-wood, sarsaparilla, and india-rubber is also considerable. The smaller articles are—isinglass, indigo, castor-beans, castor-oil, ipecacuanha, and different drugs.

Nearly all the sugar of Brazil finds a market in England, the United States, Hamburg, Trieste, and Portugal; the rice is with a trifling exception sent to Portugal; the coffee is divided between Europe and the United States, the latter having increased their imports to one-half of the whole quantity in late years. Almost all the cotton, rosewood, india-rubber, and isinglass is brought to England. The hides are distributed between England, the continent of Europe, and the United States. The tobacco is sent to Portugal and to Gibraltar, previous to being smuggled into Spain, and to the coast of Africa. The rum which is exported finds a market chiefly on the African coast and in some ports of Portugal.

The annual exports from Brazil may be estimated at about 6,000,000*l.*, of which nearly one-fifth is exported to England; a fourth to the United States; the remainder goes chiefly to Austria, the Hanse Towns, France, Portugal, and Belgium.

The imports into Brazil may likewise be estimated at nearly 6,000,000*l.* Of these about half are brought from England and its colonies in English vessels. The most important articles are cotton fabrics, which amount to nearly 1,500,000*l.*; next to these are woollen articles, linen, brass and copper ware, iron and steel wrought and unwrought, hardware and cutlery, hats, arms and ammunition, provisions, soap and candles, and tin. Many cargoes of cod are sent from the British fisheries in North America; and from the British colonies potatoes, India cotton piece goods, silks, and spices. Nearly

the whole of this commerce is carried on by vessels from London and Liverpool.

France sends to Brazil, chiefly from the ports of Havre and Brest, some articles of fashion, trinkets, furniture, wax candles, hats, dry fruits, some glass goods, and wine. From Holland and Belgium are sent beer, glass goods, linen, Geneva, and paper; from Germany, Bohemian glass, linen, and iron and brass utensils; from Russia and Sweden, iron, copper utensils, sail-cloth, cords, ropes, and tar; from Portugal, wine, brandy, fruits, hats, and European manufactures; from the United States, considerable quantities of wheat, flour, biscuits, soap, spermaceti candles, train-oil, tar, leather, boards, pitch, potashes, and some rough articles of furniture and coarse cotton cloth.

The maritime intercourse between Brazil and the neighbouring republics is not considerable. The most active is that carried on with Buenos Ayres, to which sugar, tapioca, and some other agricultural products are sent, and whence the Paraguay tea or maté is brought back.

Formerly an active trade was carried on with the coasts of Africa avowedly in silks, cottons, ivory, East India goods, &c.; but really in slaves, of whom in some years 40,000 were imported, chiefly from Benguela, Cabinda, and Mozambique. And though several years back the slave trade was by a treaty with England nominally abolished, the traffic was continued with much activity in spite of the utmost exertions of British cruisers. Recently however the Brazilian government has appeared to be really desirous of putting an end to the detestable traffic. The Emperor of Brazil in his address on closing the session of the Legislative Assembly, October 25th, 1853, said, "My government will continue the repression of the slave trade with energy and perseverance." If this be done it is but reasonable to anticipate that the traffic will soon be greatly lessened, if not wholly suppressed.

Government, &c.—In October, 1822, Brazil was declared an independent state, and the Prince Regent was proclaimed Emperor of Brazil under the title of Pedro I. The deputies of the several provinces met on the 3rd of May, 1823, the anniversary of the discovery of Brazil, and adopted the title of General Assembly of Brazil (*Assemblea Geral do Brasil*). They appointed a committee for drawing up a constitution, which was done by the 30th of August; but the constitution contained several provisions to which the emperor objected. The meetings of the assembly becoming more and more turbulent, the emperor finally dissolved it on the 12th of November, and called another assembly. In the meantime he caused a new constitution to be drawn up and published, which was afterwards accepted by the new assembly (1824). According to this instrument Brazil is an hereditary monarchy, limited by a popular assembly. The executive is in the hands of the emperor. The legislative body consists of two assemblies, the Senate and the Chamber of Deputies. The Catholic faith is the religion of the state; all other Christians are tolerated, but are not allowed to build churches, or to perform divine service in public. No important change has since been made in this constitution, but there have been some innovations and modifications. One of the most important innovations consisted in the appointment, in November, 1842, of a council of state consisting of eight members who hold the office for life. They are the immediate advisers of the emperor, and are responsible equally with the regular ministers to the General Assembly. The emperor is irresponsible. In case of failure of issue in the reigning dynasty a successor is to be chosen by the General Assembly, the initiative being in the Chamber of Deputies. The regular ministry consists of a president of the council, and ministers of the finances, the interior, of justice, foreign affairs, of war, and of marine. The emperor may create titles of nobility, but these titles are not hereditary. The members of both the houses of assembly are chosen by the provinces: the senators for life; the representatives for a temporary period. The Senate is composed of half as many members as the Chamber of Deputies: the Senate consists at present of 55 senators; the Chamber of Deputies of 112 representatives. The imposition of taxes and the regulation of all matters of finance belong to the Chamber of Deputies; the determining of the numbers, &c., of the army and the navy; as well as whatever respects the general government, &c. The judicature consists of a supreme court, a court of appeal, common law, municipal and orphan courts, the judges of which are appointed by the crown, and of justices of the peace who are elected by the people.

For ecclesiastical purposes Brazil is divided into an archbishopric, Bahia, and nine bishoprics, Cuyabá, Goyaz, Maranhão, Minas Geraes, Pará, Pernambuco, S. Paulo, Rio Grande do Sul, and Rio de Janeiro. In educational matters the country is very backward. Primary schools for gratuitous elementary instruction have been established by the general governments throughout every province, and grammar or Latin schools in most towns of any size; but they have hitherto been very inefficient, partly from the difficulty of obtaining duly qualified masters at the inadequate salaries provided for their support by the provincial governments, and partly from the general disinclination of the people to avail themselves of the schools.

The total revenue of Brazil for the year 1853-4 is estimated at about 3,594,700*l.* (32,353,000 milreis), the expenditure at 3,292,630*l.* (29,633,700 milreis). The revenue is chiefly derived from the heavy

ad valorem duty charged on all articles imported into Brazil (amounting in 1851-2 to 2,814,443*l.*), a low duty charged on the articles exported (amounting in 1851-2 to 503,070*l.*), and rents, royalties on mines, &c. The estimated expenditure for 1853-4 is thus distributed:—

Ministry of the Interior	£412,355
" Justice	250,020
" Foreign Affairs	60,000
" Marine	452,153
" War	813,935
" Finances	1,304,162
	£3,292,630

The total unredeemed public debt amounts to about 15,000,000*l.*

The Brazilian army numbers about 65,000 men. Of these the regular army consists of 22,540 officers and privates (including 3727 cavalry and 3582 artillery); the remainder are militia. The navy consists (1853) of 1 frigate of 50 guns, 5 corvettes, 5 brigs, and 9 schooners carrying together 188 guns, and 4 smaller vessels carrying together 27 guns; 10 steamers mounting 36 guns; with various unarm'd ships and steamers, and a frigate and a corvette building.

The provinces have the management of their own local affairs. Each province has its president appointed by the crown, and its provincial house of assembly, the members of which are elected by the people.

History.—Brazil was discovered in the first year of the sixteenth century. The voyages of Columbus and Vasco de Gama, who first sailed across extensive seas, had taught navigators to adopt the practice of entering at once upon the open ocean. Accordingly Pedro Alvares de Cabral, who, after the return of Vasco de Gama, was sent by the king of Portugal with a large navy to the East Indies, directed his course from the Cape Verde Islands to the south-west, and was carried by the equatorial current so far to the west that he found himself very unexpectedly in sight of land in 10° S. lat. This country was Brazil, which he saw first on the 3rd of May, 1500. He sailed along the coast as far as Porto Seguro (16° S. lat.), where he landed and took possession. He sent an account of his discovery to Lisbon, and continued his voyage to India. The king afterwards sent Amerigo Vespucci, a Florentine, to examine the country, who took a rapid survey of nearly the whole of its shores, and upon his return published an account of it, with a map. To this publication this navigator is indebted for the honour of having given his Christian name to the new continent.

Vespucci, and others who were sent somewhat later, reported that the country was not cultivated, and did not offer any great commercial advantages, but that they had found extensive forests of Brazil-wood, of which they brought some cargoes to Portugal. This was not sufficient to induce the Portuguese to form a settlement, especially as they were then actively engaged in their conquests in the East Indies; but it was quite enough to induce mercantile speculators to send their vessels for the dye-wood. This trade continued for some years, and the merchants of other nations, especially the French, began to follow the example of the Portuguese. The Portuguese government considered this as a violation of their rights as discoverers of the country, and they accordingly began to think of forming a permanent establishment. King John III. however, on calculating the expenses necessary for such an undertaking, thought it more advantageous to invest some of the richest noble families of Portugal with the property of extensive tracts of coast, for the purpose of colonising them with Portuguese subjects. Accordingly, about ten or twelve Portuguese noblemen obtained the property each of about 100 leagues of coast, and 40 or 50 leagues inland. These proprietors were called *donatarios*. Most of them made great sacrifices, and underwent much fatigue and danger in forming settlements in Brazil. The towns of S. Vincent, Espirito Santo, Porto Seguro, and Pernambuco were founded by them between 1531 and 1545. But it soon became evident that the private fortune of these noblemen was not adequate to the establishment of such settlements in an uncultivated country, and in the neighbourhood of warlike savage nations. The king therefore sent, in 1549, as governor to Brazil, Thomé de Sousa, who founded the town of Bahia in the bay of Todos os Santos, and established a regular colonial administration. The government gradually found means to acquire the property of the colonies then existing from the *donatarios*, either by purchase or by exchange.

Before the religious divisions in England began to people the coasts of North America, the Protestants of France made a similar attempt in Brazil. A colony of French Protestants was established in 1555, on an island in the bay of Rio Janeiro, by Nicolas Durand de Villegagnon, but it soon fell into anarchy. The Portuguese attacked it in 1565, and expelled the French, though not without encountering considerable resistance. On this occasion the town of Rio Janeiro was founded by the Portuguese.

On the death of King Sebastian, when Portugal was united to Spain (1580), the numerous enemies of the latter country began to annoy Brazil, among whom the English, under Thomas Cavendish, were the most active. They did not however form any settlement. The French made a second attempt in 1612 to settle on the island of Maranhão,

where they founded the town of San Luiz de Maranhão, but in 1615 they were compelled to abandon it to the Portuguese. The Dutch were more formidable enemies to the Portuguese. Their East India Company had already taken from them many settlements in the India seas, and their West India Company was thus invited to similar attempts in America. In 1623 they sent a fleet to Brazil, which took Bahia, then the capital of the country; but it was lost again in 1625. In 1629 the Dutch made another attempt, and possessed themselves of Pernambuco, from which the Portuguese were unable to dislodge them. They afterwards extended their conquests till they held in 1643 the province of Serecipe and the whole of Brazil north of the Rio Francesco, with the exception of Pará. A few years later however the settlers of Portuguese origin rose upon them and drove them out of province after province, till at last the Dutch were confined to the town of Pernambuco, from which also they were expelled in 1654. By the peace of 1660 the Dutch renounced their claims on these countries.

At that time the mineral riches of Brazil were not known. The town of S. Paulo had been founded by some Portuguese in 1620, who had ascended to the table-land of the Paraná from the town of St. Vincent, and been induced to settle there on account of its fine climate. The adventurers established a kind of democratic government, and made frequent incursions among the savage nations for the purpose of capturing them and using them as slaves. In these excursions, towards the end of the 17th century, they discovered the mines of S. Paulo; and near Sabará, on the Rio das Velhas, in 1700, the richer mines at Villa Rica; and in 1713 those of Marianna. The mines at Cuyabá and Goyaz were discovered between 1715 and 1720. The existence of diamonds in the Rio Iquetinhonha was not known before 1728. These discoveries, and the riches which government derived from the mines, induced it to remove the administration of the colony from Bahia to Rio S. Janeiro in 1773.

The government of Brazil by the Portuguese was of the most exclusive character, and led to a constantly growing dissatisfaction on the part of the bulk of the inhabitants. Foreign vessels were not permitted to enter the ports of Brazil, nor the Brazilians to send their commodities to any other country than Portugal. This of course caused discontent among the merchants. Further, the natives of Portugal who had emigrated to the colony constituted a privileged class, being exclusively entitled to all posts of honour and all lucrative employments under government, which naturally excited dissatisfaction among the rich descendants of the Portuguese. This dissatisfaction began to generate a wish for change as soon as the United States of North America had obtained their independence; and events in Europe took such a turn that Brazil obtained its object almost without bloodshed or war. When Bonaparte had formed his scheme for taking possession of the Peninsula, he began by declaring war against Portugal, upon which the royal family left Europe for Brazil, where they arrived 22nd January, 1808. Considering Brazil as the principal part of his remaining dominions, King John VI. began to improve its condition by placing the administration on a more regular footing and throwing open its ports to all nations. On the fall of Bonaparte, the king raised Brazil to the rank of a kingdom, and assumed the title of King of Portugal, Algarve, and Brazil. The royal family remained in Brazil until the king was obliged to return to Europe by the revolution which took place in Portugal in 1820, by which the constitution of Spain had been adopted in that kingdom also. The news of that event had hardly reached Brazil when the same constitution was proclaimed by the inhabitants in the town of Pernambuco, and soon afterwards in Bahia and Pará. It was feared that similar measures would be taken in Rio Janeiro, and accordingly the king found it expedient to proclaim the constitution himself on the 26th of February, 1821, soon after which he sailed for Lisbon, leaving at the head of the administration in Brazil, Pedro his eldest son and successor, as lieutenant and regent. The Cortes of Portugal did not conceal their design of restoring the old relations with Brazil, by which its commerce was restricted to the mother country; and they did not treat the deputies from Brazil quite as well as they should have done. This of course increased the discontent of the Brazilians, and prepared the way for the independence of that country.

The Cortes in Portugal continued their course of policy. They formed a scheme for a new organisation of the administration in Brazil, and recalled the Prince Regent. But the prince, induced by the representations of the Brazilians, refused to obey their orders, and sent the Portuguese troops stationed at Pernambuco and Rio Janeiro to Europe. The Portuguese commandant of Bahia however did not yield; he expelled the militia and remained master of the town. This step was decisive, and immediately followed by others. On the 13th of May the Prince Regent was proclaimed protector and perpetual defender of Brazil. The General Procurators (*Procuradores graes*) of the provinces were assembled by the Prince Regent to consult on the new form of government, but they declared that they were not competent to such a task, and proposed the convocation of deputies chosen by the people, to which the prince acceded after a short delay. As the Cortes in Portugal still persisted in their design it was thought necessary to declare the independence of Brazil, and the Prince Regent did not venture to oppose the torrent of public opinion. Accordingly on the 12th of October, 1822, Brazil was declared an independent state, and

the prince adopted the title of Emperor of Brazil: on the 1st of December he was crowned.

As this step might be considered a declaration of war against Portugal, preparations for hostilities were immediately made. The Portuguese troops still occupied the towns of Bahia, Maranhão, and Pará. Bahia was besieged by the Brazilian forces, and after a few weeks the garrison was obliged to abandon it, upon the appearance of the admiral of Brazil, Lord Cochrane, before the harbour. The admiral also compelled the garrisons of Maranhão and Pará to sail for Europe. Thus the independence of Brazil was established, with no other loss of blood than what took place in the town of Bahia.

A General Assembly of deputies from the provinces was called to consider the draft of a constitution, but as they refused to frame one to which the emperor would agree, he dissolved them in November, 1823, and a few days after published a constitution, which as already stated, was accepted and confirmed by the new General Assembly convoked in the early part of 1824. The independence of Brazil was acknowledged by Portugal in 1825.

In 1826 two events took place which gave rise to great discontent, the death of King John VI., and the war with Buenos Ayres, for the retention of Monte Video as a part of the Brazilian empire. By the decease of the king, Portugal devolved on the emperor of Brazil, and the Brazilians again apprehended that they might be placed in a state of dependence on that country. To remove such fears, Pedro declared his daughter Maria queen of Portugal, intending to marry her to his brother Miguel. Peace was concluded with Buenos Ayres in 1828, and Monte Video became the independent republic of Uruguay. But the internal peace of the country was not re-established. Frequent disputes arose between the Chamber of Deputies and the emperor, and sometimes great disturbances occurred in Rio Janeiro. In the spring of 1831, one of these disputes assumed a form of more than common seriousness in consequence of the emperor refusing to dismiss some unpopular ministers. On the 6th of April a tumultuous populace having assembled before the palace, the emperor ordered the military to disperse them. This they refused to do, and the emperor issued a proclamation by which he abdicated the throne in favour of his son, Pedro II., the present emperor.

At this time the young emperor was only in his sixth year. The Chamber of Deputies at once took a more decided lead in the government. They appointed a regency of three persons; and fixed the termination of the emperor's minority on his reaching the age of 18 years. Disturbances and revolutionary movements broke out successively in various parts of the empire during several following years. Most of them however were directed against the power of the Chamber of Deputies which was regarded with general distrust. The regency was in 1831 limited to one person. In 1841 the desire for the termination of the regency, which had been long growing, found vent in a popular rising, which the government was unable to resist; and on the 23rd of July, the young emperor, then only in his fifteenth year, was declared by the assembly to have attained his majority and to the full exercise of his constitutional prerogatives. Since that time there have been various outbreaks in different parts of the empire, some directed against the provincial governments, some with a view to erect one or other of the provinces into a republic, and some directed against the measures or the ministers of the imperial government; but on the whole Brazil has during the last few years had more internal tranquillity and consequently been more prosperous than any other of the states of South America. The most important of the foreign differences in which Brazil has been engaged was the long protracted war with Buenos Ayres, which led in 1851 to the fall of Rosas, and eventually to the opening of the Rio Paraná.

(*Ayres de Casal, Corographia Brasilia; Travels of Spix and Martius; Eschwege, Novo Brasilienis; Eschwege, Gebirgskunde Brasiliens und Brasiliens; Freyreiss, Beiträge zur Kenntnis Brasiliens; Schäffer, Brasilien; Weech, Brasiliens gegenwärtiger Zustand; Travels of Mawe, Cailleugh, Graham, Gardner, Kidder, St. Hilaire, Prince Adalbert, Wallace, &c.; and Southey's and Armitage's Histories of Brazil.*)

BREADALBANE. [PERTHSHIRE.]

BRECHIN, Forfarshire, Scotland, a royal burgh in the parish of Brechin, is situated on the left bank of the South Esk, $\frac{7}{8}$ miles above its junction with the sea at Montrose, in $56^{\circ} 46'$ N. lat., $2^{\circ} 38'$ W. long., $12\frac{1}{2}$ miles N.E. from Forfar, $39\frac{1}{2}$ miles S.W. from Aberdeen by road, and 45 $\frac{1}{2}$ miles by the Aberdeen railway. The population of the royal burgh in 1851 was 4515, that of the parliamentary burgh was 6037. The burgh is governed by 2 bailies and 11 councillors, one of whom is provost, and in conjunction with Montrose, Arbroath, Forfar, and Inverurie (BERVIE), returns one member to the Imperial Parliament.

Brechin was formerly a walled town and an episcopal residence, giving its name to a diocese founded and endowed by David I. about 1150. In the upper part of the town are the ruins of the ancient chapel of Maison Dieu, now used as a stable. In the churchyard near the cathedral there is a round tower, similar to the round towers which are numerous in Ireland; only one other exists in Scotland. This tower is about 100 feet high, and is constructed of hewn stone; the workmanship is excellent. It is surmounted with a conical roof of gray slate; and there is no appearance of there ever having been a

staircase within it. The cathedral, the western end of which is now used as the parish church of Brechin, was built by David I. in the 12th century. Brechin Castle stands on the top of a precipice, and is separated from the town on the east and west by a deep ravine; its south base is washed by the South Esk, which here forms a fine sheet of water. In this castle Sir Thomas Maule defied the forces of Edward III. until he was killed by a stone thrown by an engine, when the garrison surrendered. It is now the residence of Lord Panmure. The town-house, near the cross or market-place in the middle of the town, contains a court-room and prison, two rooms for the meetings of council, and a guild-hall. Three schoolrooms, built by subscription, are in the west end of the town. Besides the parish church and a chapel-of-ease, there are chapels in connection with the Free Church, the United Presbyterian Synod, the Scottish Episcopal Church, and other Dissenters. The hospital of the 'Maison Dieu' gives a small weekly allowance to poor residents, widows, and children of burghers. There is a school connected with it. The rector of the academy and preceptor of Maison Dieu has 52*l.* 10*s.* a year, besides fees from scholars. The number of scholars learning Latin in 1851 was 38. Spinning, weaving, and bleaching afford occupation to some extent. Several hundred persons in the town are employed in the linen trade. Distilleries, lime-works, freestone-quarries, and nursery-grounds are in the vicinity. There are two bridges over the Esk at Brechin.

BRECKNOCK, or BRECON, called by the Welsh 'Aber Honddu,' or the Mouth of the Honddu, the capital town of Brecknockshire, a municipal borough, and the seat of a Poor-Law Union, is situated in an open valley at the confluence of the rivers Usk, Honddu, and Tarell, in $51^{\circ} 57'$ N. lat., $3^{\circ} 22'$ W. long., distant 171 miles W.N.W. from London. Brecknock is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns one member to the Imperial Parliament. The population of the municipal borough in 1851 was 5673; that of the parliamentary borough was 6070. The livings of the two parishes are vicarages in the archdeaconry of Brecon and diocese of St. David's. Brecknock Poor-Law Union contains 42 parishes and townships, with a population in 1851 of 18,160.

Brecknock is built on both sides of the Honddu, and extends along the left bank of the river Usk. The castle was built A.D. 1094, by Bernard Newmarch, a relative of William the Conqueror, who wrested the county from the Welsh princes, and here fortified himself, that he might the better maintain the rights which had been granted to him as Lord of Brecon. It was considerably increased and improved by the last Humphrey de Bohun, earl of Hereford, high constable of England and governor of Brecknock. Parts of several towers, including that called 'Ely Tower,' in which Morton was confined, still exist. The situation is commanding for the purposes of warfare: the main part of the fortifications may still be traced. Two priories, the one Benedictine and the other Dominican, were also founded by Bernard Newmarch in the reign of Henry I. The first is now the parish church of St. John's, called the Priory church; the second was converted into a college by Henry VIII. The Priory church stands in the northern part of the town, adjoining the precinct of the priory, where there is a beautiful promenade by the side of the river Honddu. The church is built in the form of a cross, from the centre of which rises an embattled tower. The Dominican convent, now the college, is situated near Llanfics church, or St. David's church, on the right bank of the Usk. There are two places of worship for Independents, and three for Baptists: one of each denomination having the religious services conducted in the Welsh language. There are several schools, namely, the College school, founded in 1541, which has an income from endowment of 32*l.* a year, and had 25 scholars in 1851; Bonghrood Charity school, recently enlarged; two British schools; and a Girls' and Infants' school, erected in 1849. There are in the town a mechanics' literary and scientific institute, a young men's mutual improvement society, a savings bank, and an infirmary. The town is lighted with gas.

Brecknock occupies a healthy and picturesque situation. There are three stone bridges over the Honddu, and one over the Usk. A new shire-hall has been built, and the old town-hall converted into an assembly-room. The Lent and summer assizes are held in Brecknock. The county jail is situated in the town. A county court is held at Brecknock. There are barracks, in which detachments of infantry and cavalry are quartered. Coal is brought along the canal at a moderate price. Flannel and coarse woollen cloths are manufactured to a small extent: hats of a middling quality are made. The town is chiefly dependent on the agricultural district around. The market-days are Wednesday and Friday: the fairs, which are held in March, May, July, September, and November, are well supplied with corn, cattle, eggs, and poultry, of which last an abundance is reared by the neighbouring farmers and cottagers. Opposite the town are three mountain-peaks, known as the Brecknock Beacon, the highest of which is 2862 feet above the level of the sea.

BRECKNOCKSHIRE, an inland county of South Wales, lying between $51^{\circ} 54'$ and $52^{\circ} 17'$ N. lat., and $3^{\circ} 0'$ and $3^{\circ} 48'$ W. long., is bounded N. by Cardiganshire and Radnorshire, from which latter county it is for the most part separated by the rivers Claerwen, Elan, and Wye; W. by Cardiganshire and Caermarthenshire; S. by Glamorganshire and Monmouthshire; and E. by Monmouthshire and Herefordshire. This county extends from north to south 35 miles,

and from east to west about 30 miles. Brecknock is the county town. The area of the county is near 754 square miles. The population in 1831 amounted to 47,763; in 1841 it was 55,603; in 1851 it was 61,474. Brecknockshire was anciently called Garthmadrin, or the 'fox-hold,' and derives its present name from Brychan, a Welsh prince, who lived in the 5th century.

Surface, Hydrography, and Communications.—The surface of this county is extremely irregular, the valleys are deep, and the mountains the highest in South Wales. It is intersected on the north and south by two long ranges of mountains: that on the north goes by the general name of 'Epynt,' an obsolete British word for a hill; the other range, beginning with the Caermarthen Beacons, runs nearly parallel to the Epynt Hills, and inclining more towards the south, terminates in Monmouthshire. Between these two chains a third, which is called the Black Mountains, rises abruptly near Talgarth. Another line branches across in a direction from north to south, about eight miles below Brecknock, dividing the hundred of Devynnock from the hundreds of Talgarth and Penkelly. The highest mountains in Brecknockshire are—the Brecknock Beacons, about three miles south-west of Brecknock, which are 2862 feet above the level of the sea; Capellant, which is 2394 feet above the level of the sea; Pen Cader, or the 'Cradle Mountain,' 2545 feet above the level of the sea; and Dwggan, near Builth, which is 2071 feet above the sea. The principal rivers are the Wye, which flows along the north-eastern side of the county, separating it from the county of Radnor; the Usk, which rises in the Caermarthen Fan, about five miles from Treacastle; the Honddu, which rises in Drum-dhu, and falls into the Usk at Brecknock; the Yrfon, which rises in Bryn-garw, in the north-west boundary of the county, and falls into the Wye about a mile above Builth; the Elan, the Cierwen, and the Tawe. The Tarell also, a small river rising in Bryn-du, joins the Usk a little above Brecknock, and the Taf Fechan, a small, and Taf Fawr, a large river, which rise in different parts of the south declivity of the Brecknock Beacons, unite into a considerable stream—the Taf—at the south boundary of the county, near Cyfarthfa Park. None of these streams are navigable. To facilitate the conveyance of goods from Brecknock to Newport, a canal capable of conveying boats of 24 tons was finished in 1811 at a cost of 170,000*l.*; a railroad was soon after made from Brecknock to Hay, and from thence to Kington and the lime-rocks near Old Radnor. The Swansea Canal enters for a short distance the south-west part of the county. The mountains Mynydd Llangynidr, and Mynydd Pen Cynr, near the Clydach, at the south boundary of Brecknockshire and Monmouthshire, are intersected by many railroads, which communicate with the various collieries and iron-works. Two branches descend into the vale of Usk, so as to form a connection with the Crickhowell Canal; the one near Tal-y-bout, the other near Llangatock. A long line of railroad also begins near the ninth milestone on the Brecknock and Treacastle road, and passing up the valley of Forest Fawr to the east of the river Tawe, and nearly parallel to it, communicates with Drim Colliery, and finally with the Swansea Canal. About five miles E.S.E. from Brecknock is situated Llyn-Safaddu, or Llangorse Pool, a sheet of water two miles long and in some places a mile in breadth. It abounds in fish, and in winter is much frequented by wild fowl. In 1235 permission was granted to the monks of Brecknock to fish in this lake three days in the week, and every day in Lent, provided they only used one boat. The other lakes in this county are Llyn Van Vawr, under the Brecknock Beacons, about four miles from Bivery; Llyn Carw, about six miles from Llanwrtyd; and Pwl Bivery, near Capel Calwen, south-east of Mount Capellant. The scenery in this county is extremely beautiful. The extensive views from the mountains, the abrupt outline of the Brecknock Beacons, the undulating surface, frequently clothed with woods and intersected by torrents, from their expanse, their variety, and their wildness, are very striking to the admirers of the picturesque.

The principal roads are from Treacastle, through Brecknock to Crickhowell, which is travelled by the Caermarthen and London mail; that from Brecknock to Hay; also the roads from Brecknock to Merthyr, and from Builth to Hay. These as well as the less important thoroughfares through the county have in late years been greatly improved. Lines of communication of great public utility have been opened between Hay, Talgarth, and Crickhowell; and between Brecknock and Builth.

Geology.—The geology of this district has occupied the attention of that able geologist, Sir R. I. Murchison. The oldest rocks which occupy the west of Brecknockshire consist of grauwacke slates; a remarkable line of trap and porphyry breaks through the rocks of this age, extending from Llanwrtyd for about four miles to the north-north-east. Between these old rocks and the escarpment of Mynydd Epynt and Mynydd Bwlch y Groes, the transition-rocks are displayed; the uppermost consisting of that which Sir R. I. Murchison has described as the Ludlow rock, which there passes up into the old red sandstone. These transition rocks, which in Shropshire and Radnorshire contain thick masses of lime, are throughout the whole of their range in Brecknockshire remarkably void of limestone. The great mass of the county, especially the central and south-east district, consists of the old red sandstone, which has been shown by Sir R. I. Murchison to be divisible into three sub-formations:—1. A lower

zone of tile-stones, remarkably exhibited along the rectilinear escarpment of Mynydd Bwlch y Groes, extending into Caermarthenhire. 2. A central portion of marls, concretionary limestones (locally called 'cornstones'), sandstones, &c. 3. The upper portion of sandstone and conglomerate; this upper portion, occupying the summits of the Fans (Beacons) of Brecknock, and other lofty mountains between Brecknock and Abergavenny, is by its inclination carried under the whole of the great productive South Welsh coal-field. The remainder belongs to the Silurian system of Murchison. We thus see that the whole of the district to the north-west of this tract of country lies beneath the carboniferous series.

The mineral springs at Builth and at Llanwrtyd rise in the silicified and hardened schists, at points where they are penetrated by trap-rocks. Their origin is considered to be due to the decomposition of the vast quantities of sulphuret of iron which are collected at such points. With the exception of the strata containing iron and coal, which, though for the most part in MONMOUTHSHIRE, in some places cross the boundary of Brecknockshire, there are no mines or minerals in this county worthy of notice. Some traces of copper-ore have been found in the old red sandstone, which upon trial have proved to be unprofitable. One of the most remarkable features in the geology of Brecknockshire is a peninsula of transition rocks, which is thrown up from north-east to south-west, ranging from Erwood on the Wye to the rocky promontory of Corn y Fan, five miles north from Brecon.

Climate, Soil, &c.—The climate varies considerably, according to the elevation and exposure. In the neighbourhood of the Brecknock Beacons, the Black Mountains, and the elevated districts between Treacastle and Builth, the wind, the snow, the cold, and continual rains, are often severely felt, by which the crops are injured, and the harvests retarded; the lower valleys are comparatively warm. The country is subject to much rain, but the air is on the whole bracing, and the population healthy. The soil in the hundred of Talgarth and Crickhowell is more favourable to cultivation than in any other part of this county. Wheat is here grown in considerable quantities; and there are orchards, from which good cider is frequently manufactured. In the hundred of Devynnock, and perhaps more so in that of Builth, where there is much cold wet clay, barley and oats are the grain crops chiefly cultivated by the farmers. Agriculture throughout the county has considerably improved during the last fifty years; partly through the exertions of an agricultural society, one of the earliest in the island, which was established in 1755, by Mr. Powell of Castle Madoc. In the highlands are bred small black and brindled cattle, horses, ponies, and good hill-sheep, whose wool though finer than that of the neighbouring county is not so suitable for the manufacture of flannel. In the lowlands the Herefordshire breed of cattle predominates. The ewes are brought down from the hills in winter, and are not taken back until the cold weather has ceased and the lambs are strong enough to bear exposure.

Divisions, Towns, &c.—Brecknockshire, exclusive of the borough of Brecknock, is divided into six hundreds: Builth, Crickhowell, Devynnock, Merthyr, Penkelly, and Talgarth. It contains 66 parishes, with 73 churches and chapels. The market-towns are BRECKNOCK, the only corporate town within the county, CRICKHOWELL, which stands upon the rich banks of the Usk, and BUILTH and HAY, which occupy two picturesque situations on the Wye. These will be noticed under their several heads.

A few of the more important villages may be briefly noticed here. *Bronllys*, or *Bryn-llys*, 7 miles N.E. from Brecknock, is on the high-road, about midway between Brecknock and Hay. Here is a building of considerable antiquity, somewhat resembling in appearance one of the Irish round towers which has lost its upper part. *Crickadarn*, 10 miles N. by E. from Brecknock, stands on the right bank of the Wye: the population of the parish in 1851 was 414. The church is a small building of ancient date, and has a massive tower. The scenery about Crickadarn is very picturesque, especially along the Clettwr, which in its course through Crickadarn to the Wye flows through a deep and richly wooded dingle. *Devynnock*, on the right bank of the Usk, 9 miles W. from Brecknock: the population of the parish in 1851 was 1969. The village lies in the Vale of Senni. The church is spacious; it is of the perpendicular style and date, except the tower, which is older. The Calvinistic Methodists and Independents have places of worship. There are an endowed Free School and some almshouses. Fairs are held in April, May, August, October and November. On the Senni was anciently a strong fortress, known as Castell Dô, or the 'Black Castle.' Henry IV. stayed some time at Devynnock, whence was dated a proclamation of pardon to the Welshmen who were willing to submit. In the parish are several *carneiddau*, or cairns, and other primeval remains. *Cerrig duon*, or the 'Black stones,' a stone circle, is a short distance from the village. *Llangammarch* by the Vale of Llanwrtyd, 14 miles N.N.W. from Brecknock: the population in 1851 was 1038. The village is chiefly noticeable for a large circular British camp, which is still traceable. The Irwen is much resorted to by anglers. Llangammarch was the birthplace of the Rev. Theophilus Jones, the historian of Brecknockshire. The Vale of Llanwrtyd affords scenery of uncommon beauty and grandeur. *Llangatock*, or the Church of St. Gattock, 12 miles S.E. from Brecknock, is situated on the right bank of the Usk,

opposite to the town of Crickhowell: population of the parish 5415 in 1851. It has a very neat ancient church of the decorated style, and an independent chapel. In the parish are extensive iron-works, and also limestone quarries. The Brecknock and Abergavenny Canal passes through the village. Many cairns and other early antiquities are in the neighbourhood. There are some rather singular caves. The scenery is very striking. *Llaneddy* is a parochial chapel of which Llangattoek is the mother church. It lies on the south of Llangattoek: the population in 1851 was 9644, showing an increase since 1841 of 2278, attributed to the flourishing state of the Dyfflach or Clydach iron-works. *Llanfhangl-cwm-dd*, on the Rhian-goll, 10 miles E. by S. from Brecknock, population of the parish 1066 in 1851, is believed to have been a Roman station. The remains of a square Roman camp of large size, called *Coed-y-gaer*, are still tolerably perfect. Roman coins have been found here. The church of *Cwm-dd* is recent, with the exception of the tower. *Llangorse*, 6 miles E.S.E. from Brecknock: population 401 in 1851. The church is ancient, with a tower containing six musical bells, whose sound over the adjacent lake, Llyn-Safaddu, is greatly admired. The Calvinistic Methodists and Baptists have places of worship. There are some parochial charities. *Llyn-Safaddu* is often called Llangorse Pool, on account of its proximity to the village. *Llangynidr*, on the right bank of the Usk, 8 miles S.E. from Brecknock: population of the parish 3246 in 1851. Besides the parish church it contains places of worship belonging to the Methodists, Independents, and Baptists. There are some parochial charities. The inhabitants are largely occupied in iron-works, coal-mines, and limestone quarries. The Brecknock and Abergavenny Canal passes through the parish; fairs are held in April, October, and December. *Llyswen*, on the right bank of the Wye, 8 miles N.N.E. from Brecknock: population of the parish 225 in 1851. The little church is picturesquely situated close by the Wye. The village itself is a poor place, although here was anciently one of the residences of the native princes of Wales. *Llangoesl Castle*, in this parish, was erected in the 15th century. The grounds of Llangoesl Castle lie along the Wye for about two miles, and both by the river and on the heights afford scenes of surpassing beauty. *Llydd*, on the upper part of the Usk, 11 miles W. from Brecknock, population of the parish 1627 in 1851, possesses an ancient and rather interesting church; there is an endowed chapel-of-ease at *Rhyd-y-Briw*. The Calvinistic Methodists and Independents have chapels here. *Talgarth*, 8 miles N.E. from Brecknock, a considerable village, formerly a borough and market-town: population of the parish 1828 in 1851. The church is a much better one than Welsh churches usually are. There are some Dissenting chapels. *Treacastle*, a ward of Llyswell parish, population 274 in 1851, is a good-sized village, with an inn much resorted to by tourists; the scenery here is remarkably picturesque, and there are some remains of *Carreg Cennen Castle*, which stood on a steep and lofty rock above the river Cennen. *Tretower village* is a parcel of the parish of Llanfihangel-cwm-dd, 9 miles S.E. from Brecknock: population of the parcel of Tretower 291 in 1851. The chief object of interest is the castle, which is of Norman date, but is now a mere ruin. It belongs to the Duke of Beaufort.

Divisions for Ecclesiastical and Legal Purposes—This county is wholly in the archdiocese of Brecon, diocese of St. David's, and province of Canterbury. In its 66 parishes there are 23 rectories, 16 vicarages, and the remainder perpetual curacies. The assizes are held at Brecknock by the judge attending the South Welsh circuit. County courts are held at Brecknock, Builth, Crickhowell, and Hay. Brecknockshire returns one member to the Imperial Parliament.

Brecknockshire is divided by the Poor-Law Commissioners into four Unions—Brecknock, Builth, Crickhowell, and Hay: these Unions include 107 parishes and townships, with a population in 1851 of 69,127; but the boundaries of the Unions are not exactly coequal with those of the county. There was only one savings bank in the county in 1851. It was at Brecknock, and the total amount owing to depositors on November 20th 1851 was 23,671*l.* 12*s.* 2*d.*

Occupations of the People.—The manufactures of this county are few and unimportant, except that of iron, which employs many hands. Flannels and other woollen goods, such as baize, and coarse checks for trousers, are woven in several small factories. The knitting of stockings, which was formerly practised to a great extent by the women of the county, is now less frequent. Woven stockings, though less durable, are so much cheaper as to have greatly diminished this branch of industry.

Civil History and Antiquities.—Brecknockshire remained in the power of the Welsh princes until 1092, when Bernard Newmarch made himself master of Brecknock. Notwithstanding the vigorous efforts of the Welsh to drive him from the country, he succeeded in his conquest, and at his death the lordship of Brecknock was inherited by his son-in-law, Milo Fitz Walter, earl of Hereford. The earl was succeeded by four of his sons, in turn, and afterwards by Philip de Breos, their brother-in-law, who died about 1160. He was followed by his son William de Breos, to whom the lordship was confirmed by King John in 1194. Upon the accession of Henry III., Reginald de Breos, who had married Gwladis, daughter of Llewellyn, Prince of North Wales, was induced by the restoration of some sequestered property to forsake his father-in-law and his adherents,

with whom he had engaged in a confederacy against the English king. Llewellyn, incensed at this breach of faith, laid siege to Brecknock, which was however spared at the earnest intercession of the burghesses. Reginald and Llewellyn were afterwards reconciled. Reginald died in 1228, and was buried in the Priory church at Brecknock. Henry carried on the war against Llewellyn and his Welsh followers. Edward I. continued the sanguinary contest till 1282, when his supplies having been intercepted, and his army harassed by the king's troops, Llewellyn quitted his stronghold in Snowdon, marched towards Brecknock, and, unaware of the desertion of his friends, was slain near Builth by one Adam de Francton, who plunged a spear into his body. Llewellyn was buried at a place now called *Cefn-y-bedd* (meaning the back, or ridge of the grave), near Builth. In 1286 the lands of De Bohun, who had succeeded to the possessions of De Breos in Brecknockshire, were invaded and pillaged by the retainers of his late guardian, Gilbert, earl of Gloucester, who held the lordship of Glamorgan. De Bohun quickly retaliated upon the men of Glamorganshire; and for this feud the king sentenced the two barons to forfeit for their respective lives the liberties of Brecknock and Glamorgan, and to be kept in custody during his pleasure. They afterwards compounded with the crown, Hereford for 1000, and Gloucester for 10,000 marks. Humphrey was a benefactor to the monks, and augmentor of the liberties and privileges of the burghesses of Brecknock; he died at Plessey in 1298. He was succeeded by his eldest son, who, as an atonement for his father's conduct, surrendered to the crown the earldoms of Hereford and Essex, together with the constablership of England; and shortly after married Elizabeth, seventh daughter of Edward I., when the king, with certain reservations, restored to him his office and estates. After the disaffected barons had been defeated in the early part of the 14th century, the younger Despencer who was now constituted governor of Brecknock Castle, obtained the lordship and the property of the late Earl of Hereford, who had been killed at the battle fought at Boroughbridge, in 1321. Upon the death of the Despenchers, the confiscations consequent on the rebellion were reversed, and the property restored to the family of the Herefords, in the person of John de Bohun. This earl, after having been created knight of the bath, died in 1335. The lordship of Brecknock remained in the family till the death of William the last of the male line of the noble family of De Bohuns. The lordship of Brecknock now reverted to Henry IV., who had married Mary, the daughter of the last De Bohun. Henry IV. granted to the inhabitants of Brecknock an exemption from tolls and other payments, renewed the benefactions to the monks, and gave them their first royal charter. After passing through several hands Brecknock came as an inheritance to the young duke of Buckingham, who lived in retirement within the walls of Brecknock during the greater part of the reign of Edward IV. On the death of this king however he left his seclusion, and became a conspicuous supporter of the Duke of Gloucester, until he was seated on the throne. In reward for these services, Richard made him governor of all his castles in Wales, and lord high constable of England, with other lucrative and honourable offices; he also promised to restore to him all the lauds forfeited by the Bohuns, which would have made him the richest and most powerful nobleman in England. These promises never were fulfilled; Buckingham, as is well known, conspired against the king, took arms with his followers, but was taken, and ultimately executed at Salisbury without a trial. The Duke of Richmond afterwards passed through Brecknockshire, where he greatly increased the number of his followers. As soon as he was established upon the throne, he restored to Edward, the son of the last Duke of Buckingham, the estates and titles of his father, and in 1504 made him high constable of England—the last person that ever held that office. He was afterwards accused of treason, and executed in 1521. The dukedom of Buckingham was now extinct, and the lordship of Brecknock with its dependencies merged in the crown. Upon the union of England and Wales, which took place in 1534, in the 26th year of the reign of Henry VIII., Brecknockshire became subject to English laws and authorities, and its history from this time must be considered in conjunction with the general history of the kingdom.

Brecknockshire abounds in antiquities. The principal castles have been at Brecknock, Builth, Crickhowell, and Hay; at which last place, after the destruction of its first castle, of which nothing but an archway remains, a second was built in the reign of Elizabeth or James I., which is at this time inhabited. Besides these must be mentioned remains or traces of castles at Tretower, near Crickhowell, at Blantlyfui and Dinna, in the parish of Talgarth, at Treacastle, and Penkelly, at Broullya, where a well-preserved round tower is standing, and at Caerberis, in the parish of Llanganton. There are traces of Roman encampments and of British stations at various places in the county. Cromlechs, cairns, and tumuli, or mounds where the dead have been interred, are found in many parts of the county; which has also been intersected by several Roman roads. The Welsh language, which was formerly spoken throughout the whole of Brecknockshire, is now greatly disused in the south and west portions of the county. It is estimated that the English language is spoken ordinarily by nearly half the population.

BREDA, a town in the Dutch province of North Brabant, is situated at the confluence of the Merk and the Aa, 22 miles W. by

S. from Bois-le-Duc, in 51° 35' N. lat., and 4° 47' E. long., and has about 13,000 inhabitants. It is a well-built strongly fortified town, surrounded by marshes, which in case of attack can be laid under water. The ramparts are planted with trees and form handsome promenades. The streets are wide and well paved, and the houses well constructed. There are four squares. Several canals traverse the town. The quays are planted with trees. The castle, which is the principal building in the town, is surrounded by the Merk. It was originally built by the family of Schoten, who held it with the title of Baron, in 1190. Breda afterwards came into the possession of the dukes of Brabant; and in the beginning of the 15th century passed by marriage to the house of Nassau. In 1567 it was annexed by the Duke of Alba to the crown of Spain. In 1577 the Spanish garrison opened the gates to the confederates. Four years after, the town was treasonably delivered to the Duke of Parma; but it was retaken by stratagem in March 1590 by Prince Maurice of Nassau. In 1625 Breda yielded by capitulation to General Spinola, who commanded the troops of the Infanta Isabella. In 1637 the town again came into the possession of the States-General of the United Provinces, and was confirmed to them by the treaty of Westphalia. The French, under Dumourier, took Breda in 1793. Charles II. of England resided in Breda during part of his exile.

The castle already mentioned was rebuilt in 1680 by William, Prince of Orange, afterwards William III. of England. The arsenal and the great market-place are among the chief ornaments of the town. The principal Protestant church is an elegant building, with a spire 362 feet high: it contains a fine monument to Engelhort of Nassau, a general of Charles V. There are besides another Protestant church, and four Roman Catholic churches, as well as hospitals for orphans and for aged persons. The town-hall and military hospital deserve to be mentioned. Breda has a tribunal of commerce, a grammar school, and a magnetic observatory. Its industrial products comprise broadcloth, linen, leather, beer, and musical instruments. The railway now in course of construction to connect Antwerp and the Hague passes through Breda.

BREDON. [WORCESTERSHIRE.]

BREGENZ. [TYROL.]

BREISACH, ALT, a fortified town on the Rhine, about 12 miles W. from Freiburg, in the grand duchy of Baden. It was formerly considered the bulwark of Germany on the line of the Upper Rhine, and is still one of the strongest fortresses in Germany. The castle was built by Berthold, duke of Zähringen. Of the numerous sieges which Breisach sustained the most memorable was that of 1638, when it was taken by the Duke of Saxe-Weimar. In 1648 Breisach was ceded to the French, but the peace of Ryswick in 1697 restored it to the Austrians. Six years afterwards it was invested and taken by Marshal Vauban. Austria regained possession of the place by virtue of the treaty of Rastadt in 1715, and its works were afterwards rendered much stronger by the erection of a citadel on Mount Eckhardt. The events of the campaign of 1743 and 1744 threw it once more into the power of the French, who demolished the fortifications. Part of the town was burnt by the French during the revolutionary campaign in 1793; three years afterwards, General Mereau, upon re-crossing the Rhine in his retreat out of Swabia, left a garrison in Breisach; and the French retained possession of it in spite of the efforts of the Austrians. In 1806 the French government transferred it, together with the Breisgau, to the house of Baden. Breisach is situated on a circular hill on the east bank of the Rhine, between Basel and Strasburg; and contains about 3200 inhabitants. The Minster of St. Stephen, which has survived every calamity that has befallen Breisach, and is built in the old style of German architecture, contains the monuments of several old warriors and individuals of note.

BREISGAU, or BRISGAU, a district in Germany lying between the Rhine and the Black Forest, is now included in the Baden circle of Ober-rhein. It was originally a landgraviate belonging to the dukes of Zähringen: it then passed into the possession of the dukes of Ilochberg, and in 1367 was sold to the house of Habsburg. Rudolph of Habsburg, the founder of the reigning dynasty of Austria, was born in the castle of Limburg, in this territory. The Breisgau is traversed by numerous mountains, with the exception of the districts adjacent to the Rhine, where the surface is level and the soil highly productive: here large quantities of grain, flax, hemp, fruit, vegetables, wine, &c. are raised. In the other parts flocks and herds are reared to a considerable amount, much timber is cut, and the metals, particularly iron, copper, and lead are worked. The inhabitants of the forest-districts are celebrated for the manufacture of wooden clocks and other articles of wood. By the peace of Presburg in 1806 Breisgau became the property of the Elector of Baden, with the exception of a small tract assigned to Würtemberg, which Baden subsequently acquired. It contained seventeen towns, including Freiburg the capital, Old Breisach, Waldkirch, Kensingen, Endingen, Staufen, and St. Blasien, and a great number of villages and hamlets. [BADEX.]

BREMEN, DUCHY OF, in Hanover, is bounded N. by the German Ocean, N.E. by the Elbe, E. by Lüneburg, S. by Brunswick, S.W. by the Republic of Bremen, and W. by the Weser. Its area is 1957½ square miles, and its population about 190,000. The soil which borders upon the sea and the rivers is fertile marsh land. The

interior consists of heaths and moors, a considerable portion of which has been of late years brought into cultivation. Dykes are maintained to preserve the marsh land from inundation. The Este, Bremer, Lühe, and Schwinge flow into the Elbe. The Aller and the Lesum (which receives the Wumme and the Werpe) fall into the Weser. The Oste and the Lesser Medem have their whole course in the duchy, and enter the sea near the mouth of the Elbe. Flax, hemp, and fruit, corn and other agricultural produce in abundance, as well as vegetables, are raised. Peat is used for fuel. Considerable numbers of horses, horned cattle, sheep, and swine are reared. Geese are very numerous. The duchy is now merged in the Province of Stade, the whole area of which is 2626 square miles. The capital, both of the duchy and of the province, is STADE.

BREMEN, REPUBLIC OF, extends along both sides of the Weser, between 53° 1' and 53° 11' N. lat., 8° 32' and 8° 58' E. long. It is bounded N., E., and S. by Hanover, and W. by the duchy of Oldenburg. The whole area of the republic amounts to 74 square miles, and the population, including that of the town of Bremen, amounted in 1849 to 79,047. The surface is low, and consists chiefly of drained marsh land. The pastures are remarkably rich, and the breed of horned cattle is very fine: corn is grown only on the more elevated spots. Two separate districts, nearer the mouth of the Elbe, also belong to the republic; on these stand the towns of Vegesack, population 3538, and Bremerlehe, which is the port of Bremen and has a population of 3618. The legislative power of the republic is vested in a Senate, which consists of 4 burgomasters, 12 syndics, and 24 senators; and in the Burgher-Assembly, which is composed of all citizens who pay any considerable amount of taxes. The senators are chosen for life out of a number of candidates proposed by the burghesses, and the mode of election is by ballot. The Republic of Bremen is a constituent member of the Germanic Confederation, to the army of which it is bound to furnish 485 men. Four battalions of militia are kept up by the republic, which meet at least once a year.

The population of the Republic of Bremen was thus distributed in 1849:—

City of Bremen	53,478
Country Parts	18,413
Town of Vegesack	3,538
Port of Bremen	3,618
Total	79,047

In 1852 the revenue of the republic was estimated at 989,706 thalers; the expenditure at 978,277 thalers.

The commerce of 1851 is returned as follows:—

Arrivals.	Tonnage.	Departures.	Tonnage.
2513	171,603	2934	181,124
Value of Imports.		Value of Exports.	
By Land	19,671,696 thalers	By Land	15,983,359 thalers
By Sea	17,874,420 "	By Sea	16,880,588 "
Total	37,546,116 thalers	Total	32,868,947 thalers

BREMEN, one of the free Hanseatic towns and capital of the Republic of Bremen, stands upon the Weser, about 50 miles from its mouth, in 53° 4' 45" N. lat., 8° 43' E. long., and has a population of 53,478. The Altstadt, or old town, which is on the right bank of the river, contains some handsome streets and dwellings; but in general the streets are narrow, and, in consequence of the height of the houses, dark and gloomy. It has large suburbs, and these form by much the larger portion of the city. The Neustadt, or new town, which stands on the left bank of the Weser, is regularly built, and has broad straight streets. The two quarters are connected by the Weser bridge, which crosses the island of Werder, that lies between them and is covered with buildings. The quays extend along both sides of the river. The ramparts of the old town have been converted into promenades. Among the public buildings are the cathedral, erected in 1160, and 8 other churches. The old archiepiscopal palace, now the town-hall, is an imposing building in the gothic style. The old town-hall, built in 1405, and famous for its Rathswinkel, or 'council's wine cellar,' which, it is said, contains hock of the vintage of 1624, and various other wines of an advanced age, still exists. Besides these must be mentioned the exchange, the building in which the chief merchants hold their sittings, the great waterworks near the bridge, the arsenal, the granaries, the museum, the city library, the observatory from which Olbers discovered the planets Pallas and Vesta, and the theatre.

Bremen owes its prosperity to the navigable river on which it stands. It is the entrepôt for imports of all the countries bordering on the Weser, and especially for Hanover, Oldenburg, and Hesse-Cassel. A railroad from Bremen to Hanover was opened in December 1847. Large vessels go up the river only as far as Bremerhaven, 28 miles below Bremen; there they discharge their cargoes in a new hsrbour. Ships of 200 to 250 tons unload at Vegesack, 13 miles below Bremen; and vessels of seven or eight feet draft go quite up to the town. Cargoes brought to Bremerhaven and Vegesack are forwarded to Bremen by lighters and boats. Bremen is a place of great resort for the warehousing and transit of foreign and German goods; it has a bank, discount office, and several insurance companies. The ships

of Bremen are largely engaged of late years in carrying out German emigrants to America. The chief imports are raw cotton, cotton yarn, sugar, coffee, tea, tobacco, dye-stuffs, and other colonial produce. The exports consist of those same items and of linens, grain, oak-bark, salt meat, hides, seeds, rags, wool, woollen goods, and wine. The town has several sugar-refineries, above 100 distilleries, tanyards, soaperies, cordage and canvas factories, cotton-mills, bleach-works, tobacco factories, &c.

Bremen first rose into notice about the year 788, when it became the seat of a bishop. In 1233 it gave title to an archbishop. The city prospered greatly under its ecclesiastical rulers, who promoted its union with the Hanseatic league. In 1810 it was incorporated with the French empire, but recovered its independence after the battle of Leipzig in 1813, and was admitted a member of the Germanic Confederation, as one of the Free Hanse Towns, by the Congress of Vienna.

A railway and electro-telegraphic wires run up the right bank of the Weser to Hanover, giving Bremen access to the Prussian and Rhine systems of railroads. The electro-telegraphic wire is continued northward to Bremerhaven and Stade.

(Street, Free Towns; Havel, Free Hanse Town of Bremen; Macgregor, Statistics; Official Returns.)

BRENTA. [Aix.]

BRENTA (the Roman *Medoacus Major*), a river of North Italy, rises from two small lakes near Pergine, in the Tyrol a few miles E. from Trento, flows east through a long and narrow valley between high mountains, then turns south at Primolano, where it enters the Venetian territory. At Bassano the Brenta issues from the mountains into the great Paduan plain. At Limena there proceeds from it a canal called La Brentella, which joins the Bacchiglione. The Brenta continues its course in a south-east direction, passing near Padua; it then assumes a course nearly due east towards the lagoons of Venice. Near Strà, it receives a canal from the Bacchiglione, which passes through Padua. At Dolo, below Strà, another canal, called Brenta Nuova, carries part of the waters of the Brenta in a southern direction for nearly 20 miles to Brondolo, at the south extremity of the Venetian lagoons. The main stream however continuing its course to Fusina, where it entered the lagoons opposite to Venice occasioned considerable mischief by the violence of its current and its frequent overflowing, to prevent which the Venetians made a second cut (Brenta Nuovissima) at La Mira, a little below Dolo, which cut runs nearly parallel to the other, until both streams join near Brondolo, where they enter the sea. The original bed of the Brenta, from La Mira to Fusina, was at the same time embanked and made into a canal with locks, and it took the name of Brenta Morta, 'the Dead Brenta.' The communication between Padua and Venice is carried on by means of this canal, by which the boats from the interior supply Venice with provisions. The whole course of the Brenta is about 100 miles. The banks of the river below Padua were formerly embellished for several miles with splendid palaces and pleasure-grounds of Venetian noblemen. Many of these palaces are now gone to decay.

BRENTFORD, Middlesex, a market-town, and the seat of a Poor-Law Union, is situated in 50° 29' N. lat., 0° 18' W. long.; 7 miles W. by S. from Hyde Park Corner. It is divided into Old and New Brentford by the river Brent, which here unites with the Thames. Old Brentford is in the parish of Ealing and hundred of Ossington; New Brentford is in the parish of New Brentford and hundred of Eithorne. The population of the town of Brentford in 1851 was 8870, of which New Brentford contained one-fourth. The living of Old Brentford is a perpetual curacy, that of New Brentford a vicarage, in the archdeaconry of Middlesex and diocese of London. Brentford Poor-Law Union contains ten parishes and townships, with an area of 21,146 acres, and a population in 1851 of 41,305.

Brentford is situated on the left bank of the Thames, on the great western road from London. The town takes its name from a ford over the Brent, where that stream is now crossed by a bridge. There was a bridge here at a very early period. In 1260 Edward I. granted a toll for three years in aid of the bridge of 'Braynford.' The present bridge was built in 1824; it is a stone bridge of one arch. Brentford has little historical interest; what interest it has arisen chiefly from its two battles. In 1016 Edmund Ironsides having driven the Danes out of London followed them to this place and defeated them here with great slaughter. In 1642 Rupert gained a somewhat doubtful victory over the Parliamentarians under Colonel Hollis. The result of this encounter, which is generally known as the battle of Brentford, was however of much service in raising the spirits of the Royalists.

From its situation Brentford is a great thoroughfare, and has a considerable trade. Several manufactures are carried on in the town and its vicinity. In Old Brentford is the extensive distillery of Booth and Co.; there are also an ale brewery, a soap factory on a very large scale, gas-works, brick and tile works, saw-mills, and the works of the West London Water works Company, the chimney of which is about 150 feet high. The company has recently erected in connection with the works a stand-pipe constructed of iron flanches 9 feet in length, which is carried up a height of 214 feet. Many of the inhabitants are employed in market-gardens in the neighbourhood. The Grand

Junction Canal joins the Brent a little below Hanwell, and thus has communication with the Thames at Brentford. A loop-line connects Brentford with the South-Western railway. Edward I. granted to Brentford a weekly market on Tuesday. It is still held on the same day, and is chiefly for the sale of corn, pigs, and vegetables. Fairs are held on the 17th to the 19th of May, and on the 12th to the 14th of September.

Brentford consists principally of one long irregular and narrow street. The parish church of New Brentford is a plain brick building, erected, except the tower, at the close of the last century, on the site of an older church. The chapel in Old Brentford, dedicated to St. George, is also a plain modern erection. The Baptists have a place of worship in New Brentford. In Old Brentford there are chapels for Independents, Wesleyan Methodists and Baptists. There are National schools in New Brentford, and National, British, and Infant schools in Old Brentford.

For election purposes Brentford is the county-town of Middlesex. A joint-stock company has recently erected a town-hall and market-house, a neat and commodious structure of brick and stone. A county court is held here. There are a savings bank, a dispensary, and a literary and scientific institute. An inn at the corner of the market-place, the Three Pigeons, has acquired some celebrity from having been mentioned by some of the dramatists of the age of Elizabeth and James. It was kept by John Lowin, one of the original performers of Shakspeare's plays. The inn was purchased by the company which built the new town-hall, and was to have been pulled down: but it for the time escaped. Sion House, the splendid mansion of the Duke of Northumberland, is in the vicinity of Brentford; as is also Osterley Park, the seat of the Earl of Jersey; the grounds of both are extensive, well-wooded, and very beautiful. A substantial stone bridge, erected in the last century by Paync, crosses the Thames from Brentford to Kew.

BRENTWOOD, Essex, a village in the parish of South Weald, and hundred of Chafford, is situated on the road from London to Chelmsford and Colchester, in 51° 37' N. lat., 0° 18' E. long.; 11 miles S.W. from Chelmsford, 18 miles E.N.E. from London, both by road and by the Eastern Counties railway. The population of the town of Brentwood in 1851 was 2205. The living of Brentwood is a perpetual curacy in the archdeaconry of Essex and diocese of Rochester.

Previous to Domesday Survey, the manor of South Weald belonged to Waltham Abbey. The manors of South Weald and Brentwood are now in the possession of the Tower family. The church, erected within the last 20 years, is a plain neat edifice; the old chapel, dedicated to St. Thomas à Becket, built in 1221, is now used as a National school. In the interior is a rude image of a Becket, carved in wood. The Wesleyan Methodists, Independents, and Roman Catholics have places of worship. The Grammar school founded in 1557 provides a liberal education for the sons of persons residing within 3 miles of the school-house. The number of scholars in 1852 was 61. The endowment yields about 1200*l.* a year, out of which ten almshouse are supported. There is also a school connected with the Roman Catholic chapel. The county asylum, an elegant building just completed, is situated near the town. A school-house for the pauper children of Shoreditch parish is now being erected.

Brentwood consists chiefly of one main street along the high road. The houses are generally old, and irregularly built. The situation of the town is pleasant and healthy. Numerous good mansions have been built within the last few years in the neighbourhood. Excellent water is obtained from wells in the vicinity. Brick-making is carried on to some extent; there is also a brewery. Some remains of the old prison and of the town-hall, in which the assizes were formerly held, are still existing, and are in the hands of persons who are bound to put them in repair should the assizes be again held in Brentwood. A county court is held in the town. The market held on Thursday has been of little importance for many years. Fairs are held in July and October for cattle. At South Weald are traces of a circular camp. South Weald church is a structure of great beauty and interest. South Weald Park contains much excellent timber, and affords many pleasing views.

BRESCIA, a province of Austrian Italy, is bounded N. by the Tyrol, E. by the Lake of Garda and the province of Mantua, S. and S.W. by the province of Cremona, and W. by the province of Bergamo. The river Oglio and the Lake of Iseo, through which the Oglio passes, mark the boundary between Brescia and Bergamo, and also between Brescia and Cremona. The province is 54 miles long from north to south, and its greatest breadth from the Lake of Garda to the river Oglio is about 33 miles. The area is 1305 square miles, and the population in 1851 was 356,225.

The territory, with regard to its surface and the nature of the soil, may be divided into three tracts:—1. The valleys and mountains north of the town of Brescia, which are rugged and cold in winter; during the rest of the year great numbers of sheep and cattle are fed here, and much cheese is made. 2. The west coast of the Lake of Garda, called Riviera di Salò, which has a mild climate, and produces excellent wine, oil, and fruit, in abundance. In this part the properties are small; the peasants are, properly speaking, gardeners. About 12,000,000 of lemons, and 40,000 lbs. of laurel-oil are annually produced here. 3. The south part of the province, which forms part

of the great plain of Lombardy, and produces corn, rice, Indian corn, flax, grass, and a great quantity of mulberry-trees. The land in this part of the province is very carefully and skilfully irrigated.

All through the province olive-oil is produced in less quantity than formerly, the olive being supplanted by the mulberry, the produce of which is constant, while that of the olive is abundant only in alternate years. Within the last forty years the silk annually produced in Brescia has increased from 1,900,000 lbs. to above 3,000,000 lbs., and the quantity of oil has diminished from 400,000 lbs. to 180,000 lbs.

Besides the Oglio, which skirts the province of Brescia to the west and south, two rivers, the Mella and the Chiese, cross it from north to south, and drain the two principal valleys of its northern division. The Mella enters the Oglio near Ostiano; the Chiese enters it below Canneto. A canal issues out of the Chiese at Garvado, passes close to the town of Brescia, and enters the Oglio above Canneto, whence the boats proceed by the Oglio into the Po. A steam-boat plies between Riva and Desenzano, at the two opposite extremities of the Lake of Garda.

The province is ordinarily administered by a delegate, each district by a commissary, and each commune by a municipal officer called Podestà. For the military there is a commandant at Brescia. For judicial purposes there are civil, criminal, and mercantile courts, from which there is an appeal to the superior courts at Milan. The ecclesiastical jurisdiction is vested in the bishop of Brescia. Higher instruction is afforded by the Lyceum and the gymnasium at Brescia, the gymnasia of Desenzano and Salò, the diocesan gymnasium and seminary for clerical students, besides a college and several private establishments authorised by the government. Female education is given by the Ursuline nuns at Brescia, and by the nuns of St. Francis de Sales at Salò. For elementary education there are at least one boys' and one girls' school in each of the 235 communes into which the province is divided.

Silk, linen, paper, leather, woollen and cotton goods, fire-arms, and cutlery, are the most important manufactures of the province. The minerals include iron (which is found in the Val Trompia), copper, jasper, alabaster, touchstone; particles of gold are found in the Oglio.

The province is traversed by the railway and electro-telegraphic wires from Milan to Venice, but the section of the railroad that crosses Brescia is not yet (December 1853) completed. The telegraphic wires sweep round the head of the Adriatic from Venice to Udine and Trieste, and thence to Vienna.

The province of Brescia is divided into 17 districts and 235 communes. The chief town is Brescia, which is noticed in the next article. [BRESCIA.] Among the other towns the following are the most important:—*Bagolino*, a small place, with 3500 inhabitants, iron-works, and tan-yards, is 23 miles N.E. from Brescia. *Castenedolo*, 6 miles S.E. from Brescia, is a market-town, with a population of 4500. *Chiari*, a town of 9000 inhabitants, is situated on the high road and railway to Milan, 12 miles W. from Brescia. It is a well-built town, with several churches and several silk and silk-twist factories. There is a good trade in silk and cotton goods and in raw silk. The town was formerly important as a fortress; but its defences are now gone to decay. Some Roman remains have been found here. *Desenzano*, 17 miles E. by S. from Brescia, is situated at the south-western angle of the Lago di Garda, which here forms a small harbour for fishing craft and the small steamers that ply on the lake. The town is defended by an old castle built on a height above it. It has a considerable commerce in corn, fish, &c., and about 3600 inhabitants. Steamers ply to Riva at the northern end of the lake. To the east of the town lies the promontory of Sermione, which, surmounted by the castle built by the Scaligers, and by the remains of an ancient Roman palace (sometimes called the Villa of Catullus), forms a very beautiful object from the lake. The western shore between Desenzano and Salò abounds in beautiful and picturesque scenery. *Iseo*, a small town with 2000 inhabitants and extensive silk-works, is situated on the southern shore of the beautiful lake of Iseo (which is named from it), at a distance of 10 miles N.W. from Brescia. *Leno*, a market-town to the south of Brescia, near the Mella, has 4000 inhabitants, who manufacture silk, cotton, and linen. *Lonato*, 16 miles E. by S. from Brescia, and a few miles west from Desenzano, is a walled town, defended also by a citadel. It is situated in a fine silk district and has 6000 inhabitants. The principal church of Lonato is surmounted by a noble dome. *Montechari*, 12 miles S.E. from Brescia, on the left bank of the Chiese, has several silk-throwing establishments and 6000 inhabitants. In the environs is the plain of Monte Chari, in which military reviews are held annually. *Orzinuovi*, 20 miles S.W. from Brescia, on the left bank of the Oglio, is a place of some trade, with 4700 inhabitants. This town was formerly fortified. *Ponteveico*, also on the left bank of the Oglio, is 20 miles S. from Brescia, having a population of above 5000. The town is defended by a citadel, and has some trade in corn and wine. The Oglio becomes navigable for large barges at Ponteveico. *Rovato*, between Brescia and Chiari, has 5000 inhabitants and an old ruined castle. Timber, wrought-silk, tiles, and ironmongery, are the chief articles of trade in the town. *Salò*, beautifully situated at the head of the Bay of Salò, an inlet of the Lago di Garda, is 18 miles E.N.E. from Brescia, and has about 5000 inhabitants. The town is well built, part of it on piles. The town-hall, the church of *Dòmo*, and the hospital are the chief buildings.

Mount San Bartolomeo rises above the town, and the neighbourhood is all covered with plantations of olives, oranges, citrons, mulberries, and vines. The chief articles of trade are wine, raw-silk, fruits, and bleached linen thread, which is famous all over Italy. There are many smaller towns of between 2000 and 3000 inhabitants each.

BRESCIA (the Roman *Brixia*), the capital of the province of Brescia, is situated on the Garza, in a plain between the river Mella, or Mella, and the canal which joins the Chiese and the Oglio, in 45° 32' N. lat., 10° 13' E. long., and has, including the suburbs, 40,000 inhabitants. The city (which is described as it existed before its late capture by the Austrians) is nearly square, surrounded by walls, about four miles in circuit, and has a castle on a hill which is inclosed within the walls in the north-east of the town. It is a well-built town, has many fine churches embellished with numerous pictures and frescoes by masters of the Venetian school, and by Moretto and other native artists. The rotunda of the old cathedral was erected by the Longobards in the 7th century. The new cathedral is a splendid building; it was commenced in 1604, but the cupola was finished only in 1825. The dome of this church is the third in size in Italy. The Broletto, or ancient Palace of the Republic, a vast brick structure, surmounted by a deeply battlemented tower, and dating from the latter end of the 12th century, forms with the two cathedrals one side of the Piazza del Broletto. In the centre of the square is a statue of an armed female, the allegorical representation of the city. The town-house, the episcopal palace, and the palaces and picture galleries of the nobility deserve mention. The public library, founded by Cardinal Querini, a former bishop of Brescia, contains 90,000 volumes and some rare manuscripts, including a copy of the Gospels written in the 8th century. There are seventy-two public fountains in the streets and squares, which are supplied with water from the hills in the neighbourhood. Many ancient inscriptions and the remains of a handsome temple have been found at Brescia.

Brescia is the seat of a bishop, and of the governor of the province. There are a lyceum, two gymnasia, a college, a valuable library, and several other educational establishments in the town, besides the Ateneo, a literary and scientific society which publishes its transactions yearly, and has done much to illustrate the antiquities and artistic monuments with which this city abounds. There is also a handsome theatre, and outside of the town a large building for the annual fair which begins on the 6th of August, and a cemetery (*campo santo*), in which the tombs are placed in rows one above the other against the walls. Brescia is an important mart for raw silk; it has considerable iron-works, and its manufacture of arms and cutlery are considered the best in Italy. It has also silk, linen, and paper factories, tanyards, paper and oil-mills, and a Monte-di-Pietà.

Brixia was founded by the Cenomanni Gauls, whose capital it was (Liv. v. 35, xxxii. 30). With the rest of Transpadane Gaul it was subject to Rome, and under the empire it became an opulent and flourishing town. Augustus, it appears from inscriptions, settled a colony of citizens, not soldiers, in Brixia, which was hence styled 'Colonia Civica Augusta.' Attila and his Huns plundered Brixia in A.D. 452, but it soon recovered from this disaster, and subsequently became the capital of one of the duchies of the Lombard kingdom.

The ancient remains at Brescia are numerous, and the architectural fragments are remarkable for beauty of design and skill of execution. The most remarkable remains of buildings are those of a basilica, or court-house, which is called however a 'Temple of Hercules,' portions of the theatre; and some Corinthian columns, supposed to have formed part of the forum. The cella of the so-called Temple of Hercules has been converted into a museum, rich in ancient remains, and particularly valuable for its collection of inscriptions, which are either originals or fac-similes let into the walls. Among the ancient works in bronze discovered in Brescia is a celebrated statue of Victory.

Brescia was taken by Charlemagne. In the middle ages it suffered much from the feuds between the Guelfs and Ghibelines. It subsequently in 1426 attached itself to the Republic of Venice, to which it adhered with steadfast fidelity in all its fortunes till 1796. It was stormed by Gaston de Foix, after an obstinate resistance by the Venetian garrison, in 1512, when it is said 46,000 inhabitants of the city perished in the indiscriminate slaughter that followed upon its capture by the French, to whose lawless rapacity, unrestrained lust, and ferocious cruelty upon this occasion, even the disinterested conduct of Bayard formed but a feeble counterpoise. The French again took Brescia in 1796, when they turned the Broletto into a barrack, having first plundered it of its works of art. At the peace of 1815 Brescia, with the rest of North Italy, came under Austria. Brescia hardly ever recovered from its sack by Gaston de Foix. It revolted against the Austrians in the late insurrectionary movements in Italy, and its ruin has been all but completed by the bombardment and storming which it suffered from the Austrians under Marshal Haynau, March 30, 1849.

(*Antichi Monumenti nuovamente scoperti in Brescia*, Brescia, 1829; *Guida per la Città di Brescia*; Magregor, *Statistics*.)

BRESLAU, a large city at the confluence of the Ohlau and the Oder, the capital of the Prussian province of Silesia, stands in 51° 7' N. lat., 17° 4' E. long., 220 miles S.E. from Berlin by the Berlin and Vienna railroad, and has a population of 110,000. It has the form

of an oblong. The central part of the town contains the great market place, from which the four main streets branch off to the four principal gates. The suburbs, separated by the Ohlau, but connected with the city by six large and several smaller bridges, are denominated the 'Outer Town,' in contradistinction to the central part, which is called the 'New Town.' The regularity and width of the streets, the broad fronts and handsome elevation of the houses, give the town a cheerful appearance, which is in contrast with the massive and more sombre aspect of the churches and public buildings. There are three suburbs on the same side of the Oder as the new town; a broad ditch crossed by a cast-iron bridge is interposed between them. On the north side of Breslau lie four other suburbs, built on two islands formed by arms of the Oder, and connected with the New Town by several bridges. The greater part of the town is encircled by an agreeable promenade, which is ornamented with trees and shrubs. In Blücher Square, which used to be called the Salzring, the Exchange-buildings are erected. A bronze statue of Blücher, resting upon a pedestal of granite, stands in this square. The fortifications of Breslau, which cannot it to be besieged in 1741, 1757, 1760, and 1806, were demolished in 1813 and 1814.

Breslau contains thirty-two churches and one synagogue. The cathedral church, erected in the 12th century, is highly decorated in the interior, and contains seventeen side chapels. The church of the Holy Cross, erected by Duke Henry IV., duke of Silesia, in 1288, is in the shape of a cross, and stands upon a subterranean church of the same shape and dimensions. It contains the monument of Henry and a bronze relief of John of Breslau, by Vischer. Among the other remarkable churches are the church of St. Mary on Sand Island; St. Dorothea's, the loftiest church in Breslau; and the chief Protestant church, called St. Elizabeth's, the steeple of which is 364 feet high. The public buildings of the town are numerous. The Guildhall, erected in the 14th century, contains the hall, where the national diets formerly held their sittings. It is situated on the Parade, the finest square in Breslau. Among the other public buildings are—the government house; the courts of justice; the public library in the Sand suburb; the Roman Catholic gymnasium; the episcopal palace near the cathedral; the arsenal; the burg, once an imperial palace; and the university buildings. The university was founded by Leopold I. in 1702 for the two faculties of divinity and philosophy. Two more faculties, for law and medicine, were added in 1811, when the university of Frankfurt-on-the-Oder was incorporated with it. The library contains upwards of 100,000 volumes. The Protestants have three gymnasia here; the Catholics have a royal gymnasium and a theological college. The Jews have a good school, founded in 1790, and another of an inferior kind. Breslau likewise possesses a school of arts; a school of architecture; and a vast number of other schools and charitable institutions, among which must be mentioned the asylums for the blind and for deaf-mutes, the Silesian literary and scientific society; several public libraries; various collections of coins and works of art; and several hospitals and infirmaries. The town is the seat of a royal mint and bank, and has a head department of mines, and other establishments incidental to its character as the centre of provincial government. There is a theatre and opera-house, and several musical societies.

The central position of Breslau among the manufacturing districts of Silesia, its facilities for trade by means of internal navigation, and by railroads which connect it with Vienna, Prague, Dresden, Cracow, Warsaw, Leipzig, Hanover, Hamburg, Berlin, and Stettin, render it one of the most thriving manufacturing and commercial cities of Germany. We believe that a railway is projected to connect Breslau with Posen, and thus give it readier communication with the harbours of Stettin, Danzig, and Königsberg. Breslau is an entrepôt for the fine and coarse woollens, cottons, linens, silks, hardwares, glass, wools, hemp and flax of Silesia; for the wines of Hungary, and all kinds of colonial produce. The oxen of the Ukraine and Moldavia, the corn and cattle of Silesia, and the produce of its own distilleries, tanyards, type-foundries, and all those manufactures which it has in common with other large towns, find a regular sale at Breslau. Four fairs are held in the year, those for wool are held in the early part of June and October. The average quantity of wool sold at the June fairs amounts to 7,000,000 lbs. [SILESIA.]

Spain, *Geographie*; Macgregor, *Statistics*.)

BRESSE, a district in the former province of Bourgogne in France. It was bounded N. by the duchy of Bourgogne and Franche-Comté, E. by Bugey, S. by the Rhône which divided it from Dauphiné, and W. by Lyonnais and the Saône. Bresse now forms part of the department of AIN. Bourg was its chief town.

BREST, a town in the department of Finistère in France, and one of the great naval stations of that empire, stands on the Penfeld, in 45° 28' N. lat., 4° 29' W. long., at a distance of 370 miles W. from Paris, and has a population of 48,225. It lies on the north side of a deep bay called the Road of Brest, land-locked, and entered by a narrow channel called Le Goulet.

The town is of triangular form. The Penfeld enters the town near the northern angle of the walls, and passes through it into the roadstead with a winding course, dividing the town into two parts—that on the left bank being called Brest, that on the right bank Recouvrance. In Brest, just at the point where the river falls into the road-

stead, and placed so as to command the entrance to the port, is the castle, the strength of which is very much owing to its situation. The whole town is strongly fortified. The site of Brest is very uneven. So steep is the declivity in some parts that the communication is made by means of steps, and the gardens of some of the houses are on a level with the fifth story of others. The streets in the higher parts of the town are winding and steep. In Recouvrance modern houses are rapidly superseding the edifices of former times.

Brest is a fortress and naval station of the first class. Previous to the time of Louis XIV. it was a land-fortress merely; but Cardinal Richelieu, perceiving its importance as a naval station, caused magazines to be built and fortifications to be erected to defend the harbour. Louis XIV. afterwards established the great arsenal. All the principal buildings of the town, except the churches of St.-Louis and St.-Sauveur, are connected with the defence of the place, or are constructed for the purposes of the French navy. There are handsome quays, ship-building yards, extensive store-houses, rope-walks, and barracks; also a building called Le Bagne, for the reception of the convicts who are sentenced to the galleys. This last-mentioned building is on the summit of a hill, and large enough for 4000 convicts. The various establishments for the navy occupy nearly the whole of the port. Brest has a botanic garden, a marine library, an observatory, and a museum of natural history. It is the seat of a maritime prefect, has schools of medicine, navigation, and marine engineering, tribunals of first instance and of commerce. A naval school is established on board a vessel in the harbour. Schools of naval artillery, engineering, hydrography, and drawing, and a school for the instruction of midshipmen, are attached to the port.

The bay or road of Brest is the ancient *Brevates Portus*. It is perhaps one of the finest natural harbours in the world. The passage Le Goulet by which it is entered is less than a mile in width, but within there is room for 500 vessels of the line. The harbour is difficult of access in foul weather; the coast of Bretagne on either side of the entrance is rock-bound, and frequently fogs render the lights of Penmarec and Ouessant, by which the harbour is made, to disappear. Steamers have to slacken pace on approaching the entrance. The passage is defended by formidable fortifications on both sides. At its entrance, on the Point St.-Mathieu, there is a lighthouse with a revolving light which is eclipsed every half minute. Its height is 177 feet above the sea, and it stands in 48° 20' N. lat., 4° 47' W. long. The road may be considered as the estuary of several small streams which flow into it, none of which however are of any importance except the Aulne or river of Châteaulin, which forms part of the system of inland navigation connecting Brest with Nantes. The commerce of Brest is almost entirely confined to the victualling of the navy. A project has been long entertained of forming a commercial port here, there being no harbour of that kind between Nantes and Havre. As a port of construction, and as a school for the navy, Brest ranks before both Toulon and Cherbourg; but in importance of situation and in accessibility it is very far surpassed by either. A railway is about to be constructed from Reunes through Lorient to Brest which will connect the town and harbour with Paris and the general railway system of France.

(*Dictionnaire de la France*, Paris, 1845; Balbi's *Géographie*.)

BRETAGNE, or *Britannia*, one of the provinces into which France was divided before the revolution, was bounded N. by the English Channel, W. and S.W. by the Ocean and the Bay of Biscay, S. and E. by the provinces of Poitou, Anjou, Maine, and Normandie. Its coast-line, which was above 500 miles in length, and indented with numerous bays and harbours, extended from the mouth of the Couesnon on the confines of Normandie to the mouth of the river Boulogne, which flowing through the Lake of Grandlieu falls into the Bay of Biscay opposite the Isle of Noirmoutier, dividing Bretagne from Poitou. The greatest length of the province from south-east to north-west was 205 miles; its greatest breadth at right angles to its length 105 miles; and its area amounted to 13,085 square miles.

A long range of mountains, called Mévez, runs parallel to the northern coast, and terminates in the western part of the peninsula. The principal rivers of the province rise in this chain. Those which run north into the English Channel have a short course: the chief of these are the Couesnon, before mentioned; the Rance, which falls in at St.-Malo; and the Trieux, which enters the sea at Paimpol. To the south of the chain are the Aulne, called in the lower part of its course the river of Châteaulin, which falls into the harbour of Brest; the Blavet, which forms the harbour of Lorient and enters the Bay of Biscay at Port-Louis; the Vilaine, which joined by the Ille and several smaller streams enters the sea opposite Belle-Ile a little below Roche-Bernard. The south of the province is traversed by the Loire. All these are tide rivers and navigable.

The soil of the province is fertile along the coast; but a great part of the interior is covered with mountains, heaths, and forests. Corn sufficient for the home consumption is grown. Very little wine is produced, the common beverage being cider. Flax and hemp are extensively cultivated. Lead, iron, antimony, coal, and marble are found. Among the manufactures of Bretagne linen and sailcloth are the most important. The number of harbours along the seaboard afford great facilities for carrying on an important coasting trade, which consists principally of wine, brandy, fish, salt, cattle, butter

and the other industrial, mineral, and agricultural products of the province. The language of the inhabitants is a dialect of the ancient Celtic, corrupted of course by a mixture of French words. The province now forms the departments of CÔTES DU NORD, FINISTÈRE, ILLE-ET-VILAINE, LOIRE INFÉRIEURE, and MORBIHAN, under which heads its present state will be more fully described.

Bretagne was divided into Haute-Bretagne and Basse-Bretagne, the capitals of which were respectively Rennes and Vannes. Before the first revolution it had a local parliament or assembly of states. The states consisted—1st, of the barons, who were ten in number, and the gentry; 2nd, of the clergy, who were represented by the heads of the several orders; and 3rd, of the *tiers état*, or third estate, which was composed of the deputies returned by 41 towns. The states met every second year at Rennes, Nantes, and St.-Brieuc, alternately.

Bretagne was an early seat of the Druidical superstition, and contains some vast monuments at Carnac and elsewhere, which tradition represents as consecrated to the purposes of this ancient religion. Invasions of Bretagne from the British Islands or of the islands from Bretagne, figure in the accounts of the early historians, or the traditions of ancient times; but little or nothing certain seems to have been known before the time of Cæsar's invasion of Gaul.

At that time the states along the coast from the Sequana (Seine) to the Garumna (Garonne) had the general epithet of Armorica, from the Celtic words *Ar mor*, 'on the sea.' The chief tribes who inhabited Armorica were the Veneti, a powerful maritime people, who made a gallant though ineffectual stand against the Romans under Julius Cæsar ('Bell. Gall.' iii. 7-16), and whose name is retained in Vannes; the Osismii, who dwelt in the western part of the peninsula; the Redones, whose name appears in Redon and Rennes; the Curiosolites, who occupied the present diocese of St.-Brieuc, and the Namnetes in the south, whose name remains in Nantes. Under the Roman empire Armorica formed part of Gallia Lugdunensis, but one or two revolts served to show that their love of freedom was unshaken, though their want of success only riveted their chains the faster.

In 284 an emigration is said to have taken place from the island of Britain, then harassed by the Saxons, and that the emperor Constantius Chlorus gave them lands in Armorica. M. Daru however ('Hist. de Bretagne,' Paris, 1826) places the emigration in 333, when Maximus, chosen emperor by the legions in Britain, passed over into Gaul to dethrone Gratian. It is said that he then took with him a considerable force of native Britons, who, under their leader, Conan, were able after the defeat of Maximus to retain possession of Armorica which he had bestowed on them. When the further decay of the empire left the remoter provinces in the possession of independence, the Armoricans were released from the subjection in which they had been held; and in the year 419 the Romans recognised as their allies those who had lately been their subjects. Conan appears to have ruled his states in peace and with considerable ability till the year 421, when he died. He is usually designated Conan Meriadec, the latter name signifying, according to some, 'great king.' His successors are said to have borne the title of king till the time of Alain II., in the 7th century. In opposition to this history there are writers who deny that any immigration of the insular Britons into Armorica took place until the commencement of the 6th century, when the pressure of the Saxons forced the unhappy islanders to abandon their native seats and retire, some to the western side of the island, Cornwall, Wales, &c., and others beyond sea into Armorica.

If amidst these conflicting statements we may venture to give our own conjecture, we should say that the account given by Daru, though perhaps a distorted representation of facts, is not without foundation. A colony of this kind was much more likely to influence the language and customs of the district in which they settled, than a number of miserable exiles escaping from the pressure of barbarian invaders, and finding their way as they could to a place of refuge in a foreign land. This infusion of a military population serves also to account for the rise of a free state in Armorica, upon the decay of the Roman power, while the rest of Gaul tamely bowed to the yoke either of their Roman masters or their barbarian invaders. The reality of Conan's existence we see no just reason to doubt; and without placing implicit credence in the lists which the Breton writers furnish, we are led by the language of Gregory of Tours, and by other testimony brought forward by Daru, to admit that several succeeding chieftains, and perhaps Conan himself, took the title of king.

With Alain II., 690, as noticed above, the title of king ceased; and Bretagne, divided into a number of principalities, became again subject to the Franks, about 800, during the reign of Charlemagne. In the troubles of the following period, the kingdom of Bretagne was once more revived by Nomenot (824-851), who had been nominated governor of Vannes, by Louis le Debonnaire, son and successor of Charlemagne, and had revolted from Charles le Chauve. Erispoe, the son of Nomenot (851-857) acknowledged the supremacy of Charles, but maintained his kingly title. Civil dissensions among the Bretons themselves led to the extinction of this kingdom in 874. The country was divided into the counties of Rennes, Vannes, Cornouaille (Cornwall), and other portions; and civil discord between the rulers of the petty states thus formed conspired with the invasion of the Northmen or Normans to afflict the country. This

right of sovereignty, claimed by the kings of France, was conveyed to the Northmen by Charles the Simple, when he ceded to them the country afterwards known as Normandie, in 912. The dukes of Normandie thus became the feudal superiors of the rulers of Bretagne, and themselves did homage for this province as well as for Normandy to the kings of France. This cession was the cause of long and bloody wars between the people of the two provinces, for the Bretons struggled fiercely against the barbarians, to whose supremacy they were thus arbitrarily consigned. They seem however at last to have acknowledged the dukes of Normandie as suzerains.

In 992, Geoffroi, count of Rennes, assumed the title of Duke of Bretagne. Alain, his son, second duke of Bretagne, was, from the year 1035 to his death in 1040, the faithful guardian of the childhood of William the Bastard (afterwards the Conqueror), duke of Normandie, and several Breton lords accompanied William into England in 1066. In 1148 a disputed succession led to the dismemberment of Bretagne, and to a civil war, in which the kings of England (Henry II.) and France (Louis VII. 'le Jeune') took part. The marriage of Coustance, daughter of one of the claimants, with Geoffroi, son of Henry II., added the duchy of Bretagne to the already vast possessions of the house of Plantagenet. On the death or murder of Prince Arthur, in 1203, Normandie was declared to be confiscated, and was seized by Philippe Auguste, the French king, and Bretagne thus became immediately a fief of the French crown. The duchy came to Alix, daughter of Coustance, by her third husband, Gui de Thouars: and in her right to Pierre de Dreux, a younger branch of the royal family of France, to whom she was married in 1212.

Pierre de Dreux, a restless and ambitious prince, reigned from 1213 to 1237; first as duke in right of his wife, and then, upon her death (in or near 1219), as guardian to his son, a minor. In 1237 he abdicated his power as guardian of his son, and was intrusted by the pope with the conduct of an expedition against the infidels beyond sea: in 1248 he accompanied St. Louis in his crusade against Egypt, and was wounded and taken prisoner at the battle of Mansoura. He died on his passage back to Europe in 1250.

The history of the dukes, Jean I. (1237-1286), Jean II. (1286-1305), Artur II. (1305-1312), and Jean III. (1312-1341), presents few incidents of moment; but the death of the last-named prince brought on the dispute for the succession to the duchy between Jean de Montfort and Charles de Blois, and led to the war which forms so important an episode in the wars of England and France under Edward III. of England and the kings of France of the house of Valois. Jean III. left no children: he had two brothers—or rather one brother, Gui, count of Penthièvre, who died before him, and one half-brother, the above-mentioned Jean de Montfort, who immediately upon the death of Jean III. took possession of the duchy. Charles de Blois claimed in right of his wife, who was daughter and heiress of Gui, and the decision was referred to the king of France as suzerain. The case was argued before a court of the peers and grandees of the kingdom. Montfort, who had reason to fear an unfavourable decision, fled secretly from Paris; and a decree of the king declared Charles de Blois duke of Bretagne. Montfort immediately sought the protection of the king of England, who willingly gave him his support: and by a singular concurrence Edward III., who claimed the crown of France through a female, supported Montfort against a female claim; while Philippo VI., the actual possessor of the crown of France, whose right rested upon the exclusion of females from the succession, supported a female in her claim to the ducal coronet of Bretagne. But interest and ambition little regard such inconsistencies.

The war had nearly been concluded at its very commencement. The army of Charles de Blois invested Nantes in 1341, in which Jean de Montfort was, and throwing into the city the heads of thirty Breton prisoners of the Montfort party, so frightened the townsmen that they opened their gates, and Jean was taken, carried to Paris, and shut up in the tower of the Louvre. Jeanne of Flanders, countess of Montfort, was at Rennes when she heard of her husband's captivity: with matchless courage she re-animated her husband's partisans, raised troops, acquired numerous other partisans by fair speeches, promises, and gifts, and throwing herself into Hennebon, a town on the river Blavet not far from the coast, awaited the succours which she expected from England.

Upon the departure of the countess from Rennes that place was invested by the troops of Charles de Blois and surrendered by the townsmen, and the victorious army advanced to Hennebon, hoping by the capture of the countess and her son (a child of three years of age) to settle the matter. But they found this no easy task; Jeanne attacked vigorously by the besieging army, and having to counteract within the town the intrigues of the bishop of Léon, who wished to persuade the townsmen to surrender, defended herself with undaunted courage. In a sally during a fierce assault she entered the hostile camp, set the tents on fire, and being unable to re-enter Hennebon took refuge in the neighbouring town of Auray, recruited her forces, and again made her way into Hennebon. The siege continued, the bishop of Léon exhorted to surrender, and the heroic countess could only obtain of her now dispirited soldiers a promise to hold out for three days longer. Two days passed away; on the third the besiegers were seen preparing for a last assault, when the English fleet hovered

sight, the valiant Sir Walter Manny landed at the head of the relieving force, and having burned the machines of the besiegers, entered the town. "Whoever then saw the countess," says Froissart, "came down from the castle and kiss Sir Walter Manny and his companions, one after the other two or three times, might well say that she was a valiant lady." The siege was forthwith raised.

A second attack upon Hennebont marked the year 1342. Before the end of the year the countess of Montfort crossed the sea into England to beg further succours, and was returning with a fleet of 46 vessels, when near Guernsey she fell in with a French fleet of 22 great ships manned with Genoese seamen, and having on board 1000 men at arms under the orders of Charles de Blois himself. The battle was terminated by a tempest which separated the fleets, but four English ships were taken. The countess landed with her reinforcements, and the kings of England and France arrived in Bretagne with hostile forces; but early in the year 1343 a suspension of arms between the two potentates was agreed on, and the Bretons alone, with some mercenaries, were left to carry on the war. In 1344 the Montfort party was strengthened by the severity of the king of France, who, without form of trial, put to death a Breton lord, Olivier de Clisson, on a charge of traitorously forming an alliance with England. The widow of Clisson, on hearing of this, gathered some troops, surprised a castle held by the friends of Charles de Blois, and distinguished herself by her exploits in a war in which, more than in any other, women emulated the warlike fame and courage of men.

In 1345 Jean de Montfort managed to escape from the Louvre, after a confinement of three years. He landed in England, did homage to Edward as his suzerain, obtained aid and returned to Bretagne. He died however shortly after, and the rights of his son, a mere child, were bravely sustained by the Countess Jeanne.

In 1347 Charles de Blois, who had besieged Roche Derrien near Tréguier, was surprised and taken prisoner by an inferior body of English troops. His wife, Jeanne de Penthièvre, sustained his cause with a valour equal to that of the Countess of Montfort, and the hatred of the Bretons for the English induced many of them to embrace her party. In 1356 Charles recovered his liberty by ransom, and renewed the war, which was carried on for seven years longer, during which no decisive action took place. In 1363 the young count de Montfort attained his majority, and did homage for the duchy of Bretagne to his powerful protector the king of England. In 1363 Charles de Blois and Jean de Montfort signed a treaty by which Bretagne was to be divided into two parts, having Rennes and Nantes for their respective capitals; but the reproaches of his wife, Jeanne de Penthièvre, who told him that she had married him to defend her inheritance, not to yield up half of it, determined Charles to break it. The following year witnessed the decisive battle of Aurai, in which Montfort, Chandos, and Olivier de Clisson overthrew the army of Charles de Blois, though he was aided by the bravery and skill of the celebrated Bertrand du Guesclin. Charles de Blois himself fell in the action, and the treaty of Guérande in 1365 secured the duchy of Bretagne to the house of Montfort.

Although Jean de Montfort (Jean IV.) had no competitor for the duchy, his possession of it was neither quiet nor uninterrupted. His own violent disposition precluded repose. The course pointed out to him by the gratitude due to England for past services and his present duty of fidelity to France was neutrality; but the duke went beyond this; he formed an alliance with the English, which necessarily drew down upon him the hostility of France, while his liberality to the English individually disgusted the barons, and the admission of English garrisons alienated the towns of his duchy. He quarrelled with Clisson, who soon after left his service for that of the French king. A French army under Du Guesclin, now constable of France, himself a Breton, entered Bretagne in 1370, and the duke abandoned by his subjects was obliged to take refuge in England. In 1373 he returned, but not finding any support again retired to England. The duchy was declared to be confiscated; but a violation of the independence of the Bretons, and an attempt to establish the 'gabelle,' or salt tax, caused the recall of the duke in 1390, and after a disturbed reign, in which his quarrel with Olivier de Clisson forms a prominent feature, Jean de Montfort died in 1399.

Jean V., son of the late duke, came to the duchy a minor. He had been married while yet a child to a daughter of the French king, Charles VI., and upon attaining his majority was involved in that perpetual scene of disturbance which marked the reign of the unhappy monarch. Though frequently changing sides in the unhappy contests which followed, he preserved Bretagne from war until the year 1425-26, when it was partly ravaged by the Duke of Bedford, regent of France for the English party, who was enraged at Jean for having deserted the English interest for that of the Dauphin. In 1430 he was captured and taken prisoner by the Count of Penthièvre and his brothers, princes of the house of Blois, grandsons of that Clisson who had himself been entrapped in a similar manner by the late duke. Jean obtained however his release, and the event led in its consequences to the ruin of the house of Blois. In the year 1442 Jean V. died.

Jean V. was succeeded by his son, François I., and he by Pierre II. and Arthur III., whose histories present few points of interest. Pierre II. held the duchy from 1450 to 1457; Arthur III. from 1457 to 1459.

The first part of the long ducal reign of François II. (1458-1488) coincided with the reign of the astute Louis XI., whose desire of repressing the enormous power of the great feudal nobles led him into frequent disputes and contests. In 1465 François entered into the confederacy of the nobles against the king, known by the title of 'The League of the Public Good.' The Bretons were too slow in their movements to take part in the battle of Montlhéry, but they assisted in the blockade of Paris and took Pontoise and Evreux. In 1486 François allied himself with Maximilian, king of the Romans, who had married the heiress (since dead) of the late Duke of Burgundy; with the king and queen of Navarre; the dukes of Lorraine, Orléans (heir presumptive to the throne of France, and afterwards Louis XII.), Foix, and others, for mutual protection and support against the court of France, which was now directed by Anne, lady of Beaujeu, daughter of Louis XI., and guardian of her young brother the king Charles VIII. This led in 1487 to the invasion of Bretagne by the French. Henry VII. of England, who had in his adversity resided for some time in Bretagne, did not interfere in time: the occasion seemed favourable for annexing Bretagne to France, the king of which country laid claim to the duchy by virtue of the rights of the house of Blois, which Louis XI. had long since purchased. Nantes was attacked; but the invaders were repulsed. In 1488 a battle was fought at St.-Aubin de Cormier between the French army under La Tremouille and the Bretons and their allies, English, Germans, Gascons, and Spaniards: the latter were defeated with loss, and the Duke of Orléans was taken prisoner on the field. A treaty was however agreed upon, and François died just after its conclusion, the 7th or 9th of September, 1488.

Anne, daughter of the late duke, succeeded to the duchy. Her situation was embarrassing and painful. The Maréchal de Rieux, her guardian, and other powerful persons at the court wished her to marry the Sire d'Albret, a Gascon noble to whom she was exceedingly averse. Some English and Spanish auxiliaries arrived to defend her against the hostile designs of France, but she feared that the English would make themselves masters of her person and compel her to marry the Sire d'Albret. To put an end to these intrigues and annoyances, she gave her hand to the Archduke Maximilian, to whom she was married by proxy in 1489. The French wished to dissolve the marriage, which indeed was never consummated; and in the year 1490 hostilities recommenced between France and Bretagne. The duchess was besieged in Rennes, and reduced to the necessity of negotiating. During the negotiations a proposal was made on the part of the French, listened to by the Breton leaders, and finally carried into effect, that the duchess and the young king of France, Charles VIII., should reconcile their discordant claims by marrying. This marriage took place in 1491; and by the terms of it the rights of whichever party died first were to go to the survivor in default of lawful issue. The duchess was bound also, if she survived, to marry only the future king of France or the heir presumptive, so that the final union of the duchy with the crown was apparently secured.

In 1498 Charles VIII. died without children; and in 1499, nine months after his decease, Anne married his successor, Louis XII. The articles of marriage between Anne and the new king were designed to separate the crown of France from the ducal coronet of Bretagne, by providing that the latter should descend to the second son, or in default of a second son to a daughter, so as to give to the province a sovereign of its own. The duchess Anne died in 1514, aged 37 years. Her daughter Claude was married a few months after to the Duke d'Angoulême, heir presumptive to the French throne, which he ascended upon the death of Louis XII. in 1515 under the title of François I.; and shortly afterwards Claude ceded to her husband her rights over Bretagne during her lifetime. It was not however till several years after her death, which was in 1524, that Bretagne was formally united to France: this union took place in 1532.

From this time the history of Bretagne ceases to possess any importance. It became completely a province of France, and the traces of its separate existence (except always the prevalence of the Breton language), which diminished during the monarchy, have been quite obliterated in the new arrangements induced by the French revolution.

(Daru, *Histoire de Bretagne*.)

BRETON, CAPE. [CAPE BRETON.]

BREWOD. [STAFFORDSHIRE.]

BRIANÇON, the capital of an arrondissement in the department of Hautes-Alpes, in France, the seat of a tribunal of first instance and of a college, is situated on a round-topped eminence at a little distance west of the Col de Genève, and at the junction of the Guisanno and the Clarée (which here unite and form the Durance), 37 miles N.E. from Gap, and has a population of 3433, including the whole commune. The town which stands 4384 feet above the level of the sea, consists chiefly of one steep street tolerably well built and traversed by a brook; in the centre is a square space in which the market is held. The rest of the town is ill built and dismal looking. One of the most remarkable houses is one of three stories, which is still called the Temple from its having been a Protestant chapel; it bears the date 1574. As a town Briançon is a poor place, but as a fortress it ranks very high, commanding as it does one of the great passes over the Alps. The

fortifications include a triple line of ramparts and seven forts, built on rocky heights of different elevations above the town and the fires of which cross each other. The summit of the eminence on which the town stands is crowned by fort Vieux. Several redoubts and lunettes command the road to Italy; but on the opposite bank of the Clarée is the most important part of the fortifications which communicate with the town by a bridge of a single arch 127 feet in span and 179 feet above the surface of the river. A zigzag road leads from the bridge to the several forts which command all the approaches to the town and communicate with each other also by subterranean galleries cut in the solid rock; all the forts and defences of the town are commanded by the lunette called Point-du-Jour, which occupies the highest ground between the two rivers. Briancón is the principal arsenal, magazine, and dépôt for the French Alps. The erections connected with the fortifications give the town a very imposing and picturesque appearance from the valley of the Durance. Besides these, vast barracks and a handsome church built on a terrace on the outskirts of the town and surmounted by two handsome towers are conspicuous objects. There are many pretty country houses in the neighbourhood of Briancón, one of which situated at the foot of the inclined plane that leads up to the town is surrounded by finely improved grounds, adorned with waterfalls and streams derived from the river Cervières which joins the Durance below Briancón. Nails, scythes, hosiery, hemp-hackles, cotton-yarn, crayons, leather, copper ware, &c., are made in the town, which trades in these articles, and in lead-ore, mules, sheep, turpentine, manna (gathered from the larch), lavender-water, and simples collected on the Alps.

Briancón occupies the site of the ancient *Brigantium*, which was 6 Roman miles from *Alpis Cottia* (Mont Genève), and was connected by a road through Grenoble with Vienne on the Rhône, and by another road through Embrun with Gap.

(*Dictionnaire de la France; Annuaire pour 1853; Dictionary of Greek and Roman Geography.*)

BRIANSK. [OREL.]

BRIARE. [LOIRET.]

BRIAVELL'S, ST. [GLOUCESTERSHIRE.]

BRIDGE, Kent, a village, and the seat of a Poor-Law Union, in the parish of Bridge, hundred of Bridge and Petham, and lathe of St. Augustine, is situated on the right bank of the Lesser Stour, near an old bridge over that river, in 51° 15' N. lat., 1° 7' E. long.; 3 miles S.E. from Canterbury, and 53 miles E.S.E. from London by road. The population of the parish of Bridge, including 234 persons in the Bridge Union workhouse, in 1851 was 864. The living is a vicarage in the archdeaconry and diocese of Canterbury. Bridge Poor-Law Union contains 22 parishes and townships, with an area of 39,771 acres, and a population in 1851 of 11,164. This place, which is of some antiquity, is termed in old deeds *Brigge*. Besides the parish church there is a chapel for Wesleyan Methodists. There are two schools in the parish. The South-Eastern railway brings this district of country within easy reach of the metropolis. In the neighbourhood are many gentlemen's seats.

BRIDGEND, Glamorganshire, a market-town, and, in conjunction with Cowbridge, the seat of a Poor-Law Union, in the parishes of Coyty and Newcastle and hundred of Newcastle, is situated on both banks of the river Ogmore, in 51° 30' N. lat., 3° 34' W. long.; distant 7 miles W. by N. from Cowbridge, 18 miles W. by N. from Cardiff, 181 miles W. from London by road, and 190½ miles by the Great Western and South Wales railways. The population of the parish of Coyty in 1851 was 2304; that of the parish of Newcastle was 1536; the population of the town of Bridgend is not given separately but probably amounted to about 3000. The living of Coyty is a rectory, held with the curacy of Nolton, in which the greater part of the town stands, in the archdeaconry and diocese of Llandaff. Bridgend and Cowbridge Poor-Law Union contains 52 parishes and townships, with a population in 1851 of 23,369.

Bridgend is called in Welsh *Pen-y-Bont-ar-Ogwr*. The town is divided by the river Ogmore, or Ogwr, into two unequal parts: the lesser portion, which is on the right bank, is in the parish of Newcastle; the other part, on the left bank, which is called Oldcastle, is in the parish of Coyty. Two bridges cross the Ogmore here, the more modern one being that over which the turnpike-road passes. The parish church of Newcastle, St. Illtyd's, stands in an elevated position surmounting the steep bank of the Ogmore at a height of about 100 feet. The church has been recently rebuilt in the gothic style. There is a chapel-of-ease to Coyty parish in Bridgend, and another called Nolton Chapel. Three Dissenting chapels are in the town. There are a National and a Wesleyan school.

The sanitary condition of the district is attended to by a Local Board of Health. The general appearance of the town is picturesque. In the main street are several new buildings and handsome shops. The market-place, built by the Earl of Dunraven, is well planned and executed neatly paved, and kept in excellent order. Behind the market are well-built public slaughter-houses. A county hall has been recently built. The town is lighted with gas. Bridgend possesses a mechanics institute and a savings bank. A county court is held in the town. The chief support of Bridgend arises from its position as a market-town, placed between a mineral and an agricultural population. The market day is Saturday. A fair is held on Holy Thursday for

cattle, sheep, and hogs, and another on November 17th. The South Wales railway now open to Swansea passes near Bridgend. A railway for coals, 4½ miles in length, connects Bridgend with the Llynr Valley mineral line. About three miles from the town is a quarry of mountain limestone. The river Ogmore is much resorted to for salmon fishing; also for the Sewin trout and the gwyniad, a fish which abounds in this river. About two miles from Bridgend stands Coyty Castle, an extensive ruin.

BRIDGENTH, Shropshire, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, is situated on the river Severn, in 52° 33' N. lat., 2° 26' W. long., 20 miles S.E. by E. from Shrewsbury, and 138 miles N.W. by W. from London. The town lies on both sides of the Severn, which arc connected by a bridge of six arches. The larger portion of the town is on the right bank, built on a red-sandstone rock, which rises 60 feet from the bed of the river. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The population of the municipal borough in 1851 was 6172; that of the parliamentary borough was 7610. The livings of St. Mary and St. Leonard are perpetual curacies in the archdeaconry of Salop and diocese of Hereford. Bridgenorth Poor-Law Union contains 29 parishes and townships, with an area of 67,882 acres, and a population in 1851 of 15,608.

Bridgenorth, anciently *Bruges* or *Brug*, is stated to be of Saxon origin. The first known charter is one of the 16th year of King John. The borough has sent members to Parliament since the 23rd year of Edward I. Bridgenorth Castle is historically interesting. When or by whom it was built is uncertain; but in 1102 Robert de Belesme, earl of Shrewsbury, rebuilt the castle and strengthened the town, and defended it unsuccessfully against Henry I. on behalf of his elder brother Robert, duke of Normandy. In 1156-7 Henry II. besieged Bridgenorth, when, it is said, his life was saved by a knight who stepped forward and received in his own person an arrow aimed at the king. In the civil wars the inhabitants espoused the Royalist cause, and held out for three weeks against the Parliamentary forces; a large part of the town, including the church of St. Leonard, was on that occasion burned to the ground.

Besides the parish churches, the National school in the lower town is licensed for divine service. There are also places of worship for Baptists, Independents, and Irvingites. Bridgenorth has a Free Grammar school founded in 1503. It has an income from endowment of about 50*l.* a year, and had 36 scholars in 1852. Connected with the school are three exhibitions to Christ's College, Oxford. The school is free to sons of resident burgesses. There are also a Blue-Coat school for educating, clothing, and apprenticing 30 boys; a National and an Infant school, common to both parishes; and a National school in the lower town, erected in 1847. A society for the diffusion of religious and useful knowledge; a mechanics institute; a savings bank; a dispensary; and a combined infirmary and dispensary, erected in 1836, are the chief public institutions in the town. A library, bequeathed for the use of the clergy in the town and neighbourhood by the Rev. Hugh Stackhouse, contains many old and valuable books. There is also a public subscription library. Bridgenorth possesses a considerable number of charities; amongst others an almshouse for 12 of the widows or unmarried daughters of burgesses, and an hospital for 10 widows belonging to the upper town.

The situation of Bridgenorth renders it airy and salubrious. The prospect from the top of the hill is delightful. There is a curious walk made from the high part of the town to the bridge, being hewn to the depth of twenty feet through the rock; and the descent is great, but it is made easy by steps and rails. A public mall on the grove above the lower town forms a beautiful walk, although now little frequented. The town is lighted with gas. There are three carpet manufactories and two large mills for the spinning of worsted. A large portion of the labouring class finds employment in the navigation of the Severn, but the principal sources of profit to the inhabitants are the market, held weekly on Saturday, and the retail trade with the neighbourhood. There are five annual fairs—on the Thursday before Shrove Tuesday, May 1st, June 20th, August 2nd, and October 29th (the last continuing for three days), for cattle, sheep, butter, cheese, bacon, &c. There is a jail at Bridgenorth, built in 1823. The inhabitants to the east of Bridgenorth are less connected with the town than those on the west. They are separated from it by a tract of hilly but fertile country, and their chief market is Wolverhampton.

BRIDGETOWN. [BARBADOES.]

BRIDGEWATER, Somerset, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Bridgewater and hundred of North Petherton, is situated on the banks of the river Parret, in 51° 7' N. lat., 3° 0' W. long., 33 miles S.W. by S. from Bristol, 139 miles W. by S. from London by road, and 151½ miles by the Great Western railway. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The population of the municipal and parliamentary boroughs, which are co-extensive, was 10,317 in 1851. The living is a vicarage in the archdeaconry of Taunton and diocese of Exeter. Bridgewater Poor-Law Union

contains 10 parishes and townships, with an area of 85,530 acres, and a population in 1851 of 33,477.

Bridgewater is mentioned in Domesday Book under the name of *Brugic*. William de Briwore, to whom Henry II. had granted the manor, built a castle of considerable strength at Bridgewater, and obtained from King John for the town a market and a fair; he also founded the hospital of St. John, consisting of a master, brethren, and 13 poor persons of the order of St. Augustine. This hospital had very large possessions. In the west part of the town was a priory of Minorites, or Gray Friars, dedicated to St. Francis. There was also in Ireland's time an hospital for lepers. The founder of St. John's hospital commenced a stone bridge of three arches over the river Parret; this was completed in the reign of Edward I. by Sir Thomas Trivet.

Bridgewater was one of the towns that were taken by the barons during their revolt against King Henry III. In the civil wars it stood out a long time for the king. In July, 1645, Colonel Wyndham, the governor, was compelled to surrender, when the castle was dismantled; the only remains of it now existing are the sally-port and some small detached portions of the walls. The inhabitants of Bridgewater supported the claims to the throne of the Duke of Monmouth, who was proclaimed king by the mayor and corporation.

The parish church, dedicated to St. Mary, is a handsome structure, consisting of a nave, chancel, transept, two side aisles and a tower, surmounted with a lofty spire. It has recently been restored. There is also a chapel-of-ease in the parish dedicated to the Holy Trinity. There are places of worship in Bridgewater for Independents, Baptists, Methodists, Quakers, and Unitarians. King James's Free Grammar school, founded in 1561, has an income from endowment of about 13*l.* a year. It is free to none: 6 boys of the borough pay 2*s.* a quarter. The number of scholars in 1852 was about 30. In 1723 Dr. John Morgan founded and largely endowed a school for the education of the sons of decayed tradesmen resident within the borough. A spacious school-room and a house for the master were erected in 1816. The number of scholars is about 150, of whom 30 are clothed on the foundation. A school was founded and endowed by Mr. Edward Tackerell for the clothing, educating, and apprenticing the children and grandchildren of certain of his relatives. The management is in the hands of trustees. Various other sums have been left for the instruction of poor children. There are almshouses and an infirmary.

The elective franchise was conferred on Bridgewater by Edward I. in the 23rd year of his reign, since which time it has returned two members to Parliament. Its first charter was granted by King John, June 26th, 1200, and twelve other charters were granted to it between that time and 1683. The town is pleasantly situated, about nine miles from the sea, in a level but well-wooded country; to the north-east are the Polden and Mewlip hills, and on the west the Quantock hills. The river Parret, over which there is a handsome iron bridge, divides the town into two parts. The principal part of the town is on the left bank of the river. The streets, although rather irregular, are of good width and paved; the houses are generally well built: the town is lighted with gas. The town-hall is a good building. The jail is convenient in its internal arrangements. The market-house is a rather handsome structure, surmounted with a dome and lantern. Eastover, that part of the town which is on the right bank of the river Parret, has greatly increased since the formation of the Bristol and Exeter railway, the station of which is in Eastover. It possesses a very handsome church dedicated to St. John the Evangelist.

The river Parret is navigable as far as Bridgewater for vessels of 700 tons, but it is subject, like some other rivers in the Bristol channel, to a rise of nearly six fathoms at spring-tides. The flow of the tide is preceded by a head-water commonly termed the 'bore,' which often produces much inconvenience among the shipping. The principal imports to Bridgewater are grain, coals, tallow, and timber. Coals are imported from Wales, and conveyed into the interior of the country by means of the river Parret and a canal. The Parret is navigable as far as Langport; the canal runs to Taunton, and thence into Devonshire. The foreign trade is principally with Russia, the United States, Canada, Newfoundland, and the West Indies. The number of vessels belonging to the port as registered on December 31st, 1852, was under 50 tons burden, 54 vessels, tonnage, 2021; above 50 tons, 68 vessels, tonnage, 10,143; with 2 steam-vessels, 31 tons. The number and tonnage of vessels entered and cleared at the port of Bridgewater during the year 1852 were as follows:—Coastwise, inwards, 2682 vessels, 126,958 tons; outwards, 1170 vessels, 47,722 tons. In the colonial and foreign trade there entered 58 vessels of 9365 tons, and cleared 15 vessels of 3046 tons.

A manufacture peculiar to and constituting the staple trade of Bridgewater, is the fabrication of that kind of white brick known as Bath brick; this branch of industry gives employment to many of the inhabitants. There are markets on Tuesday, Thursday, and Saturday; that on Thursday being the principal market for provisions, and especially for cheese, for which the neighbourhood is celebrated. Fairs are held on the first Monday in Lent, July 24th, October 2nd, and December 27th. The fair on October 2nd, called St. Matthew's Fair, which is held by royal charter, was formerly the mart of Somersetshire and the adjoining counties, and is still of considerable importance. Bridgewater possesses a savings bank. A

county court is held in the town. Petty sessions are held weekly for the borough, and monthly for the county. The July quarter sessions are held in Bridgewater, and the summer assizes are held here alternately with Wells. Bridgewater was the birthplace of Admiral Blake, who received his education at the Grammar school in the town.

BRIDGEWATER. [VAN DIEMEN'S LAND.]

BRIDLINGTON, formerly written *BRELLINGTON*, but now commonly pronounced 'Burlington,' East Riding of Yorkshire, a port and market-town in the parish of Bridlington and wapentake of Dickering, is situated in 54° 5' N. lat., 0° 12' W. long., distant 40 miles E. by N. from York, 203 miles N. from London by road, and 204 miles by the Great Northern (via Boston and Hull) and North Midland railways. The population of the town of Bridlington with Bridlington Quay was 2432 in 1851. The living is a perpetual curacy in the archdeaconry of the East Riding and diocese of York. Bridlington Poor-Law Union contains 32 parishes and townships, with an area of 63,410 acres, and a population in 1851 of 14,201.

The town is about a mile from the east coast. At this place the surface which farther north is hilly, subsides into a flat, which extends along the coast to Spuru and thence to Hull, and comprises the whole of the fertile alluvial tract called Holderness.

Bridlington is considered by some authorities to have been the site of a Roman station—*Gabrantovicorum*. Flamborough Head is thought by some good antiquaries to be the *Ocellum Promontorium*; though the received opinion is that Spurn Head better agrees with its position. The road to York called the York road, appears to have been a British road, perhaps improved by the Romans. The remains which determine the exact sites of inland towns inhabited by the Romans, have here been long swept away by the encroachments of the sea. After the invasions of the Danes, and after the Saxons had established themselves in Britain, the north portion of the country was the last subdued; nor was this effected until the landing at Flamborough of Ida, in 547. A series of parallel intrenchments intersect the Wolds from east to west, and near the extremity of the Wolds shorter lines occur in different directions. Tradition attributes them to the Danes; and this locality was undoubtedly their stronghold for nearly three centuries. Several engagements were fought here between the Danes and the Saxons and Normans. The Danes' tower, near Flamborough, is plainly of Norman architecture. Great numbers of tumuli are spread over the Wolds, some in groups, others detached. The group called 'Danes' graves' comprises at present about 200 barrows. The detached tumuli extend down to Flamborough Head. Some of them have been found to contain merely skeletons, others bronze and iron weapons, and a few British urns. Specimens of these urns, now in the possession of a gentleman at Bridlington, were evidently formed by hand, and baked. In July 1834 a tumulus was opened at Gristhorpe, near Fiely, a description of which was published by Mr. Williamson. The coffin was of oak, and of the rudest shape and structure, the interior having been hollowed out apparently with chisels and hatchets of flint. The body within the coffin was enveloped in a strong skin. No pottery was found. Flint heads of arrows, and of a javelin, pins of horn, bone, and wood, and the fragments of a horn-ring, were among the contents of the coffin; in addition to which was a spear-head of brass or some other composition of metal. The body is considered to have been about 6 feet 3 inches in height, and its muscular attachments are very strong. The coffin and its contents are placed in the Scarborough Museum. At the foot of the Wolds large Saxon barrows occur. In 1824 a party of gentlemen caused some ground in a field called Tuft-Hill, at Kilham, to be opened, when half-burned bones, pieces of urns, &c., were found intermingled with the light sandy earth. In a sand-pit at a short distance they discovered a human skeleton, about 3½ feet below the surface; many ornaments of brass, clasps, hooks, rings, and buckles were found in different parts, as well as a large number of amber and glass-beads which lay about the neck. The legs of the skeleton were crossed. Near Rudston, five miles from Bridlington, about six years back, a large tessellated pavement was discovered by a ploughman. The design is said to have differed from those of Roman pavements. The tesserae were formed of the chalk-stones of the neighbourhood, and were put together with considerable skill. An account of the Beacons will be found in Poulson's 'History of Holderness;' the sites of nearly all those referred to in Queen Elizabeth's 'Letter to the Justices,' may be traced to this day: they are supposed to be coeval with the Danish invasion. The derivation of the names of many of the villages, as well as the common dialect of the inhabitants, is evidently from the Saxon.

After the Norman Conquest the manor of Bridlington formed part of the extensive possessions of Earl Morcar. To Walter de Gant, son of a nephew of the Conqueror, to whom the manor had been granted, Bridlington owes its priory, the most distinguishing feature in its early history. When completed, probably in 1114, it was peopled with canons regular of the order of St. Augustine. The estates of the priory were of immense extent, and included not only lands in its vicinity but also in many other parts of Yorkshire and in Lincolnshire; and they were largely added to by subsequent benefactors. Henry I. granted to the prior civil jurisdiction over the manor and town. John granted them an annual fair and a weekly market.

The monastery existed four centuries: when it was dissolved its revenues amounted to 550*l.* per annum, a very large income at that day. In 1539 it was demolished, and the manor and rectory became the property of the king, by whom they were granted on lease to various individuals. In 1643, during the contest between Charles and his parliament, Bridlington became the scene of temporary hostilities on occasion of the queen landing here with a supply of arms, under the convoy of Admiral Van Tromp. Admiral Batten, whose squadron had been stationed to intercept the queen, cannonaded the town for some hours, but was warned off by the ebbing tide, which would have left him in shoal water. The celebrated Paul Jones with four ships engaged and captured two ships, the convoy of the Baltic fleet, in Bridlington Bay, on September 21st, 1779. Jones reached the Texel in safety with his prizes.

The priory church is the chief feature in Bridlington. The nave and an arched gateway leading to it are the only parts now left of the once spacious monastery. The west front has had two towers, of which the lower stories only remain. This front still retains a great degree of architectural magnificence, and is in the style of the beautiful collegiate church of Beverley. "The grand western entrance is an exquisite specimen of the architecture of Henry VII.'s time; excepting however the north-western tower, which belongs to a much earlier period. The style of the north-western tower is early English, as is also the whole of the north side of the church. The west window is 55 feet in height from its base to the crown of the arch, and 27 feet in breadth. The head is filled with good perpendicular tracery. . . . The north porch is also a truly splendid specimen of architecture. . . . The length of the present church in the interior is 185 feet; and the distance of the farthest pillar from the east wall of the church, whose foundation has been taken up, 152 feet; so that the ancient church seems to have been nearly of the same length as Beverley minster, about 333 feet; its breadth is 68 feet, and height about 60 feet." ('An Historical and Architectural Description of the Priory Church of Bridlington,' by the Rev. Maria Duke Prickett.) Attention has recently been directed to the restoration of this church. The work has been carried on under the superintendence of the archdeacon of the East Riding and a committee of clergymen and laymen connected with the district. The great west window has been elaborately restored by Mr. Wailes of Newcastle. The Wesleyan and Primitive Methodists, Baptists, and Independents have places of worship in Bridlington. A building which was formerly a Quakers' meeting-house, is now used as a temperance-hall. There are in Bridlington an Endowed school, founded in 1636 for the instruction of 20 boys, the children of poor parishioners; another school, founded and endowed in 1781, "for maintaining and educating the poorer children of Bridlington and Key in the art of carding, knitting, and spinning of wooll," in which 12 children are instructed; National and Infant schools; also about 20 day and boarding-schools. The town possesses two public subscription libraries, a small museum, and a mechanics institute.

The streets of Bridlington are narrow and irregularly built, and the appearance is that of an old town; but the town has been much improved within the last twenty years. The streets are lighted with gas. The town-hall is over the priory gateway; the corn-exchange is in the market-place. The trade of Bridlington is chiefly in corn. Soap-boiling and bone-grinding for the purpose of manure, give employment to some of the inhabitants. The retail business with the surrounding agricultural districts, and the resort of visitors to Bridlington Quay during the bathing season, are now the principal sources of the prosperity of the town. The imports are chiefly coals from Sunderland and Newcastle, timber from America and the Baltic, and general merchandise from London and Hull. Two fairs are held annually in a large open area between the priory-gate, called also the 'Bayle Gate,' and the church. This area, which is called 'the Green,' was the close of the priory.

BRIDLINGTON QUAY, East Riding of Yorkshire, a small modern town in the parish of Bridlington and wapentake of Dickering, is situated on the sea-coast, in the recess of Bridlington Bay, in 54° 4' N. lat., 0° 10' W. long., and about one mile from the town of BRIDLINGTON. The population of the town of Bridlington Quay in 1841 was 1852; in the Census returns of 1851 the population is included with that of Bridlington town. The living is a perpetual curacy in the archdeaconry of the East Riding and diocese of York.

This place is much frequented during the bathing season; it has increased rapidly within the last ten years. The principal street, which runs directly to the harbour, is very wide. The town is lighted with gas. Two substantial stone piers inclose the harbour. There is good anchorage in the bay, particularly when the wind is unfavourable for coasting-vessels proceeding northward round Flamborough Head. A new church in the early English style was erected about 1842. The Wesleyan and Primitive Methodists have places of worship. There are National schools for boys and girls, a commodious Infant school, and a day-school conducted by Wesleyan Methodists.

A fine view of Flamborough Head and Bridlington Bay is obtained from the piers. The beach has a fine hard sand, which affords a good walk at low water. There are warm and cold sea-water baths. At a short distance there is a chalybeate spring of reputed efficacy, resembling

the waters of Scarborough and Cheltenham, but not so purgative. An ebbing and flowing spring, which was discovered in 1811, furnishes an abundant supply of water of remarkable purity. This spring, being below high water mark, is covered by the sea every tide. The fossils of the chalk-cliffs near Bridlington are numerous and well known. A few years ago a head of the great extinct elk with branching horns measuring 11 feet from tip to tip, was found in the lacustrine deposit in this vicinity.

BRIDPORT, Dorsetshire, a port, borough, and market-town, and the seat of a Poor-Law Union, in the Bridport division of the county, is situated in a vale above the confluence of two branches of the river Brit, or Bride, in 50° 44' N. lat., 2° 4' W. long.; 15 miles W. by N. from Dorchester, 134 miles W.S.W. from London by road. Dorchester, the nearest railway station, is 141 miles from London by the South-Western railway. The population of the municipal borough, which is co-extensive with the parliamentary borough of Bridport, was 7566 in 1851. The town is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a rectory in the archdeaconry of Dorset and diocese of Salisbury. Bridport Poor-Law Union contains 19 parishes and townships, with an area of 31,731 acres, and a population in 1851 of 16,860.

At the period of the Domesday Survey, Bridport contained 120 houses, and possessed a mint for the coining of silver. The first charter was granted to the town in the 37th of Henry III. The town has sent members to Parliament since the 23rd of Edward VI. A market and three fairs were granted in the 36th of Queen Elizabeth. The prosperity of the town of Bridport is dependent upon the harbour, which is at the mouth of the river Brit, at the distance of a mile and a half from the town. The sand accumulates so rapidly in the harbour that much trouble and expense have been required to fit it to receive vessels of any considerable burden. From the commencement of the 14th century down to the present time much has been done to improve the harbour. It is now safe and commodious, and can accommodate vessels of 250 tons burden; the trade of the port has in consequence rapidly increased. The number and tonnage of vessels registered as belonging to Bridport on 31st December, 1852, were—under 50 tons, 2 vessels, 73 tons; above 50 tons, 14 vessels, 1774 tons. The number and tonnage of vessels that entered and cleared at the port of Bridport during the year 1852 were as follows:—Coastwise, inwards, 193 vessels, 13,728 tons; outwards, 87 vessels, 3717 tons; colonial and foreign, inwards, 37 vessels, 3143 tons; outwards, 34 vessels, 1751 tons.

Bridport had a considerable coasting trade in coal and grain, but it has been almost entirely lost in consequence of the superior facilities for transmission of goods afforded by railways. Hemp, flax, tallow, timber, and wheat are imported from Russia and the Baltic; and timber from Norway and America. Wines, spirits, skins, coals, culm, and slates are also imported. The exports consist chiefly of the manufactures of the town, and of cheese and butter for which the neighbourhood is celebrated. The manufactures of Bridport are principally of twine, shoe-thread, cordage, sailcloth, and fishing nets. The antiquity of the hemp trade in Bridport long since dignified a halter with the name of a 'Bridport dagger.' Ship-building is carried on to some extent.

The parish church is an ancient cruciform edifice, chiefly of the perpendicular style. The Independents, Baptists, Unitarians, Wesleyan Methodists, Quakers, and Roman Catholics have places of worship. There are National and Infant schools; a savings bank; a mechanics institution with reading room and lecture room; almshouses for 27 persons; besides several charities. The town consists chiefly of three spacious and airy streets; the main street forming a portion of the old mail road from London to Exeter. The streets are well paved and lighted with gas. The sewerage is good. The town-hall, erected in 1786, in the centre of the town, is built of brick, faced with Portland stone. The markets are held on Wednesday and Saturday. Fairs for cattle, sheep, cheese, and peltry, are held on April 6th, Holy Thursday, and October 11th. A county court, a court of sessions, court of record, and court leet are held in the town.

BRIE, a district in France comprehended partly in Champagne, and partly in the Ile-de-France, extended from the banks of the Seine toward the north-east nearly 70 miles; and its greatest breadth at right angles to the length was about 65 miles. It was formerly divided into Brie Française, chief towns Brie-Compte-Robert, and Montereau; Brie Champeoise divided into Upper Brie, capital Meaux, and Lower Brie, chief town Provins; and Brie Pouilleuse, chief towns Château-Thierry and La-Fère-en-Tardenois. Brie Pouilleuse was afterwards incorporated with Brie Champeoise.

Brie had anciently its own feudal lords, who bore the title of counts of Meaux; but Herbert of Vermandois, count of Meaux or of Brie, having become count of Troyes or Champagne in the 10th century, united the two countries. Brie ever afterwards followed the fate of Champagne. The territory is now divided between the departments of Aisne, Aube, Marne, Seine-et-Marne, and Seine-et-Oise.

BRIEG. [SILESIA, PRUSSIAN.]

BRIEL (sometimes called *Brielle* and *the Brill*), a seaport town on the northern side of the Island of Voorn in the Dutch province of South Holland, is situated near the mouth of the Maas, in 51° 54' N. lat.,

4° 9' E. long. The confederates, having been driven from the Netherlands by the Duke of Alla, equipped a fleet in England in 1572, and entered the harbour of Briel, which surrendered to them, and thus became the earliest seat of Dutch independence. In 1585 the town was given up to Elizabeth, queen of England, as security for advances made by her to the States of Holland, and it continued garrisoned by English soldiers until 1616, when it was restored. Briel is well built and strongly fortified. The harbour is commodious, and capable of containing 300 vessels. The inhabitants number about 5000; the men are principally occupied as fishermen and pilots. Briel was the birth-place of the admirals Van Tromp and De Witt. The town is 12 miles W. from Rotterdam.

BRIENNE-LE-CHÂTEAU. [Aube.]

BRIENZ, LAKE. [Bern.]

BRIEUC, ST. (or St.-Brieux), an episcopal city in France, capital of the department of Côtes-du-Nord, the seat of tribunals of first instance and of commerce, of a chamber of commerce, an agricultural society, a school of hydrography, communal college, and a diocesan seminary, is situated on the Gouet near its mouth, in the Bay of St.-Brieuc, a part of the English Channel, 278 miles W. from Paris, in 48° 30' 53" N. lat., 2° 45' 44" W. long.; and has about 13,000 inhabitants.

This city owes its origin to a monastery built in the 5th century by St. Brieuc, an Irishman: it has given title to a bishop since A.D. 844. It is built near the little river Gouet, over which is a handsome granite bridge, and in a bottom surrounded by hills sufficiently high to intercept the view of the sea, although so near. The Gouet is navigable, and at its mouth is the village of Legué, with a tide-harbour which forms the port of the town, and is almost joined to it by buildings. St.-Brieuc is a neat town, tolerably well laid out and built for an old town, with streets sufficiently wide, and neat squares. The ramparts were demolished in 1788 and their site converted into a promenade, which is planted with lime-trees, and terminates in a terrace, whence there is a view of the Channel on one side and the Bay of St.-Brieux on the other.

The entrance of the Gouet was formerly defended by the tower or fort of Cesson, which was demolished in 1598 by order of Henri IV.: from its ruins, which crown a high cliff nearly 300 feet above the sea, there are fine views of the coast. At the foot of the cliffs there is a strand of considerable extent, covered with firm level sand at low-water, which serves (in the beginning of July) as a race-course for horses from the five departments formed out of the Armorican peninsula. The cathedral of St.-Brieuc is a structure of various dates: part of it is as old as the 11th century; the nave was rebuilt in the 18th century. It has two fine rose-windows. In the south transept is the chapel of St.-Sacrement, which is adorned with several wooden statues of good workmanship, representing the Annunciation. There are several specimens of good wood-carving in the interior. The building is surmounted by two low and ugly towers, one of which supports a high wooden spire. The church of St.-Michel has a hideous exterior, resembling a large barn; but the interior is handsome and has an imposing effect. The town has seven public fountains and two bridges.

Among the manufactures of St.-Brieuc may be enumerated linen, serge, woollen stuffs, cotton and linen yarn, leather, paper, gilt buttons and beer. It is engaged also by means of the port of Legué in the coasting trade, in the Newfoundland cod-fishery, and in ship-building. Corn, flax, hemp, pulse, butter, honey, and cattle are the principal exports. St.-Brieuc has a public library containing 24,000 volumes, a theatre and a fine hospital. The see of St.-Brieuc includes the department of the Côtes-du-Nord. The bishop is a suffragan of the archbishop of Tours.

For a long time after its foundation St.-Brieuc was an open town, often taken and plundered by the Normans, who however were conquered under its walls, in 937, by the Bretons under Alain Barbetorte. The town was taken and pillaged by the Constable de Clisson during the war against Duke Jean. On this occasion the duke had fortified the cathedral, which the constable took and made his headquarters. The Chouans entered St.-Brieuc in 1799, but were driven out by the inhabitants.

BRIGHTON, or as it was formerly ordinarily written, and is still written in most legal documents, BRIGHTELMSTONE, Sussex, a parliamentary borough, market-town, and watering-place, and forming of itself a Poor-Law Union, in the hundred of Whalesbone and rape of Lewes, is situated in 50° 49' N. lat., 0° 8' W. long., distant 52 miles S. from London by road, and 50½ miles by the Brighton and South Coast railway. The town occupies the entire breadth from east to west of the parish of Brighton, and extends west into the parish of Hove. The barracks and a few detached houses north of the town are in the parish of Preston. The population of the parliamentary borough of Brighton, which includes the parishes of Brighton and Hove, was 69,673 in 1851. The town of Brighton comprises an area of 1940 acres. The government is vested in a constable and a body of commissioners, 112 in number, elected by the 201 householders under an Act of Parliament for regulating, paving, improving, and managing the town. The parliamentary borough was constituted by the Reform Act; it returns two members to the Imperial Parliament. The living of St. Nicholas, the parish church of Brighton, is a vicarage

held with the rectory of West Blachington, in the archdeaconry of Lewes and diocese of Chichester.

Brighton stands near the centre of the curved line of coast of which the east and west points are respectively Beachy Head and Selsea Bill. The town is built on a slope, and is defended from the north winds by the high land of the South Downs, which from Beachy Head as far as the central part of Brighton press close on the sea and form high chalk cliffs. From the central part of Brighton westward the hills recede farther from the sea, leaving a level coast. Thus the town of Brighton in the eastern part presents a high cliff to the sea, and in the western part a low sloping beach. The town has not increased towards the north so much as along the coast; but it has run up the depressions in the chalk, along which the London and Lewes roads respectively are formed. The entire sea frontage of the parish of Brighton, a space of nearly three miles in length, is occupied with a range of superior houses. The population of the town has increased with astonishing rapidity during the present century: in 1801 it was 7339; in 1811, 12,012; in 1821, 24,429; in 1831, 40,634; in 1841 it was 46,661; and in 1851 it was 65,569. The number of residents during the summer occasionally amounts to 80,000. The place is rapidly increasing.

The origin of Brighton is uncertain. Roman coins have been dug up in the vicinity. At the Conquest the lordship of the manor was included in the possessions of Harold, and was given by the Conqueror to his son-in-law, William de Warren. About this time some Flemings are supposed to have established themselves here for the purpose of fishing. From the exposed nature of the coast the town has occasionally suffered from hostile invasion. It was plundered and burned by the French in the early part of the 16th century. During the reigns of Henry VIII. and Elizabeth fortifications were erected to protect the town. Brighton has frequently suffered from storms and the encroachments of the sea, by which the cliffs have been undermined, and at different times many houses have been destroyed. Wooden groins have been formed which run from the cliff to low water mark, within which the loose shingle is deposited; the shingle in this part of the channel is always driven eastward. A sea wall has been built along the eastern cliff, extending from the pier to Kemp Town. This wall is 60 feet high, 23 feet thick at the base, tapering to the top to a thickness of 3 feet: its construction cost the town upwards of 100,000*l.* Two centuries ago the town was situated 'under the cliff,' or on the tract of beach now covered by the sea, on which stands the chain pier. Twenty-two houses were destroyed in 1665, leaving still under the cliffs 113 tenements; the whole were swept away in hurricanes which occurred in 1703 and 1705, and by irruptions of the sea. In the year 1818, while some labourers were making excavations in Ship Street and Middle Street, the walls of one of the engulfed streets, named South Street, were discovered 15 feet below the surface of the beach. About the middle of the 18th century attention was directed to Brighton as a suitable watering-place, chiefly by Dr. Richard Russell, an intelligent medical man, whose work on the use of sea-water excited considerable interest. The place was rendered a fashionable resort by George IV., then Prince of Wales, who first visited Brighton in 1782, and for many years in succession made it his residence during the summer and autumn. In 1784 the foundation of the Marine Pavilion was laid. This royal palace may be regarded as the nucleus of modern Brighton. Its exterior appearance is rather fantastic than graceful, presenting an assemblage of domes, minarets, and pinnacles. The Pavilion has been purchased and fitted up by the corporation of Brighton as a place of recreation for the inhabitants and visitors. The grounds attached, which occupy upwards of 7 acres, are appropriated as pleasure-grounds for the use of the public.

Adjoining the Pavilion is a large open space termed the Steyne. Prior to 1793 this was a piece of common land used by the fishermen for repairing their boats and drying their nets. It is now inclosed with railings, planted with trees, intersected with roads, and rendered an ornament to the town. It is surrounded by excellent houses. On the north side is a bronze statue of George IV. by Chantrey; and on the south side is the Victoria Fountain, 32 feet high, erected by subscription in 1846. The rapid increase of Brighton caused the want of a suitable landing-place to be strongly felt. A company was accordingly formed for the erection of a suspension or chain pier, which was begun in October, 1822, under the direction of Captain Brown, and opened in November of the following year. The cost of erection was 30,000*l.* It is composed of four spans or chain bridges, each 255 feet in length, and at the end on a framework of strong oaken piles is a platform paved with blocks of granite. The main chains, which are eight in number, are carried over pyramidal cast-iron towers 25 feet high, which rest on clusters of piles. The entire length of the pier is 1136 feet, the breadth of the platform being 13 feet. This structure was seriously damaged in heavy gales in October, 1833, and November, 1836. The pier has since been considerably strengthened, and is now in a state of thorough repair.

On the east side of the parish of Brighton is Kemp Town, a magnificent assemblage of private houses erected on the estate of Mr. Kemp. When first built some years ago it was quite detached from the town, but is now united with it. On the west side of the town, in the parish of Hove, are several handsome squares and terraces. The

Marine Parade extends about a mile along the cliff from the Steyne to Kemp Town, and along the whole distance is a broad terrace on the margin of the cliff, which at this place attains a considerable height. Many fine houses are situated on this range, which forms an agreeable and convenient promenade. In clear weather the prospect from the cliff is very extensive; the Isle of Wight, 40 miles distant, may occasionally be discerned from it. The battery in the western quarter of the town consists of six pieces of heavy ordnance, 42-pounders. It was erected in 1793, and rebuilt in 1830. On the eastern side of the town is the Queen's Park, which is planted with trees, and affords opportunities of healthful exercise and recreation to the inhabitants of Brighton. A chalybeate spring in the parish of Hove has considerable celebrity.

The parish church, an ancient edifice dedicated to St. Nicholas, stands on Church Hill. At the west end is a square tower surmounted with a small spire, and containing a peal of eight bells. St. Peter's church, on the north level, near the entrance to the town by the London road, is a handsome structure of the perpendicular style, erected in 1827 by Barry. In addition to these there are 11 churches and chapels belonging to the Established Church in Brighton, besides the parish church and St. Andrew's chapel in the parish of Hove. The Dissenters have upwards of 20 chapels, including 5 Independent, 5 Baptist, 1 English Presbyterian, 3 Wesleyan and Primitive Methodists, 1 Roman Catholic, 1 Unitarian, and various other chapels. Some of the Dissenting chapels are handsome edifices. There is also a Jews' synagogue.

The Central National school was erected in 1830, and was subsequently enlarged to accommodate 650 pupils. The cost of the erection was 4500*l.* Besides this school there are numerous National, British, and Infant schools, of which a British and Infant school and a School of Industry are supported by the Society of Friends. The Union Charity schools, founded in 1805 by Edward Goff, Esq., are under the management of Dissenters. There are also two Ragged schools, and a School for educating and clothing the Indigent Blind. Brighton is a favourite place of education for the children of the more opulent classes. There are upwards of 100 boarding-schools in the town, besides a large number of day-schools. St. Mary's Hall, Kemp Town, is an institution founded for educating the daughters of poor clergymen, and preparing them for governesses; it has been established about 20 years: each pupil pays 20*l.* per annum. There is also a Training school for school-mistresses, in which there were 17 pupils in 1851.

The Brighton College, a proprietary school, founded in 1847, is intended to provide on moderate terms a sound religious, classical, and general education of the highest order. The college, a handsome building in the Tudor-collegiate style, was erected in 1849. The literary societies include the Royal Brighton Scientific and Literary Institution, the Brighton Athenæum, and the Brighton Working Men's Institute.

The benevolent institutions of Brighton are numerous. Among these may be named the Sussex County Hospital, established in 1828; the Victoria wing was added to the building in 1839 and the Adelaide wing in 1841; it is on a large scale, and open to the sick and lame poor of every county and nation; the Brighton Dispensary, founded in 1809, for administering advice and medicine gratuitously to the sick poor, and for promoting vaccination; the Provident and Self-supporting Dispensary, for the labouring classes; a Dorcas Society; a Lying-in-Institution; the Dollar Society, for the benefit of persons, especially the aged, who have experienced great reverses in their circumstances; a Society for the relief of distressed Widows; an Asylum for Female Orphans; an Infirmary for Diseases of the Eye; an Asylum for the Blind; an Institution for the Deaf and Dumb; a Homœopathic Dispensary; several Loan and Provident societies for the benefit of persons of limited incomes, and a savings bank.

The town-hall of Brighton is a large but inelegant building of a so-called classic character, with three double porticoes. It contains rooms for public meetings, for the meetings of magistrates, town commissioners, police offices, &c.; it has also a spacious market room. In the Justice room the Sussex county court sits two days in each month. The building was commenced in 1830, on the site of the old market, nearly in the centre of the town, and cost upwards of 50,000*l.* Its dimensions are 144 feet by 113 feet. The new market-place, which is commodious, is in the same locality. The market is well supplied with poultry, meat, fish, and vegetables, and is open daily, an Act for a daily market having been obtained in 1773. A corn-market is held in the town on Thursday. A fish-market is held by the fishermen on the open beach. Fairs are held north of the town on Holy Thursday and September 4th. Brighton is well lighted with gas. The supply of water is good. Among the places of amusement are a theatre, an assembly room, and two club-houses. At some of the public rooms as well as on the promenade music is provided during the bathing season. About a mile east of the town, on a beautiful part of the Downs, races take place annually, about the beginning of August. Regattas and other aquatic sports are occasionally given. In addition to the bathing-machines on the beach, baths, shampooing establishments, and other places for the accommodation of invalids and other visitors are abundantly provided. The hotels are numerous, and some of them on a scale of great magnitude and splendour.

The trade of Brighton is confined almost wholly to the supply of the wants of a wealthy population. Almost the only manufacture of the place is that of Tunbridge ware. Shoreham, about 7 miles west from Brighton, and Newhaven, about 9 miles to the eastward, are the ports through which the foreign and coast trade of Brighton is conducted. The coast off Brighton is too dangerous to allow of much direct trade with the town. Fishing is carried on somewhat extensively: the fisheries giving employment to upwards of 100 boats and about 500 men. Mackerel, herrings, soles, brill, and turbot are taken in large numbers; mullet, whittings, and other fish are also caught. The principal feature of the traffic of Brighton in more recent years has been the construction and operations of the three branches of the Brighton and South Coast railway, which have their common centre in the town, namely, the main line northward to London, the branch westward to Portsmouth, and that eastward to Hastings. The central station in Brighton in the north-west part of the town is a handsome and convenient building. Previous to the opening of the railway there were 32 coaches passing daily in each direction between London and Brighton. There is now not one. The greatly increased facility of communication by railway between Brighton and the metropolis has caused a considerable demand for house accommodation, to meet which building is extensively carried on. The Downs and the country generally in the vicinity of Brighton afford a great number of fine drives and walks.

Upon the erection of the chain pier, Brighton became a packet-station, and was much used by those who preferred going and returning from Paris by way of Dieppe and Rouen, instead of the old route of Dover and Calais. The opening of the South-Eastern line of railway introduced a rival and more ready communication with Paris by way of Folkestone and Boulogne; and more recently Newhaven, since the construction of a branch railway to it, has obtained a share of the Brighton and Paris traffic.

BRIGHTON. [VAN DIEMEN'S LAND.]

BRIGNOLES. [VAR.]

BRINDISI, the Roman *Brundisium* or *Brundisium*, and the Greek *Brentesio*, a town in the province of Terra d'Otranto in the kingdom of the Two Sicilies, well known in Roman history for its capacious and safe harbour, which was the chief port of embarkation from Italy to Greece, is situated on the Adriatic Sea, 200 miles E. by S. from Naples, 44 miles E. by N. from Taranto, in 40° 38' N. lat., 18° E. long., and has 6500 inhabitants. The origin of Brundisium is lost in the obscurity of the ante-Roman times. Tradition spoke of a Cretan colony having early settled here; and it certainly existed as a Messapian or Salentine city before the settlement of Greek colonies in this part of Italy. It appears to have retained its independence after that event, and it never received a Greek colony. It was one of the chief towns of the Messapian peninsula, and of that part of it called Calabria by several ancient geographers. The Brundisians and the other Messapians were often at variance with the Greek colony of Tarentum before the Romans extended their conquests into Apulia. After the war of Pyrrhus and the subjugation of Tarentum, the Romans, under the consuls M. Attilius Regulus and Lucius Junius Libo, turned their arms against the other towns of Messapia, and seized Brundisium among the rest, about B.C. 267. It was made a Roman colony in B.C. 244, and from this time it rose rapidly to wealth and prosperity, partly owing to the fertility of its territory but still more to its excellent commercial situation. Its double harbour, the inner part of which forms two horns half encircling the town, was the chief naval station of the Romans in the Adriatic. Hannibal failed in his attempt to seize Brundisium, and it was one of the eighteen colonies which voted men and money to assist Rome in continuing the war. The Roman generals and the armies during the wars with Macedonia, Greece, and Asia, almost invariably sailed from Brundisium, and here likewise they lauded on returning home. When the provinces east of the Adriatic were thoroughly subjugated by the Romans, Brundisium became a great commercial thoroughfare, and soon rose to be one of the most flourishing towns of South Italy.

Brundisium in consequence of its position witnessed many remarkable historical events. Sulla, on his return from the Mithridatic War in B.C. 83, landed at Brundisium, which he exempted from all taxation in reward for his friendly reception in the port and town at this critical period of his life. In B.C. 57, Cicero landed at Brundisium on his return from exile. Pompey having left Rome at the beginning of the civil war, repaired to Brundisium, where he was besieged by Cæsar, who endeavoured to prevent his escape by blocking up the inner harbour by means of two piers which he raised, one on each side of the entrance. Before however he could accomplish his object, Pompey embarked his troops in secrecy and sailed away for Greece. To these two piers raised by Cæsar the beginning of the deterioration of the inner port has been attributed. It was at Brundisium that Octavius assumed the name of Cæsar. In B.C. 40 it was besieged by Antony and Ahenobarbus, but its fall was averted by a reconciliation between Antony and Octavius. Soon after Antony again threatened it with a fleet of 300 sail, when Mæcenas and Cocceius succeeded in once more making an arrangement between the two triumvirs. The representatives of Octavius were accompanied by the poet Horace, who has immortalised his journey to Brundisium ('Sat.' i. v.). Virgil died at Brundisium B.C. 19, on his return from Greece; and

here at a later period Agrippina landed with the ashes of her husband Germanicus.

The port of Brundisium consisted of an outer and an inner harbour united by a very narrow channel. The outer harbour was in a great degree sheltered by some islets, one of which, *Iarra* (now *Iaola di St. Andrea*), was occupied by a Pharos lighthouse. At the south-western end of the roadstead a narrow channel led to the inner harbour, which was completely landlocked, deep enough for the largest ships, and formed by two arms of the sea which as mentioned above extended in the shape of two horns round three sides of the town.

The calamities which befell Brindisi after the fall of the Roman empire, when it was taken and retaken by the northern barbarians, the Greeks, and the Saracens, contributed to the deterioration of the bar by preventing the inhabitants from attending to its repair.

The Normans finally wrested Brundisium from the Greek empire, and the city witnessed the marriage of Tancred's son Roger with the Princess Irene. Under the Normans the city was the chief port of embarkation for the Crusaders: when these expeditions ceased it sunk into insignificance as a naval port. The town was sacked by Louis of Hungary in 1348, and soon after by Louis, duke of Anjou. In 1456 an earthquake destroyed the greatest part of the town: from this disaster the town never recovered.

Frederick II. built a castle for the defence of the town, which was repaired and extended by Charles V. Under the Angevins the inner harbour was already become a stagnant pool separated from the sea by an isthmus or bar (the slow work of centuries) which blocked up the channel between the inner and outer harbours. Other marshes formed themselves in the neighbourhood; and the air of the town, which had in ancient times been unwholesome in autumn, became seriously affected. A cut was made across the isthmus, and the seawater being thus let in, and the other marshes at the same time partially dried up, the air of Brindisi evidently improved. The depth of the channel however is not more than about eight feet, and vessels are obliged to remain in the roads, in which there is good anchorage partly protected by an island having a castle upon it called *Forte di Mare*. New works have been undertaken since 1830 to keep the channel of communication clear and to cleanse the inner harbour of the mass of sea-weeds which accumulate very fast, and by their decay corrupt the atmosphere. These recent works have brought to light many of the piles driven by Cæsar.



Coins of Brundisium. Copper. Brit. Mus.

The present town of Brindisi occupies but a small part of the site of the ancient city. It is surrounded on the land side by walls and ditches, and has a castle flanked by enormous round towers, and called *Forte di Terra*, which commands the northern arm of the inner harbour. Outside the town and not far from the castle is a fountain said to be of Roman construction, with a niche on each side, from which flow two rills of very good water, probably the fountain mentioned by Pliny, from which the ships were supplied. The water in the town is brackish. The town is ill built and looks miserable, and the air is still unwholesome in summer. The inhabitants carry on some trade by sea: part of the oil of Puglia is shipped off at Brindisi. The principal object of antiquity is a pillar about 50 feet high, which forms a conspicuous object. Another, which stood near it, has been removed to Lecce, and the pedestal alone remains; they were probably designed for fire-beacons. The cathedral is a large but not handsome building of the Norman times, with a mosaic pavement: it bears many marks of the effects of earthquakes. Frederick II. was married to his second wife, Yolanda, in the cathedral in 1225.

Brindisi gives title to an archbishop. The harbour has been considerably improved since 1843, when a lighthouse was erected, which stands in 40° 39' 17" N. lat., 17° 58' 21" E. long. The town contains a public library, the gift of Monsignore de Leo, a native of Brindisi. The territory of Brindisi is distinguished now as in ancient times by its great fertility. The olive especially flourishes, and vast quantities of oil are made. Steamers to the Ionian Islands and Malta touch at Brindisi, which has been recently constituted an entrepôt for foreign goods, with bonding warehouses.

BRINTON, Norfolk, a village, and the seat of a Gilbert's Poor-Law Incorporation, in the parish of Brinton and hundred of Holt, is situated in 52° 53' N. lat., 1° 2' E. long., 28 miles N.N.W. from Norwich, and 118 miles N.N.E. from London. The population of the parish in 1851 was 190. The living is a rectory held with the rectory of Thornage in the archdeaconry and diocese of Norwich. Brinton, Melton-Constable, and Burgh Parva, form together a Davies Gilbert's Incorporation, which contained in 1851 a population of 299. Brinton is a small but pretty village. In the neighbourhood are two or three good mansions.

BRIONIC ISLES. These three islands lie on the north-east coast of the Adriatic, near the port of Tassano, and north of Pola, in the Austrian Circle of Trieste. They contain the quarries from which the Venetians obtained the ash-gray-coloured and highly durable marble of which their palaces are constructed. The largest of the islands is called Brioni; the names of the other two are Coseda and San Grolamo. They are situated in 45° 3' N. lat., 18° 53' E. long.

BRIOUDE. [LOIRE, HAUTE.]

BRISBANE. [WALES, NEW SOUTH.]

BRISTOL, a port, parliamentary and municipal borough, cathedral city, the seat of a Poor-Law Union, and a county in itself, is situated between the counties of Gloucester and Somerset. For many purposes it is considered to be in the county of Gloucester. It stands at the junction of the rivers Avon and Frome, in 51° 27' N. lat., 2° 35' W. long.; 33 miles S. by W. from Gloucester by railway, 103 miles W. from London by road, and 113 miles by the Great Western railway: the population of the municipal and parliamentary boroughs, which are co-extensive, was 137,328 in 1851. The borough is governed by a corporation consisting of 16 aldermen and 48 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. For sanitary purposes the city is governed by a Local Board of Health. The livings of the city parishes are in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Bristol Poor-Law Union, which is co-extensive with the city, contains 20 parishes, with an area of 1840 acres, and a population in 1851 of 65,716. Bedminster, which forms part of the borough, is also the seat of a Poor-Law Union comprising 23 parishes and townships, with an area of 52,939 acres, and a population in 1851 of 38,171.

Name and History.—The most ancient name of Bristol on record is *Caer Oder* (the City of the Gap, or chasm through which the Avon finds a passage to the sea), though the site of *Caer Oder* was probably the present Clifton. The name of Bristol has been spelled in nearly fifty different ways, chiefly variations however of the form *Briogstone*. Much diversity of opinion prevails as to the origin of the name, but it appears to be formed of two Saxon words, *Bricg*, a bridge, or *Brice*, a rupture, and *Stow*, a place; the form *Bricestow* would thus have a similar meaning to the *caer oder* of the Britons.

The Romans obtained early possession of Bristol; and in the time of Constantine, the time assumed by Mr. Seyer in his 'Memoirs of Bristol' for its foundation, they invested it with a wall and gates, which inclosed the area now occupied by the most central portions of the town. At the epoch of the invasion of Cerdic the Saxon, (A.D. 495), Bristol formed part of the dominions of the princes of Cornwall, whose jurisdiction extended over all Somersetshire and part of Gloucestershire. In 584 it was made a frontier city of the Saxon kingdom of Mercia. In 596 Jordan, the companion of Augustine, preached on the spot now called College Green, which subsequently became the site of the monastery built in honour of the chief missionary, and now of the cathedral church of Bristol. In the 11th century, Bricstou, as it was called, was, from its convenience as a port, especially for embarkation to Ireland, used commonly for the purpose of exporting slaves; a practice which Wolstan, bishop of Worcester, denounced to the Conqueror, who by a royal edict forbade, though he failed utterly to extinguish, the inhuman traffic. To the early part of the Norman period the addition of the second wall around the town is ascribed.

The first historical notice of the castle occurs on the death of William I., when it was fortified and held by Godfrey on behalf of Robert, the Conqueror's eldest son, and appears to have been a place of considerable strength. At the time of preparing Domesday Book, Bristol was a walled town and a royal burgh. The local government of the city was vested in a prepositor or chief magistrate, who acted under the custos of the castle, the *caput honoris*. It does not appear that the prepositor was a salaried officer, although, as he was *de virtute officii* excheator to the king, his reasonable charges on that head were defrayed; but the town was charged with the maintenance of the castle. The prepositor at the accession of William I. was Hardying, a wealthy merchant of the town, and the founder of the Berkeley family. He was continued in his office by the Conqueror, and was succeeded on his death in 1115 by Robert, commonly called Fitzharding, and first lord of Berkeley. The honour of Bristol was transferred from one possessor to another, according to the course of royal favour, till the reign of Stephen, in whose reign the castle was made one of the strongest fortresses in the kingdom; it covered six acres of ground, and had walls twenty-five feet thick. During this stormy period the prepositor of the town, Robert Fitzharding, was employing a portion of his wealth in erecting the abbey of St. Augustine, now the cathedral church, and in founding the priory of St. James, subsequently the parochial church of that name; and William of Malmesbury writes that the port was at that time "the resort of ships coming from Ireland, Norway, and other countries beyond sea." Henry II. on his accession (1154) resumed the royal jurisdiction over the towns, castles, &c., which belonged to the crown, by taking them into his own hands; but twenty years elapsed before he obtained possession of the castle of Bristol, when (1175) the earl surrendered it to the king. Bristol had thus evidently become a port of some note in the 11th century; and in the 12th century (1164 and 1190) charters were granted by Henry II. which placed Bristol in a most

favoured position among commercial towns. In the reign of Henry III., on occasion of a visit by that monarch to Bristol, the privilege of choosing a mayor and two prepositors was granted to the burgesses. The functions of the prepositors from henceforth were similar to those of bailiffs or sheriffs, into which offices their own subsequently lapsed; and upon the mayor devolved the duty of escheator to the king. The king frequently farmed out the revenues of the town to individuals at a yearly rent for a short lease. The trade of the port having outgrown the extent of the quay, which stretched along the then bank of the river, the burgesses resolved to cut a new course for the Avon. The ground necessary for the purpose was ceded to the mayor and commonalty by the abbot of St. Augustine's for the sum of 10 marks. In 1239 the work was commenced; it was completed about 1247. An extent of quay of about 2400 feet was thus obtained, and the channel of the river was dug 18 feet deep and 40 yards wide at a very heavy expense. About the same time Redcliff or Radcliffe, on the Somersetshire side of the Avon, was united to Bristol; a wall was made to embrace the united town; a stone bridge was built from one to the other, and both shared in forming the new harbour. Redcliff shortly became the seat of those manufactories which from the 13th to the 16th century almost entirely supplied England with cloth, glass, and soap. In the year 1243 it is recorded that Bristol-made soap was first sold in London.

During the unsettled state of the kingdom in the reign of Edward II., the town was for some time held by the citizens against the sovereign. The rebellion began in 1311; and the town held out for the space of four years, during which time it continued to exist, a little republic in the heart of a monarchy. The local government was carried on according to its ancient form, except that the burgesses held the authority of the castle at defiance, and, for their better security, built against it a strong wall with forts, traces of which of an immense thickness have been discovered in making excavations on its site in Dolphin Street, anciently, from this fact, termed Defence Lane. In 1392 the traffic of the port on which customs were levied comprised live stock, agricultural produce and fish, wine, wool, skins, linen cloths, and cloth of silk, 'Irish Galway cloths,' salt, ashes, hovey, iron, lead, alum, brass, tallow, millstones, copper, leather, oil, and wood. Various charters and protections were from time to time awarded to Bristol; these sometimes referred to the woollen manufacture. In the 27th of Edward III. a wool staple was fixed at Bristol, and the 'cloth of Bristol' acquired a high reputation. In the 47th of the same reign Bristol was made a county in itself; the jurisdiction of the castle was confined to its own precincts, and the independence of the town from any feudal rights was established. The successive charters granted to Bristol were very numerous; three were granted during the reign of Richard II. By one granted in 1377 the townsmen are empowered to levy new duties on timber, coal, bark, flax, hemp, pitch, tar, wax, pepper, fruit, almonds, and chalk. As early as 1437 Bristol had extended its commerce along the whole west coast of England, to South Wales and Ireland, and to France and Russia. At that date it appears that the commercial shipping of Bristol comprised 66 'ships' and 64 'boats.' The exports comprised cloth, iron, glass, cutlery, honey, meath (mead), alum, pitch, wine, salt, fish, and cardys (corduroys). The imports were very much more numerous; among the most material were iron, Irish cloth, tin, skins of lambs, goats, calves, sheep, &c., hides in barrels, fish, salt, wine, oil, and fruit. These were the articles charged with customs or port dues; but the townsmen traded in numerous articles exempt from imposts, and not included in this list. In 1442 the commons ordered eight ships, having each 150 men, to keep the sea continually, of which number Bristol was directed to furnish two; and twelve years after, when a fleet was ordered for the protection of trade, London lent towards its fitting-out 300, and Bristol 150.

On the accession of Edward IV. to the crown, 1461, he came, in his progress through the western counties, to Bristol; and after some concession on the part of the townsmen, he confirmed to them all their former privileges. In their negotiations the townsmen were much aided by a wealthy merchant, William Canynges, of whom it is recorded by William of Worcester that he employed for the space of eight years 800 seamen, and every day 100 artificers. Among three persons, to whom the honour of founding Redcliff church has been ascribed, Canynges is one: the other two being his grandfather and Simon de Bourton. From a charter granted by Henry VII., we learn that the town then possessed a recorder, which officer and five others, to be chosen by the mayor and common council, were appointed aldermen, with powers equal to those exercised by the aldermen of London. The merchants of Bristol entered with spirit into the exploratory voyages of Sebastian Cabot, who was a native of the town. In the reign of Henry VIII., among the suppressed religious houses of the greatest note, were the monastery of St. Augustine, now the cathedral church, and the hospital of the Gaunts, now the mayor's chapel. Henry VIII. founded upon the ruins of the abbey lands a bishopric, the town having previously formed part of the diocese of Salisbury. In the year following, 1546, a mint and a printing-press were set up in the castle. Bristol contributed towards the fleet intended to oppose the Spanish Armada. In 1609 Newfoundland was colonised from Bristol. Bristol became early involved in the contest between Charles and the merchants respecting ship money. The city was held by the Parlia-

mentarians. The castle was demolished by order of the Parliament in 1656. In 1663 Charles II. visited Bristol. By an Act obtained in 1699 the corporation, for the better preservation of the river, extended their jurisdiction 4 miles along the course of the Avon inward above Bristol bridge. In 1793 Bristol was disturbed by riots having their origin in a circumstance of local interest: they are spoken of as the 'bridge riots.' A disturbance of a much more disastrous nature occurred in 1831, on the occasion of the visit of Sir Charles Wetherell to Bristol. He was recorder of the city; and his opinion which were adverse to the Reform Bill gave origin to a commotion which ended in a serious riot. On October 29th a lawless mob set fire to the city prison, the Gloucester county prison, the mansion-house, and the bishop's palace; and during the ensuing night 45 more public buildings, and almost as many private houses were destroyed. On the following morning the military dispersed the mob after killing 12 persons, and wounding 96. The property destroyed was estimated at 200,000*l.*; and Bristol has ever since paid a rate of about 10,000*l.* a year, in liquidation of the losses.

Site, Aspect, Streets, &c.—The rivers Avon and Frome have their course through Bristol—the former being the larger river. The city is built at about eight miles' distance from the mouth of the Avon; its site is for the most part a thick bed of sand, which generally yields water at the depth of a few fathoms. Some portions of the city are built on ground so steep as to render the formation of carriage-roads almost impracticable. Kingsdown, St. Michael's Hill, and Brandon Hill, rise nearly 250 feet above the level of the river. There are seven eminences within the limits of Bristol, taking it in its greatest extent; and the streets are built on these eminences and in the hollows between them. Bristol is nearly ten miles in circumference. Several Acts of Parliament have been obtained during the last thirteen years, conferring the necessary powers for carrying out various public improvements in the city, by the formation of new streets, providing a sufficient supply of water, &c.

Public Buildings and Institutions.—There are about forty churches and chapels belonging to the Establishment in Bristol, Bedminster, and Clifton; and about an equal number of places of worship belonging to Roman Catholics, Independents, Baptists, Wesleyan Methodists, Calvinistic Methodists, Quakers, Unitarians, and Jews. The church of St. Mary Redcliff has been long admired as a grand example of gothic architecture. It is supposed that this church was built at four different periods, ranging between 1200 and 1400. It is considered by many to be the finest parish church in England. The tower reaches to a height of about 200 feet. The north porch is a rich specimen of the decorated style, but had fallen considerably to decay, when in 1848 a subscription was commenced which led to the adoption of a plan for the entire restoration of the church. A society has since been established, under the name of the Canynges Society, to carry out the restorations as fast as funds can be provided, and to issue annual reports relating to the progress of the works.

The cathedral church, anciently part of the Abbey of St. Augustine, possesses one of the finest Norman gateways in the kingdom. The church contains five monuments by Chantrey and Baily. St. Stephen's church was rebuilt about 1465, on the site of a much older edifice. Its chief ornament is the tower, 133 feet high, which is a fine example of the perpendicular style. The Temple church was founded in the reign of Stephen by the Knights Templars; but the date of the present structure is not known. The Temple Meads, being part of the lands belonging to the house of the Knights Templars, were exempt from tithes, and remain so to this day. All Saints, or All Hallows, was one of the most ancient churches in Bristol, but the present structure was erected about 1470. St. Augustine the Less was founded by the abbots of St. Augustine's Monastery as a chapel for the accommodation of the inhabitants who had erected houses within the precincts of the monastery: the present structure was built in 1480; it was improved in its interior arrangements in 1843. St. James's church was built and consecrated as early as 1130; the tower was added and the church made parochial in 1374. The nave and north aisles are parts of the original Norman structure. This church has recently undergone extensive restorations. The church of St. John the Baptist consists of but one aisle, and is the smallest in Bristol: it was built about the middle of the 14th century; considerable alterations have been recently made in this building. The Mayor's Chapel, formerly the collegiate church and hospital of the Virgin Mary and St. Mark, is a small but highly-enriched structure, with numerous effigies and monuments. The church of St. Philip and St. Jacob is supposed to have been erected some time before 1200; the venerable structure being much dilapidated was recently repaired. St. Thomas's church has a tower which was built in the 12th century. Bristol is thus particularly rich in old churches, nearly all of which have been more or less restored within the last few years, chiefly by means of private subscriptions. Several new churches have been built since 1836. Of the three Roman Catholic chapels in the city, one opened in 1843 is a beautiful structure. Many of the chapels of Protestant Dissenters have been erected within the last few years. The Jews' synagogue was, previous to 1842, a Quakers' meeting-house.

The Free Grammar school was founded in 1532 by Robert Thorne. The endowment has recently undergone a Chancery investigation, the result of which was that in 1848 the school was reopened on a very

enlarged and superior system; it now contains nearly 300 boys. The College Grammar school was founded by King Henry VII., for educating the singing boys of the cathedral. Queen Elizabeth's Free Grammar school is a small endowed establishment under the control of the corporation. Queen Elizabeth's Hospital was founded in 1586 by John Carr, for boarding, clothing, and educating poor children and orphans of the city and of the manor of Congresbury. The estate has so greatly improved in value that the trustees have been enabled to increase the number of boys from 38 to 132, to enlarge the range of instruction, and to build a beautiful structure in lieu of the old one in Christmas Street. The new hospital was opened in 1847. It is situated on the western slope of Brandon Hill, on a site of four acres; and as there is an ascent of 48 steps up the slope of the hill to the building, the building itself is shown to great advantage. The hospital is nearly 400 feet in length, and is amply supplied with school-rooms, dormitories, lavatories, baths, wardrobe room, dining-hall, class-rooms, sick-rooms, kitchens, playgrounds, &c. Colston's Free school (at which Chatterton was educated), Temple Street school, the Red Maids' school, Elbridge's Charity school, St. Augustine's Charity school, and the Pile Street school, are among the older public schools of Bristol. In the Red Maids' school 80 girls (clothed in red) were to be boarded and educated till the age of 18; the improved value of the estate has enabled the trustees to increase the number to 120, and to build a fine new school-house in the Elizabethan style, which has recently been opened.

Among the more modern schools of the city is the Bristol College, founded in 1830 by a proprietary body, on the plan of King's College, London: the college is in Park Street. The number of scholars in 1852 was 60. The Bristol Education school, the Clerical Education school, the Bristol Diocesan and Cathedral Middle Day school, the Merchants Hall school, the Marine school, the Blue-Coat Girls school, the Bristol Adult school, the Hannah More schools, and the Countership schools are among the numerous public schools of Bristol; to which must be added the National, British, Infant, and Ragged schools. The Baptist denomination has a college for the education of young men intended for the ministry. The college, which was founded in 1770, and has an endowment of 94*l.* a year, had 19 students in 1852.

The hospitals and miscellaneous charities of Bristol are very numerous. St. Peter's Hospital, a very old building, is appropriated for the relief of the sick poor. The Bristol Infirmary, in Marlborough Street, is a large structure, with sufficient space and funds to receive 200 in-patients. The Bristol Dispensary and the Clifton Dispensary, the Bristol General Hospital, the Lying-In Institution, the Eye Infirmary, and several Dorcas societies, assist in various ways the sick poor. The Asylum for the Blind, in Park Street; the Bristol Deaf and Dumb Institution, in Park Row; the Asylum for Orphan Girls; the Clergy Society and the Gloucestershire Society are among the numerous charitable institutions; to which may be added about 20 almshouses and minor charities.

The Bristol Institution, a handsome building erected in Park-street, opened in 1623, has a reading-room, a small library, and a museum, containing a very fine collection of ancient and modern works of art; among which are Bailly's statue of Eve at the Fountain, and a complete set of casts from the *Ægina* marbles. The museum also contains rich collections in natural history and mineralogy. The Bristol Library, the Bristol Law Library, and the Medical Library are the principal public libraries in the city; the first named, besides a large library, has a valuable museum of natural history. The Bristol Athenæum is a literary and scientific institution for the middle classes; its lectures are delivered at the Royal Albert Rooms. The Victoria Rooms form one of the best modern buildings in Bristol; the large hall is 117 feet long, 55 feet wide, and 47 feet high. The building is used for concerts, exhibitions, and meetings. There are in Bristol an assembly room, and a theatre.

Of the municipal buildings the Council-house was built in 1824 in the Italian style; over the principal entrance is a fine figure of Justice, by Bailly. Annexed to the Council-house is a common hall for the daily administration of justice. The Bridewell Prison, in Bridewell Lane, was rebuilt after the riot in 1831. The jail, near Bathurst Basin, is a large and strong structure, finished in 1820. The Custom House and the Excise Office were both rebuilt after the riots. The Exchange, built about 1740, is a quadrangular edifice, 110 feet long by 148 feet in depth. The interior is now occupied chiefly as a corn-market, the merchants preferring to assemble in the Commercial Rooms. These rooms, opened in 1811, are situated in Carr Street, and form well arranged commercial and news-rooms. The Merchant Venturers' Hall, in King Street, belongs to a society, or company, incorporated by letters patent in the reign of Edward VI.; the society, which consists of the principal merchants, possesses large landed property. This is the only trading company remaining out of twenty-three which were in existence in Bristol a century ago; the halls belonging to those companies are now occupied as exhibition-rooms, warehouses, &c. The new Guildhall, in Broad Street, opened in 1846, is a very enriched specimen of the Tudor style, having a central tower and two wings. The central tower is loftier than the wings. The principal apartments of the building are; Law Court, 54 feet by 30 feet, and 24 feet high; Court of Requests, 30 feet by 24 feet, and 13

feet high; two Courts of Bankruptcy, each 30 feet by 24 feet, and 14 feet high; and a Grand Jury Room, 33 feet by 15 feet, and 14 feet high. The architect was Mr. R. S. Pope, of Bristol.

Behind the exchange are the principal markets, designated the High Street and the Nicholas Street markets. In the former are three arcades for the sale of butter, cheese, poultry, eggs, and bacon; there is also a handsome new market-house for meat and vegetables. The Nicholas Street market is for meat and poultry. Other markets are located in different parts of the city. At the markets held in the Leather Hall in March and September, more leather is said to be sold than at any other fair or market in the kingdom.

Docks, Commerce, Manufactures.—The docks were commenced in 1804, by a proprietary body, and were first opened in 1809. The old channel of the Avon was converted into one floating harbour, about three miles in length. The quays were made to extend from Bristol bridge to the small stone bridge across the Frome, where that river ceases to be navigable, and form three sides of a parallelogram, the eastern and southern being washed by the Avon, the western by the Frome. The total extent of quay is 2000 yards; but these limits admit of any extension along the banks of the harbour below the town which the increase of trade may require. There are two basins for the temporary accommodation of vessels entering or quitting the harbour. Cumberland Basin, at Rowham, principally used by large vessels, extends in length between the locks 275 yards, in extreme width 147 yards; it becomes smaller towards the month, and empties itself through two locks into the Avon. Bathurst Basin, east of Cumberland Basin, about 300 yards below the iron bridge at Bedminster, communicates with the Avon branch of the harbour, above its junction with the Frome, and empties itself into the river Avon through a single lock; it is used by the coasting-vessels, and is about 170 yards long, and of an average width of 80 yards. By the construction of the harbour, important facilities were afforded to the trade of the port. The actual cost of the docks exceeded 600,000*l.*; and the dividend has seldom exceeded 2 per cent. An Act was obtained in 1842 for improving the floating dock.

About 60 years ago Liverpool began to overtake Bristol in shipping and commerce. In 1786 the tonnage belonging to the port of Liverpool amounted to 49,541 tons, comprised in 465 vessels; the number of vessels belonging to the port of Bristol in 1787 was 360, with a burden of 56,909 tons. In the same year the entire trade of Bristol stood thus:—Foreign trade—British vessels in, 255, tonnage 38,502; out vessels 243, tonnage 37,542; foreign bottoms in, 69, tonnage 11,112; out 66, tonnage 37,542. Coasting trade—in vessels 1862, tonnage 66,200; out vessels 1632, tonnage 62,139: Irish vessels in, 161, tonnage 9623; out 139, tonnage 9187. The port charges of Bristol having been considerably in excess of the charges at the ports of London, Liverpool, Hull, and Gloucester, this circumstance tended to draw shipping away from Bristol to the other ports; and with a view to check the decline which had been gradually taking place in the commerce of Bristol, a new arrangement of the dock charges on a lower scale was adopted under the powers of an Act of Parliament obtained in 1848. By this Act the docks were transferred from the company to the corporation. Additional grounds belonging to the company were declared to be within the city of Bristol, in order to the better exercise of corporate privileges. The dock dues which formerly varied from 6*d.* to 3*s.* per ton, were reduced so as to range from 4*d.* to 1*s.* A borough assessment of 4*d.* in the pound is to make up the loss accruing from the change. On November 13th, 1848, a grand procession paraded through Bristol to commemorate this important alteration. It has been found that the arrivals and departures of shipping have considerably increased since the new system was adopted. The number and tonnage of vessels registered as belonging to the port of Bristol on December 31st, 1852, were:—Sailing vessels under 50 tons, 153, tonnage 4577; above 50 tons, 191, tonnage 46,497: Steam vessels, under 50 tons, 12, tonnage 304; above 50 tons, 19, tonnage 3743. During 1852 there entered and cleared at the port—in the coasting trade, sailing vessels, inwards, 550, tonnage 312,286; outwards, 3765, tonnage 238,377: steam vessels, inwards, 208, tonnage 65,471; outwards, 207, tonnage 65,486. In the colonial trade there were, inwards, 180 vessels, of 68,171 tons; and outwards, 107 vessels, of 37,131 tons. In the foreign trade the numbers were:—Sailing vessels, inwards, 450, tonnage 68,457; outwards, 155, tonnage 42,756: steam vessels, one inwards, 111 tons; and one outwards, 590 tons.

The foreign trade of Bristol principally consists in imports of sugar, rum, wine, brandy, colonial and Baltic timber, tallow, hemp, turpentine, barilla, dye-woods, fruits, wheat, and tea. The principal articles of export are iron, tin, bricks, refined sugar, glass bottles, Irish linen, and manufactured goods. Bristol derives a considerable portion of her supply of foreign produce coastwise under bond principally from London and Liverpool, but also from the minor ports of Gloucester, Newport, Bridgewater, Exeter, Barnstaple, and Bideford. The coasting trade of Bristol is very considerable, particularly with Ireland. The imports principally consist of iron, tin, coal, salt, Irish linens, and agricultural produce: the exports, of articles of foreign and colonial produce, particularly groceries, tea, wines, and spirits, and of the manufactures of the place. The existing manufactures of Bristol are glass bottles, crown and flint glass, brass-wire, pins, sheet-lead, zinc, peltre, chain-cables, anchors, machinery, drugs, colours, dyes, painted

floor-cloth, earthenware, refined sugar, starch, soap, British spirits, tin, copper and brass wares, bricks, beer, porter, pipes, tobacco, and hats. Most of these manufactures are carried on within the city or in its immediate neighbourhood. The principal factories are those for glass, sugar, iron, brass, floor-cloth, and earthenware. There was established about fifteen years back a very large joint-stock cotton factory, under the title of the Great Western Cotton-Works. It consists of an immense range of spinning, weaving, bleaching, and repairing shops.

The principal bridge is that connecting the centre of the town with the Redcliff side of the Avon; it is built of stone, and has three arches; the centre arch is elliptical, with a span of 55 feet, the side arches are semicircular, each 40 feet in span. A swivel-bridge of iron, opened in 1827, in the place of the old drawbridge, crosses the harbour, connecting the parishes of Clifton and St. Augustine with the city; and two iron bridges, each with one arch of 100 feet span, cross the new course of the Avon, severally connecting the city with the Bath and Wells and Exeter roads. In 1838 an Act was obtained for constructing St. Philip's Bridge; and in 1842 a second Act empowered the widening of the bridge. For the suspension-bridge over the Avon, the original Act was obtained in 1831; several subsequent Acts have been obtained, permitting the postponement of the works, about 30,000*l.* more than the amount collected and expended being required to complete the undertaking. The Portbury Pier and Railway Company have a clause in their Act, enabling them to complete the bridge in conjunction with their railway; but the proceedings of the company are wholly suspended.

The connection of Bristol with other parts of England by means of the broad-gauge railways is efficient. The Great Western line extends through Bath and Reading to London; the Midland line through Gloucester and Birmingham to the north; and the Bristol and Exeter line to the south and west. The communication with Wales is partly by steamers, which pass down the Avon and cross the Severn to Chepstow, Newport, Cardiff, &c.; and partly by means of the Aust Ferry, to which a road of about eight miles leads from Bristol. The joint-station at Bristol is a large structure in the Tudor style. A small branch, about four miles long, leaves the Bristol and Exeter railway at Yatton, about twelve miles from Bristol, and runs to Clevedon, on the bank of the Severn opposite Cardiff.

Clifton, Hotwells, &c.—The rocks in the immediate neighbourhood of Bristol are composed of carboniferous limestone, coal-measures; and the newer red-sandstone formation, with the dolomitic conglomerate. In the last formation there have been discovered some saurian remains, which form three new genera. The ranges of mountain limestone at St. Vincent's Rocks are remarkably fine; the coal-fields extend north and south of the city about twenty-eight miles, but the beds are thin as compared with those of the other coal-districts of England. The rocks at Clifton supply a saline spring; the temperature of which from the pump is 74° Fahrenheit, and it then evolves free carbonic acid gas. It is principally celebrated for its beneficial influence in consumptive cases. The Hotwell House is situated beneath the rocks, looking on the river, along the banks of which a carriage road leads from the well round the rocks to Clifton Down; but a readier means of access to Clifton is furnished by an easy serpentine path, leading up the rocks from behind the Hotwell House. The scenery around Bristol, particularly the Clifton Hotwells, is very beautiful, and the botanical features of the country are highly interesting. Clifton has long been a favourite residence for wealthy persons. The hotels, crescents, parades, assembly-rooms, libraries, &c., are such as are met with at most watering-places. The portion of the Hotwells district nearest the city is becoming surrounded by commercial and shipping establishments; but higher up towards Clifton and St. Vincent's Rocks there are still left some fine walks and rides. There are not many open spots within the limits of Bristol; but the heights around the city afford numerous pleasant walks, such as more level towns are deficient in. The College Green, Brandon Hill, Tyndall's Park, Cotham, and Clifton, are all open to the inhabitants. On Clifton Down are the Zoological Gardens, opened in 1836, to which a botanic garden is attached.

BRISTOL CHANNEL. [SEVERN.]

BRISTOL, U.S. [RHODE ISLAND.]

BRITAIN, GREAT. [GREAT BRITAIN.]

BRITAIN, NEW. [NEW BRITAIN.]

BRITANNIA, the name by which the Island of Great Britain is mentioned by the Latin writers. We propose in the present article to give a notice of its ancient inhabitants, with a very brief narrative of the Roman conquest and occupation of the country.

The earliest inhabitants of Britain, so far as we know, were probably of that great family the main branches of which, distinguished by the designation of Celts, spread themselves so widely over middle and western Europe. The Welsh and Danish traditions indicate a migration from Jutland; and the name of Cymry, given to the immigrant people, has been supposed to indicate their probable identity with the Cimberians (the *Κυμβριοί* of Herodotus, and the Cimabri of the Roman historians), who, being expelled by the Scythians from their more ancient seats north of the Euxine, traversed Europe in a north-westerly direction, and founded new settlements near the Baltic

and the mouth of the Elbe. These barbarians then reached Britain by the same route which was afterwards traversed by the Saxons and Angles. The Celts crossed over from the neighbouring country of Gaul; and Welsh traditions speak of two colonies, one from the country since known as Gascony, and another from Armorica. At a later period the Belgæ, actuated by martial restlessness or the love of plunder, assailed the south and east coasts of the island and settled there, driving the Celts into the inland country. These Belgæ were a branch of the great Teutonic family.

Before the arrival of Julius Cæsar in Britain the island was but imperfectly known to the more civilised nations of the ancient world. The people of Carthage and Massilia (called Massalia by the Greeks) or Marseille, traded for tin with certain islands called by Herodotus *Κασσιτερίδες* (Cassiterides), the 'Tin Islands;' which are supposed by some to have been the British Isles, or at least Cornwall and the Scilly Isles.

The etymology of the word Britain has been much disputed. One of the most plausible is that which derives it from a Celtic word 'brith,' or 'brit,' (painted, Camden); in which name it is supposed there is a reference to the custom of the inhabitants of staining their bodies with a blue colour extracted from woad. Carte says that the name in the most ancient British poets is 'Inis' (island) 'prydhain.' Whether this form or that of the Roman writers furnishes the best clue to the original form of the native designation is perhaps questionable. The meaning of 'prydhain,' if it be anything more than a corrupt form derived from the root 'brit,' does not seem to be known. It would be to little purpose to give other etymologies, or to enter further into a matter in which certainty is so little attainable.

Cæsar is the first writer by whom any authentic particulars respecting the island are given. Stimulated probably by the desire of military renown, and of the glory of first carrying the Roman arms into Britain—provoked also, as he tells us, by the aid which had been furnished to his enemies in Gaul, especially to the Veneti (the people of Vannes in Bretagne), and other maritime people of Western Gaul—he determined upon the invasion of the island. As a preliminary step he summoned to his camp a number of the merchants who traded to the island (who alone of the Gauls had any acquaintance with it), and to them he addressed his inquiries. Their caution however, or their ignorance, prevented his learning much from them. Failing in this quarter, one of his officers, C. Volusenus, was sent to reconnoitre; but he did not venture to leave his ship, and trust himself on shore among the natives. Cæsar, no way deterred by this want of information, collected a fleet, and disposed his forces with a view to the descent.

The description which Cæsar gives of Britain in his 'Commentaries' is as follows:—

"The inland part of Britain is inhabited by those who, according to the existing tradition, were the aborigines of the island; the sea-coast by those who, for the sake of plunder or in order to make war, had crossed over from among the Belgæ, and in almost every case retain the names of their native states from which they emigrated to this island, in which they made war and settled, and began to till the land. The population is very great, and the buildings very numerous, closely resembling those of the Gauls: the quantity of cattle is considerable. For money they use copper, or rings of iron of a certain weight.* Tin (*plumbum album*) is produced there in the inland districts; and iron near the sea-coast, but the quantity of this is small; the copper which they use is imported. There is timber of every kind which is found in Gaul except beech and fir. They deem it unlawful to eat the hare, and the hen, and the goose; these animals however they breed for amusement. The country has a more temperate climate than Gaul, the cold being less intense.

"The island is of a triangular form, one side of the triangle being opposite Gaul. One of the angles of this side, which is in Cantium (Kent), to which nearly all vessels from Gaul come, looks towards the rising sun; the lower angle looks towards the south. This side extends about 500 miles. The next side looks towards Spain and the setting sun. On this side is Hibernia (Ireland), considered to be about half the size of Britain; but the passage across is of the same length as from Gaul into Britain. Midway in this passage is an island which is called Mona (Man); many smaller islands also are thought to lie in the passage, concerning which islands some have written that about the winter solstice they have night for thirty days together. We could not ascertain anything upon this point by inquiry; but we found, by using certain measures of water, that the nights were shorter than on the continent. The length of this side, according to the opinion of the natives, is about 700 miles. The third side fronts the north; there is no land opposite to this, but one angle of it extends very much in the direction of Germany: this side is thought to be 800 miles in length. So that the whole island is 2000 miles in circuit.‡

* The copies here vary very much. We have followed the text of Oudeadorp, as edited by Oberlin. Lipsæ, 1805.

† This is a literal rendering of Cæsar's expression '*inferior*,' the meaning of which it is rather difficult to fix. He elsewhere states that the 'lower' part of the island was the more westerly (Lih. iv. c. 28)—*inferiorem partem insule quæ est propius solis occasum*.

‡ The Roman mile was about twelve-thirtieths of the English mile. It is scarcely necessary to observe that Cæsar's description of the island is erroneous in several respects.

"Of all the natives, those who inhabit Cantium (Kent), a district the whole of which is near the coast, are by far the most civilised; and do not differ much in their customs from the Gauls. The inland people for the most part do not sow corn, but live on milk and flesh, and have their clothing of skins. All the Britons however stain themselves with woad (*sc vitro infusant*), which makes them of a blue tinge, and gives them a more fearful appearance in battle: they also wear their hair long, and shave every part of the body except the head and the upper lip. Every ten or twelve of them have their wives in common, especially brothers with brothers and parents with children; but if any children are born they are accounted the children of those by whom first each virgin was espoused." (Lib. v. c. 12, 14.)

As to the religion of the Britons, Druidism flourished among them in all its vigour. Indeed this singular superstition was considered by the Gauls to have originated in Britain. The following is Cæsar's account of the Druids:—

"They are ministers of sacred things; they have the charge of sacrifices both public and private; they give directions for the ordinances of religious worship (*rdigiones interpretantur*). A great number of young men resort to them for the purpose of instruction in their system, and they are held in the highest reverence. For it is they who determine most disputes, whether of the affairs of the state or of individuals; and if any crime has been committed, if a man has been slain, if there is a contest concerning an inheritance or the boundaries of their lands, it is the Druids who settle the matter; they fix rewards and punishments. If any one, whether in an individual or public capacity, refuses to abide by their sentence, they forbid him to come to the sacrifices: this punishment is among them very severe; those on whom this interdict is laid are accounted among the unholy and accursed; all fly from them, and shun their approach and their conversation, lest they should be injured by their very touch; they are placed out of the pale of the law, and excluded from all offices of honour.

"Over all these Druids one presides, to whom they pay the highest regard of any among them. Upon his death, if there is any of the other Druids of superior worth, he succeeds; if there are more than one who have equal claims, a successor is appointed by the votes of the Druids; and the contest is sometimes decided by force of arms. These Druids hold a meeting at a certain time of the year in a consecrated spot in the country of the Carnutes (people in the neighbourhood of Chartres), which country is considered to be in the centre of all Gaul. Hither assemble all from every part who have a litigation, and submit themselves to their determination and sentence. The system of Druidism is thought to have been formed in Britain, and from thence carried over into Gaul; and now those who wish to be more accurately versed in it, for the most part go thither (that is, to Britain) in order to become acquainted with it.

"The Druids do not commonly engage in war, neither do they pay taxes like the rest of the community; they enjoy an exemption from military service and freedom from all other public burdens. Induced by these advantages, many come of their own accord to be trained up among them, and others are sent by their parents and connections. They are said in this course of instruction to learn by heart a number of verses, and some accordingly remain twenty years under tuition. Nor do the Druids think it right to commit their instructions to writing, although in most other things, in the accounts of the state and of individuals, the Greek characters are used. They appear to me to have adopted this course for two reasons—because they do not wish either that the knowledge of their system should be diffused among the people at large, or that their pupils, trusting to written characters, should become less careful about cultivating the memory; because in most cases it happens that men, from the security which written characters afford, become careless in acquiring and retaining knowledge. It is especially the object of the Druids to inclement this—that souls do not perish, but after death pass into other bodies; and they consider that by this belief more than anything else men may be led to cast away the fear of death, and to become courageous. They discuss moreover many points concerning the heavenly bodies and their motion, the extent of the universe and the world, the nature of things, the influences and ability of the immortal gods; and they instruct the youth in these things.

"The whole nation of the Gauls is much addicted to religious observances, and on that account those who are attacked by any of the more serious diseases, and those who are involved in the dangers of warfare, either offer human sacrifices or make a vow that they will offer them, and they employ the Druids to officiate at those sacrifices; for they consider that the favour of the immortal gods cannot be conciliated unless the life of one man be offered up for that of another; they have also sacrifices of the same kind appointed on behalf of the state. Some have images of enormous size, the limbs of which they make of wicker-work and fill with living men, and setting them on fire, the men are destroyed by the flames. They consider that the torture of those who have been taken in the commission of theft or open robbery, or in any crime, is more agreeable to the immortal gods; but when there is not a sufficient number of criminals they scruple not to inflict this torture on the innocent.

"The chief deity whom they worship is Mercury; of him they have many images, and they consider him to be the inventor of all

arts, their guide in all their journeys, and that he has the greatest influence in the pursuit of wealth and the affairs of commerce. Next to him they worship Apollo and Mars, and Jupiter and Minerva; and nearly resemble other nations in their views respecting these—as that Apollo wards off diseases, that Minerva communicates the rudiments of manufactures and manual arts, that Jupiter is the ruler of the celestials, that Mars is the god of war. To Mars, when they have determined to engage in a pitched battle, they commonly devote whatever spoil they may take in the war. After the contest they slay all living creatures that are found among the spoil; the other things they gather into one spot. In many states, heaps raised of these things in consecrated places may be seen; nor does it often happen that any one is so unscrupulous as to conceal at home any part of the spoil, or to take it away when deposited: a very heavy punishment with torture is denounced against that crime.

"All the Gauls declare that they are descended from Father Dis (or Pluto), and this they say has been handed down by the Druids; for this reason they distinguish all spaces of time not by the number of days, but of nights; they so regulate their birth-days, and the beginning of the months and years, that the day shall come after the night." (Cæsar 'De Bell. Gall.' lib. vi. 13, 14, 16, 17, 18.)

Although in what relates to or is closely connected with the system of the Druids we have quoted that part of Cæsar's 'Commentaries' which has relation to Gaul, we have thought ourselves authorised in applying his description to Britain by his declaration that the system existed in its greatest vigour in that island. Of the account which he gives of the civil institutions of the Gauls we do not feel ourselves completely justified in making a similar application, although it is likely that in their political and social arrangements a considerable similarity existed between the two countries.

In the autumn of the year B.C. 55, Cæsar, embarking with the infantry of two legions (about 8000 to 10,000 men) at the Portus Itius (probably Witsand, between Calais and Boulogne), arrived with part of his fleet, after a passage of about ten hours, on the coast of Britain, and beheld the steep cliffs which skirted the shore covered with armed natives ready to dispute his landing. Proceeding about seven miles farther, he disembarked on the open and level beach which presented itself to him (26th of August). The place at which Cæsar first touched was near the South Foreland, and he landed somewhere on the flat shore which extends from Walmer Castle towards Sandwich. He did not make good his landing without a severe struggle. But the season was late, and Cæsar made apparently no progress in the island. Being anxious to return, he contented himself with requiring an increased number of hostages, whom he commanded to be brought to him on the continent, for which he immediately embarked.

In the next year (B.C. 54), Cæsar, embarking again at the Portus Itius, invaded the island with a much larger force. His fleet consisted of 800 vessels of all classes. He landed in the same place as on the former occasion, and, setting out about midnight in pursuit of the natives, found them drawn up on the bank of a river, the Stour, to oppose his further progress. His cavalry drove them into the woods in the rear of their position, and one of his legions (the 7th) stormed a stronghold, formed of timber, which had been formerly constructed probably in some domestic war. Intelligence that his fleet had been damaged by a storm obliged Cæsar to recall his troops from the pursuit of the enemy; and his return to the coast, to ascertain the extent of the damage and take measures for repairing it, delayed his operations for some days. Upon his return to his former post he found that the natives had augmented their forces from all parts, and had intrusted the command-in-chief to Cassivellaunus, a prince whose territories were divided from the maritime states by the river Thames or Thames, at a part which was 80 Roman miles, or about 74 English miles, from the Kentish coast. This prince had been engaged previously in incessant wars with his neighbours; but the common danger compelled them to forego their disputes, and it is likely that his talents for war pointed him out as the most suitable person for general. After some severe but unsuccessful struggles Cassivellaunus dismissed the greater part of his forces, detaining about 4000 charioteers, whose skill in the management of their chariots rendered them very formidable, and retired, as it appears, into his own dominions across the Thames. That river was fordable only in one place in the line of Cæsar's advance, and the natives had planted stakes sharpened at the point on the bank and in the bed of the river. Cæsar, crossing the river, put the enemy to flight; received the submission of several tribes, and took by storm the town of Cassivellaunus. These disasters, combined with the entire defeat of the princes of Cantium (Kent) in an attack upon the maritime camp which the Romans had formed to protect their fleet, induced Cassivellaunus to submit. The conqueror demanded hostages, fixed a tribute to be paid by the subject Britons, and returned to Gaul with his forces and a number of captives.

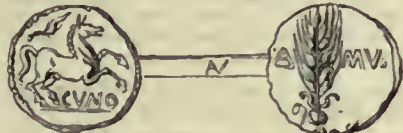
The line of Cæsar's march from the Stour to the Thames cannot be determined, nor is it clear at what place he crossed the Thames. He probably spent about two months in Britain in his second expedition. ('The British expedition of C. Julius Cæsar,' by G. Long, in 'Classical Museum,' No. 13.)

The tribes with whom the Romans in Cæsar's expedition became acquainted were as follows: we give also their names as written by Ptolemæus, where they have been identified or where identity is

conjectured by antiquaries. The positions are those laid down or suggested in the map published by the Society for the Diffusion of Useful Knowledge, 'Ancient Britain,' part 1, with the exception of the Cassi, as to which tribe we give Camden's conjecture:—

Cæsar.	Ptolemæus.	Inhabitants of
People of Cantium	Καντιοι	Kent.
Trinobantes . . .	Τρινοβαντες	Essex.
Genimagni . . .	Σιμενοι (?)	Norfolk, Suffolk, Cambridge.
Segontiaci	not mentioned	parts of Hants and Berks.
Ancalites	Ανκαλιται (?)	parts of Berks and Wilts.
Bibroci	not mentioned	parts of Berks and adjacent counties.
Cassi	Cassio Hundred, Herts (?)

The Romans did not return to the island until the reign of Claudius, leaving the Britons alone for about a century. In the interval the Britons who dwelt in the parts nearest to Gaul appear to have made some progress in civilisation. They coined money, and many British coins have been discovered, of which about forty (note to Gough's 'Camden') belong to a prince, Cunobelin, whose residence was at Camalodnum (either Colchester or Maldon), and whom we should therefore take to be a king of the Trinobantes, the people of that part of the country. The money of Cunobelin is supposed to have been the work of a Roman artist, or of some Gaul familiar with Roman customs. The subjoined engraving is from a coin, one of several of Cunobelin, in the British Museum:—



Coin of Cunobelin. Gold. Actual size.

The Trinobantes took the lead in opposition to the invading force sent by the emperor Claudius. Aulus Plautius, a senator of praetorian rank, commanded the forces which were designed for the attack on the island (A.D. 43). The Britons were defeated in two battles, in the first of which they were commanded by Catardacus, in the second by Togodumnus, the sons of the now deceased Cunobelin. After various encounters with the natives, Plautius awaited the arrival of the emperor Claudius. Claudius embarked with reinforcements, including some elephants, and, landing at Massilia, proceeded through Gaul to Britain. Upon his arrival he crossed the Thames with his army, defeated the natives who had assembled to oppose him, took Camalodunum or Camulodnum, the capital of Cunobelin, and forced numbers of the Britons to submit. After this success Claudius disarmed the vanquished tribes and returned to Rome, leaving Plautius to secure the Roman conquests. The senate decreed triumphal honours to the emperor, and the memory of his victory has been perpetuated in his coinage.

During the command of Plautius, his lieutenant Vespasian conquered the Isle of Wight. Upon the departure of Plautius, those Britons who were struggling for independence overran the lands of such as had allied themselves with or submitted to the Romans; and P. Ostorius Scapula, who succeeded Plautius (A.D. 50) as proprætor, on his arrival found affairs in great confusion. He immediately collected forces, routed and pursued the invaders, and prepared to restrain their incursions by stations or camps at the rivers Sabrina (Severn) and Antona or Aufona (Nene). The line which Ostorius proposed to defend comprehended within it all the southern and south-eastern parts of the island, including nations who for the most part were of Belgic origin, and who had either submitted without a struggle to the Roman sway, or had been subdued by Plautius and Vespasian, or had willingly embraced the Roman alliance. This part of the island was inhabited by the tribes mentioned by Cæsar, by the Iceni, or inhabitants of Norfolk, Suffolk, and Cambridgeshire, and the Atrebatii; by the Catuclani or Catyuechani, probably the native tribe of Cassivellaunus; by the Dobuni; and by the following people not yet noticed: the Damnonii or Dumnonii, people of Devonshire and Cornwall; the Durotriges, in and about Dorsetshire; the Belgæ, people of Somersetshire, Wilts, and Hants (the name of whose capital, Venta, is preserved in Winchester); and the Regni, people of Surrey and Sussex.

The Iceni had never been subdued: they had allied themselves with the Romans, but they saw that, if Ostorius severed the island into two parts by a line of military posts, the independence of all within that line would be sacrificed. They consequently opposed his plan; but they were defeated by Ostorius. He next subjected the Cangi and the Brigantes. He then prepared to march against the Silures or Silyres, a people of South Wales, whose resistance to

the Romans was more obstinate than that of any other people of South Britain. That no apprehension of a rising in his rear might impede his progress, he settled a colony of veterans at Camalodunum.

Although the name of Cataractus, or, according to the orthography of Tacitus, Caractacus, has not been mentioned since the notice of Plautius's first campaign, that valiant prince appears to have kept the field; and in some manner, with which we are not acquainted, he became commander of the Silures. (Tacit. 'Ann.' xii. 33, 36.) The seat of war was transferred into the country of the Ordovices, people of North Wales and Shropshire, by Caractacus. He posted his forces upon a steep ascent, and fortified the approaches by a rampart of loose stones; a river ran in front of his strong position, and his best troops took their station before the ramparts. But this strong position was stormed by the Roman troops; the wife and daughter of Caractacus were taken; his brothers surrendered themselves; and the gallant prince himself was put in chains by Cartimandua, queen of the Brigantes, with whom he had taken refuge, and delivered up to the Romans. His noble demeanour when at Rome before Claudius commanded the admiration of that prince, and the emperor pardoned him. His defeat and capture took place probably A.D. 51.

The insignia of a triumph were decreed to Ostorius; but his successes ended with the defeat of Caractacus. The Romans were harassed with repeated skirmishes, and by the obstinate resistance of the Silures, and Ostorius died worn out with care (perhaps A.D. 53).

Didius, the successor of Ostorius, found the Roman affairs in a depressed condition; and he does not appear to have gained any signal advantage. His command lasted into the reign of Nero, the successor of Claudius, probably till A.D. 57. Veranius, the successor of Didius, lived only a year after undertaking the command, and did little. His successor, Paulinus Suetonius, attacked the island of Mona (Anglesey), transporting his infantry over the straits which divide that island from the mainland (the Menai) in flat-bottomed boats, the cavalry fording the passage, or in the deeper parts swimming. The description of this attack, which is highly characteristic of the people of the island, is given in the annals of Tacitus. ('Annales,' xiv. 30.)

From the shores of the extreme west Suetonius was recalled by the news of a great rising of the natives under Boadicea in that part of the island which had been already subdued by the Romans. [BOADICEA, HIST. AND BIOG. DIV.]

The revolt of Boadicea had nearly extinguished the Roman dominion in Britain, but at last the natives were completely defeated in a battle, the scene of which is supposed to have been just to the north of London. Battle Bridge, St. Pancras, is thought to have preserved in its name a memorial of this dreadful day. (Nelson, 'History of Islington.') The Roman general ravaged the territories of all those native tribes which had wavered in their attachment to the Romans, as well as those who had joined in the revolt. Suetonius was at last recalled without finishing the war (A.D. 62) and Petronius Turpilianus appointed his successor.

Several generals were successively sent to the island; but the Romans made little progress until the time of Vespasian, A.D. 70-78, in whose reign Petilius Cerealis subdued the Brigantes, who under Venutius had renewed hostilities; and Julius Frontinus subdued the Silures. But the glory of completing the conquest of South Britain was reserved for Cnæus Julius Agricola. [AGRICOLA.]

From the time of Agricola we read little about Britain in the Roman historians until the reign of Hadrian (A.D. 117 to 138), who visited the island. The emperor fenced in the Roman territory by a rampart of turf 80 Roman, or about 74 English, miles long. This rampart extended from the æstuary Ituna, Solway Frith, to the German Ocean, a little south of the more solid wall afterwards built by the emperor Severus. In the subsequent reign of Antoninus Pius (A.D. 138 to 161) Lollius Urbicus, his lieutenant in Britain, drove back the harbarians, and recovered the country as far as Agricola's line of stations between the Forth and Clyde. [ANTONINUS, WALL OF.]



Medal of Antoninus Pius.



Reverse.

Brass. Brit. Mus. Actual size.

In the following reign of M. Aurelius Antoninus (A.D. 161 to 180) we have some notice of wars in Britain, which Calpurnius Agricola was sent to quell. Commodus, the successor of Aurelius, sent against the Caledonians his lieutenant, Ulpianus Marcellus, who defeated the Caledonians with heavy loss.

Septimius Severus, near the close of his reign, though growing old

and infirm, crossed over into the island A.D. 206 or 207. The natives who had been in a state of insurrection offered to submit; but Severus dismissed their ambassadors and continued his military preparations. Two people, the *Mæatae*, who dwell nearest to the Roman wall, and the *Caledonians*, who were more remote, were the great objects of the emperor's hostility. These tribes wore little clothing, and painted or otherwise marked upon their bodies the figures of divers animals; a small target or shield, a spear, a poniard, and as we learn from Tacitus a cumbersome unpointed sword, composed their offensive and defensive arms. They had neither walls nor towns, but lived in tents; a pastoral race, feeding upon milk and wild fruits, and the flesh of such animals as they took by hunting.

It was during this war that Severus ordered the erection of the wall which stretches across the island from the Solway to near the mouth of the Tyne. The length of this wall, owing to the corruption of the text of ancient authors, is given with great diversity. It is probable that the true reading in each of them was LXXXII or LXXXIV miles, which is rather more than the length assigned to Hadrian's rampart of turf, which was near this wall, and extended in the same direction. Remains of both these great works exist.

The rampart of Severus, which is of stone, is for the most part, but not invariably, parallel to that of Hadrian; it lies to the north of it, and extends rather farther at each end. It is accompanied throughout by a military road, or indeed by several military roads. Perhaps the most complete account of the wall of Severus is by Hutton ('History of the Roman Wall,' pp. 136-140).

Severus died probably at Eboracum (York), A.D. 210 or 211. He appears to have carried his arms far into Scotland, and probably fixed the boundary of the empire at the rampart of Antoninus, though his erection of a wall so near to the rampart of Hadrian indicates that he thought the intermediate territory either of little value or of uncertain tenure. His son Caracalla soon after his death surrendered a great part of this territory when he made peace with the *Caledonians*. In the reign of Diocletian and Maximian, Carausius, a Menapian (the *Menapians* were a people of the Netherlands), who commanded the Roman fleet in the North Sea against the Frankish and Saxon pirates, seized Britain and assumed the purple (about A.D. 288); and such was his activity and power that the emperors consented to recognise him as their partner in the empire. He was however after some years killed by Allectus, one of his friends (A.D. 297), and three years afterwards (A.D. 300) Britain was recovered for the emperors by Asclepiodotus, captain of the guards. Upon the resignation of Diocletian and Maximian (A.D. 304) Britain was included in the dominions of Constantius Chlorus, one of their successors. This prince died at Eboracum A.D. 307, after an expedition against the *Caledonians*. His son Constantine the Great also carried on some hostilities with the same people and the *Mæatae*. The northern tribes now began to be known by the names of *Picts* and *Scots*.

The Roman power was now decaying, and the provinces were no longer secure against the irruptions of the savage tribes that pressed upon the long line of their frontier. Britain, situated at one extremity of the empire, suffered dreadfully. The northern tribes, *Picts*, *Scots*, and *Atacotti*, burst in from the north, and the Saxons infested the coast. In the reign of Valentinian, Theodosius (father of the emperor of that name), being sent over as governor, found the northern people plundering *Angusta* (London). He drove them out, recovered the provincial towns and forts, re-established the Roman power, and gave the name of *Valentia* either to the district between the walls of Antoninus and Severus (Richard of Cirencester, Roy), or as Horsley thinks, to a part of the province south of the wall of Severus.

When Gratian and Valentinian II. associated Theodosius (son of the above) with them in the empire, Maximus, a Spaniard, who had served with great distinction in Britain, took umbrage at the preference shown to another, and raised in the island the standard of revolt, A.D. 351. Levying a considerable force he proceeded over to the continent, defeated Gratian, whom he ordered to be put to death, and maintained himself for some time in the possession of his usurped authority. He was however at last overcome by Theodosius, and the province returned to its subjection to the empire. The Britons who had followed Maximus into the continent received from him possessions in *Armenia*, where they laid the foundation of a state which still retains their name. [BRITANNÆ.]

Stilicho, whose name is one of the most eminent in the degenerate age in which he lived, served in Britain with success, probably about A.D. 403; but the time and particulars of his service are not known. The unhappy province after his departure was again attacked by *barbarians*, and agitated by the licentiousness of the Roman soldiery, who successively set up three claimants to the imperial throne, Marcus, Gratian, and Constantine. The first and second were soon dethroned and destroyed by the very power which had raised them. Constantine was for a time more fortunate. Raising a force among the youth of the island he passed over into Gaul (A.D. 409), acquired possession of that province and of Spain, and fixed the seat of his government at Arles, where he was soon after besieged, taken, and killed. His expedition served to exhaust Britain of its natural defenders: the distresses of the empire rendered the withdrawal of the Roman troops necessary, and near the middle of the 5th century,

or according to some about A.D. 420, nearly 500 years after the first invasion by Julius Cæsar, the island was abandoned by them.

We proceed to give an account of the subdivision, government, and general state of Britain while a province of the Roman empire.

The first Roman governors were the *proprætors*, officers chiefly or entirely military; nor are there, so far as we know, any records or traces of a subdivision of Britain till a comparatively later period of the Roman dominion. The extensive and important changes introduced into the Roman government by Diocletian affected Britain. The whole empire was divided into four great prefectures, and Britain was included in the prefecture of Gaul.

Our authority for the administration of Britain is the 'Notitia Imperii,' a record of late date, probably as late as the time of the Romans quitting the island. From the 'Notitia' we learn that the government of the island was intrusted to an officer called 'Vicarius,' which Horsley, not inaptly, translates 'vice-gerent.' Under him there were five governors (for civil purposes, we presume), two 'Consulares' (men of consular rank) for the two provinces of *Maxima Cæsariensis* and *Valentia*, and three 'Præsides' (presidents) for the provinces of *Britannia Prima*, *Britannia Secunda* (First and Second Britain), and *Flavia Cæsariensis*. Three other principal officers are mentioned,—the 'Comes littoris Saxonici per Britanniam' (Count of the Saxon shore in Britain), the 'Comes Britanniarum' (Count of Britain), and the 'Dux Britanniarum' (Duke of Britain). We have translated the words 'Comes' and 'Dux' by 'Count' and 'Duke,' after Horsley: the modern titles are obviously derived from the more ancient; but there is this difference, that while the modern names now indicate only rank and title, the ancient names were attached to offices.

The situation of the five provinces of Britain, according to Richard of Cirencester (a monk of the 14th century, whose work was discovered and published at Copenhagen about the middle of the last century, and whose authority, though disputed by some, is apparently trustworthy), was as follows. We give them in a tabular form, with the nations which occupied each:—

BRITANNIA PRIMA, the country south of the Thames and the Bristol Channel, including the territories of the

<p><i>Cantii</i> <i>Belgæ</i> <i>Damnonii</i> <i>Bibrocii</i> <i>Segontiaci</i> <i>Hedui</i> <i>Atrebatii</i> <i>Durotriges</i></p>	<p>These nations are mentioned by Richard of Cirencester: the <i>Cantii</i> were the inhabitants of Kent; the <i>Belgæ</i>, of Somersetshire, Wilts, and Hants; the <i>Damnonii</i>, of Devonshire and Cornwall; the <i>Bibrocii</i>, of parts of Berks and adjacent counties; the <i>Segontiaci</i>, of parts of Hants and Berks; the <i>Hedui</i>, of Somersetshire and part of Gloucestershire; the <i>Atrebatii</i>, of parts of Berks and Wilts; the <i>Durotriges</i>, of Dorsetshire and neighbourhood. Richard places the <i>Bibrocii</i>, whom he seems to confound with the <i>Regni</i> (or, as he terms them, the <i>Rhemi</i>) in Surrey and East Sussex. He says the <i>Durotriges</i> were sometimes called <i>Morini</i>.</p>
<p><i>Regni</i> <i>Ancalites</i></p>	<p>Not mentioned by Richard, unless the first are the same as the <i>Rhemi</i> or <i>Bibrocii</i>, and the second as the <i>Atrebatii</i>. The <i>Regni</i>, according to other authorities, were people of Surrey and Sussex. The <i>Ancalites</i> of Cæsar are held to be the <i>Atrebatii</i> of Ptolemæus.</p>
<p><i>Cimbri</i> <i>Cornubii</i></p>	<p>People, as it seems, of Devonshire and Cornwall, mentioned by Richard, not by Ptolemæus.</p>

BRITANNIA SECUNDA, the country separated from the rest of Britain by the *Sabrina* or *Severn*, and *Deva* or *Dee*; that is, *Wales*, *Herefordshire*, *Monmouthshire*, and parts of *Shropshire*, of the counties of *Gloucester* and *Worcester*; including the territories of the

<p><i>Silures</i>, people of that part of South Wales bordering on England and of those parts of England between South Wales and the <i>Severn</i>.</p> <p><i>Ordovices</i>, people of that part of North Wales bordering on England.</p> <p><i>Dimetia</i>, or <i>Διμητρία</i> { People of the west part of South Wales, counties of Pembroke, Caernarthen, Cardigan.</p> <p><i>Cangiari</i>, { People of Caernarvonshire, supposed by some to be or <i>Καγκάριοι</i> { the <i>Cangi</i>, attacked by <i>Ostorius</i>. (See above.)</p>
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FLAVIA CÆSARIENSIS, the territory north of the Thames, east of the *Severn*, and probably south of the *Mersey*, the *Don* which joins the *Yorkshire Ouse*, and the *Humber*; comprehending the territory of the

<p><i>Carnabii</i> <i>Koprauiot</i></p>	<p>People of Cheshire, part of Shropshire, and some adjacent districts.</p>
<p><i>Cassii</i> <i>Cateyeuchlani</i> <i>Dobuni</i> <i>Iceni</i> <i>Trinobantes</i></p>	<p>Richard of Cirencester considers the <i>Cassii</i> and the <i>Cateyeuchlani</i> to be the same people. The same writer considers that the <i>Cassii</i> and <i>Dobuni</i> made up the kingdom or rather the republic of the <i>Cassii</i>. The situation of the <i>Cassii</i> is supposed to be in <i>Caeslo Hundred</i>, <i>Herts</i>; the <i>Dobuni</i>, in <i>Gloucestershire</i>; the <i>Iceni</i> (supposed to be the <i>Cenomagni</i> of Cæsar), in <i>Norfolk</i>, <i>Suffolk</i>, and <i>Cambridge</i>; the <i>Trinobantes</i>, in <i>Essex</i>.</p>

Coitani
Κοιτανοί } People of the counties of Lincoln, Nottingham, Leicester, and the adjacent parts. These people seem to be regarded by Richard as a subdivision of the Icenii. The Icenii, properly so called, he gives as the other subdivision, calling them Cenomanni.

MAXIMA CÆSARIENSIS, the country from the Mersey and the Humber to the wall of Severus, comprehending the territory of the

Brigantes.
Parisii
Παρισιοί } People of the East Riding of Yorkshire.

Volantii
and
Sistuntii } Two nations confederate together, according to Richard, not mentioned by Ptolemæus; they inhabited Lancashire, or part of it.

VALENTIA or VALENTIANA, the country between the wall of Severus and the rampart of Antoninus, including the south part of Scotland, the county of Northumberland, and part of Cumberland, comprehending the territories of the

Ottadini
Οτταδινοί } The inhabitants of the east coast of Northumberland and the adjacent coast of Scotland.

Gadeni
Γαδινοί } These people dwelt to the west of the Ottadini, in Northumberland, in Roxburgh, Selkirk, Peebles, and Lanark-shires.

Selgovæ
Σελγουαί } The inhabitants of Dumfries and part of Kircudbright-shires.

Novantæ
Νοβανταί } The inhabitants of Wigtonshire.

Damnii
Δαμνιοί } The inhabitants of that part of Scotland south of the wall of Antoninus not occupied by the above-mentioned nations. They seem to have occupied a considerable tract north of the wall, which, being cut off from the rest of their territories, was wasted by the Caledonians.

The remaining part of the island was never long in the power of the Romans. Agricola overran part of it and established some stations; and probably other commanders after him brought it into temporary subjection. The part which Agricola thus subdued is termed by Richard

VESPASIANA, including the country between the rampart of Antoninus and a line drawn from the Moray Frith (Varar æstuary,* Ptolemæus) to the mouth of the Clyde, and comprehending the territories of the

Horestii, mentioned by Tacitus but not by Ptolemæus; it is likely they occupied the portion of the territory of the *Damnii* which lay beyond the wall: they were south-west of the Tay.

Vecturones
or
Yenricones
Ουενικοντες } The difference between Richard and Ptolemæus with respect to this people makes it uncertain whether we are to assign them to Fifeshire or Angus.

Tairali
Τεταλοι } Inhabitants of the coast of Aberdeenshire. Their chief town, *Devana* (*Δηουανα*), was probably Old Aberdeen.

Vacomagi
Ουακομαγοί } The range of the Grampians towards the north-east; Banff, Moray or Murray, Nairn, and part of Inverness-shires.

Damnii Albani (not mentioned by Ptolemæus), parts of Perth, Argyle, Stirling, and Dumbarton-shires. General Roy considers Albani to mean mountaineers. Perhaps they are comprehended by Ptolemæus among the *Damnii* (*Δαμνιοί*) of Valentia.

Attacotti, not mentioned by Ptolemæus but by Ammianus Marcellinus. They inhabited, according to Richard, the country on the hawk of the Clyde and of the great lake Lyncalidor, supposed to be Loch Lomond.

Richard supposes that this province of VALENTIA was, in the time of the later emperors called THULE: to the rest of Scotland he gives the name of

CALEDONIA, comprehending the territories of the following people:—

Caledonii, properly so called, *Καληδονιοί* } North-west of the Moray Frith and Loch Ness. The immense Caledonian Forest covered their territory or rather skirted it to the north-west. Ptolemæus seems to make them extend in a south-west direction as far as Loch Fyne; thus assigning to them parts of Inverness, Perth, and Argyle-shires.

Cantæ
Κανταί } Inhabitants of parts of Ross and Cromarty-shires.

* Varar, as it is correctly written in the Latin edition of Ptolemæus by Pirekheimer. The name Varar still exists in Strath Farar, the upper end of the Moray Frith.

Logi
Λογοί } These two nations seem to have inhabited the east coast of Sutherland and Caithness-shires. The name of the Logi is preserved in that of the modern parish of Loch. Richard intimates that the Carnabii were a colony of the people so called in South Britain, who abandoned their country in conjunction with the Cantii, upon the Roman conquest, and settled here. If there be any truth in this account we may perhaps identify the Cantæ with these wandering Cantii.*

Catini
Καρηνοί } Part of Caithness and Sutherland-shires west of the Caruabii. If we follow Richard's orthography, perhaps a relic of the name Cat-ini may be preserved in Caithness.

Mertæ
Μερται } West of the Logi in Sutherlandshire.

Carnonacæ
Καρνονακαι } The west coast of Sutherland and Cromarty-shires.

Cerones
Κερωνες
Creones
Κρεωνες } These two people (if two there were, for we are inclined to think some confusion of transcribers has led our name to be variously written, and hence it has been supposed there were two people where really was only one) dwelt along the west coast of Scotland, between Loch Broom and the Linnho Loch.

Epidii
Επιδιοί } The peninsula of Cantire and the adjacent part of Argyle-shire between the Linnho Loch and Loch Fyne. Richard, in his map, gives the names of Epidia Superior and Inferior to Jura and Islay respectively.

Horsley gives an arrangement of the provinces entirely different from the above, except so far as regards Britannia Secunda. He makes Britannia Prima to extend from the coast of Sussex to the banks of the Nene, and assigns the western counties to Flavia Cæsariensis. He places Valentia within the wall of Severus, and Maxima Cæsariensis beyond it.

Our chief authorities in the above table have been Richard of Cirencester and Ptolemæus; in the Latin names we have commonly followed the spelling of the former; the Greek names we have subjoined from Ptolemæus, as far as he furnishes them, except where they have been given before in the course of the history. The locality of the several nations may be seen in the maps of Ancient Britain (north and south), published by the Society for the Diffusion of Useful Knowledge.

There were, according to Richard of Cirencester, two municipia or towus whose inhabitants enjoyed most of the privileges of Roman citizens.

Verulamium (*Ουρολαβιον*) near St. Albans.

Eboracum (*Εβορακον*), now York, quarters of the sixth legion and apparently the residence of the Roman emperors when in Britain.

The Colonie were settlements of Roman citizens, and served to diffuse the language, religion, and arts, and to secure the supremacy of Rome. According to Richard there were in Britain nine colonie, namely:—

Londinium (*Λονδιβιον*) or *Augusta*, now London, mentioned by Tacitus as a place of great trade, though not spoken of in his time as a colony.

Camalodunum (*Καμουλοδωνον*), *Gemina Martia*, now Colchester or Maldon (?).

Rutupis (or *Rutupæ*, 'Itin. Anton.' *Ρουτουπια*), now Richborough, near Sandwich.

Thermæ or *Aquæ Solis* (*Τεταρα Θερμα*), now Bath.

Ica or *Secunda*, now Caerleon.

Deva or *Getica* (*Δηουνα*), now Chester, quarters of the 20th legion.

Glevum or *Claudia*, now Gloucester.

Lindum (*Λινδον*), now Lincoln.

Camboricum, now Cambridge (or Icklingham, in Suffolk. Horsley).

There were ten cities *Latæ jure donati*: the inhabitants of these possessed privileges, but not equal to the foregoing.

Durnomagus (*Δυροβρινα*, 'Itin. Ant.'), now Castor on Nene or Water Newton.

Catarractum (*Καταρρακτο* or *Catarractonum*, 'Itin. Ant.' *Κατουβρακτονιον*), now Catterick in Yorkshire.

Cambodunum (*Καμουλοδωνον* ?), now Slack in Yorkshire near the border of Lancashire.

Coccium (supposed by some to be the *Πυροδωνον* of Ptol.), now Ribchester, Lancashire.

* A comparison of the situation of the Carnabii at the extremities of the island in Cornwall and Caithness will perhaps incline us to account for the similarity of their designation by a reference to its etymology rather than to such a connexion of the people as Richard supposes. The Celtic root *corn* or *horn* (see Camden) appears in many other languages with the signification of an extremity or a horn: compare the Hebrew *קרן*, the Latin *corn-u*, our own words *corn-er*, *Corn-wall*, &c. By a reference to the presumed etymology of the names *Cantæ* and *Cantii*, we can account for their similarity also; the root *cant* (compare *Cantii* and *Cantæ* above with the ancient *Cant-abri* and the modern *Cant-ire*, see Camden) is supposed to mean in Celtic, a corner.

Logobalia (*Logorallium*, 'Itin. Ant.'), now Carlisle.
Pterota (*Πτεροτα στρατοπέδον*, the flying camp), now Burgh-head,
 Morayshire, Scotland.
Victoria (*Ουακίπα*), now Dealgin Ross, Perthshire.
Theodoria, now Dumbarton.
Corinum (*Δαρεκονοσιον*, 'Itin. Antoa.' *Καρινον*), now Cirencester.
Sorbiodunum, now Old Sarum.

There were twelve towns called *Stipendiariae*, with whose municipal constitution and privileges we are not acquainted.

Venta Silurum, now Caer-went or Caer-gwent, Monmouthshire.
Venta Belgarum (*Ουακίπα*), now Winchester, Hants.
Venta Icenorum (*Ουακίπα*), now Caistor, near Norwich.
Segontium, now Caer-Segont, near Caernarvon.
Maridunum, now Seaton, near Colyton, Devon.
Rage (*Ραγ*, 'Itin. Anton.' *Ραγ*), now Leicester.
Canitopolis or *Durovernum* (*Δαρουβερν*), now Canterbury.
Durium (*Δαρουβερν*, 'Itin. Anton.' *Δουβριον*), Dorchester.
Ioca (*Ιοκα*), now Exeter.
Bremennium (*Βρεμνερν*), now Riechester, Northumberland.
Vindonum (*Βινδομια*, 'Itin. Anton.'), near Andover, Hants, a very doubtful position.
Durobrivæ, now Rochester.

In the above list we have given the orthography of Richard, noting any variation between him and the 'Itinerary of Antoninus.' The Greek names as usual are from Ptolemæus. The list of *Municipia* and *Colonia*, it should be added, is by no means complete.

BRITISH AMERICA. The territory comprehended under this name extends from 41° to 78° N. lat., and from 52° to 141° W. long. The south boundary of British America is formed by the territory of the United States. The frontier line between New Brunswick, Canada, and the United States, was settled by the Conventions of 1839 and 1846. It strikes the St. Lawrence in lat. 45°, at the village of St. Regis, which stands at the western extremity of Lake St. Francis. The line then proceeds in a south-western direction through the middle of the St. Lawrence into Lake Ontario, which it divides into two nearly equal portions; leaves Ontario by the river Niagara and bisects Lake Erie; passes north through the river Detroit into and through the lake and river St. Clair; enters Lake Huron at its southern point and quits it at its north-western extremity; runs through 'the Narrows' and to the west of the island of St. Joseph into Lake Superior, which it crosses with a winding course leaving Isle Royale within the limits of the United States. Quitting Lake Superior by Pigeon River the boundary-line runs north-west to the north-western angle of the Lake of the Woods in 49° 0' N. lat., 94° 25' W. long.; proceeds thence due west to the Pacific: the island of Vancouver, opposite this maritime boundary-point, being allotted to Great Britain. A very large proportion of the territory to the north of the line just described has been little explored, and is of value only as hunting-ground. The eastern portion of the territory is in possession of the Hudson's Bay Company, while the western is known as the North-Western or Indian territory. A portion of the north-west coast of America bordering on the North Pacific Ocean is claimed by Russia. This portion extends from 57° N. lat. to the shores of the Arctic Sea, and from 140° W. long. to the North Pacific Ocean.

The settled provinces of North America belonging to Great Britain are Lower Canada, or Canada East, lying between 44° and 50° N. lat., and between 64° and 76° W. long.; Upper Canada, or Canada West, 41° to 49° N. lat., 74° to 85° W. long.; New Brunswick, 45° to 48° N. lat., 64° to 68° W. long.; Nova Scotia and Cape Breton, 43° to 47° N. lat., 60° to 67° W. long.; Prince Edward's Island, 46° to 47° N. lat., 62° to 65° W. long.; Newfoundland, Canada; Cape Breton; COPPERMINE RIVER; HUDSON'S BAY TERRITORIES; NEW BRUNSWICK; NEWFOUNDLAND; NOVA SCOTIA; VANCOUVER ISLAND.]

BRITISH CHANNEL [ENGLISH CHANNEL]

BRITISH GUYANA. [GUYANA, BRITISH.]

BRITISH HONDURAS. [HONDURAS, BRITISH.]

BRITISH INDIA. [HINDUSTAN.]

BRITISH KAFFRARIA. This name is applied to a dependency or military possession, recently annexed to Cape Colony in South Africa. The annexation arose out of the Kaffir war of 1847. For twenty years before that date the settlers in the Albany district of Cape Colony, being near the eastern frontier, were often exposed to irruptions from the Kaffirs. Successive governors of the colony—Sir B. D'Urban, Sir P. Maitland, and Sir H. Pottinger—had endeavoured in vain to suppress these incursions. In 1847 Sir H. Smith subdued for a time the Kaffirs, but their deep-seated resentment against the white settlers broke out again with great force in 1850. On the last day of that year Sir H. Smith issued a proclamation from King William's Town establishing martial law in the colony, and ordering all colonists between the ages of 15 and 20 to rise en masse to defend the frontier against the Kaffirs. The British troops suffered much annoyance and loss in the harassing bush-warfare which ensued. On the 8th November, 1851, in an encounter with the Kaffirs in the Waterkloof, Lieutenant-Colonel Fordyce and several officers and men of the 74th regiment were killed, and a considerable number wounded, the Kaffirs escaping unhurt. In January 1852 Major-General Cathcart replaced Sir H. Smith. On the 20th December General Cathcart defeated the Basutos, a Kaffir tribe,

on Berea Mountain in the Orange Sovereignty, shortly after which three chiefs named Macomo, Sandilli, and Kreili submitted to the British, and the war was virtually at an end. A treaty of peace was ratified at a conference between the General and the Kaffir chiefs held near King William's Town on the 9th of March, 1853. This 'little war' cost England about a million and a half sterling. The country called British Kaffraria is a large district eastward of Cape Colony, over which the British government hold a kind of sovereignty or protectorship, the precise character of which has not been very clearly defined. British military posts are maintained at various points over the area. The district is divided into counties: Buffalo River is considered the harbour; a town called London is to be established at the mouth of Buffalo River.

BRITISH WEST INDIES. [WEST INDIES, BRITISH.]

BRITTANY. [BRETAGNE.]

BRIVES. [CORREZE.]

BRIXEN. [TYROL.]

BRIXHAM, Devonshire, a seaport and market-town in the parish of Brixham and hundred of Haylor, is situated on the south side of Torbay, in 50° 23' N. lat., 3° 31' W. long.; distant 25 miles S. from Exeter, and 203 miles S.W. by W. from London. The population of the town of Brixham in 1851 was 5627. The livings are in the archdeaconry of Totnes and diocese of Exeter.

The manor of Brixham formerly belonged to the Novants, from whom it passed to the Valletot family, who sold the manor. It was afterwards divided into quarters, one of which was purchased by 12 fishermen of Brixham Quay, divided into 12 shares, and again subdivided into smaller portions, the possessors of these divided shares, however small, calling themselves quay lords. Many of these quay lords are to be found among the fishermen of the place. Brixham is situated about a mile and a half south-west from Berryhead, the most westerly point of Torbay, and directly opposite to Torquay; being distant from that celebrated watering-place about 7 miles by water. The town is long and straggling, extending, from the upper extremity beyond the church to the lower on the quay, upwards of a mile and a half. Most of the business of the place is transacted in the lower town. In both sections of the town there has been of late years a considerable increase of new and well-built houses, and the two are now almost united. The lower town is lighted with gas. The fish-market has been enlarged and greatly improved. The prosperity of Brixham is chiefly dependent on its fishery. More than 200 sail of vessels, comprising 20,000 tons of shipping, and employing 1500 seamen, belong to this town, which as a port is subordinate to Dartmouth; most of these vessels are engaged in the fishing trade. The average amount received for fish is said to be 600*l.* per week. The best of the fish are sent to Exeter, Bath, Bristol, and London. Turbot, soles, whiting, plaice, mullet, mackerel, and other fish are taken in considerable numbers. During the London season about 50 of the decked trawl boats are usually absent from Brixham, being employed in supplying the London market with soles, turbot, &c., from Hull and Ramsgate, fishing over the intermediate space between those places. Several of the vessels belonging to Brixham are employed in the Mediterranean, Spanish, and coasting trade. The harbour consists of two basins, the outer one having been formed at an expense of nearly 5300*l.*, raised solely amongst the inhabitants.

The parish church, situated in the upper town, was built by the Prior of Totnes in 1373; the accommodation has been increased by the addition of galleries. In the church is a cenotaph of Sir Francis Buller, the judge. Lower Brixham has been constituted a district parish; its church, which was built in 1820 has since been enlarged. The Wesleyan Methodists, Baptists, and Independents have places of worship. There is a National school, with which has been incorporated an Endowed school founded in 1634.

The Public Rooms, erected in 1835, are situated near the centre of the town. The market-house is by the water-side. A market was granted to Brixham by Act of Parliament in 1799. Markets are held on Tuesday and Saturday. A fair is held on Whit-Tuesday and the following day. There are two iron mines in the neighbourhood of Brixham, one of which is worked during the winter. The ore is shipped at Brixham to be smelted in Wales. Brixham was the landing-place of William Prince of Orange, afterwards William III., when he arrived in England, November 4th, 1688. A monument with an inscription commemorates the event. At the end of the pier is a tablet recording the visit of the Duke of Clarence, afterwards William IV., July 21st, 1828. The inhabitants on that occasion presented to the duke an address, with a piece of the stone on which the Prince of Orange had first set foot, both being inclosed in a box made of heart of oak said to be 800 years old.

BRIXTON. [SURREY.]

BRIXWORTH, Northamptonshire, a small village, and the seat of a Poor-Law Union, in the parish of Brixworth and hundred of Orlingbury, is situated in 52° 21' N. lat., 0° 54' W. long.; 6½ miles N. from Northampton, and 7¼ miles N.W. by N. from London. The living is a vicarage in the archdeaconry of Northampton and diocese of Peterborough. The population of the parish of Brixworth in 1851 was 1258, including 137 inmates of the Union workhouse. Brixworth Poor-Law Union contains 34 parishes and townships, with an area of 61,370 acres, and a population in 1851 of 14,629. Besides the parish

church, there is a place of worship for Baptists. There is a National school. A fair is held on the Monday after Ascension Day.

BROACH. [BAROACH.]

BROADSTAIRS. [KENT.]

BROCK. [CANADA.]

BROCKVILLE. [CANADA.]

BROD. [BOSNIA.]

BRODY, a town in the Austrian Crownland of Galicia, is situated in a swampy plain bounded by forests, and on the rivulet Suchamielka, which flows north into the Styr; in 50° 7' N. lat., 25° 18' E. long., and has 24,000 inhabitants. Brody is large, but ill built and dirty; the houses are mostly constructed of wood. Above 8000 of the inhabitants are Jews, on which account the town has been nicknamed 'The German Jerusalem.' There are several squares and open spaces; several Greek and Roman Catholic churches, three synagogues, a convent, a large palace belonging to the Potocki family, and other handsome buildings. It has two Jewish schools, a Roman Catholic grammar school, a seminary for female education annexed to the convent, a Jewish hospital, a theatre, and public baths. Brody was made a free town in 1779. In a commercial point of view, it is the most important town in Galicia. The trade is almost exclusively in the hands of the Jews, and consists principally in the export of cattle, horses, honey, wax, tallow, isinglass, hides and skins, leather, aniseed, dried fruit, &c.; jewels, pearls, colonial produce, and manufactured goods are imported by way of Odessa; there is also a transit trade in merchandise to Russia, Turkey, &c. The chief industrial products of Brody are leather and linen; its fairs are well attended.

BROEK. [HOLLAND, SOUTH.]

BROMBERG. [POSEN.]

BROMLEY, Kent, a market-town and the seat of a Poor-Law Union, in the parish of Bromley, hundred of Bromley and Beckenham, and lathe of Sutton-at-Hone, is situated on elevated ground on the right side of the small river Ravensbourne, in 51° 24' N. lat., 0° 1' E. long.; 10 miles S.E. from London. The population of the parish of Bromley in 1851 was 4127. The living is a perpetual curacy in the archdeaconry of Maidstone and diocese of Canterbury. Bromley Poor-Law Union contains 16 parishes and townships with an area of 41,333 acres, and a population in 1851 of 17,640.

The origin of the name of this place is doubtful. The manor was given by Ethelbert, king of Kent, in the 8th century to the bishop and church of Rochester. After the conquest it was seized by Odo, bishop of Bayeux, the brother-in-law of the conqueror, but was restored in 1076 to the see of Rochester through the exertions of Archbishop Lanfranc. The dean and chapter of Rochester are the patrons and impropriators of the great tithes. The present mansion, a plain brick building, was erected in 1777. In the grounds is a spring of mineral water, known as St. Blaise's Well, which was at one time in great repute for its healing properties. Bromley church is a spacious gothic structure, with an embattled tower. It is partly of perpendicular architecture, but has been much disfigured by repairs and alterations. The interior contains some monuments of several bishops of Rochester. A chapel of ease, dedicated to the Holy Trinity, was erected in 1841. There are places of worship for Wesleyan Methodists and Independents, National and Infant schools, a literary institution, and a savings bank. Bromley College, founded in 1666 by John Warner, bishop of Rochester, for 20 poor widows of clergymen, has been enlarged by subsequent benefactions so as to accommodate 40 widows, each receiving 3*l.* a year, with an allowance for coal and candles. The college is a handsome pile of buildings, standing at the entrance of the town from the London road. Other charities are in the parish. Bromley consists chiefly of one long street, in which are some well-built houses. The town is paved, and is lighted with gas. Petty sessions and a county court are held here. Bromley being on the main road to Tonbridge Wells and Hastings, formerly possessed a considerable posting trade; since the construction of the South-Eastern railway this trade has greatly declined. It is now mainly dependent on the trade of the agricultural district in which it stands and of the families of the gentry in the vicinity of the town. The market day is Thursday. Fairs are held on February 14th, and August 5th, for cattle, horses, sheep, and hogs.

BROMLEY ABBOTT'S. [STAFFORDSHIRE.]

BROMLEY ST. LEONARD'S. [MIDDLESEX.]

BROMPTON. [KENT.]

BROMPTON. [MIDDLESEX.]

BROMPTON. [YORKSHIRE.]

BROMSGROVE, Worcestershire, a market-town and the seat of a Poor-Law Union in the parish of Bromsgrove and upper division of the hundred of Haleshore, stands near the small river Salwarp, in 52° 20' N. lat., 2° 3' W. long., 13 miles N.N.E. from Worcester, 116 miles N.W. from London by road, and 127 miles by the North-Western and Bristol and Birmingham railways. The population of the town in 1851 was 4426. In the reign of Edward I. Bromsgrove returned two members to Parliament; but when the trade of the town declined the inhabitants petitioned to be freed from the franchise. The living is a vicarage in the archdeaconry and diocese of Worcester. Bromsgrove Poor-Law Union contains 15 parishes and townships, with an area of 47,206 acres and a population in 1851 of 24,824.

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The town consists principally of one good street about a mile in length, lighted by gas, and paved. Commissioners were appointed under the powers of an Act of Parliament obtained in 1846 for the purpose of effecting various improvements in the town. This measure has been highly beneficial.

The church of Bromsgrove, dedicated to St. John the Baptist, is situated on a gentle eminence; it has a beautiful tower and spire, together 189 feet in height. There was a church at Bromsgrove at the time of the Conquest. A chapel of ease at Cats Hill in this parish has been made a district church. There are three or four Dissenting chapels, a literary and scientific institute, National and Infant schools, and a savings bank. A Grammar school founded by Edward VI. in 1553, and further endowed by Sir Thomas Cookes, Bart., in 1693, has an income from endowment of about 35*l.*, and had 58 scholars in 1852, of whom 12 were free scholars. The 12 boys on the foundation are educated, clothed, and apprenticed; and in Worcester College, Oxford, are six scholarships and six fellowships, the vacancies in which are filled up by boys selected from this school.

The linen manufacture was formerly carried on at Bromsgrove, but has been abandoned. Nail-making is now the principal trade; there is also an extensive manufactory for patent buttons. In the parish of Stoke Prior, and closely adjoining that of Bromsgrove, are situated the extensive salt and alkali works of the British Alkali Company. The manufacture of salt has been carried on for centuries in the adjoining borough of Droitwich, where it is prepared from rich springs of native brine. Rock-salt was discovered in 1829 at Stoke Prior in the course of sinking a pit in search of brine. The beds of salt were of great thickness, and were excavated to a considerable extent; but at present the supplies for making refined salt are derived from a natural brine spring, which has communicated with the excavations. Immediately after making this discovery, the proprietors erected extensive works for the manufacture of salt, and for the preparation of British alkali by the decomposition of this substance, which very speedily changed the green fields and retired lances into an active manufactory and a populous village. The Birmingham and Worcester Canal passes near Bromsgrove and Stoke Prior. Bromsgrove is situated in a highly-cultivated and richly-wooded valley. On the Lickey Hill, which forms one of its acclivities, are the sources of the river Rea, which flows through Birmingham; of the Salwarp, which passes through Droitwich; of the Arrow, and of several small streams, some of which fall into the basin of the Severn and ultimately into the Irish channel, while others descend in the opposite direction to the basin of the Trent and the German Ocean. The strata belong to the new red-sandstone formation. The Lickey Hill is composed of quartz, and is regarded by geologists as the source from whence have been derived the vast beds of gravel which extend through Oxfordshire, in the valley of the Eweulode, and even along the Thames.

BROMWICH, WEST, Staffordshire, a mining and manufacturing town, and the seat of a Poor-Law Union in the parish of West Bromwich and hundred of South Offley, is situated in the heart of a mining district, near the river Tame, in 52° 31' N. lat., 1° 59' W. long., four miles from Birmingham, 113 miles N.W. from London by road, and 115 miles by the North-Western railway. The population, which in 1831 was 15,327, increased by the year 1841 to 26,121; in 1851 it was 34,591. The parish is divided into two districts, namely, north-east (16,706 inhabitants) and south-west (17,885 inhabitants). It is governed by the county magistrates, who hold petty sessions. The living is a perpetual curacy in the archdeaconry of Stafford and diocese of Lichfield. West Bromwich Poor-Law Union contains six parishes and townships, with an area of 20,165 acres, and a population in 1851 of 69,718.

The circumference of the parish of West Bromwich is about 13 miles, nine of which are marked by the course of the river Tame as it flows from Oldbury to the Trent. In the 12th century Birmingham, Castle Bromwich, Little Bromwich, and West Bromwich all belonged to one feudal lord; and Bromwich is said to have been distinguished from Bromwicham (Birmingham) by the prefix West, which indicates its relative position. West Bromwich affords a remarkable instance of the growth of population and wealth through mining and manufacturing industry. Within the space of a few years it has grown up from being little else than a barren heath to a town nearly three miles in length. The iron and coal beneath the surface of the whole parish have caused the growth of the town. The manufacture of iron goods is carried on very extensively at Bromwich: guns, gunlocks, swords, bayonets, saddlers' ironmongery, fire-irons, coach ironmongery, chains, bolts, nails, and agricultural implements are among the iron goods made here.

The Earl of Dartmouth, who is the chief landowner, has a seat at Sandwell Park, near West Bromwich; it occupies the site of a small Benedictine priory. The earl has appropriated about four acres of ground, inclosed by a wall, for the use of the inhabitants. The Birmingham and Wolverhampton Canal supplies West Bromwich with water-carriage for heavy goods.

All Saints parish church belonged to the priory of Sandwell, and the original structure is supposed to have been built about seven centuries ago; but the body of the church was nearly all rebuilt in 1785, and the upper part of the steeple was rebuilt in 1824. Christ church was built in 1828. Trinity church and St. James's have been erected

within a recent period. There are six chapels for Wesleyan Methodists, three for Independents, two for Baptists, three for Primitive Methodists, and one for Roman Catholics. There are four National schools, and schools are connected with most of the chapels. A literary institute and two mechanics institutions are in the parish.

There are gas-works at Bromwich on so extensive a scale as to have 150 miles of pipes in connection with them. The gas company has two stations, one at Birmingham, which supplies a great part of that town, and one on the Dudley Road. The two stations together produce 200,000,000 cubic feet of gas in a year.

BROMYARD, Herefordshire, a market-town and the seat of a Poor-Law Union, in the parish of Bromyard and hundred of Broxash, is situated in 52° 11' N. lat., 2° 29' W. long., 14 miles N.E. from Hereford, 125 miles W.N.W. from London. Worcester, which is about 14 miles from Bromyard, is 120½ miles from London by the Great Western, and Oxford, Worcester, and Wolverhampton railways. The population of the parish of Bromyard was 9000 in 1851. The living is a rectory and vicarage in the archdeaconry and diocese of Hereford. Bromyard Poor-Law Union contains 33 parishes and townships, with an area of 52,200 acres and a population in 1851 of 11,652.

The parish of Bromyard is almost encircled by the river Frome; the town lies a short distance from its right bank. The church is a spacious structure, partly in the Norman and partly in the decorated styles; with nave, side aisles, and chancel; it is 136 feet long by 65 feet wide. In the town are places of worship for Independents, Wesleyan and Primitive Methodists, and Quakers. The Free Grammar school, founded by Queen Elizabeth, A.D. 1565, and augmented in 1665 by John Peryn, Esq., a native of Bromyard and afterwards alderman of London, is under the patronage of the Goldsmiths' Company and the principal inhabitants. Its income is about 120*l.* a year: the number of scholars in 1852 was 40. Mr. Peryn also left funds to establish in the church of Bromyard a divinity lecture to be delivered every week, by six neighbouring clergymen; who are still appointed to officiate, as vacancies occur, by the principal inhabitants of the parish. There are National schools, an almshouse for widows, a dispensary, and a savings bank. An agricultural society was formed in 1844. A county court is held in Bromyard.

The magistrates of the district hold their petty sessions every Monday in premises called 'Dumbleton Hall,' formerly an old manor-house left to the parish, but recently rebuilt by subscription, and now affording accommodation for parochial meetings, the savings bank, fire-engine house, &c. A new police station house with a residence for a superintendent was built in 1844. There is a covered market place with commodious stalls and benches; but poultry and dairy produce are still sold in the public streets. The market is held on Monday. There are fairs for live stock and agricultural produce during the year. The town is wholly dependent on agriculture. Bromyard returned burgesses to Parliament up to the reign of Edward I., when this privilege was withdrawn at the request of the inhabitants, who pleaded their inability to defray the expense of their representatives. During the civil wars between Charles I. and the Parliament, the royal army with the king in person marched from Worcester towards Hereford to relieve that city then besieged by the parliamentary forces. On this occasion the king and the court lay at Bromyard on the 3rd of September 1645; and on the following day proceeded to Hereford.

BRO'NTE, a town in the province of Catania in Sicily, situated at the western base of Mount Etna, 22 miles N.N.W. from the city of Catania. The territory of Bronte is healthy and fertile, and produces corn, almonds, wine, pistachio nuts, and silk. Bronte has manufactures of paper and coarse woollens, and has a population of about 9000. It is a modern town, and has grown out of several scattered habitations since the time of Charles V. Admiral Lord Nelson was made Duke of Bronte in 1799 by King Ferdinand, with an income of *£*3000, about 3000*l.* sterling.

BROOKLYN, a city, the capital of King's County, State of New York, is situated at the west end of Long Island, and on the shore of East River, opposite New York city, in 40° 42' N. lat., 74° 1' W. long., distant 145 miles S. by W. from Albany, and 227 miles N.E. by E. from Washington. The population of Brooklyn city, which in many respects may be regarded as a suburb to New York, has very rapidly increased since the commencement of the present century. In 1800 the population was 3278, in 1830 it was 15,398; in 1840 it was 24,223; in 1850 it had risen to 96,838.

Brooklyn is regularly laid out, and has many wide streets, with a profusion of well-built churches and public buildings. The city is lighted with gas, and has a good supply of water. Of its churches, which are upwards of 60 in number, 11 belong to Episcopalians, 11 to Methodist Episcopalians, 7 to Roman Catholics, 7 to Presbyterians, 6 to Baptists, &c. For educational purposes the town is divided into 13 districts, each of which possesses schools and a good library, the schools and library being free to the inhabitants of the district. There are also numerous advanced schools and academies for youth of both sexes. Among the public buildings are the City Hall, a handsome marble edifice, the City Hospital, the Dispensary, &c. In the eastern part of the town is the United States Navy Yard, on the Wallabout, covering about 40 acres. Connected with the Navy Yard are large ship houses, timber sheds, store-houses, workshops, &c., and

an immense dry dock, the most extensive work of its kind in the United States. Eastward from the Navy Yard stands the Naval Hospital on an eminence commanding an extensive prospect of interesting scenery; the hospital stands in a well laid out park of about 33 acres. The Greenwood Cemetery, covering about 300 acres of ground, in the south part of the city, is pleasingly laid out with walks, trees, shrubbery, and small ponds or lakes, and contains numerous good monuments, many of which are of white marble. Brooklyn has communication with New York by five ferries across East River, which is here about half a mile broad, and across which first-class steamers constantly ply, the usual charge being one cent for each passenger. Carriages and waggons are also conveyed across. A considerable amount of trade is carried on in Brooklyn. It is a favourite place of residence for the merchants of New York. Four daily newspapers are published in the city. Some remains are still visible of fortifications erected by the Americans during the revolutionary war. The site of Fort Green has been converted into a public park called Washington Park. Near the Navy Yard is a tomb in which were placed the remains of 11,000 Americans who perished in the prison ships which were moored in the bay during the period of the revolutionary struggle.

BROSELEY, Shropshire, a market-town in the parish of Broseley and district of Weulock borough, is situated on the river Severn, in 52° 34' N. lat., 2° 30' W. long., 13 miles E.S.E. from Shrewsbury, and 144 miles N.W. by W. from London. The population of the parish in 1851 was 4739. The living is a rectory held with the rectory of Linley in the archdeaconry of Salop and diocese of Hereford. Extensive iron and coal mines and brick and tile works afford the chief means of employment to the population. The parish church, an edifice in the perpendicular style, rebuilt in 1845, will accommodate about 1200 persons. There are places of worship for Baptists, Independents, and Wesleyan and Primitive Methodists. Within the parish are two National schools. The town is lighted with gas. A market is held on Wednesday, and an annual fair on Easter Mouday. A spring of petroleum or fossil tar was discovered here in 1711. After some years the supply of petroleum failed, but the spring broke out again in 1747, and yielded about three or four barrels a day; about 1752 the spring was cut into in searching for coals, and the quantity of petroleum yielded has since been small. At Pitchford, a few miles from Broseley, is a coarse-grained sandstone, highly impregnated with petroleum.

BROUGH, or **BURGH-UNDER-STAINMOOR**, Westmorland, a small market-town in the parish of Brough, in the East Ward, is situated on the mail-coach road to Carlisle and Glasgow, in 54° 28' N. lat., 2° 20' W. long., 8 miles S.E. from Appleby, and 262 miles N.N.W. from London by road; Tebay station of the Lancaster and Carlisle railway, which is 16 miles from Brough, is 263 miles from London. The population of the township of Brough in 1851 was 773; that of the entire parish was 1533. The living is a vicarage in the archdeaconry and diocese of Carlisle.

The town of Brough is little more than a village, the railway having destroyed the coaching trade which from its position on the North Mail Road it formerly possessed. A small weekly market is held on Thursday: there are two cattle markets and two annual fairs, one of which, called Brough-Hill fair, is held on a common two miles from the town, and is a great fair for cattle, horses, wearing apparel, and hardware. The town is divided into two parts, called Market Brough and Church Brough, by the Hilbeck, a small feeder of the Eden. Lead and coal mines in the parish give employment to a considerable number of the inhabitants. The church is a neat structure of the 14th century, with a handsome embattled tower of somewhat later date, and a peal of four bells. There is a chapel at Stainmoor in the parish; and there are places of worship for Baptists and Wesleyan and Primitive Methodists. The Endowed Grammar school has recently been incorporated with a National school.

Brough Castle is a very ancient edifice: the ruins stand on an eminence, in the midst of what is supposed to have been the Roman station of Vertere. Both castle and town were taken and sacked by King William of Scotland in 1174. The chief parts now standing are portions of the keep and some other towers; the keep is in its general appearance similar to those of the Tower of London, Rochester Castle, &c. Many Roman coins have been dug up in the parish.

BROUGHSHANE. [ANTRIM.]

BROUGHTON ARCHIPELAGO. Vancouver gave this name to the group of islands discovered by him in company with Captain Broughton, in 1793, off the west coast of North America, to the north of Vancouver Island.

The Chatham Islands, discovered in 1791 by Captain Broughton, are also sometimes called the Broughton Archipelago. [CHATHAM ISLANDS.]

BROUGHTON-IN-FURNES. [LANCASHIRE.]

BROUGHY FERRY. [FORFARSHIRE.]

BRUCHSAL, an old town on the Salzach, in the circle of Mittel-Rhein, in the grand duchy of Baden, is mentioned in ancient records between the years 937 and 996, when it was called Bruxole. It was the residence of the bishops of Spire from the year 1024, and came into the possession of the grand dukes of Baden in 1803. It is situated 15 miles N.E. from Karlsruhe by the railway to Mannheim,

and has a population of about 8000. The town, which is surrounded by a wall, is well built, and consists of the Old Town, the New Town (founded in the last century), and the suburbs of St. Peter and St. Paul, which the Salzach separates. The buildings most deserving of notice are the former episcopal palace, a handsome structure in the Italian style; spacious barracks and stables; three parochial and three auxiliary churches, the finest of which is that of St. Peter, where the last four bishops of Spire lie interred; an ecclesiastical seminary; a gymnasium; a military hospital, another well-arranged hospital for 70 patients, conducted by the confraternity of Pious Brothers, and provided with an anatomical theatre and a lecture room; and a general house of correction for the circle of the Mittel-Rhein. There are some salt-works outside of the town; but they are in a state of decline. The principal occupation is making and selling wine.

BRUFF. [LIMERICK.]

BRUGES, a city in Belgium, capital of the province of West Flanders, is situated in a level country, in 51° 12' N. lat., 3° 13' E. long, about 6 miles from the sea, and has a population of 49,457. Its Flemish name Brugge is derived from the number of bridges which cross the canals. The city is connected with all the principal towns in Belgium by railway. It is distant 14 miles E. by S. from Ostend, 59 miles W. by S. from Antwerp, and 75 miles W.N.W. from Brussels. Its distance from Brussels in a straight line however is only 60 miles.

In the 7th century Bruges held the rank of a city. In 837 it was fortified by Baldwin, count of Flanders, in order to form a barrier to the progress of the Northmen. The city was surrounded by walls in 1053, and enlarged in 1270. It was almost entirely destroyed by fire on three several occasions—in 1184, 1215, and 1230. It was further enlarged in 1331 by Count Lewis de Crecy. In order to commemorate the high degree of perfection to which the woollen manufacture had then been carried in Bruges, Philip the Good in 1430 instituted the order of the Golden Fleece. While under the dominion of the dukes of Burgundy Bruges became a principal emporium of the commerce of Europe, the great centre of the English wool trade, and the connecting link between the Hanseatic league, and the great trading republics of Italy. The merchants of Venice and of Genoa conveyed thither the produce of Italy and the Levant, which they exchanged for the manufactures of the north of Europe. The tapestry of Bruges was at that time the most esteemed of any in Europe, and this reputation it long enjoyed. In addition to the woollen manufacture Philip the Good gave encouragement to many other branches of industry, and particularly to the production of silk and linen fabrics. His enlightened patronage attracted the Van Eycks to Bruges, in whose time the painters' guild, enrolled in 1353, numbered above 300 painters. At the time of its greatest prosperity Bruges is said to have had a population of 200,000.

In 1438 the citizens rose against the archduke Maximilian, and placed him in confinement. Having vainly solicited the king of France to support them in this act of violence they were reduced to submission by the emperor of Germany, who marched to the deliverance of his son. On this occasion 56 citizens were condemned to death, and a great number were banished; the city was deprived of its privileges and was subjected to a heavy fine. From this time the city lost its commercial importance, which was in great part transferred to Antwerp. In 1560 Pope Paul IV. erected Bruges into a bishopric, which was united to that of Ghent by the concordat of 1801 but since the fall of Napoleon has recovered its independence. Bruges was bombarded by the Dutch in 1704. Two years thereafter it surrendered to the allies; and it was twice taken by the French—in 1708 and 1745, but reverted to the house of Austria. In 1794 the troops of the French republic took possession of the city, which was soon after incorporated with France, and so continued until the close of the war in 1814, when it became part of the kingdom of the United Netherlands. Bruges, during its annexation to France, was the capital of the department of Lys.

Bruges stands on the little river Rege, which was formerly navigable, and crowded with richly freighted cargoes up to the quays of the town, but is now almost absorbed by canals. Ramparts extending all round the town form an agreeable public walk. The streets of the town are narrow, but neat and clean, and the houses are mostly large and well built; many of them have an appearance of grandeur which attests the opulence of their former inhabitants. The public buildings are numerous and interesting for their antiquity, their architecture, and the works of art which they contain. We can here only enumerate the principal.

The cathedral of St. Sauveur, in Sten Street, is externally an ugly brick building; but the interior is the finest in Bruges. It dates from 1358, and contains several curious paintings by Hemling and others, and a series of monumental brasses. At a short distance from the cathedral is the church of Onze-Vrouw (Notre-Dame), surmounted by a tall brick tower; the interior is celebrated for its elaborately carved pulpit, and for the statue of the Virgin and Child by Michel Angelo. In a chapel on the south side of the choir are the tombs of Charles the Rash and his daughter Mary, wife of the emperor Maximilian. Mary's monument was erected in 1495; that of Charles was erected at the cost of his great-grandson, Philip II., about 1558. These monuments, so dear to the Flemish, were concealed from the rapacity of the French by the beadle of the church; they were cleaned

and re-gilt in 1848. Close to Notre-Dame is the hospital of St. Jolu, where the sick are tended by nuns, and in which are the celebrated pictures executed by Hans Hemling in 1479 and presented to the hospital in gratitude for the attention he received in it after the battle of Nancy, in which he was wounded. The subjects of these admirable paintings are the 'Virgin and Child with St. Catherine,' the 'Decollation of St. John the Baptist,' and 'St. John at Patmos;' the two latter are painted on the shutters. On a Reliquary are painted by the same artist the Life and Martyrdom of St. Ursula, a series of small pictures which rank, says Kugler, among the very best productions of the Flemish school. In the chapel is an altar-piece by Hemling, representing the Adoration of the Magi: and at the sides the Nativity and the Purification. The large gothic hall of the hospital, divided by piers and pointed arches into aisles and partitioned off into wards and dormitories, remains the same as when Hemling was tended in it. The town-hall, an elegant gothic structure, dates from 1377. The long series of statues of the counts of Flanders which filled the niches on the façade was pulled down, smashed, and burnt in the great square by the French in 1792. In the grand hall of this building, remarkable for its open roof of wood-work, the public library is placed. Adjoining the town-hall is the court-house, the council chamber of which is decorated with a finely-carved wooden chimney-piece, representing life-size statues of Charles V., Mary of Burgundy, Charles the Bold, and Margaret of York. At the other end of the town-hall is the curious chapel of the Saint Saug, under which is a crypt dating from the 9th century, and said to be the oldest building in Bruges. The former cathedral of St. Donatus, which was demolished by the French, stood opposite the town-hall, and contained the remains of John Van Eyck, who died here in 1441. Its site is now planted with trees, among which is a painted plaster-cast statue of Van Eyck. The Academy of Painting in the Hct Poorters Huis, which was formerly the factory of the Biscayans, is rich in old paintings by Van Eyck, Hemling, and others. On one side of the Grande Place is the Halles, which dates from 1364, and is surmounted by an elegant gothic tower of great height, and commanding fine views of the town and surrounding country. This tower contains the carillons, or chimes, which are the finest in Europe; they are played by machinery every quarter of an hour. Bruges was famous for its chimes as early as the year 1300. On the south side of the Grande Place is a house (Au Lion Belge) which was inhabited by Charles II. during his exile from England. Of the many other remarkable structures in Bruges we can only name the Beguinage, or convent of Beguine nuns, at the west end of the town, and the English nunnery, founded about a century ago, and admired for its beautiful chapel, in which part of the offices are exquisitely chanted by the nuns.

Six canals diverge from Bruges to Ghent, Sluis, Nieuport, Furnes, Ypres, and Ostend. The high embankments along the canal to Ghent are immortalised by Danto in the 15th canto of his 'Inferno.' The canal from Ostend allows the passage from the sea to Bruges of vessels of from 200 to 300 tons burden. There are besides a wet dock and a dock for the building and repair of vessels, and warehouses for receiving goods in entrepôt. In the 12th and 13th centuries the port of Bruges is said to have been at *Damme*, now a small village 3 miles N.E. from the town. Here were docks and basins capable of holding 1000 sail, where now is a fertile plain.

Bruges has an academy of the fine arts, an atheneum or college, in which lectures on every branch of education are given gratuitously, a museum, a botanic garden, a public library, a cabinet of natural history, and a school of navigation. The principal trade is in linen and cotton manufactures, corn, flax, hemp, and colza. The manufactures of Bruges consist of linens, lace, woollen and cotton goods, salt, refined sugar, earthenware, paper, and other minor branches of industry. Its trade, which had greatly decayed, is said to be partially reviving under the influence of that general prosperity which Belgium has enjoyed since her separation from Holland. The city however still has a desolate air; it is too large for its population, and the passers-by in its streets seem few.

(Murray's *Belgium and the Rhine*, London, 1852.)

BRÜNN, the capital of Moravia, since 1641, when the seat of government was transferred hither from Olmütz, is situated in the fork between the Zwittova and Schwartzava, at a distance of 92 miles by railway N.N.E. from Vienna, 102 miles S.W. from Prague, and has about 40,000 inhabitants. It stands in the middle of a fine open country, and partly on an eminence which commands some beautiful and extensive prospects. The town is surrounded by a deep ditch and high walls, and was formerly protected by the citadel of Spielberg, constructed on the summit of a hill 816 feet in height; but since the partial demolition of its defences by the French, in 1809, the Spielberg has been converted into a stato-prison and a house of correction. The fortifications of Brünn have been greatly strengthened since 1850. East of the Spielberg is another eminence, the Franzensberg, about 600 feet in height, along one side of which the residences of the chapter and the new parts of Brünn have been erected. Independently of the Spielberg, the town is about a mile and a half in circuit, and has four gates facing the cardinal points; the streets are irregular, narrow, and crooked, but well paved, provided with flag-stones for foot passengers, and well lighted at night. There are seven squares ornamented with fountains. The Large Square is of

spacious dimensions, surrounded by good dwelling-houses, and embellished with a handsome column. Brünm is divided into six parishes, and has as many parochial churches, besides those in the suburbs. The cathedral stands on the Petersberg, a rocky height in the west part of the town. St. Jacob's is a fine specimen of the gothic style of the beginning of the 14th century: the roof, which is very lofty, is supported by two rows of columns, and is covered entirely with copper: the steeple is 276 feet high. The church of the Minorites, with the adjoining sacred staircase and house of Loretto, is of peculiarly handsome construction; and the church of the Capuchins (celebrated for Sandrart's fine altar-piece, the Raising of the Cross), as well as the gothic church of the Augustinian monastery, in the Althörn suburb, with Kranach's Madonna and a large library are well deserving of notice. Among other public buildings are the Diocastrial House, which contains the governor's residence and the government-offices; the palace for the military department; the town-hall which is embellished in the gothic style; the theatre, and its assembly-room; the Jesuita' college, the northern front of which occupies one side of a whole street; the archiepiscopal palace built on the Petersberg, one of the most commanding sites in the town; the handsome mansions of the nobility; the military hospital; and the Maria-school, an endowment for females of noble birth. There are several delightful promenades in and near Brünm, the most attractive of which are the gardens on the Franzensberg, which are ornamented with an obelisk, 60 feet high, erected in 1818 in honour of the emperor Francis I.; and the Augarten, a park laid out in the English and French style. Brünm is the seat of government for the Margraviate; and also of the high courts of judicature. It gives title to the metropolitan of Moravia, and the Protestant consistory is established here. Among the educational establishments of Brünm are an episcopal seminary, a gymnasium, a museum, a training school, an academy for girls attached to the Ursuline convent, and several other schools. The principal benevolent institutions of the town are a general infirmary, a lying-in hospital and lunatic asylum; an orphan asylum; asylums for the blind, and the deaf and dumb; and a national loan-bank. Independently of the house of correction on the Spielberg, there is another here for the province in general.

Brünm is one of the most important manufacturing towns in the empire of Austria. It is particularly noted for the manufacture of fine woollen cloths and kerseymeres, silks, ribbons, yarns, leather, gloves, carpets, cotton prints, and vinegar. No town in Moravia has so extensive a domestic trade, in which it is much favoured by its central position and by the railways which connect it with all the leading towns of Austria, Prussia, and Central Germany. It has four wholesale markets in the year, which are each of fourteen days' duration. The trade of Brünm in colonial and other foreign productions is also extensive.

BRUNSWICK (Braunschweig). Two distinct sovereignties have sprung from the house of Brunswick. The possessions of the elder or ducal line are confined to the grand duchy of Brunswick-Wolfenbüttel; the younger or electoral line, by whom the kingly title was assumed in 1814, possesses the kingdom of Hanover, and is also designated the Brunswick-Lüneburg, or Hanoverian line. The latter line has given kings to Great Britain since the commencement of the 18th century. This article relates wholly to the duchy of Brunswick.

The duchy is at present divided into six circles, which, with their respective area and population, are as follows:—

Circles.	Area in Square Miles.	Pop. in Dec. 1852.
Brunswick	224	69,702
Wolfenbüttel	230	52,662
Helmstedt	305	44,312
Holzminden	316	39,400
Gandersheim	276	42,257
Blankenburg	173	23,492
Total	1524	270,825

The lands of which the duchy of Brunswick is composed principally consist of three large unconnected districts, lying on the banks of the Aller, Ocker, Leine, and Weser, in the north-west of Germany. The most southern of these districts lies wholly upon or next the Lower Harz; the eastern district extends from the northern foot of the Harz to the plains of Lüneburg, and is traversed by several ranges of hills, but declines in the north to an uninterrupted plain; and the third or western district is all highland, and embraces portions of the Solling, Iltz, and Hols ranges. These territories are bounded N. and S. by Hanover, E. and S.E. by Prussian Saxony and Anhalt, and W. by the Weser which divides them from the Prussian dominions. Brunswick possesses also three isolated demences—the bailiwick of Ottenstein, on the right bank of the Weser, which is quite detached from the rest, and has the principality of Waldeck for its neighbour; the bailiwick of Thedinghausen, which is surrounded by the Hanoverian earldom of Hoya; and the bailiwick of Calverde, which is situated within the borders of Prussian Saxony. These several possessions were formerly constituent parts of the German empire, con-

sisting of the principalities of Wolfenbüttel and Blankenburg, the ecclesiastical bailiwick of Walkenried, the bailiwick of Thedinghausen, and other isolated parcels of land, together with four-fifths of the sovereignty of the Lower Harz.

The northern districts of Brunswick, particularly the principality of Wolfenbüttel, have an undulating surface, intersected by several ranges of hills, and there are also some forests: at their northern extremity heaths and moors occur. The southern districts, including the Blankenburg territory, which lie within the limits of the Harz, are a succession of highlands and mountains, in part well wooded, and furrowed by wide and highly-cultivated valleys. The Harz is the principal mountain range in the Brunswick dominions; it amounts to 164,000 acres, independently of its offsets. The loftiest summits within the duchy are the Wormberg, which is 2880 feet, the Radauerberg 2317 feet, the Förstertrünke 2298 feet, and the Rammelsberg 1914 feet high. Throughout the duchy the surface gradually declines from this range towards the north, the larger portion sloping to the banks of the Weser, and the remainder eastward in the direction of the Elbe.

The soil in the north is highly productive, with the exception of the extreme borders, which belong to the great Lüneburg plain, though even here it does not degenerate into mere drift-sand or barren heaths. In the south the country is mountainous and of a stony character, which is particularly observable of the Blankenburg districts; but in Wolfenbüttel and Scheppenstädt, and next the Weser and Leine, it admits of profitable cultivation. Thedinghausen consists partly of marsh and partly of high land. The most unproductive tract in Brunswick occurs in the bailiwick of Ottenstein, in the Holzminden circle.

The whole of that part of the Harz which is comprised within the Brunswick territory belongs to the region of the Lower Harz; the highest point is on the north-east edge of the most southerly districts, whence it spreads not only over the entire principality of Blankenburg, but sends out its branches, though not always in an unbroken line, over most parts of the duchy. These mountains contain the bulk of the woods and forests of Brunswick; the higher regions of the Harz are exclusively the regions of the fir and pine; the less elevated have these species of wood intermixed with underwood; and the lowest acclivities abound in oaks, beeches, birches, alders, &c.

The most considerable river in the duchy, the Weser, flows for about twenty miles through its western territory (where it is navigable), and again through the district of Thedinghausen, which lies about 14 miles S.E. from the city of Bremen. Among its tributaries, the Aller traverses a small portion of the northern district of Vorsfelde only, but in its course receives the Ocker, the principal river of the northern half of Brunswick, and is very useful to the duchy as a means of transporting timber. Other tributaries of the Aller are the Leine, which divides the Harz from the Weser districts; the Fuse, which traverses the western extremity of Wolfenbüttel; and the Innerste, which rises in the Harz, and passes into the Hildesheim territory. The chief streams which discharge their waters into the Elbe or its tributaries are the Ohre and Bode. The Bode is the principal river of Blankenburg.

Brunswick contains a great number of ponds. The Wipperteich, near Vorsfelde, is still the largest of them, although a considerable portion of it has been reclaimed. There are mineral springs of some note at Helmstedt and near Seesen on the Harz, and sulphuretted waters near Bisperode and Bessingen. The great morass which formerly extended from the Ocker to the Bode has been drained by the navigable canal which now unites those rivers.

The valleys between the mountain ranges of the southern and western parts of Brunswick are by no means so favourable to the growth of grain as the rich lands in the vicinity of the Weser and Leine. The eastern highlands also, being too cold and stony for agricultural purposes, are used for grazing and supplying timber; but the northern part of Brunswick, where the sand usually acquires consistency from the presence of loam or mould, yields good crops of most kinds of grain. The country is seldom parched by excessive heat, and winter is usually limited to three months' duration in the northern districts; and even in the southern the atmosphere is cold and exposed to storms only among the mountain regions of the Harz. In the northern, harvest begins in the third week of July; and in the southern it is not above fourteen days later.

The agricultural products comprise wheat, rye, barley, oats, hay, common fruits, beans and peas, potatoes, tobacco, hops, rupo-seed, chicory, and flax.

Horses and horned cattle are numerous, but of rather inferior breed. Great attention is paid to the rearing of sheep, and wool is an important article of the commerce of the duchy. Of goats and poultry the supply is scanty. Great numbers of bee-hives are kept in the sandy districts where heath grows. Fresh-water fish, such as carp, pike, and trout, are plentiful.

The woods and forests are placed under the control of a public board. Their most extensive sites are the districts of the Harz, Blaukenburg, and the Weser, where the felling and preparing of timber, and the working it into utensils and for other domestic purposes, employ a vast number of hands. The most common kinds of wood are beech, fir, pine, and oak.

The mines of Brunswick are of two classes; one class comprising such as are worked in conjunction with Hanover (Communion-Harz), and the other independently of it. The mines of the Upper Harz yield small quantities of gold and silver, and are rich in iron, copper, lead, litharge, zinc, vitriol, sulphur, and salt. These mines are under the direction of a joint board at Goslar. The independent mines lie on the Lower Harz, in the principality of Blankenburg, near Seesen, and the district of the Weser; their principal produce is iron. Other mineral products are marble (near Blankenburg), alabaster, limestone and gypsum, potter's-clay, asbestos, serpentine, agate, Jasper, chalcidony, garnets, porphyry, sandstone, freestone, coal, and alum. There are several saltworks. Cobalt and ochre are obtained from the Rammelsberge mines in the Upper Harz.

The peasantry use the Low German, and the townspeople and persons of education the High German dialect. For higher education the youth of Brunswick frequent the neighbouring university of Göttingen, into which 40 Brunswick students are admitted gratuitously, the duchy contributing a small portion of the professors' stipends. At the head of her own educational establishments in Brunswick, are a lyceum, conducted by 19 professors, and frequented by pupils from the higher classes of society; an anatomical and surgical institute; a gymnasium; and other schools. There are gymnasia also in Wolfenbüttel, Helmstedt, Blankenburg, and Holzminden. For the poorer classes there are schools of industry, civic schools, and above 400 parochial schools in the duchy. There is a public library at Wolfenbüttel, containing upwards of 200,000 volumes and 10,000 manuscripts, &c., besides libraries and cabinets in the capital and in other towns.

The constitution of Brunswick is a limited monarchy, the form of which is determined by the national compact of the 12th of October, 1832. The sovereignty passes to the female upon the failure of the male line, and the heir-apparent comes of legal age on attaining his eighteenth year. The legislature is composed of the duke, an upper chamber consisting of 6 prelates and 78 holders of equestrian estates; and a lower chamber, composed of 6 prelates, 19 deputies from towns (6 from Brunswick and one from every other town), and as many representatives of the landholders, who do not possess equestrian rights. During the prorogation of the chambers, a permanent committee of representatives acts as a legislative organ. The legislature must be assembled once at least every three years in the month of November. The taxes are voted for periods of three years; and every point connected with the finances, and indeed with the administration of national affairs, is more or less under the cognisance and control of the legislature. All Christian persuasions enjoy an equality of civil rights. The property of the church, schools, and charitable endowments cannot be diverted from its original destination, nor can it be incorporated with the property of the state.

There are provincial boards in each circle for its local government and police.

The revenue is derived from the ducal demesnes, monopolies, &c., and the direct and indirect taxes. The income of Brunswick for the financial period 1852-54 is estimated at 4,052,500 thalers, and the expenditure at the same amount. For public instruction, church aids, and benevolent institutions, the sum of 421,000 thalers, derived from property belonging to religious communities and schools, is allotted during the same period. The public debt amounted in September 1845 to 9,469,457 thalers, 3,725,000 of which were borrowed for the construction of railroads. Brunswick is a member of the German Zollverein, or Customs Union, the receipts from which on its frontiers in 1851 amounted to 393,618 thalers, in 1852 to 404,501 thalers.

The military establishment consists of an infantry corps, numbering 4857 men in time of war and 2476 in time of peace, with an artillery force of 502 in time of war and 244 in time of peace. By a military convention made with Prussia in December 1849, the Brunswick brigade is joined to the Prussian division in garrison at Magdeburg.

The mineral resources of Brunswick afford extensive employment for the labouring classes; but they are also extensively employed in the spinning of yarn and weaving of linen. About 5000 tons of flax are annually grown. The linen manufacture however has greatly declined of late years. In the districts nearest the Weser the people knit considerable quantities of stockings; and in the northern parts the peasantry make for their own use a species of linsey-woolsey called 'beiderwand.' Seed-oil is an important product of the lowlands, averaging 1200 tons a year. Other industrial products are paper, plaster-of-Paris, lime, tiles, pottery, pipes, china, glass, soap, ribbons, beer, and tobacco. The manufacture of woollens is small, and principally carried on at Brunswick. The number of water-mills is 284, wind-mills 63, and mills worked by horses 6: besides these, Brunswick possesses 51 saw and other mills.

The duchy having no coast or navigable streams, its trade with foreign parts is naturally cramped; but the introduction of railroads connecting Brunswick and Wolfenbüttel with the principal towns and ports of Germany has given a great impulse to commerce. The chief articles of home manufacture which are exported consist of yarn, linen, grain, oil, chicory, madder, leather, timber, hops, and ironware. The importations are principally composed of colonial produce, raw materials, fish, butter, cheese, cattle, &c.

The chief towns in Brunswick are those which give name to the several circles. BRUNSWICK the capital and WOLFENBÜTTEL are described in separate articles. *Helmstedt*, a walled town with suburbs, is situated near the Prussian frontier, 22 miles E. by S. from Brunswick, and has about 6000 inhabitants. It was formerly strongly fortified, but the outworks have been levelled, the ditches filled, and their sites converted into walks planted with trees. The girding wall still remains, through which four gates lead into the town, an old looking place. It contains however several small squares, two Lutheran churches, of which that of St. Stephen is the finest, an orphan asylum, a town-hall, and the former university building now used as a court-house. The university founded in 1575 was suppressed in 1809 by Jerome Bonaparte, and a part of the library transferred to Göttingen. It has still a college and training school. The town is a place of some manufacturing and commercial activity: flannel, soap, hats, grain spirits, vinegar, leather, pipes, &c. are made: coal mines are worked in the neighbourhood. *Holzminden*, 56 miles S.W. from Brunswick, on the right bank of the Weser at the foot of the Solling mountains, is a small but well-built town, with a comparatively large suburb called Altendorf, and about 4000 inhabitants. The town is a busy industrious hive, turning out a great variety of products—iron and steel wares, hosiery, flannel, linen, linen-thread, paper, leather, &c. There are saw-mills, paper-mills, oil-mills, a hydraulic engine for cutting and polishing the flags brought from quarries of the Solling, and iron works. The Brunswick tolls for the passage of the Weser are paid at Holzminden, which is also a port of entry for colonial and other produce required for Brunswick and the neighbouring parts of Germany. *Gandersheim*, near the Hanoverian frontier, 37 miles S.W. from Brunswick, is a small place with about 2000 inhabitants. It has a ducal residence, but the most remarkable building is the former abbey of Gaudersheim, of which the abess was always a member of the house of Brunswick. The town and former principality of *Blankenburg* are noticed in a separate article. [BLANKENBURG.]

BRUNSWICK, the capital of the Duchy of Brunswick, is situated on the Ocker, 37 miles by railway E.S.E. from Hanover, 85 miles W. by N. from Magdeburg, in 52° 16' N. lat., 10° 32' E. long., and has about 42,000 inhabitants. It was founded by Henry the Lion. It became one of the Hanse towns in the 13th century, and until the middle of the 15th was accounted the chief town in Lower Saxony; but its prosperity declined with that of the Hanse towns. It is at present the residence of the Dukes of Brunswick. The fortifications were levelled in 1794, and converted into promenades. The area of the town, which includes Richmond, the duke's country seat, Eisenbüttel, and the Münzberg, occupies about eight square miles. The town contains some new streets, but the greater part of it is old looking. The streets are well lighted and paved. Among its 12 churches are the cathedral, in which are monuments to Henry the Lion and Matilda his consort, and the vault of the ducal family; and St. Andrew's, the steeple of which is 316 feet high. The chief public buildings are the new palace, house of legislative assembly, mint, arsenal, opera-house, town-hall, Collegium-Carolinum, and general and lying-in hospital. Between the Augustus and Steinthore gates an obelisk 60 feet high is erected to the memory of the two dukes of Brunswick who fell in the campaigns of 1806 and 1815. The establishments for education consist of the college, a gymnasium, and seminary for teachers, a college of anatomy and surgery, two orphan asylums, and a deaf and dumb asylum. There is a good museum in the arsenal. Brunswick has 7 gates and 12 squares or open spaces. A fine avenue of lime-trees leads from the town to the duke's seat, Richmond, the grounds of which are laid out in imitation of Richmond Park near London. The principal manufactures are woollens, linen, lackered and hard ware, tobacco, chicory, mineral colours, sealing-wax, china, papier maché, leather, coloured papers, brandy, and liqueurs. Brunswick has an important wool-market; its once celebrated annual fairs are now of little account.

BRUNSWICK. [MAINE.]

BRUNSWICK, NEW. [NEW BRUNSWICK.]

BRUNTISLAND. [BRUNTISLAND.]

BRUSA, PRUSA, BU'RSA, or BROUSSA, a celebrated town in the ancient province of Bithynia, in Asia Minor, stands in 40° 11' N. lat., 29° 26' E. long., at the northern base of the Bithynian Olympus, in a most picturesque and fertile country. Prusa is mentioned by Strabo (p. 564, Cas.) as a well-governed town, situated near the Mysian Olympus, which is the same as the Bithynian. Strabo (p. 564) says that Prusa was founded by Prusias, who carried on war against Croesus. Pliny ('Hist. Nat.' v. 32) says that it was built by Hannibal, alluding to the time when he was staying at the court of Prusias, king of Bithynia. The town rose to importance only after its capture by Orkhán, the son and successor of Osmán, the first sultan of the Osmanlis, who took it by capitulation a few weeks before the death of his father, in A.D. 1326. Prusa surrendered after a blockade of ten years, effected by means of two castles which Osmán built in the immediate neighbourhood of the town, one of which, the castle of Balabanjik, is still standing.

Brusa became the residence of Orkhán, and this sultan, as well as Murád I., Bayázid I., and Mohammed I., and several Turkish princes were buried in the new capital. It continued to be the capital of the Turkish empire to the capture of Constantinople in 1453, though

during twenty years previous to this event the sultans used to reside at Adrianople. During several centuries it was the principal seat of Turkish learning, and its divines were notorious for their prejudices and fanaticism; but its inhabitants are now distinguished for their toleration and hospitality towards Europeans. The population is about 60,000, including about 9000 Armenians, 3000 Greeks, and 2000 Jews of Spanish descent. A rapid torrent flows along a deep gap through the town, and divides the Turkish quarter from the Armenian. The streets are narrow and tolerably clean for a Turkish town: the houses are mostly built of wood and clay. Brúsa is well supplied with fountains, and contains several very fine buildings, among which the great mosque is the most remarkable: in the mosque of Dauid Monasteri, rather a small building, is the tomb of Sultan Orkhán. The total number of mosques exceeds 200. There are also large bazaars, several khans, colleges, Christian churches and schools, and more than one synagogue. In the centre of the town is the citadel, built on a rock. Brúsa is one of the most important commercial centres in Turkey; it has an important trade in raw silk, and its industrial products comprise satin, carpets, longcloths, cotton and cotton-twist, tapestry, &c. The trade in corn, opium, and meerschaum clay, which is quarried in the neighbourhood, is important. The bazaars are well stocked with all kinds of British and other European manufactures, which are imported through Mudaniyeh, the port of Brúsa, six leagues distant on the Sea of Marmara. The trade with Constantinople, Smyrna, and the interior of Asia Minor is carried on by caravans. There are several permanent European residents in Brúsa. The beauty of the environs of Brúsa is celebrated, but the principal features of the town as well as the curivous are the hot springs. The chief source is about a mile and a half west of the town; it rises out of a calcareous tuff or travertine, the formation of which is still going on in some places. Hamilton found the heat of the water to be 184° Fahrenheit; about a hundred yards farther west there is another spring, the temperature of which is 180° Fahrenheit, and there are several more in the neighborhood. Abd-el-Khadir, the Arab chief, so long confined in France by the policy of Louis Philippe, and at last restored to liberty by the emperor Napoleon III., retired to Brúsa on his departure from France in 1852.

(Von Hammer, *Umblick auf einer Reise nach Brúsa und dem Olympus*; Hamilton, *Researches in Asia Minor*, &c.)

BRUSSELS (in Flemish *Brussel*, in Latin *Bruzelles*, and in French *Bruxelles*), the capital of the kingdom of Belgium and of the province of South Brabant, is situated in 50° 50' N. lat., 4° 22' E. long., on the river Senne, a small feeder of the Dyle, at a distance of 76 miles in a straight line, 69 miles by railway through Malines and Ghent E. by S. from Ostend, 36 miles S. from Antwerp, and has a population of 124,461, or including the suburbs about 160,000.

The Senne enters the city of Brussels by two branches, one of which passes by the old market-place, and the other crosses the garden of the Chartreux. It forms four islands in the interior of the city, the two principal of which are called Saint Géry and Bon Secours. The river is not navigable in any part of its course, but a broad navigable canal runs parallel to the Senne northward to Vilvorde, whence it is carried to Willebroeck on the Rupel. Another canal running southward for a considerable way also parallel to the Senne connects Brussels with the Sambre above Charleroi. The city has railway communication with all the principal towns of Belgium, and with France, Germany, and the Dutch frontier.

The greatest length of Brussels from north-north-east to south-south-west is about one mile and a half, and its greatest breadth about a mile and a quarter. In form it resembles a rectangle combined with a triangle, the base of the rectangle subtending the north-north-east, and the vertex of the triangle, which is much rounded, lying towards the south-south-west. The town is partly built on the side of a hill, and when seen from the west has the appearance of a fine amphitheatre. It is inclosed by a brick wall, which has eight gates, bearing respectively the names of the Antwerp, Schaarbeck, Louvain, Namur, Hal, Anderlecht, Flanders, and the Canal gates. These gates communicate with high roads, leading to different parts of the kingdom, which centre in Brussels as the capital, and outside the gates are several large suburbs. Inside the wall a wide boulevard planted with fine trees runs all round the town, and is above five miles in length.

Brussels is divided into an upper and a lower town. The upper town is on the eastern side of the city; it is also the newest and most fashionable quarter as well as the healthiest owing to its more elevated site. Here are the king's palace, the legislative chambers, and public offices in the Rue de la Loi, separated from the palace by the park, in the north-eastern angle of which is a theatre. In the upper town also are all the principal hotels and the residences of foreign ambassadors and ministers. The leading features of the lower town are its numerous well-built streets, which contain many fine old buildings formerly the residences of the Brabant nobility, now occupied by merchants and tradespeople. It has splendid churches and other public buildings; and several handsome squares surrounded by noble buildings, some of them unrivalled specimens of gothic civil architecture. An entirely new quarter, called the Quartier Leopold, has recently sprung up between the Louvain and Namur gates to the east of the upper town. This quarter contains many modern mansions, and is becoming the fashionable part of the town. French is the prevailing

language of Brussels, which is similar to Paris in many respects—in its opera, cafés, hotels, palace garden resembling that of the Tuileries, and boulevards. English is very generally spoken, Brussels having been for a long time resorted to by English families as a cheap place of residence. Flemish also is commonly spoken.

Brussels contains above 300 streets, besides numerous lanes and courts. Several of the streets are wide and airy; the houses are lofty and well built, and great care is taken to preserve their external cleanliness and neatness. The square of the great market-place (La Grande Place), situated in the centre of the city, is a parallelogram, surrounded on all sides by handsome buildings; the Hôtel-de-Ville, or town-hall of Brussels, and the halls of many trading companies occupy two of its sides. Of the other squares the principal are the Place Royale in front of the church of St. Jacques at the end of the Rue Royale; in the centre of this square is a fine bronze equestrian statue of Godfrey de Bouillon: the Place du Grand Sablon, at the end of which is the court-house, or Palais de Justice, a large structure formerly belonging to the Jesuits: the Petit Sablon, on the south-east side of which is the Prison des Petits Carmes, built on the site of the Hôtel Cuylenbourg, the place of meeting of the confederates in the reign of Philip II.: the Place des Martyrs, in which is a statue of Liberty, supported by four kneeling Genii, erected over the tomb of the Belgians slain in the revolution of September 1830: the Place de la Mounaie, on one side of which is the Mint, and opposite it the theatre royal, a handsome structure. Among the ornaments of the town are the public fountains, 29 in number, erected in different parts, which supply the inhabitants with water. One of these fountains, that in the Place du Grand Sablon, consisting of a beautiful group in statuary marble, was erected in 1751, under the will of the Earl of Aylesbury, "as an acknowledgment of the enjoyments he had experienced at Brussels during a residence of forty years."

Brussels contains twelve large churches, only a few of which are very remarkable for their exterior; but the interiors are for the most part decorated with rich sculptures, wood carvings, and paintings. The finest of these structures are the collegiate church of Sainte-Gudule, which stands at a short distance from the Rue Royale and the chamber of deputies; the church of Notre Dame de Bon Secours; and the church of Notre Dame de la Chapelle, situated in the Rue Haute, and containing some fine oil paintings and frescoes, a pulpit representing Elijah under a canopy of the palm-tree and comforted by an angel, and the tombs of Breughel the painter and the Spinola family. Sainte-Gudule is a handsome gothic structure, of which the choir and transepts were finished in 1273, the nave in the 14th century, and the square towers in 1518. Chapters of the order of the Golden Fleece were held in this church by Philip the Good in 1435 and by Charles V. in 1516. The exterior was cleaned and restored in 1843. The interior of Sainte-Gudule is lighted through beautiful painted glass windows, of which the four that adorn the chapel of the Saint-Sacrement des Miracles are said to be unrivalled. In the choir are monumental sculptures of some of the dukes of Brabant, and a finely sculptured monument has been recently erected in memory of the late Canon Triste. Against the pillars of the nave are statues of the Twelve Apostles by Du Quesnoy. But perhaps the greatest artistic wonder of the church is Verhuggen's carved pulpit, which represents Adam and Eve driven out of Paradise by an angel, who is seen wielding the fiery sword on one side of the globe while death appears with his dart on the other: the trees of life and of knowledge and various animals are beautifully represented. The pulpit, which is formed by the hollow of the globe, is surmounted by a canopy on which stands the Blessed Virgin and the infant Jesus, who crushes the serpent's head with the foot of the cross. This pulpit was executed for the Jesuits of Louvain; on the suppression of the order it was presented to Sainte-Gudule by Maria Theresa. The marriage of the Duke of Brabant, crown prince of Belgium, with the archduchess Marie of Austria, was celebrated in the church of Sainte-Gudule August 22, 1853. There are two Protestant chapels in Brussels, one near the museum, and the other on the Boulevard de l'Observatoire.

The Hôtel-de-Ville, or town-hall, the finest municipal palace in Belgium or elsewhere, was begun in 1401 and finished in 1442. The beautiful tower of gothic open work is 364 feet high, and surmounted by a gilded statue in copper of St. Michael, 17 feet high, which serves as a weathercock. The interior was greatly injured during the first French revolution, and it contains little worth notice now except some tapestries representing the abdication of Charles V. in 1555, which event however took place in the old ducal palace that stood on the site of the Place Royale and was burnt down in 1733. In the market-place in front of the town-hall the Counts Egmont and Horn were beheaded in 1568.

The Hotel-de-Belleuve, which stands between the Place Royale and the park, was occupied by the Belgians during the revolution of 1830, and was riddled with shot. At the opposite angle of the Place Royale stand the stables of the Prince of Orange, and a little farther along, towards the Rue de la Madeleine, is the Palace of the Fine Arts. This building was formerly the palace of the dukes of Brabant, and subsequently of the Spanish and Austrian governors of the Netherlands. It is now converted into a museum, containing a picture gallery, in which are several paintings by Rubens and other great Flemish painters; the public library, in which are 200,000 volumes

of printed books and above 18,000 manuscripts; and natural history collections very rich in zoological and mineralogical specimens. Public lectures are delivered in the building to the public gratuitously by professors appointed by the government; and in a part of it an exhibition of Belgian products and manufactures takes place every four years.

The most admired quarter of Brussels is that which immediately surrounds the Park. The Park is a large inclosure in the upper town containing an area of about seventeen acres, which is laid out in plots of greensward separated by shady walks under carefully-trimmed trees, and ornamented with statues. It was occupied by the Dutch troops at the revolution of 1830. On the south side of the Park are the king's palace and gardens. On the east side of it, in the Rue Ducale, are the palace and grounds presented by the city of Brussels to the late King of Holland when Prince of Orange, and the residences of the foreign ambassadors at the court of Brussels. On the north side of the Park is the Rue de la Loi, containing the government offices and the Palais de la Nation, or legislative chamber, which was built by Maria Theresa for the Council of Brabant, and resembles the French Chamber of Deputies before 1848. On the west side of the Park is the Rue Royale, a fine wide street, which extends nearly a mile from the Place Royale to the Schaarbeek Gate and the botanic garden. Near this gate, in the Rue de Ragule, is the house in which the Duchess of Richmond gave the grand ball to the Duke of Wellington and his officers on the eve of the battle of Waterloo, June 15th, 1815.

Of the gates of the city, the only one remaining of those that formed part of the fortifications erected in 1381 is the Porte de Hal—a large gothic structure formerly used as a prison, now as a museum for old armour and other antiquities. Of the other buildings in Brussels we can only mention the Palais d'Arenberg in the Place du Petit Sablon, famous for its choice paintings, its objects of vertu, and its gardens; the university building in the Rue des Sals, which was originally Cardinal Grandvella's palace; the astronomical and magnetic observatory in the angle between the Louvain and Schaarbeek gates; the railway terminus for the northern lines at the end of the Longue Rue Neuve; the terminus of the southern lines near the church of Notre Dame de Bon Secours; the Broodhuis, a fine old gothic structure in the Grande Place, which was built in 1525, and once was the town-hall of Brussels; the Grand Béguinage, where above a thousand females, young and old, live in religious societies, observing certain rules, but not inclosed as nuns are—each society occupies a separate house, and is governed by a matron; and the Abattoir, which is built outside the walls between the Petit Senne and the Charloroi Canal.

The city supports several large hospitals and charitable institutions. One of these, the Hôpital de St.-Pierre, near the Hal Gate in the south of the town, was originally founded for the reception of Crusaders returning wounded from the Holy Land. Attached to it are very spacious and well-kept gardens and commodious baths. Of the other hospitals the principal are—the Grand Hospice, between the Béguinage and the docks, in the north-west of the city; the Hôpital de St.-Jean, near the Rue de la Madeleine; the Maternité, to the south of the church of Notre Dame de Bon Secours; the Hospice de Pacheco, near the botanic garden; the military hospital, in the Rue des Minimes; and the asylums for orphans, the blind, and deaf-mutes. Most of these hospitals are well endowed, and the sick in them are tended by Sisters of Charity or nuns of other orders.

Brussels has several barracks, one or two prisons, a military magazine, a concert-hall in the Park, and numerous hotels, cafés, and baths. The city is well supplied with water, and lighted at night with gas. The best shops are in the Rue Montagne de la Cour, in the Rue de la Madeleine, and in the Gallerie St.-Hubert, an extremely handsome street, glazed overhead. Besides the boulevards and the botanic garden there is a noble promenade along the broad canal that leads to Malines, formed by a triple avenue shaded by magnificent lime-trees, which were spared by Marshal Saxe in the siege of 1746 at the entreaty of the ladies of Brussels. The favourite excursions in the environs are to the royal palace of Laeken, which is about nine miles to the north of Brussels, and commands fine views of the city and neighbourhood; and to the battle-field of Waterloo.

In the year 1781 an order was given by the emperor Joseph II. prohibiting burials within the city, and directing the formation of burial-grounds outside the walls. Three cemeteries were accordingly established—one near the Hal Gate, another near the Flanders Gate, and the third, which is the largest, near the Louvain Gate. In addition to these the English inhabitants of Brussels have established two cemeteries—one on the road leading to the village of Veele, and the other on the Louvain road.

Among its numerous educational establishments Brussels numbers a free university founded in 1834, a primary normal school, a polytechnic school, an academy of the fine arts, a royal academy of music, and several industrial schools. The public library before mentioned was formed by the union of the Burgundian library with the Royal library; it is open every week-day; the reading-room is everything that can be desired by the student. Among the private libraries must be mentioned the library of the Bollandists; and the great geographical establishment of Vandornieilen, near the Petit Senne, outside the Flauders Gate. It was established in 1830; it contains 20,000

volumes, a large collection of maps, in connection with a school of geography and a museum of natural history. One English newspaper and several journals in French and Flemish are published in Brussels.

Brussels, besides being one of the best-built cities in Europe, is considered a very pleasant place of residence. It is also healthy, although the climate is subject to considerable variations. The mean temperature, as ascertained by observation at the Royal Observatory for a complete year, was 52° Fahr. The greatest heat occurred in June, when the thermometer stood at 76½° Fahr.; the greatest cold in January was 37·8° Fahr. The number of days on which it rained was 180; there occurred 39 days of frost and 25 days of fog; it hailed on 5 days and snowed on 11 days, and there were 7 thunderstorms during the year; 3 of these occurred in June and the same number in July. The prevailing winds were from the west and south-west, and occupied 182 days. From the east, north-east, and south-east, it blew 104 days; from the north 30 days; from the south 25 days; and from the north-west 24 days.

Brussels is the seat of the Cour de Cassation, or supreme court of justice for Belgium, of a high court of appeal, of a court of exchequer (des comptes), and of a military court. The assizes for the province of South Brabant are held in the city four times in each year. Brussels is also the head-quarters of the fourth Military Division of the Belgian army. Ambassadors, ministers, or consuls from almost all the governments in the world reside in Brussels.

Brussels is one of the great centres of Belgian industry. It has several banks of issue and deposit, a national mint, savings bank, &c. It is particularly celebrated for the manufacture of lace, considered the finest in the world. The flax from which it is made is grown in the neighbourhood of Hal, the finest sorts bringing from 300 to 400 francs a pound; and the finest kind of lace costs 150 francs an ell (¾ of a yard), but good and inferior sorts may be bought at 50 francs and 10 francs the ell respectively. Many other manufactures are also prosecuted, among which are those of cambric, fine linen, damask, silk and cotton ribbons, machinery, cabinet-work, jewellery, mathematical and musical instruments, hats, stockings, calicoes, gold and silver lace, paper and paper-hangings, porcelain, hardware, and various chemical preparations used in the arts. Brussels has also many coach factories, soaperies, sugar-refineries, breweries, distilleries, and extensive printing and lithographic establishments. The commerce of the city is facilitated by a canal which connects it with the Schelde, and admits vessels of 300 tons; by good high roads and railroads which radiate from the city in all directions. Electro-telegraphic wires connect Brussels with Paris, Amsterdam, London, Berlin, and Vienna.

The population of the city was 84,004 in 1825, and 98,279 in 1830. The revolution in the latter year caused many mercantile men and persons attached to the former government to remove their establishments from Brussels to the Dutch provinces, so that the population of the city was temporarily diminished. Other causes have since brought a considerable influx of inhabitants; so that in 1835, when a census was taken, the numbers were found to be augmented to 102,702, and the population has since continued to increase: in 1849 there were 124,461 persons residing within the walls. The 'Almanac de Gotha' of 1854 gives the population of Brussels at 210,400; but this probably includes the suburbs and all the outlying dependencies of the city.

The origin of Brussels reaches back to the 7th century. The first buildings were erected in the island of St.-Géry, so named after St. Géry, bishop of Cambray, who built a chapel on the spot. In the 10th century Otho II. inhabited a castle in the island of St.-Géry. The city was inclosed with walls in 1044 by Lambert Baldric, count of Louvain; but the walls were removed and the city enlarged in 1369. Two dreadful fires occurred in 1326 and 1405; on the first occasion 2400 houses, and on the second 1400 houses were destroyed. The prosperity of Brussels was greatly increased in the 12th century by the establishment of the manufactures of cloth and fire-arms.

The city was taken by the English in 1213. In 1314, in consequence of long-continued rains, a contagious disorder carried off so many of the citizens that sixty were buried in the same grave. In 1370 the Jews were banished from the city and province, and their property was confiscated.

Brussels was taken by surprise in 1488 by Philip of Clèves. On regaining possession the Emperor Maximilian, suspecting the inhabitants of having been in league with Philip, deprived the city of various privileges, which were bestowed upon Malines. In 1489 and 1573 Brussels was ravaged by the plague. The tyranny of the Duke of Alba occasioned about 10,000 artisans to leave Brussels in 1567, many of whom settled in England.

In 1695 this city was bombarded by Marshal Villeroy, who demolished upwards of 4000 buildings. In 1708 it was again besieged by the Elector of Bavaria, but was relieved by the army under the Duke of Marlborough. In 1746 Brussels was taken by Marshal Saxe, but it was restored to Austria at the peace of Aix-la-Chapelle. The Austrian Netherlands having been conquered by the French in the early part of the war of the French revolution, Brussels was declared by the directory to be the chief place in the department of the Dyle. On the 1st of February, 1814, the Prussian army took possession of this city, which under the provisions of the treaty of the same year

became one of the capitals of the newly-formed kingdom of the Netherlands. On the separation of Belgium from Holland at the revolution of 1830, the movements leading to which began in Brussels, this city became the capital of the new kingdom and the seat of government. Brussels has been recently distinguished for the interest taken by her inhabitants in questions of high social and scientific interest. Here the first Peace Congress was held in 1848, and a general European Statistical Congress held a session in 1853.

BRUTON, Somerset, a market-town in the parish and hundred of Bruton, is situated on the right bank of the river Brue, which gives name to the town, in 51° 6' N. lat., 2° 26' W. long.; distant 22 miles S. by W. from Bath, and 109 miles W. by S. from London. The population of the town in 1851 was 1885; that of the entire parish was 2102. The living is a perpetual curacy in the archdeaconry of Wells and diocese of Bath and Wells.

The manor of Bruton, or Brumetone, as it is named in the Domesday Survey, was possessed by Edward the Confessor and subsequently by William the Conqueror. A Benedictine monastery was founded here at an early date; afterwards a priory of Black Canons was established. At Bruton the river Brue, here a narrow stream, is crossed by a stone bridge. The town has one main street clean, and well paved, with neatly built houses; and several smaller streets. The town is lighted with gas. Bruton parish church, which stands on the left bank of the river, is a handsome structure in the decorated style, with a tower which has richly ornamented battlements. The Independents and Wesleyan Methodists have places of worship in the town. The endowed Free Grammar school founded by Edward VI. educates 11 boys on the foundation; other pupils also attend the school. The income from endowment is about 300*l.* a year, from which several exhibitions are given to meritorious scholars. The number of scholars in 1852 was 40. There is a National school. An hospital for 14 old men, 14 old women, and 16 boys, founded by Hugh Saxey or Sexey, auditor to Queen Elizabeth, is a very valuable institution. The buildings form a spacious quadrangle. A statue of the founder is placed in a niche on the south side. The petty sessions are held in the upper part of the town-hall; the lower part is used as a market-house. The market day is Saturday. Two fairs are held yearly. The principal manufactures are of stockings and silk. A silk factory employs a considerable number of females.

BRZESE-LIVEWSKY. [GRODNO.]

BRZEZANY. [GALICIA.]

BUCH, a district of the Bordelois, in France, extending along the coast of the Bay of Biscay. Its capital was La Teste, or Tête de Buch, at the head of the Basin d'Arcachon. This district is now included in the department of Gironde. Its lords bore the title of Captal, and their lordship gave to them several rights and privileges in the city of Bordeaux.

BUCHAN, BULLERS OF. [PETERHEAD.]

BUCHAN, DISTRICT OF. [ABERDEENSHIRE.]

BUCHARIA. [BOKHARA.]

BUCHARIA, LITTLE, or Eastern Turkestan, is a name sometimes employed to indicate the most western portion of the countries dependent on the Chinese empire. It is described under **TMAN-SUAN-NAXLU**, its Chinese name.

BUCHOREST, or **BUKARESHT**, the capital of Wallachia, is situated in the eastern part of that principality, in a rich and spacious plain, diversified by hills, and on the Dunbovitza, a feeder of the Arghiah and about 40 miles N.W. from its mouth, in the Danube below Oltenitza. In extent it is about four miles from north to south, and nearly three miles from east to west. It is ordinarily the residence of the prince and divan or council of Wallachia, the seat of government, as well as of a Greek archbishop, and the headquarters of the foreign envoys or consuls; but at the time we write (January, 1854) the city and the whole principality is in the occupation of a Russian army, and the prince has withdrawn from his territories. Independently of its agreeable situation, Bucharest has no claim to its designation, which means 'city of enjoyment;' for it is, with few exceptions, a heap of wretched brick or mud cabins, ranged along lines of streets either unpaved or faced with trunks of oak. It is composed of the prince's palace, a vast pile, and of 67 quarters: these quarters being the separate property of the Boyars, on whose land colonies of their followers have gradually accumulated. The boyars' residences are spacious, and built of stone. The handsomest building, next to the prince's palace, is the adjacent metropolitan church; both of them situated on the largest square and in the centre of the town. There are nearly 100 churches, many of which are built in an uncouth style, none have fewer than three steeples or towers, and many no less than six; some have even nine. Seven of them, as well as the twenty-six monasteries and convents, are protected by walls. The other edifices of note are a large bazaar, a Roman Catholic and a Lutheran church, a synagogue, several hospitals and infirmaries, and the consular residences, particularly that of the Austrian consul, which is a handsome structure and built in good taste. In the middle of Bucharest there is a tower, called the Fire Tower, 60 feet high, which commands a full view of every part of it. Bucharest has a college conducted by twelve professors, and attended in ordinary times by between 400 and 500 students, a museum, a public library, and a great number of schools. The

whole number of dwellings is about 10,000. The town is full of coffee-houses, almost every one of which has a gambling or billiard table, and of shops where sherbet and wine are drunk. Bucharest is the great commercial mart for the principality, and an entrepôt for the commerce between Austria and Turkey. Its inhabitants carry on an extensive trade in grain, wool, honey, salt, timber, wax, tallow and cattle. There are no large manufactures; but woollen cloths, carpets, brandy, &c., are made. There is a Corso, or public walk, to which the fashionable resort in great numbers, in the main street and along the bridge which crosses the Dunbovitza. Bucharest was taken by the Russians in 1769, and by the Austrians in 1789. By the treaty of Bucharest signed May 23, 1812, Turkey ceded Bessarabia and part of Moldavia to Russia. 44° 26' N. lat., 26° 8' E. long.

BUCKENHAM, NEW. [NORFOLK.]

BUCKHAVEN. [FIFESHIRE.]

BUCKLE. [BANFFSHIRE.]

BUCKINGHAM, the chief town of the county of Buckingham, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, in the parish and hundred of Buckingham, is situated on the left bank of the river Ouse, in 52° 0' N. lat., 0° 59' W. long.; 58 miles N.W. from London by road, and 61 miles by the Buckinghamshire branch of the London and North-Western railway. The borough of Buckingham is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The population of the municipal borough, which coincides in extent with the parish, was 4020 in 1851; that of the parliamentary borough, which comprises eight parishes, was 8069. The living is a vicarage in the archdeaconry of Buckingham and diocese of Oxford. Buckingham Poor-Law Union contains 29 parishes and townships, with an area of 44,770 acres, and a population in 1851 of 14,395.

Buckingham is described in the Domesday Survey as an ancient borough. It does not appear, however, that the town sent members to Parliament before 1544. Edward III. fixed one of the staples for wool at Buckingham. A charter was granted in the first year of the reign of Mary (1554), which was surrendered in 1634, when another was granted, but the charter of Mary was resumed a few years later under the proclamation for restoring surrendered charters. In 1644, Buckingham was for a few days the headquarters of Charles I.; the neighbouring towns of Aylesbury and Newport Pagnell being garrisoned for the Parliament.

The church, dedicated to St. Peter and St. Paul, is erected on the summit of a mount, formerly the site of a castle. The erection was completed in 1730 at an expense of about 7000*l.* The former church had a lofty spire, which fell in 1699; the tower which supported it remained till 1776, when it also fell. There are two places of worship for Independents, and one for Baptists in the town. The Free school, endowed by Gabriel Newton for 25 boys, who were clothed in green, is now incorporated with the National school. A Grammar school was founded by Edward VI. for six boys. The income from endowment is 10*l.* 8*s.* a year; the number of scholars in 1850 was about 30.

The present town-hall was erected about the end of the last century by the first Marquis of Buckingham. The jail was built by Lord Cobham about 1753, at his own expense, for the use of the town and county. The town is lighted with gas. There are in the town a public bath, a mechanics' institute, and a savings bank. No trade of any consequence is carried on. Lace-making with bobbins is the only manufacture, and at this work the best hands earn a very small sum weekly. The market day is Saturday. There are ten annual fairs which are well attended. A county court is held in the town.

There were three stone bridges over the Ouse at Buckingham. One of the bridges was taken down by the Buckinghamshire Railway Company, who replaced it by a brick bridge of three arches. The Buckinghamshire railway passes through the southern end of the town. Some good public walks are in the neighbourhood of Buckingham.

(Browne Willis, *History of Buckingham*; Lipscomb, *Buckinghamshire*; *Communication from Buckingham*.)

BUCKINGHAMSHIRE, an inland county of England, of very irregular form, lies between 51° 26' and 52° 12' N. lat., 0° 23' and 1° 10' W. long. It is bounded N. and N.W. by Northamptonshire; W. by Oxfordshire; S. by Berkshire; and E. by Bedfordshire, Hertfordshire, and Middlesex. Its greatest length, measured nearly north and south, from the neighbourhood of Olney to the river Thames above Staines is 53 miles. Its breadth varies much; the greatest breadth is about 27 miles. The area of the county is 464,930 acres; it is one of the smaller English counties, being the thirty-third in the scale of relative magnitude.

Aylesbury, which, though it does not give name to the county, has the best title to be considered the county town, is about 37 miles in a direct line N.W. from London; or by the road 88 miles.

Surface, Hydrography, and Communications.—The principal hills in Bucks are the Chilterns, a chalk range, which entering the county from Oxfordshire runs across it in a north-east direction, and enters Bedfordshire near Dunstable, separating the basin of the lower Thames from the basin of its tributary the Thame, and from the basin of the Ouse. Near Ivinghoe the elevation of these hills is 904 feet above the level of the sea; and another eminence south-west of Wendover is 905 feet; Muzzle Hill, near Brill, is 744 feet, and Bow Brickhill, between

Fenny Stratford and Woburn, 683 feet. Under the northern slopes of these hills is the rich Vale of Aylesbury, watered by the Thame. In that part of the county, south-east of the Chilterns, there is a good deal of woodland, though it has much diminished within the last 100 years. Beech is the prevailing timber in the south part of the county. There is some wood on Whaddon Chase, a tract of high land in the northern part of the county. The whole of the Chiltern district is said to have been a forest; and according to ancient historians the Chilterns and the south-east part of the county were once so covered with woods, chiefly of beech, as to be almost impassable, till an abbot of St. Albans had several of them cut down because they afforded harbour to thieves.

The chief rivers of Buckinghamshire are—the Thames, which skirts the county on the south-west, separating it from Berkshire, and for a short distance from Surrey; the Colne, which separates Berkshire from Middlesex until its junction with the Thames at Staines; the Thame, also a feeder of the Thames; the Ouse, and its tributary the Ousel. The Thames becomes the boundary of the county a little below Henley, and has a winding course first to the east and then to the south-east, past Great Marlow, Taplow (opposite Maidenhead), and Eton, to its junction with the Colne, being navigable throughout this part of its course. The Wick, which passes High Wycombe, joins the Thames below Marlow. The Colne becomes the boundary of the county a few miles below Rickmansworth, and continues, by one or other of its arms, to be the boundary until it meets the Thames. Its general course is south; it passes Uxbridge in Middlesex, and Colnbrook, and receives a considerable stream, the Mishhour, from Amersham. It is not navigable; but works several mills. It produces trout and other fish. The Thame is formed by the junction of several small streams; the principal, to which the name of Thame is assigned, rises near the village of Stewkley, between Fenny Stratford and Aylesbury; and flowing in a south-west direction, unites near the village of Quarrendon with another stream which rises near Tring (Herts), and flows partly through Hertfordshire and partly through Buckinghamshire, and for a part of its course forms the boundary of the two counties. The united stream flows to the south-west until it reaches the border of Oxfordshire, near the town of Thame. Near Thame the navigation commences. After separating Bucks from Oxon for a few miles the river enters Oxfordshire, through which it flows till its junction with the Thames at Dorchester. The whole length of the Thame in that part of its course which belongs to Buckinghamshire is about 23 miles. This river abounds with eels, and produces pike, perch, chub, roach, and gudgeon. The length of the Ouse, and the extent of surface which it drains, give it a high place among the English rivers; but it is only in the upper part of its course that it is connected with Buckinghamshire. It touches the boundary of the county at Turweston near Brackley (Northamptonshire, in which county the Ouse rises) and after dividing it for a few miles, first from Northamptonshire and then from Oxfordshire, quits the border, and flowing east and then north-east through the county past the town of Buckingham again becomes a border stream, and separates Northampton from Buckinghamshire. Again quitting the border it flows to the north-east, past Newport Pagnell (where it receives the Ousel), Weston Underwood, and Olney. After dividing Buckinghamshire from Bedfordshire for a short distance, it finally quits the county a few miles below Olney. Its course within the county is very winding, being in all about 43 miles, although the direct distance from the point where it first touches to the point where it finally leaves the county is only 23 miles. The Ousel is formed by the junction of several small streams, which rise on the north slope of the Chilterns or their continuation the Dunstable Downs, and unite on the border of Buckinghamshire and Bedfordshire, above Leighton Buzzard. After dividing for several miles the two counties it quits the border, and flows through Buckinghamshire north to Newport Pagnell, where it falls into the Ouse. Its whole length may be estimated at from 25 miles to 30 miles. It is remarkable for fine perch, pike, and bream.

Buckinghamshire is tolerably well furnished with canals. The Grand Junction Canal enters the county from Hertfordshire not far from Ivinghoe, and runs north to Newport Pagnell, following the valley of the Ousel. From thence it follows the valley of the Ouse till it enters Northamptonshire near Stony Stratford. There are several cuts from this canal in Buckinghamshire; one to the town of Buckingham, another to Wendover, and a third to Aylesbury, besides a shorter cut to Stony Stratford. Several important roads cross the county. The parliamentary and mail road through Chester to Holyhead, before the construction of the railways the main channel of communication between the metropolis and Ireland, crosses the north part in a north-west direction, between Hockliffe and Stony Stratford; another road to Chester, nearly parallel to this, and more to the north, passes through Newport Pagnell. In the south part of the county there are the Oxford road through Beaconsfield and High Wycombe; and the great western or Bath and Bristol road between Colnbrook and Maidenhead. There is also a road to Birmingham through Aylesbury, Winslow, and Buckingham. The North-Western railway enters the county near Marsworth, 9 miles east from Aylesbury, and passes through the eastern part of the county in a nearly north-western direction. A branch from it to Aylesbury, about $\frac{1}{4}$ miles long, quits the main line at Cheddington. Another branch quits the main line

at Bletchley and passes through the north-western part of the county to Winslow and Buckingham, and thence to Banbury in Oxfordshire. It is connected by various branches with the Great Western railway at Oxford, with Winslow and with Rugby. Acts for the several branches were obtained by a distinct company, entitled the Buckinghamshire Railway Company; but the works have been leased in perpetuity to the London and North-Western Company. The Great Western railway passes through the southern extremity of the county, entering it a few miles north of Colnbrook, and quitting it at Maidenhead. A short branch to Windsor quits the Great Western line at Slough. The Windsor and Staines branch of the South-Western railway also passes along the southern extremity of the county for a few miles; entering it near Staines, and quitting it just above Datchet.

Geological Character.—The general direction of the out-crops of the different geological formations which cross this county is north-east and south-west; and the formations present themselves successively to the observer as he travels north-west. The south-east part of the county, included between the Thames and the Colne, is occupied by the plastic clay which skirts the London clay. Only a very small portion of the London clay is found in Buckinghamshire, in the neighbourhood of Staines. The chalk underlies the plastic clay, and rises from beneath it, forming the range of the Chiltern hills. The chalk marl which is generally found skirting the chalk, rises from beneath it, and is in turn succeeded by what is termed Tetsworth clay. Sandstone, more or less ferruginous, crops out from beneath this clay, and is succeeded by the limestone which is known by the name of Aylesbury stone. The chalk marl and the Tetsworth clay form the soil of the fertile Vale of Aylesbury: the sandstone rises into a ridge bounding that vale on the north and north-west. The colitic series of formations succeeds those which we have already noticed, and occupies the north-west part of the county. Only two however of the principal formations of this series appear in Buckinghamshire. The Oxford or clunch clay rises from under the Aylesbury limestone, and extends to the town of Buckingham and to the north-west of Stony Stratford and Newport Pagnell. To this formation succeeds that containing the cornbrash, forest marble, great oolite, and other strata.

Climate, Soil, Agriculture.—The climate of Buckinghamshire is mild and healthy. The chalk-hills, which traverse it through its whole breadth from south-west to north-east, are neither very high nor bleak, and the general temperature is favourable to the ripening of most of the crops usually raised in Great Britain. The hills which are a portion of the Chiltern range, divide the county into two distinct parts, varying in soil and fertility. To the west lies the fertile Vale of Aylesbury, which contains some of the richest pasture in England, and is a part of the valley of the Thame. Towards the north of this rich tract are some inferior soils; and still farther north are some very poor wet clays and gravels. Towards Bedfordshire there are some light sands partaking of the nature of the sandy belt which crosses that county. On the south-east of the county the surface is more varied, there being several depressions or valleys on the eastern slope of the chalk, in which some good loams occur. The mixture of chalk with the clay forms a soil well suited to wheat and beans, and with the help of moderate manuring and good tillage produces abundant crops. In the valley of the Thames are some very good and well-cultivated soils. The lower lands along the Thames and Colne, which are occasionally flooded, are in permanent meadows and very valuable. The whole of this plain consists of a good loam lying on the blue clay, called the London clay; but with the interposition in many places of a stratum of gravel, which adds much to the soundness of the soil above, by forming a natural drain for the waters. The arable land in this part of the county is carefully cultivated. About half of the land in the county is in meadows and pastures, and the other half under the plough. A great many commons and common fields have been inclosed of late years, and considerable improvements have been made. Much of the land in Buckinghamshire being of a good quality, the farms are not in general very large; few are above 500 acres, and many do not exceed 20 or 30 acres; the average may be taken at about 200 acres. Leases for 7 and 14 years prevail, but most farms are let from year to year; and the tenants are seldom removed, provided they pay their rent and cultivate the land in a proper manner.

Cattle, &c.—It is supposed that Buckinghamshire feeds about 20,000 milch cows, each giving on an average 200 lbs. of butter annually. The cows are chiefly short-horns, Glamorgan, and home-bred. The large Hereford oxen are preferred for grazing where the land is very good. The greater speed and general usefulness of the horse causes him to be preferred for the plough in spite of the pretended economy in the use of oxen. Hay is the chief food of the cattle in winter, but turnips and straw are often substituted notwithstanding the bad taste which turnips impart to the hutter. No great quantity of cheese is made in this county, except a few cream cheeses in the neighbourhood of the principal towns. The hutter is chiefly sent to London made up in the form of ohlong rolls weighing 2 lbs. each. It is sent in baskets, called from their shape 'flats,' which hold from 20 to 40 rolls. Their depth is uniformly 11 inches. In the dairy farms the calves are usually sold when three or four days old to dealers, who sell

them again to those farmers who being within a moderate distance from London or any considerable town, find it more profitable to fatten calves by suckling them than to make butter. Many ewes are kept in this county for the sake of early lambs for the London market. The Dorsetshire ewes, which have lambs very early in the season, are consequently preferred for this purpose. Where mutton is the object, the South Down breed is in greater request. The Gloucestershire and Leicester and a broad crossed between them have come into favour since long wool has borne a better price in proportion to the quantity than the shorter and finer.

The horses used for the plough and team are generally large and black; some of them are bred in the county, but most of them are brought when young by dealers from Northamptonshire and Lincolnshire. The largest and finest are frequently resold at six years old to London dealers for dray horses at a considerable profit. Hogs are an important appendage to a dairy farm. The favourite breed is the Berkshire, sometimes crossed with foreign breeds, as the Chinese or Neapolitan, or with the Essex or Suffolk breeds. The Neapolitan cross increases the aptitude to fatten, but renders the hog more delicate and susceptible of cold. The Chinese cross gives very delicate small porters and sucking pigs. There is a peculiar trade in this county, which is the rearing and fattening of ducks early in the season for the London epicure. The eggs are hatched under hens, and the ducklings are reared in the house with great care.

Divisions, Towns, &c.—When the Domesday Survey was made this county was divided into eighteen hundreds. They are now reduced to eight; one of them however still retaining the title of 'the Three Hundreds of Aylesbury.' The modern hundreds are: Newport on the north-east and Buckingham on the north-west of the county; Ashendon, Cottesloe, and Aylesbury in the centre; Burnham on the south-east; and Stoke and Desborough on the south and south-west. Desborough, Stoke, and Burnham are the three 'Chiltern Hundreds,' the stewardship of which is a well known nominal office bestowed upon a member of Parliament who wishes to vacate his seat. There are about 200 parishes in the county.

Buckinghamshire has no city. The market-towns are fourteen. **AYLESBURY**, as being the assize town, the place where the quarter sessions are always held, and the principal place of county election, may now be regarded as the county town. **BUCKINGHAM**, on the Ouse, in the north-west part of the county, was formerly considered the county town. The other market-towns are—**GREAT MARLOW**, on the Thames; **ILTON WYCOMBE**, or Chipping Wycombe, on a small stream flowing into the Thames; **NEWPORT PAGNELL**, at the junction of the Ouse with the Ouse; **AMERSHAM**, on the road from London to Aylesbury; **OLNEY**, on the Ouse; **CHESHAM**, to the right of the Aylesbury road, not far from Amersham; **PRINCE'S RISBOROUGH**, to the left of the Aylesbury road, not far from Wendover; **WENDOVER**, on the road from London to Aylesbury, beyond Amersham; **BEACONSFIELD**, between Uxbridge and Wycombe; **STONY STRATFORD**, on the Ouse; **WISLOW**, between Aylesbury and Buckingham; and **IVINGHOE**, between Dunstable and Wendover. These will be found described under their respective heads. We shall subjoin a few particulars of Fenny Stratford and Colnbrook, which formerly had markets (now disused), and are consequently sometimes reckoned among the market-towns; and of a few other places which have some claims to notice.

Fenny Stratford, on an eminence on the great Holyhead road, 14 miles N. by E. from Aylesbury: population of the township 1142 in 1851. The chapel, dedicated to St. Martin, was rebuilt in 1724-30, chiefly through the exertions of the antiquary Browne Willis, who is buried within the rails of the communion-table. There are chapels for Baptists and Wesleyan Methodists, and a National school. There are four fairs—April 19th, July 18th, October 10th or 11th, and November 29th. Fenny Stratford is on the Watling Street. There is a stone bridge over the Ouse, which flows by the town. Fenny Stratford gets its name from the nature of the surrounding country. The *Magiorivium* of Antoninus was at or near Fenny Stratford.

Colnbrook is on the high western road, 3½ miles from the Slough station of the Great Western railway: the population of the chapelry of Colnbrook in 1841 was 1050; in the Census returns of 1851 the population is returned with that of the three parishes in which it is situated. The town consists of one long street of neat respectable-looking houses. The Colne flows here in four channels, each of which is crossed by a bridge. An ancient chantry chapel at Colnbrook, which continued to be used after the Reformation, was endowed by private benefaction in 1692. A Baptist meeting-house, a Free school, and a British school are in the town. There are two fairs on the 5th of April and 3rd of May. The town was incorporated in 1543 by the style of the bailiff and burgesses of Colnbrook.

About seventeen places in the county had charters for markets, which have been long ago disused. The following are the only villages which appear to call for description:—

Burton, a long straggling village about a mile N.N.E. from Aylesbury: the population of the parish of Ilorton-with-Broughton was 688 in 1851. The church, which is of the decorated and perpendicular styles, has been repaired, and open oak seats have been substituted for the old pews. The Baptists and Methodists have places of worship, and there is a National school. The Aylesbury railway passes

through the parish. **Bletchley**, about 15 miles N. from Aylesbury: population of the township 433 in 1851. The church is a rather superior example of a village church; it is chiefly of the perpendicular style, but some small portions are decorated. In the interior is a splendid tomb to Lord Grey de Wilton; there are also some incised brasses. **Borstaff** or **Boarstaff**, about 14 miles W. from Aylesbury, population of the parish 243 in 1851, is chiefly noteworthy for its castle, originally erected in the reign of Edward II. Borstaff House endured three or four attacks during the contest between Charles I. and the Parliament. Only the embattled gatehouse now remains. It is a good example of that portion of the early castellated mansion: a bay window and some other insertions are of the Elizabethan age. **Brickhill**, **Great**, 15 miles N.E. from Aylesbury, population of the parish 780 in 1851, is a good-sized straggling village, with a church chiefly of the perpendicular style, a large Baptist chapel, and almshouses for 22 persons, together with several parochial charities. **Brill**, population of the parish 1311 in 1851, stands on an eminence on the border of Oxfordshire, about 10 miles W. from Aylesbury. It is said that the Saxon kings had here a palace, which was a favourite residence of King Edward the Confessor. King Henry II. kept his court here in 1160, attended by Thomas à Becket as his chancellor; he was here again with his court in 1162. Henry III. kept his court at Brill in 1224. (Lysous's 'Magna Britannia.') In the war between Charles I. and his Parliament Brill was garrisoned by the Royal party. The church is ancient; some portions are early English. The Wesleyan Methodists and Independents have places of worship. Near Brill is a mineral spring. **Burnham**, population of the parish 2301 in 1851, between Colnbrook and Maidenhead, a little to the right of the high western road, had formerly a monastery of Augustine nuns of which considerable remains still exist. There was in the 13th century a palace at Chippeuham in Burnham parish in which Henry III. occasionally resided. Burnham church is spacious and interesting; portions of it are of early English date, the remainder is chiefly decorated. There are here a Dissenting chapel and a National school. **Chalfont St. Giles**, on the road to Amersham, 22 miles W.N.W. from London, population 1169 in 1851, contains the house in which Milton finished his 'Paradise Lost,' and where he is said to have commenced his 'Paradise Regained.' The church is of the decorated and perpendicular styles. The Independents and Primitive Methodists have places of worship. Here is a school endowed by Sir Hugh Palliser, who is buried in the parish church; also a British school; and at Chalfont St. Peter, close by, is a school supported by the Portland family. The population has decreased in consequence of the trade being drawn away to other places more accessible by railways. The population of Chalfont St. Peter was 1482 in 1851. **Chenies** or **Cheneys**, on the Chess, a feeder of the Colne, 17 miles S.E. from Aylesbury: the population in 1851 was 565. Here was formerly a seat of the dukes of Buckingham. The old Tudor Manor-house, which belonged to the Chenies, a picturesque brick mansion, stands near the church. The church, which is of the decorated and perpendicular styles, has been recently restored. A mortuary chapel built in 1556 serves as the mausoleum of the Bedford family. There are here a chapel for Baptists, a school of Industry, an Infant school, almshouses for 10 poor persons, and some parochial charities. On the Chess are extensive paper-mills. In the vicinity, the scenery of which is very beautiful, are several mansions. **Crawley, North**, 17 miles N.E. from Buckingham: population 914 in 1851. The church is a very fine building, chiefly of perpendicular date and style, but some portions are earlier. In the interior is a rood screen of unusually beautiful carved work of the decorated period. In the panels are painted figures of kings and bishops, very curious on account of the costumes. The Independents and Baptists have chapels here. There are National and British schools. **Crendon, Long**, 8 miles S.W. from Aylesbury: population 1700 in 1851. The village consists of a number of houses irregularly arranged, and chiefly constructed of rough stone. In the vicinity traces of a Roman cemetery have been discovered: many urns, &c., have been exhumed. **Notley Abbey**, in the parish of Long Crendon, was founded about 1162 by Walter Giffard, the second earl of Buckingham, for Augustinian monks. A portion of the abbey has been converted into a residence; the chapel is used as a cow-house; the remainder is a ruin. Close by is a curious old water-mill which belonged to the abbey. **Long Crendon** church is a cruciform edifice of early English and subsequent styles. The Wesleyan Methodists and Baptists have places of worship. **Cuddington**, 5½ miles S.W. from Aylesbury: population 623 in 1851. The church is of the Norman and early English styles, with some inserted windows of the decorated style. The Wesleyan Methodists and Baptists have chapels. There is a charity for apprenticing poor boys and distributing money to needy inhabitants. **Datchet**, on the Thames opposite Windsor, had a population in 1851 of 898. It is a quiet village, chiefly dependent on the neighbouring gentry. It is resorted to in summer by anglers and holiday visitors. The church is a small ancient structure; parts of it are of the early English style. There is a Baptist chapel. **Eddesborough**, about 8 miles E.N.E. from Aylesbury: the population of the parish in 1851 was 1838. The church, a very fine building in a commanding position, is perpendicular in style. It contains many interesting monuments of stone and brass. The Wesleyan Methodists

have a place of worship. Many of the inhabitants are dependent on the plaiting of straw; there are several plaiting schools in the parish. *Haddenham*, 7 miles S.S.W. from Aylesbury: population 1703 in 1851. The church is a spacious and very fine building. The Wesleyan Methodists and Baptists have places of worship. In the parish are some mineral springs. *Uxbridge*, near Marlow: population 1365 in 1851. Greenland House, near this village, the seat of the Doyleys, was a severely contested post in the war between Charles I. and the Parliament. The church has been modernised. There is an Independent chapel. *Hampden*, near Prince's Risborough, about 9 miles S. from Aylesbury: population 308 in 1851. The manor was for centuries in the Hampden family, the male line of which became extinct in 1754. The celebrated John Hampden lies buried in the churchyard; and there is a representation of the battle of Chalgrove Field, in which he received his death-wound in 1643, on the monument of John Hampden, Esq., the last heir male of the family. Hampden House, the former seat of the Hampdens, contains several family pictures. There is a whole-length portrait of Oliver Cromwell. The church is mostly perpendicular, with parts of earlier date. The Independents have a chapel at Hampden. *Horton*, near Colnbrook, at the south-eastern extremity of the county is chiefly remarkable as having been the residence of Milton in his early manhood. No vestige of the house remains. The population of the entire parish, which is partly in the county of Middlesex, was 842 in 1851. The ancient church with its ivy-mantled tower is a rather picturesque object. In it is an inscription in memory of the mother of Milton. There is a Free school. On the Colne is a large water-mill. *Iver*, on the Colne near Uxbridge, 17 miles from London, was once a market-town; it has still two fairs: the population in 1851 was 1985. The church is partly Norman and early English. The Wesleyan Methodists have a place of worship. There is a National school. On the Colne are extensive paper and oil mills. The Great Western railway and the Grand Junction Canal pass through this parish. *Langley Marsh* is a good sized village near Colnbrook, part of which town is in this parish: the population of the entire parish in 1851 was 1874. The church is ancient, and contains some good monuments. In the churchyard is a noble yew-tree. The Wesleyan Methodists, Independents, and Baptists have places of worship. There are almshouses for 10 poor persons. *Medmenham*, on the left bank of the Thames, 4 miles W. from Great Marlow: population 401 in 1851. Here was a cell belonging to the Cistercian monastery at Woburn, founded in 1200. What remains of it is now converted into a private residence. The church, which is ancient, has been lately repaired. There are two Free schools. *Great Misenden*, between Amersham and Wendover, 9 miles S. by E. from Aylesbury, was the seat of a rich abbey of the canons of St. Augustine. Some small portions of the conventual buildings remain. The population of the parish in 1851 was 2097. The parish church is a handsome cruciform building, of the decorated and perpendicular styles; it was thoroughly repaired in 1828. The Wesleyan Methodists and Baptists have places of worship. There are National, British, and Infant schools. In the neighbourhood are several good mansions. *Penn* is situated on an elevated site, commanding extensive prospects, 16 miles S.S.E. from Aylesbury: population 1254 in 1851. The original part of the church is of the early English style, but it has been spoiled by tasteless modern additions and alterations. There are chapels for Wesleyan Methodists and Baptists, and National and Infant schools. *Pitstone*, anciently *Pightelsthorpe*, about 10 miles W. from Aylesbury: the population of the entire parish in 1851 was 545. In this parish was the rich abbey of Ashridge. The abbey, for some time after the dissolution of the community, was a royal palace; and Queen Elizabeth, before her secession, frequently resided here. The conventual buildings were nearly all pulled down by the late Duke of Bridgewater. Edward I. spent his Christmas at Ashridge, either in the monastery or the neighbouring castle of his cousin, Edmund, earl of Cornwall, son of Richard, king of the Romans, A.D. 1290. He held a parliament there at the same time. There are here a small church, of decorated and perpendicular styles, a chapel for Wesleyan Methodists, and a National school. *Quinton*, or *Quinton Mallet*, 7 miles N.W. from Aylesbury: the population of Quinton township in 1851 was 854. The church is partly decorated and partly perpendicular. In the chancel is a very showy altar-tomb in memory of R. Winwood, Esq., 1689; there are also some brasses in excellent preservation. The Baptists have a chapel here. There are almshouses for six poor widows. *Slough*, one mile and a half from Eton; the town is situated partly in the parishes of Stoke Poges and Upton: the population of Slough in 1841 was 1189; and in the Census returns for 1851 an increase of 1277 since 1841 in Upton parish is attributed to the erection of new buildings in the town of Slough and the neighbourhood. Since Slough has been made a first-class station of the Great Western railway, the town has considerably increased. A new church has been built; and the railway station and large railway hotel have added much to the appearance of the place. Slough was for many years the residence of Sir William Herschel; it was here he constructed his large reflecting telescope, and made most of his important discoveries. He died here in 1822. Salt Hill, near Slough, was the scene of the celebrated 'Eton Montem.' *Steeple Claydon*, 12 miles N.W. from Aylesbury, was at the Domesday Survey one of the most populous

places in Buckinghamshire: in 1851 the population was 869. The church is of the decorated and perpendicular periods, with modern transepts. It contains a monument to General Sir Harry Calvert, by Chantrey. In the village is a Free school built and supported by Sir Harry Verney. Claydon House is a handsome mansion, standing in a fine park. *Stoke Poges* lies to the right of the road, between Colnbrook and Maidenhead: the population in 1851 was 1501. The manor was in the reign of Queen Elizabeth seized by the crown for a debt. It was the residence for a time of 'the grave Lord Keeper,' Sir Christopher Hatton; and subsequently of Sir Edward Coke, who in 1601 entertained Queen Elizabeth here, and presented her with jewels to a considerable amount. The park is adorned with a colossal statue of Sir Edward Coke; and adjoining the park is a large monument, erected to the memory of the poet Gray. The old manor-house, now pulled down, is the scene of Gray's 'Long Story,' and the churchyard of his well-known 'Elegy.' The poet spent much of his youth in this village; and his remains lie in the churchyard, under a tomb which he had erected over the remains of his mother and aunt. Stoke church and churchyard well answer to the description in Gray's 'Elegy.' At *Stowe*, near Buckingham, is the mansion which until recently was the seat of the Duke of Buckingham. The grounds were originally laid out in straight paths and avenues, and adorned with canals and fountains. Subsequent improvements were made under the direction of Bridgman, Kent, and other artists and amateurs; and the beauties of Stowe were commemorated by Pope and West, who spent many festive hours with the then owner, Lord Cobham. The grounds when viewed from a distance appear like a vast grove, interspersed with columns, obelisks, and towers. They are adorned with arches, pavilions, temples, a rotunda, a hermitage, a grotto, a lake, and a bridge. The temples are adorned with busts, under which are suitable inscriptions. The house was originally built by Peter Temple, Esq., in the reign of Elizabeth; it was rebuilt by Sir Richard Temple, who died in 1697, and has been enlarged and improved since. The whole front extends 916 feet, the central part 454 feet. The costly and splendid contents of this mansion were two or three years ago sold by auction; the mansion itself is now unoccupied. *Taplow*, on the banks of the Thames, nearly opposite to Maidenhead, population 704 in 1851, may just be mentioned on account of Taplow Court, the seat of the Earl of Orkney; and the former mansion of Cliefden House, destroyed by fire in 1795, and again about three years since: a new mansion has been built by Mr. Barry. This magnificent house was begun by the witty and profligate Duke of Buckingham, and was for some time the residence of Frederick Prince of Wales, father of George III. Cliefden is now the property of the Duke of Sutherland. The church is a modern brick edifice. On the Thames at Taplow is a large paper-mill. *Waddesdon*, 5½ miles W.N.W. from Aylesbury on the road to Bicester: parish population 1439 in 1851. The church is very interesting; it contains examples of every style of architecture from Norman to perpendicular. There are chapels for Wesleyan Methodists and Baptists, and a British school. Among other parochial charities are almshouses for six poor widows, and a fund for distribution among needy parishioners. *Weston Underwood*, near Olney, was for some years the residence of the poet Cowper; and some of his descriptions of rural scenery were drawn from nature in his walks round this place. The church is of early English and perpendicular styles. There are a Roman Catholic chapel and schools in the parish: the population in 1851 was 405. *Whitchurch*, 4¼ miles from Aylesbury: population 915 in 1851. The church is chiefly early English. The Wesleyan and Primitive Methodists have places of worship. Creslow manor-house in this parish is a picturesque example of a manorial residence of the 16th century. *Wolverton*, 4 miles from Stony Stratford, has grown into importance from having been made the central station of the North-Western railway. The population of Wolverton in 1851 was 2070, being an increase of 1653 since 1831. In the village or town are a church, a Wesleyan chapel, a school-room, a lecture and news-room; besides extensive gas-works, and workshops for the repairing of the locomotives and carriages belonging to the railway company. Most of the inhabitants are dependent on the North-Western Railway Company. The houses though small are generally convenient, and there are several plots of ground let out at a very low rent by the company for workmen's gardens. The new church is in 'the railway town,' as it is sometimes called, close by the station. The old church is at some little distance from it, by the old hamlet of Wolverton. *Wyrdisbury*, or *Wraysbury*, on the Thames, 3 miles N.W. from Staines: population 701 in 1851. In this parish was a Benedictine nunnery founded in the reign of Henry II. In the grounds of Ankerwyke House is a celebrated yew-tree which overshadows a circle of 207 feet in circumference. It is believed to be older than the time when King John signed the Magna Charta on Runnymede, on the opposite side of the river. Magna Charta Island lies just off Wyrdisbury to which parish it belongs. Wyrdisbury church is a very handsome village church; it has recently been well restored. There is a station here of the Windsor and Staines railway.

Divisions for Ecclesiastical and Legal purposes.—Of the 201 parishes 79 are vicarages, and 29 curacies or donatives. The county is for the most part in the diocese of Oxford, and in the archdeaconry of Buckingham. The several parishes of the county are divided among the seven rural deaneries of Buckingham, Burnham, Muresley, Newport,

Willesdon, Wenslover, and Wycombe. The county is divided by the Poor-Law Commissioners into seven Unions: Amersham, Aylesbury, Buckingham, Eton, Newport-Pagnell, Winslow, and Wycombe. These Poor-Law Unions include 192 parishes and townships, with an area of 356,095 acres, and a population in 1851 of 143,647; but the boundaries of the Unions are not strictly coequal with those of the county. Buckinghamshire is in the Norfolk circuit. The Lent and summer assizes and the quarter sessions for the county are held at Aylesbury, where also is the county jail. County courts are held at Aylesbury, Buckingham, Newport-Pagnell, and High Wycombe. The county returns three members to the Imperial Parliament, one having been added by the Reform Bill. Aylesbury is the chief place of the county election. Two members are returned for the hundred of Aylesbury (the right of voting for the borough of Aylesbury having been thrown open to the freeholders of the hundred), and two each for the boroughs of Buckingham, High Wycombe, and Marlow.

Civil History and Antiquities.—Camden and most other antiquaries have included Buckinghamshire, and probably with good reason, in the territory of the Catyechlani or Catnellani. [BRITANNIA.] When the Romans, under the command of Aulus Plautius, in the time of the emperor Claudius, seriously undertook the conquest of Britain, it has been considered by some that Buckinghamshire was the seat of conflict, and that in a battle within its borders, Togodumnus, one of the British chieftains, was slain. It is more likely however that the death of Togodumnus occurred in the marshes of Essex, near the mouth of the Thames. When South Britain was subdued by the Romans and divided into provinces, Buckinghamshire was included in Flavia Caesariensis. Several of the ancient British and Roman roads crossed this county. The Watling Street coincides with the parliamentary and mail-coach road to Ilolyhead in that part of it which runs from Brickhill to Stony Stratford through this county. The Ikening, Ikenold, or Iekniel Street runs along the edge of the Chiltern Hills, and a road runs nearly parallel to it under the hills, called by the country people 'the Lower Acknell Way.' The Akeman Street crossed this county also, but its direction is uncertain. Of Roman stations some notice has been already taken. The Magiovinium of Antoninus was probably at Fenny Stratford; Lactodorum, which Camden fixes at Stony Stratford, and Pontes, which he fixes at Colnbrook, are placed by more modern antiquaries at stations beyond the limits of Buckinghamshire; namely, Lactodorum, at Towcester in Northamptonshire, and Pontes, at Staines in Middlesex. There are several ancient camps or earth-works in the county, chiefly near the edge of the Chilterns or the course of the Thames. There is an earth-work at Ellesborough, on the ridge of the Chilterns, in one corner of which is a high circular mound or keep 80 paces in circumference, called Castle Hill, or Kimble Castle. The name of the adjacent villages of Kimble (Great and Little) was written in ancient records Kynobel or Cunobel.

In the civil wars in the reigns of Stephen and John, Buckinghamshire was the scene of contest, but not of any marked event. Hanslope Castle, near Stony Stratford, held for the barons against John by its owner, was taken by the king's favourite, Fulke de Breut, A.D. 1216 or 1217. In the great civil war between Charles I. and his Parliament, the village of Brill was garrisoned by the king. Upon this garrison the parliamentary forces under Hampden made some unsuccessful attempts. Aylesbury seems at this time to have been held by the Parliament. In 1643 the Parliamentarians under the Earl of Essex were quartered at different places in the county. Prince Rupert attacked by surprise their quarters at Wycombe and another place, and took several prisoners. The opposite party pursued him in his retreat at Oxford; and it was in a skirmish which took place on this occasion that Hampden received his death-wound. In 1644 the king had his head-quarters at Buckingham. In the same year Borstall House in this county, "reputed a strong place," says Lord Clarendon, was abandoned by the Royalist party, who thought it right to withdraw those garrisons which were too far distant from Oxford.

Buckingham is not by any means rich in antiquities. Of the baronial castles of the feudal age there are scarcely any remains; some earth-works alone serve to mark the sites of those at Lavendon, near Olney, and Whitechurch, between Aylesbury and Buckingham, and of Hanslope Castle, Castlethorpe, near Stony Stratford. The remains of the buildings belonging to the various religious establishments are but scanty. There are some very small remains of Burnham Abbey, and Melmenham Abbey. Of Missenden Abbey, part of the cloisters remain, having groined arches resting on pillars, with enriched capitals in the Norman style. There are more considerable remains of Noley Abbey, which is now converted into a farm-house. The buildings occupy three sides of a quadrangle. On the south side is the hall, 63 feet long by 24 feet (nearly) wide, now used as a barn: the style of this building appears to be the early English. On the west side are the buildings of the farm-house, in the later English style; some part was probably built after the dissolution. Part of the monastery of Mursley (or St. Margaret), in the parish of Ivinghoe, is yet standing.

Of the churches of early date, Stewkley, between Winslow and Loughton Buzzard (Bedfordshire), is a good Norman structure, with much of the characteristic Norman carving. The porch on the south side, and the pinnacles of the short square tower, which is between

the nave and chancel, have been added since its erection. Other examples of the Norman period occur at Hanslope; Leckhampstead; Wing; High Wycombe; Stanton Bury near Stony Stratford; the deserted church of Upton, near Colnbrook; Water Stratford, near Buckingham; and Diuton, near Aylesbury: a few other churches have some portions of Norman architecture. Of the early English style the examples are more abundant. Chetwode church, near Buckingham, formerly the church of the priory of Austin Canons, may be considered as coeval with the foundation of the priory, A.D. 1244. This church contains some of the most ancient and elegant specimens of stained glass to be found in the kingdom. Lilligutouse Dayrell, and Cold Bradfield are also excellent examples of this style. Many of the churches have portions of early English work. In examples of the decorated style the upper part of the county is very rich. Clifton Reynes, Emberton, Olney, and Great Ilorwode are excellent specimens of the style; in the lower part Chesham Bois, and the south aisle of North Marston, are the best examples. Of perpendicular churches remaining the best are Maids Morton and Willesdon, portions of North Crawley, and the chancel of North Marston; the tower of Maids Morton has interesting features; the chapel of Eton College also has some very good portions.

In 1851 there were four savings banks in the county, at Aylesbury, Buckingham, Newport Pagnell, and High Wycombe. The amount owing to depositors on November 20th 1851 was 133,639*l.* 3*s.*

BUCKLAND. [DEVONSHIRE.]

BUCKOWINE. [BUKOWINA.]

BUDA, BUDIN, or OFEN, a city on the right bank of the Danube, in the Hungarian county of Pesth, is united with the city of Pesth, which lies on the left bank of that river, by a bridge of boats about 3500 feet in length, and by a chain bridge recently erected by an English engineer. The two towns (called conjointly Buda-Pesth) constitute the metropolis of Hungary and seat of government. Buda is 130 miles in a straight line but above 150 miles by railway through Pressburg and Waitzeu S.E. from Vienna. It is built round the Schlossberg in the midst of a mountainous and picturesque country. It is about nine miles in circuit, and contains about 33,000 inhabitants. The central part of Buda is called the Fortress; it rises on all sides round the acclivities of the Schlossberg, and is inclosed at its foot by walls and bastions; thence it spreads out into five suburbs. To the south of the town there is a lofty eminence called the Blocksberg, on the summit of which an observatory is built. The Fortress, which occupies about a twelfth part of the entire area of Buda, is laid out on a regular plan, and contains handsome buildings and spacious squares. The most remarkable buildings are the royal palace, a vast structure fronting the river in which the Palatine, or viceroy, of Hungary resided; the Church of the Assumption; the garrison church; the house of assembly for the states; the arsenal; the town-hall; and the several buildings for the various departments of the business of the state. Buda contains altogether twelve Roman Catholic churches, several monasteries, one Greek church, and a synagogue. It possesses a royal gymnasium, a Roman Catholic high school, several libraries, a school of design, several other educational establishments, a theatre, and many charitable institutions. The observatory, which stands in 47° 29' 12" N. lat., 19° 2' 45" E. long., is supplied with the finest instruments and apparatus. The isle of Marguerite which is laid out as a garden, and the sulphurous warm-baths in various parts of the suburbs, are particularly deserving of mention. From one of the hot sulphur springs, which marks 117½° on Fahrenheit's thermometer, the German name Ofen (oven) is derived. Buda is the Hungarian and Slavic name of the town.

Buda manufactures a little silk and velvet, leather, some cottons, and woollens. It possesses also a cannon-foundry, copper-foundries, a gunpowder-manufactory, a silk spinning-mill, an extensive type-foundry, and a tobacco-manufactory. The trade of the town principally consists in the wines produced by the vineyards in the environs, to the annual amount of about 4,500,000 gallons. This wine, which resembles Burgundy and is well known under the name of 'Ofener-Wein,' comes from the extensive vineyards belonging to the town itself, which are said to cover an area of seventy square miles.

From some remains of ancient buildings found at Alt-Ofen (a large market-town of 8000 inhabitants close to Buda), it has been inferred that a Roman town once occupied the spot, the name of which is given as Aquincum or Sicambrium. The site is probably ancient, but the first beginning of the town of Buda was the erection of a fortress on the Schlossberg in A.D. 1240. King Stephen and some others of the Hungarian kings occasionally resided in Buda. It was taken in 1526 by Solyman the Magnificent, and retaken the following year by Ferdinand of Bohemia. Solyman again took it in 1529, and it remained in the hands of the Turks till 1686 when it was taken by the Duke of Lorraine who blew up the castle. This was subsequently rebuilt by Maria Theresa. During the insurrection which followed the murder of the Imperial Commissioner Count Lamberg on the bridge of Buda-Pesth (Sept. 23, 1848), Buda as well as Pesth suffered much from the violence of civil war. The palace of the Palatine, the Vienna gate of the town, with the bastions and parapets of the fortress, were all but demolished during the bombardment of the city by Gorgey on the 17th, 18th, and 20th of May 1849. On the 20th the city was stormed in consequence of the treachery of an Italian

regiment in the garrison. General Henzi, whose heroic defence of the city is supposed to have saved Vienna from being attacked by the Hungarians, died of his wounds on the night of the 21st. A cast-iron monument 66 feet high and 90 feet in circumference, erected in honour of the general and his companions in arms, was uncovered in the presence of the emperor Francis Joseph in July 1852. The monument represents a dying warrior crowned with laurel by an angel; above him is a dome round which on delicate columns are figures of Faith, Truth, Religion, Magnanimity, and Devotion. The tablets on the sides contain the names of those who fell in defence of the city. The fortifications of Buda have been recently all thoroughly repaired.

BUDAYOON. [BAREILLY.]

BUDISSIN. [BAUTZEN.]

BUDLEIGH, EAST. [DEVONSHIRE.]

BUDWEIS, the capital of the circle of Bndweis in the south of Bohemia, is situated on the Moldau, 75 miles S. from Prague, 100 miles N.W. from Vienna, in 48° 59' N. lat., 14° 28' E. long., and has about 9000 inhabitants. It is a well and regularly built town, and is partially fortified. Budweis includes three suburbs; is the seat of a bishopric; and has a handsome rathaus, or town-hall, cathedral, seven churches, one monastery, a gymnasium, a philosophical academy, and a diocesan and theological seminary. The markets for horses and grain are important: the manufactures consist of broadcloth, damasks, muslin, saltpetre, &c. By means of the Moldau, which is navigable down to Prague, and the Elbe, and by the horse-railway that connects the town with Linz on the Danube and Gmunden on the Trauen-see, in the archduchy of Austria, Budweis is a place of considerable transit for salt from the Salz Kammergut, and for other merchandise. The district around Budweis up to the source of the Moldau belongs chiefly to the princely house of Schwarzenburg, one of whose ancient seats, the Schloss Frauenberg, a feudal fortress, stands in the neighbourhood of a magnificent gothic castle lately erected; around the Schloss is a vast park well stocked with wild boars.

BUDWORTH, GREAT. [CHESHIRE.]

BUENOS AYRES, the largest, most populous, and southernmost of the federal provinces of the Argentine Confederation, South America, extends from the Rio Negro on the south, about 41° S. lat., to a line which, about 33° S. lat., divides it on the north from the provinces of Santa Fé, San Luis, and Mendoza. On the west it nominally extends to the Rio Diamante, or even to the Andes, but this western part of the province is still only occupied by the native Indians. On the east and south-east it has a coast-line along the Rio La Plata and the Atlantic of upwards of 600 miles. The surface is roughly estimated at 200,000 square miles: the population probably does not exceed 250,000.

The coast-line, surface, and geology of this province have been sufficiently described under ARGENTINE CONFEDERATION. The only harbours along the extensive line of coast suitable for large vessels, are those of Buenos Ayres city, which is a very bad one, and Port Belgrano in Bahia Blanca, near the southern extremity of the province, which is an excellent one. Almost the entire province is a level plain; the only exceptions being the unoccupied western districts, which are hilly, and the Sierras del Vuulcan and Ventana, and connected ranges, which traverse the southern districts. A large portion of the province is fit for agriculture; but though a good deal of corn is raised, the attention of the inhabitants is chiefly given to the rearing of cattle. The peasantry are generally averse to the cultivation of the soil, to mechanical work, to fishing and navigation, or, indeed, any settled labour. Their employments are mostly confined to the tending of cattle and horses, or such callings as can be pursued on horseback. They live in ranchos, or huts, which are built of stakes, filled in with mud and covered with thatch, and consist of a sleeping apartment and a 'cook-house.' Their food consists of beef and an infusion of maté. The cattle farms, 'Estancias', are many of them of large size; some of the most extensive and complete of these establishments are the property of British subjects, a good proportion of the labourers being natives of Ireland. It is estimated that there are 12,000,000 head of cattle in the province. Great attention has been paid within the last few years to the breeding of sheep, which thrive remarkably in this climate. The old breeds were very inferior animals, but they have been greatly improved, mainly through the skill and enterprise of three or four English sheep-farmers. The number of sheep now in the province is estimated at 6,000,000, of which a third are of the improved breed. There are in the province several 'Saladeros,' or vast establishments at which the cattle are slaughtered, the flesh salted and dried, or boiled down for tallow, and the skins prepared for exportation; some of the vats at these 'Saladeros' will contain the carcasses of 250 oxen. Very large quantities of horses are kept on the plains in a semi-wild state. In 1851 the exports from Buenos Ayres amounted in value to 2,126,705*l.*; the value of the hides exported being 1,300,570*l.*, of tallow, 240,800*l.*, of wool, 219,200*l.* The imports in 1851 amounted to 2,110,000*l.*; of which the imports from Great Britain, chiefly of cotton and woollen goods, silks, hardware, iron, cutlery, and glass, amounted to about 900,000*l.*; from France, chiefly of wines, fine cloths, silks, laces, gloves, and fancy articles, to about 500,000*l.*; and from the United States, chiefly of spirits, provisions, coarse cloths, soap, and candles, to about 200,000*l.* There is also a

very large coasting trade in fruits, &c., brought down to the market at Buenos Ayres, in vessels constructed for the service, and chiefly the property of Italians and Frenchmen. As Buenos Ayres alone of the provinces of the Argentine Confederation has a coast-line, and consequently was thus brought into connection with foreign nations, the provincial government, though not by express arrangement, from the first carried on the business of the Confederation with foreign powers. It also sought to assume to itself the monopoly of the external commerce, by strictly closing the navigation of the Paraná to foreign vessels. The endeavour to maintain this political and commercial supremacy has led to protracted wars with foreign powers, as well as with the other provinces, as has been already noticed in our account of the ARGENTINE CONFEDERATION. It is therefore only necessary to add here that the state of siege, which in that article Buenos Ayres was said to be enduring, has since been raised, and commercial relations have been resumed; that a treaty has been agreed upon between General Urquiza, as president of the Argentine Confederation, and the governments of Great Britain, France, and the United States, for the opening of the Paraná and Uruguay, and establishing a protectorate over the island of Martin Garcia, which commands the entrances of these rivers; and that Buenos Ayres has published a formal protest addressed to "all European governments," against that or any such treaty. The differences between Buenos Ayres and the other provinces remain of course still unsettled. The tenacity with which Buenos Ayres clings to its commercial policy is easy to be understood, when it is stated that nearly the whole of the revenue required for carrying on its government, and meeting the demands of its creditors, is obtained from its custom-duties; and that while the Paraná remained closed to foreign vessels, the entire import and export trade of the riverine provinces, as well as the interior, had to be supplied through the port of Buenos Ayres. According to the constitution, the executive consists of a governor, or captain-general, as he is styled, aided by a council of ministers appointed by himself. He is responsible to the junta, or legislative assembly, by whom he is elected. The junta itself consists of 44 deputies, one-half of whom are annually renewed by the people.

There are few towns of any importance in this province except the capital BUENOS AYRES. The next largest city is that of *San Nicolas de los Arroyos*, which is well situated on high ground on the Paraná, about 190 miles from Buenos Ayres, and has about 8000 inhabitants. The town covers a considerable space, in consequence of the better houses having large fruit gardens attached. The streets, which are built at right angles, have brick foot-ways. The church in the great square has a large wooden cross opposite to its entrance. Near it are the barracks. There are schools for boys and girls. The town has a good deal of trade; and has been steadily improving for some years. *San Pedro*, population about 1000, is another of the towns on the Paraná, which appears capable of carrying on a considerable trade. *Tandil* is a small place, situated at the foot of a range of rocky hills, about 210 miles S. by W. from Buenos Ayres, which serves as a fort against the Indians, and to supply the wants of the surrounding country. *Chascamas*, about 90 miles S.E. from Buenos Ayres, adjoining the largest lake of the same name, was once a place of some trade, and contained upwards of 4000 inhabitants, but became greatly reduced during the late civil wars. It has a large but now partly ruinous church, and several stores and shops kept by Europeans.

(Sir Woodbine Parish, *Buenos Ayres*, new edition; MacCann; Gerstaecker, &c.)

BUENOS AYRES, the capital of the province of Buenos Ayres, and the chief city of the Argentine Confederation, in South America, is situated in 34° 36' 29" S. lat., 58° 10' 11" W. long., on the south bank of the upper part of the wide estuary of the La Plata River, about 150 miles from the place where it enters the sea. The population of the city in 1825 was 81,136, it is now estimated at about 120,000.

The La Plata at Buenos Ayres is about 36 miles wide, so that Colonia, a small place on the opposite bank, is only visible from the more elevated places in the town, and then only in very clear weather. Though the estuary has a considerable depth in the middle, it grows so shallow towards its south bank, that large vessels are obliged to remain in the outer roads, about seven miles from the shore; small vessels enter the inner roads, called 'belizas,' where they are still two miles from the town. The beach itself is extremely shallow; even boats cannot approach nearer than from 50 yards to a quarter of a mile, according to the state of the tide, and persons as well as goods are landed in rudely constructed carts drawn by oxen. When it blows fresh the surf on the beach is very heavy, and often causes loss of life.

The city stands on a high bank for about two miles along the river, and has a handsome appearance at a distance. Between the city and the water's edge is a space of considerable width, rarely covered by the tides, on which General Rosas, in 1847, commenced the construction of a great sea-wall, which was intended to stretch northward from the fort the whole length of the city, and to be planted with trees, so as to form a grand esplanade. Though it remains at present unfinished, it still forms a favourite promenade. On the beach, about the centre of the line of houses, is the fort or castle, the walls of which extend to the water's edge, and are mounted with cannon. Its buildings are appropriated to public offices, and the residence of the

president of the republic. About a mile lower down the high bank suddenly turns inland, leaving a vast level plain along the shore, traversed by a little stream, which makes a good harbour for small craft, its mouth forming a kind of circular basin.

Behind the castle is the Plaza de la Victoria, a great square, which occupies a considerable space; it is divided into two parts by a long and low edifice, which serves as a kind of bazaar, and has a corridor along the whole length of each side, which is used as a shelter for the market people. One side is occupied as a market. The opposite side, which is much larger, is a kind of 'place d'armes,' and contains a very fine edifice, called the 'cabildo,' or town-house, in which the courts of justice hold their sessions, and the city council, or cabildo, meets. Near the centre of the square is a neat pyramid, with an emblematic figure at each corner, erected in commemoration of the Revolution, by which the country was freed from the dominion of Spain.

There are in the city fifteen churches, of which the principal is the cathedral, which of itself covers almost a whole square. The front is a modern portico of 12 Corinthian columns. It is surmounted with a large and lofty dome. The interior is very splendid. San Domingo, San Mercedes, San Francisco, and the Recoleta are all large and handsome buildings, but of a somewhat gloomy and neglected aspect. In the time of the Spaniards these churches were ornamented with a profusion of gold and silver, but the revolutionary wars have drained them of their wealth. For the use of British subjects, who are very numerous, a church was erected some years back, at a cost of about 4000*l.*, half of which was contributed by the British government; it is capable of holding about 600 persons, and the service is conducted according to the rites of the Church of England. The Scotch, who number in the city and suburbs about 1000, have a Presbyterian chapel which holds about 400 persons. A Methodist chapel was erected in 1842, at a cost of 2250*l.*, which is used by all sections of British Dissenters. The Germans number about 800; the Protestant portion of them have a chapel in connection with the Evangelical Church of Prussia. In connection with all these Protestant places of worship are schools for the children of both sexes. For a long time these were flourishing establishments, but by a series of measures, commencing in 1844, the government has placed them under such severe restrictions, including a very oppressive degree of police surveillance, that their efficiency has been seriously impaired, and their existence continually imperilled. A Protestant cemetery has a neat gothic chapel. There are general hospitals for the sick, and numerous benevolent institutions, supported by both Roman Catholics and Protestants.

The streets of the city are at regular intervals, and are open at right angles to the river, with a rather steep ascent from the shore. They are straight and regular; a few of them near the piazza are paved, but the greater part are unpaved and very dirty. Besides the Alameda, or public walk on the beach, there are also public pleasure-grounds, lately opened at a short distance from the city.

In the neighbourhood of the plaza there are many houses of two stories, but towards the outskirts the houses have only one story. The most noticeable of the commercial buildings are the 'baraccas,' or ware-houses, which are very extensive establishments, well provided with hydraulic presses, &c., but the buildings themselves are little better than long sheds. Though the trade of the city is very considerable, the streets have a dull and listless appearance, especially to one accustomed to the hustle and activity of an English commercial town. The extent of the commerce and its character are sufficiently indicated under ARGENTINE CONFEDERATION and BUENOS AYRES, (Province of). Hotels, boarding-houses, and stores are numerous; several of them are kept by English and Americans.

In the vicinity of the city are many extensive sheep farms and Saladeros, and a large establishment for the preparation of preserved meats.

No other town of South America has so many institutions for the promotion of science. The university is attended by about 450 students, and possesses a library of about 20,000 volumes. There are also a collection of objects of natural history, an observatory, a separate school of mathematics; a public school, a school for painting and drawing; a literary society for the promotion of natural philosophy and mathematics, an academy of medicine, and another of jurisprudence, a normal school for mutual instruction, a patriotic union for the promotion of agriculture, besides some charitable societies. Several newspapers are published in the town.

The majority of the inhabitants are the descendants of Spaniards, who have settled in the country during the last three centuries. The number of free negroes or slaves is small; that of native Indians is greater; they compose the larger part of the lower classes, and speak only Spanish, having entirely forgotten the language of their ancestors.

The town was founded by the Spaniards in 1535, but in 1539, being obliged by the neighbouring Indians to abandon it, they retired to Assumption, on the Paraguay. When the Spaniards were firmly settled in the country they rebuilt the town in 1589, and since that time it always has been increasing, though slowly. The climate is healthy, as its name Buenos Ayres (good air) implies, an appellation which was bestowed on it by its founder Mendoza.

BUFFALO, United States, the chief town of Erie County, State of New York, is situated at the head of Niagara River, near its right bank, in 42° 53' N. lat., 78° 55' W. long., distant 325 miles W. from Albany by railway, and 364 miles by canal. The population of the city of Buffalo in 1810 was 1508; in 1825 was 5140; in 1830 it was 8653; in 1840 the number of inhabitants was 13,213; in 1850 it was 42,260. The rapid increase of the town may be ascribed to the circumstance of the Erie Canal connecting the Hudson River at Albany with Lake Erie having its termination at this port.

The estuary of Buffalo Creek, on the right bank of which the town is situated, and which here falls into Lake Erie, constitutes the commodious and safe harbour of Buffalo. Niagara River is the channel of communication between Lakes Erie and Ontario. Buffalo stands on elevated ground, commanding varied and picturesque views of land and lake scenery. The town is surrounded on three sides by a fine alluvial plain. The houses are well built, and are arranged in numerous broad and regularly laid-out streets and three handsome public squares. The streets are lighted with gas. There is a good supply of water. The churches, which belong to about twelve different denominations, are about forty in number. The Roman Catholic cathedral is the most striking of the ecclesiastical edifices. Besides a full supply of common schools, which are open to all children, there are numerous educational seminaries of a higher class. Buffalo possesses a university, chartered in 1846, connected with which is a Medical school. The Young Men's Association is a kind of literary institute, possessing a library of about 7000 volumes, a small mineralogical and zoological museum, and a good reading-room. The German Young Men's Association is a similar institution with a library, chiefly consisting of works in the German language. Fifteen newspapers are published in Buffalo, including four daily papers. There are numerous benevolent institutions in the city, of which may be named the Orphan Asylum, the City Hospital, the Female Orphan Asylum, the Hospital of the Sisters of Charity, and the Association for the Relief of the Poor. A considerable trade is carried on at Buffalo. Large quantities of wheat, Indian corn, flour, butter, &c., are imported.

The number of travellers passing through Buffalo is at all times very great; it forms the port whence persons going to the northern part of the western states first embark upon the lakes. Buffalo was attacked by the British in 1813, and so entirely destroyed by fire, that of about 200 houses of which the place then consisted only one escaped. The lapse of forty years has made a vast change in the aspect of the town, which is now an important commercial port, and the twelfth in amount of population of the cities of the United States. The railway communication possessed by the town is abundant, reaching to Albany, to New York, to Canada, and in various directions to the interior of the country. The Grand Erie Canal, the main source of the prosperity of Buffalo, was commenced in 1817 and finished in 1825; it is 363 miles long, with a surface width of 40 feet, and has 84 locks. The cost of its construction was about ten millions of dollars; large tolls are received from the traffic carried along its waters. In 1850 there were entered at the port 719 vessels of 101,992 tons burden, and there cleared 748 vessels of 103,593 tons. The arrivals in the coasting-trade were 3558 vessels of 1,255,480 tons, and the clearances 3599 vessels of 1,263,907 tons. The value of the merchandise carried along the Erie Canal amounted to between eight and nine millions of pounds sterling; the goods from Albany by railway amounted to about a million and a quarter.

BUG RIVER. [Bou.]

BUGEY, a district of France, formerly included in Burgogne, is bounded S.E., S., and S.W. by the Rhône, which here makes a considerable bend. Belley was its capital. It now forms the arrondissement of Belley and Nantua in the department of AIX, under which head the nature and products of the country are noticed. The towns of Gex, Nantua, and Seyssel were also in Bugey. Bugey formerly was subject to the counts of Savoy, by whom it was ceded to France by the treaty of Lyon, A.D. 1601.

BUILTH, Brecknockshire, a market-town and the seat of a Poor-Law Union in the parish and hundred of Builth, is situated on the right bank of the river Wye, in 52° 9' N. lat., 3° 3' W. long.; distant 14 miles N. from Brecknock, and 173 miles W. by N. from London. The population of the parish of Builth, otherwise Llanvair-y-Buallt, in 1851 was 1158. The living is a perpetual curacy in the archdeaconry of Brecon and diocese of St. David's. Builth Poor-Law Union contains 31 parishes and townships, with an area of 142,720 acres and a population in 1851 of 8346.

In the 29th of Henry III. the castle of Builth, a fortress of great strength and importance, was in the possession of Roger Mortimer who was dispossessed of it by Llewellyn prince of North Wales. Llewellyn was afterwards betrayed by the garrison of this castle, whence the epithet of 'traitors of Builth' was affixed by the Welsh to the townsmen. In the early part of Henry VI's reign the castle was held by Edmund, the last Mortimer Earl of March, after whom it devolved on his brother-in-law, Richard, earl of Cambridge. It afterwards became vested in the crown, and has since passed through various hands to the Gwynne family. The castle occupied a height overlooking the river Wye. The only portion now existing is a small fragment of the north wall.

The town of Builth consists chiefly of two streets which meet in an acute angle, and thence form one street, extending along the road towards Llandoverly. The streets are narrow; the town is irregularly built, but having many rude old-fashioned houses it has a somewhat picturesque appearance. Across the Wye is a handsome stone bridge of six arches, erected in 1770 at the joint expense of the counties of Radnor and Brecknock. The parish church, dedicated to St. Mary, was with the exception of the tower, which is ancient, rebuilt in 1793. About two miles south from Builth is a new church for the parish of Llandoverly. The Baptists, Independents, and Calvinistic and Wesleyan Methodists have chapels in Builth. There is a Free school for 36 boys and 12 girls. The market-day is Monday. Fairs are held on January 27th, October 2nd, and December 6th, for agricultural produce and general wares. A county court is held in the town. About a mile from the town are mineral springs, called Park Wells, which on account of their medicinal qualities are visited in summer by invalids in considerable numbers. The river Wye and its tributaries contain excellent trout and salmon, and Builth is much resorted to by anglers. The scenery around the town is very beautiful.

(Jones, *History of Brecknockshire*; Cliffe, *Book of South Wales*; *Land We Live In*, vol. I., the Wye.)

BUI TENZORG. [JAVA.]

BUJERIAH. [ALGÉRIE.]

BUKOWINA, sometimes written *Buckowine*, formerly a subdivision of Austrian Galicia, has been constituted a crownland of the Austrian empire by the Imperial Patent of December 31, 1851. It is bounded N. and N.W. by Galicia, E. and S. by Moldavia, and S.W. by Transylvania. Its greatest length from the Dniester, which forms the northern boundary to the Moldavian frontier, is about 95 miles; its greatest breadth from the junction of the Rokitna with the Pruth on the eastern border to the Czeremosz on the west near 48° N. lat., 25° E. long., is about 73 miles. The area, according to the imperial cadastral returns of 1850, is 4014 square miles, and the population, according to the census of 1850-1 was 380,826.

The surface is almost entirely covered by high mountain ranges, offsets of the Carpathian chain. It belongs entirely to the basin of the Danube, with the exception of a narrow strip along the Dniester. A great number of rivers take their rise in the Bukowina, the largest of which are the Czeremosz before mentioned, the Sereth, the Suczawa (a feeder of the Sereth), and the Moldawa. The Bistricza, a feeder of the Moldawa, crosses the southern angle of the Bukowina; and the Pruth traverses the northern district. Along most of the rivers there is a good breadth of fertile land; but in many parts they flow through large marshes. The district between the Pruth and the Dniester is almost entirely covered with oak forests. In the rest of the crownland there are extensive forests of pine, fir, beech, and common woods. There is comparatively but a small proportion of the surface adapted for agriculture; but this is not neglected where the soil admits of it. Corn and potatoes are grown; also flax, hemp, and pulse. Horned cattle are reared in considerable numbers. Honey and wax are important products. But a large proportion of the male population is engaged in wood-cutting and mining. The mineral products are silver, lead, salt, copper, and iron. Particles of gold are found in the sands of the Bistricza. The industrial establishments comprise metal foundries and smelting furnaces, salterns, glass-works, potash factories, and brandy distilleries.

The Bukowina formed, until the patent above mentioned was issued, the circle of Czernowicz, in the eastern part of Galicia. Its chief town is Czernowicz (pronounced *Tchernowitch*), which is situated on a hill on the right bank of the Pruth, 147 miles S.E. from Lemberg, and has about 7000 inhabitants. The town is the residence of a Greek bishop and a Greek consistory; it has a Greek cathedral and several other churches; a college; manufactures of clocks, silver plate, hardware, and carriages; and an active trade with Germany, Moldavia, and Wallachia. Among the other towns may be mentioned *Suczawa*, situated 43 miles S. from Czernowicz on the river *Suczawa*, near the eastern frontier, which has four churches, a gymnasium, a synagogue, and about 5000 inhabitants; and *Sereth*, also on the eastern frontier, and about midway between Czernowicz and *Suczawa*. *Sereth* stands on the river of the same name, and has three churches and about 4000 inhabitants.

The principal roads of the Bukowina diverge from Czernowicz; one north-westward up the valley of the Pruth leading to Lemberg, and another southward near the eastern frontier through *Sereth* and *Suczawa*, whence it runs west up the valley of the Moldawa and across the Carpathians by the Borgo Pass to Bistritz, in Transylvania. The Bukowina was included in Dacia; it fell successively under the Huns, Goths, Sarmatians, and Hungarians. Under the sway of the Hungarian kings it formed a dependency of Transylvania till the 15th century, when it was ceded to Turkey and incorporated with Moldavia. In 1777 it was ceded by Turkey to the empress Maria Theresa, governed for a few years by military regulations, and then annexed to Galicia in 1786.

BULAMA. [BESSAROGS.]

BULGARIA, a country of Turkey in Europe, is bounded N. by the Danube, which separates it from the principalities of Wallachia and Moldavia, and from the Russian province of Bessarabia; E. by

the Black Sea; S. by the crests of the Emineh and Khojah Balkan; and W. by the principality of Servia, from which it is partially divided by the Timok, a feeder of the Danube. The area is above 32,000 square miles, and the population according to the estimate of 1844 was about 3,000,000, the majority of whom are adherents of the Greek Church. The area is thus distributed, as nearly as we can ascertain:—Pashalic of Silistria, including the territory of Varna, 13,000 square miles; pashalic of Nicopoli, 10,000 square miles; pashalic of Widdin, 4500 square miles; and a portion of the pashalic of Sophia, 4500 square miles. These divisions however do not coincide with the present Turkish divisions of Bulgaria, which are Widdin, Nich or Nissa, and Silistré. We retain however the old divisions in our maps.

The Danube runs with many windings, but in the general form of a bow, with the convex side towards Bulgaria, all along the northern boundary to the mouth of the Sereth, whence it turns to the eastward and enters the Black Sea by several mouths. [BESSARABIA; DANUBE.] Reckoning all its windings the river flows along the province for not less than 500 miles, and is navigable for steamers and large vessels all the way. It forms numerous small islands in its course and a delta at its mouth; and on both sides of the river at intervals are extensive marshes, which in the dry season are very unhealthy and infested by mosquitoes.

The Balkan Mountains, the ancient *Hæmus*, rise on the southern frontier to about 6000 feet above the sea. They sink down rapidly on the south side; on the north the slope is more gradual. The chain is traversed by many defiles and passes. [BALKAN.] From its crest numerous ramifications extend northward to the plain of the Danube. These offsets are generally well wooded or covered with rich pasture; and they are separated by valleys or small plains drained by feeders of the Danube. The principal of these rivers, commencing on the Servian frontier and proceeding eastward, are the Timok, the Ogust, the Skitul, and the Isker, which cross the pashalic of Widdin; the Wid, the Osma, the Jantro (which passes the town of Tirnova), and the Lom, which traverse the pashalic of Nikopoli, sometimes called the sanjak of Rustchuk; and the Drista, the Taman or Jemurlu, and the Kara-Sn, which drain that part of the pashalic of Silistria which belongs to the basin of the Danube. The Kamtchik, which rises west of the Selimno Pass of the Balkan, flows eastward through a longitudinal valley between parallel ranges of the Balkan, and enters the Black Sea between Cape Emiueh and the port of Varna. In the mountains that screen the valley of the Kamtchik on the north is the town and fortress of Shumla. The most important of the other tributaries of the Black Sea in Silistria is the Parawadi, which passes through the marshy lakes of Devno and falls into the port of Varna. The Parawadi River is identified by General Jochmus in his 'Notes of a Journey to the Balkan' with the ancient Lyginos; and the site of Alexander's battle with the Triballi (B.C. 336) he considers to be the isthmus between the two lakes of Devno, a little west of the village Buyuk-Aladin. Not far from the same spot, but nearer Varna, is the site of the great battle fought between the sultan Murad and King Wladislaus in 1444. The site is easily identified by two large mounds called Sandshak Tópé and Murad Tópé.

The coast of Bulgaria, or Silistria, from Cape Emineh, the eastern extremity of the Balkan, to Cape Kalakria or Gulgrad Burnu, north of Varna, is generally high; to the northward of this last point the shore is for the most part flat, low, and marshy. The most important places along this coast are the city, port, and fortress of Varna, and the little town and roadstead of Kustenjuh, which is only about 30 miles distant from the point where the Danube makes the great bend to northward. It has been lately proposed to cut a navigable canal across the isthmus, in order to avoid the tedious navigation by the mouths of the Danube. Between the base of the Baba-Dagh, an elevated mass in the extreme north of Silistria, and the sea lies the large lake of *Rascein*, or Razem, which is 35 miles long from north-west to south-east, and about 15 miles wide where broadest. It is separated by a narrow strip of land from the St. George mouth of the Danube, from which a little arm called *Dunavitz* enters the lake. The lake itself communicates with the Black Sea by two principal channels called the *Jalova* and the *Portitcha* mouths. On the west shore of the lake is the town of *Baba-Dagh*, with 10,000 inhabitants, seven mosques, and extensive salt-works. The fishery of the lake is important. At the northern base of the Baba-Dagh range, and on the right bank of the Danube, is the fortress of *Issatscha*, near which the Russians in 1828, and *Darius* about 2300 years before them, passed the Danube. In consequence of the Russians having neglected to keep the *Sulina* mouth of the Danube in a navigable state, attention has been turned to the St. George mouth, which belongs to Silistria, but is by treaty open to all trading vessels, and to the war ships of Austria and Russia. No vessel of any size however can easily enter it, owing to the banks of mud which have accumulated round its embouchure, and to the shallowness of the stream from the deposits of the river. It has however been lately surveyed with the view to make it navigable, and to free the trade of countries along the lower Danube from the vexatious regulations of the Russians.

A considerable portion of the sanjak of Sophia, now called by the Turks (we believe) the pashalic of Nich or Nissa, forms part of

Bulgaria. This district of Bulgaria extends southward to the point where the Eminch Balkan, the Despot-Dagh, and the Khojah Balkan meet near the source of the Iker and the Sulu Derbend, or Pass of Trajan. The Iker here traverses a beautiful plain, in which stands the populous and well-built city of Sophia, famous for its hot springs. Into the plain from the north-west a high valley screened by the Khojah Balkan and Mount Tesovitch opens; in its northern part stands the city of Nissa, in a fertile country watered by the Nisava, a feeder of the eastern Morava. Near Nissa is the Tower of Skulls erected as a trophy of victory gained over the Servians by the Turks under Kumurgee.

The plains of Bulgaria are in general well cultivated, and the hillslopes are covered with vineyards. On the Thracian side of the Balkan (excepting the valley of the Maritza) cultivation is generally confined to the immediate circuit of the villages; but in Bulgaria wide tracts are subdued by the plough, and large quantities of corn are produced by the industrious inhabitants. The largest quantities of corn are grown in Sillistria and in the plains near the Danube. A good deal of flax, hemp, and tobacco are grown, large quantities of wine are made, and fruits are abundant. Roses are cultivated very extensively for making perfumes. Timber cut in the mountain forests is floated down the rivers for export to the towns on the Danube. For want of good roads however Bulgaria, like all other parts of the Turkish empire, has comparatively but a limited trade. The Bulgarians however seem to enjoy a rude abundance; it is rare to see a beggar, and their well-built dwellings, and neat fields and gardens present a most favourable contrast to the mud-plastered huts of wattle and the neglected or rudely-cultured steppes on the Wallachian side of the Danube.

The soil of Bulgaria is in general fertile and well watered; the section between the town of Sistova and the Balkan however is deficient in water, although it yields grass abundantly. The best cultivation is seen in the districts extending from the western part of the pashalic of Sillistria to the pashalic of Widdin: this region is inhabited chiefly by Bulgarians, a race always remarkable for industry and for their pacific disposition, notwithstanding their long oppression under the Turkish feudal system and the rapacity of the pashas. But the Tanzimat has now put the Bulgarian on a level in point of law with the Turk (in other respects he was always his superior), and the feudal system has been swept away; so that Bulgaria, at all times confessedly the best cultivated part of Turkey, will probably soon reach a high degree of prosperity and improvement.

That part of Sillistria which skirts the Black Sea is sometimes called the pashalic of Varna, and is inhabited chiefly by Turks and Tartars, who barely raise enough corn for their own consumption, and are chiefly occupied in rearing cattle. The fine plain south from the Baba-Dagh to the neighbourhood of Kustenjé is inhabited by Bulgarians, and by a goodly number of Russian colonists from Bessarabia, who raise large quantities of hard wheat of very superior quality. In the rest of Sillistria the country is well cultivated throughout, and yields an abundant supply of provisions of all kinds. Hard wheat of two kinds, distinguished by the names of 'arnaut' and 'colons,' is grown very abundantly. Barley also of fine quality is extensively grown. The other crops are maize, beans, and hemp, which in years of drought do not succeed so well. Several thousand oxen are slaughtered in the city of Sillistria for the tallow, which is sent to Constantinople.

The eastern part of the pashalic of Nicopoli is well wooded as far as the neighbourhood of Rustchuk; it also possesses abundant pasturage, and in ordinary years, when not visited by long droughts, it is very productive in corn. Wood for building and oak planks of superior quality are exported. Between Rustchuk and Sistova the plain of the Danube is occupied densely and solely by Bulgarians, and presents a fertile and pleasing aspect. Besides corn the chief products are hemp, flax, attar of roses, and tallow. Sistova is considered the capital of the Bulgarians; it is one of the most important towns on the right bank of the Danube, and carries on a considerable trade with Wallachia. Westward from Nicopoli, and throughout the greater part of the pashalic of Widdin, the country is more thinly peopled, habitations being met with only where there is water, and agricultural produce is raised merely sufficient for the local consumption. The plain of the Danube here partakes of the nature of a steppe, and cultivation prevails more in the mountainous districts. Indeed the cultivation of corn for export was long effectually checked in this part of Bulgaria by a restrictive system, by which the farmers could not sell their surplus produce without the pasha's permission, and at a price fixed by him. Sometimes the pasha appropriated the surplus to himself, ground it at his own mills, and then forwarded it for sale to Constantinople. These regulations have been very injurious to the trade of Widdin, which however has a considerable commerce in manufactured goods imported from Austria.

The tallow trade causes the rearing of large numbers of cattle in Bulgaria. Large herds of oxen to the number of 40,000 or more are fattened during the summer months, and slaughtered during the autumn, in the neighbourhood of Varna, Sillistria, Rustchuk, and other towns, for their hides and fat; for beef is seldom eaten by the Moslems, whose favourite animal food is mutton and goat. There is a depot at Varna for the tallow and other products of the province.

Owing to the difficulties, tediousness, and expense of the river navigation, and vexatiousness of the Russian quarantine regulations, the corn and other products of Bulgaria are generally brought by land-carriage to Varna for export even from the plain of the Danube. Corn however for export to Constantinople is frequently conveyed in 'kirlaches,' or Turkish lighters of from 30 to 100 tons, which are very numerous on the river, to Matzin, a small port opposite Brailoff, and there embarked in larger vessels. From the roadstead of Kustenjeh also large quantities of corn are occasionally exported; but the exposed condition of this port since the destruction of its mole (built by Constantine the Great) is a great obstacle to its trade. Its position however has been at all times considered of great importance, as it is only 30 miles distant from Czenawoda on the Danube. A canal was projected in 1837 to unite the two points, and to give a short and direct route to the Danube trade by avoiding the great northern bend of that river, and the intricate shoals and mud-banks in its mouth. This project has been recently revived, and will probably be one day executed.

Besides horned cattle, including buffaloes, Bulgaria rears a great many horses of inferior breed, sheep and goats in great numbers, and swine for the consumption of the Christian part of the population; pork to the Moslem as to the Jew is an abomination. The manufactures of the country are all of a coarse description, and for home consumption. The imports are manufactured goods, coffee, spices, sugar, salt, &c.

The principal towns of Bulgaria are described in this work under separate heads:—WIDDIN, NICOPOLI, SISTOVA, RUSTCHUK, SILLISTRIA, RASSOVA, TIRNOVA, SOPHIA, VARNA, KUSTENJEH, SHUMLA, NISSA, &c.

Bulgaria comprises the greater part of ancient Mœsia, which was occupied in the time of Darius by the Getæ, and in the time of Alexander by the Triballi. It is a very interesting country for its historical associations, to illustrate which there is great need of enlightened exploration. General Jochmus, in the work already quoted, has thrown great light upon the history of the expeditions of Darius and Alexander in this country. He supposes Darius to have crossed the Balkan by the pass to the north-west of Mesembria, and to have marched northward to Issatecha by the same route that Marshal Diebitsch led the Russians in an opposite direction in the campaign of 1828. Alexander, he says, fought the action with the Thracians at the foot of the defile of the Balkan to the north of Aïdos; thence crossed the defile to the Lygius, near the town of Parawadi; and after his victory over the Triballi, before mentioned, marched in three days to the Danube, which he is supposed to have crossed at or near Sillistria, for the purpose of attacking the Getæ. Bulgaria contains some Roman remains: the great Roman road connecting Trajan's Bridge over the Danube with Dyrrachium on the Adriatic crossed the valley of the Timok, the ancient Timacus, above Widdin, and is still in parts entire. On the road from Shumla to Rustchuk numerous ancient mounds covered with forest-trees are passed at a place called Lazgarat, marking no doubt the site of some great ancient battle.

Mœsia was originally inhabited by a Scythic or Slavonic people. It was subjected by M. Licinius Crassus about B.C. 29 to the Romans, who built entrenched camps along the Danube; one of these is still visible near Widdin. In the 3rd century it was invaded by the Goths, whose incursions were not thoroughly checked till the time of Aurelian, who planted several Roman colonies in the province. It was next overrun by the Visi-Goths, to whom Theodosius I., after the defeat and death of Valens at the great battle of Adrianople in A.D. 378, ceded the country; and a part of those who settled in the western part of it are known in history as the Mœso-Goths. In the 6th century Slavonian tribes spread over Lower Mœsia, and in the 7th century Upper Mœsia was given by Heraclius to the Serbs and other Slavonic people, to protect the empire in that direction against the Avars.

The Bulgarians, a Tartar people from the banks of the Volga, subdued the Slaves of Lower Mœsia about the middle of the 7th century; but became in a short time so blended with the Slavonic part of the population, that before the commencement of the 9th century they had adopted the Slavonic language and customs, the name of the race which gave its designation to the country alone remaining. They were governed by kings who put themselves under the protection of the Greek emperors. This alliance however they renounced in 1185, their king Assan remarking that the Greek empire needed protection more than Bulgaria. Long wars with Hungary desolated the country between this and the 13th century, when Bulgaria was subjugated by Stephen IV. about the time that the Turks made their first appearance in Europe. In 1392 the Turks made the Bulgarian king Susman prisoner, and the people lost their independence. There are many Bulgarian colonies in Thrace and in the countries along the left bank of the Lower Danube.

In consequence of the Russian occupation of the principalities of Moldavia and Wallachia in 1853, the line of fortresses along the left bank of the Danube and the defiles and fortresses in the Balkan range were occupied by a large Turkish army, divisions of which crossed the Danube opposite Kalafat and Oltenitza, and obtained some advantages over the Russians.

(Arrian, l. 1-5; Herod. iv.; *Dictionary of Greek and Roman Biography*; General Jochmus, *Notes of a Journey to the Balkan*, 1853; Macgregor, *Commercial Statistics*; *Frontier Lands of the Christian and Turk*; Ubicini, *Lettres sur la Turquie*, Paris, 1853.)

BUNBURY. [WESTERN AUSTRALIA.]

BUNDELCUND, or **BOONDELA**, a division of the province of Allahabad, in Hindustan, lies between 24° and 26° N. lat., and 77° and 82° E. long. This territory is bounded N. by the river Jumna, E. by Baghulund, S. by Malwa and Berar, and W. by the possessions of Scindia. In its form Bundelund is an irregular parallelogram: its greatest length is in the direction from south-east to north-west; its area is nearly 24,000 square miles: the population is about 2,400,000. There are three ranges of mountains in Bundelund, which extend in continuous lines parallel to each other. One of these ranges, which forms part of the Vindhyan chain, is less sterile and rugged than the part of the same chain which passes through Bahar. On the summit of this range a considerable extent of table-land occurs, which is 1200 feet above the level of the Gangetic plain. The second mountain range, called the Panna Ghauts, runs parallel to the Vindhyan chain at the distance of about 10 miles. The third range, called the Bandair, occurs at about an equal distance beyond the second to the north-west, and comprises the most elevated part of the province. The soil of Bundelund presents a very great variety. The valleys and lowlands consist principally of rich black loam: the hilly country and elevated table-land are in great part composed of poor and sterile soil. The fertile tracts, when assisted by irrigation, produce abundant harvests of every kind of grain and plant that is cultivated in Hindustan: the principal produce of the poorer lands is millet. Iron is found among the hills, where also catechu, or terra Japonica, is produced in abundance. The principal rivers of Bundelund are the Betwah, the Desan, and the Ken or Canc. Neither of them is navigable. There are in different parts of the country some very large reservoirs for purposes of irrigation.

The principal towns are Banda, the capital; Bejour, Jeitpore, Jhansi, Chatterpore, Callinger, and Tehree. *Banda* is situated in 25° 30' N. lat., 80° 20' E. long., about 90 miles W. from Allahabad. This town has much increased of late years. The cotton brought for sale to its market is of superior quality. *Bejour* is in 24° 38' N. lat., 79° 27' E. long. *Jeitpore* is in 25° 17' N. lat., 79° 32' E. long. *Jhansi*, the capital of a petty Boondela state under British protection, is situated in 25° 32' N. lat., 78° 34' E. long. This town is the centre of an active trade carried on between the Deccan and the towns of the Doab: it contains a considerable carpet manufactory; and large quantities of the warlike weapons used by the Boondela tribes, such as bows, arrows, and spears, are made here. *Chatterpore*, in 24° 56' N. lat., 79° 35' E. long., is about 135 miles W.S.W. from the city of Allahabad: it has much decayed of late years. The manufacture of coarse cotton cloths, used for wrappers, is carried on. *Callinger*, a fortified town in 25° 6' N. lat., 80° 25' E. long., stands on a lofty mountain, the base of which is 10 miles in circuit. The walls include the whole summit of the hill, and are composed of rough uncut stones. *Tehree*, or *Teary*, on the north-west frontier of Bundelund, in 24° 45' N. lat., 78° 52' E. long., is the residence of a Boondela chief or raja, who possesses several villages, and has a considerable revenue.

The British connection with the chiefs of Bundelund originated in an arrangement concluded with the late Peishwa on 31st December 1802. The Bundelund states are thirty-three in number: of these states five are protected and tributary, including an area of 4476 square miles, with a population of 399,500: their aggregate annual revenue is about 183,464*l.*; the amount of tribute about 10,388*l.*; the military force maintained by them amounts to about 9500 men. The other states, numbering twenty-eight, have in the aggregate an area of 6450 square miles, a population of 630,300, and a revenue of 316,658*l.* Their military resources include 261 artillery, 2380 cavalry, and 20,975 infantry. The Nawah of Banda, a descendant of the former governors of Bundelund, has no hereditary dominions, but receives an allowance of four lacs of rupees (40,000*l.*) per annum from the British government, and maintains a force of 69 artillery, 167 cavalry, and 207 infantry.

BUNDER ABBAS. [GOMBRON.]

BUNGAY, Suffolk, a market-town in the parishes of Holy Trinity and St. Mary's, Bungay and hundred of Wangford, is situated on the Waveney, which sweeps round the town in the form of a horse-shoe, and here separates Suffolk from Norfolk, in 52° 27' N. lat., 1° 23' E. long.; 40 miles N.N.E. from Ipswich; and 109 miles N.E. from London by road; Diss station of the Eastern Union railway, which is 16½ miles from Bungay, is 111 miles from London. The population of the town in 1851 was 3841. The living of Holy Trinity is a vicarage; that of St. Mary's is a perpetual curacy; they are in the archdeaconry of Suffolk and diocese of Norwich. The two parishes of Bungay are united for poor-law purposes, but are not under the operation of the Poor-Law Amendment Act.

The town of Bungay was in ancient times dependent on Bungay Castle, which is supposed to have been erected by the Bigods, the Norman earls of Norfolk. Some ruins of the castle-walls remain. Of the chancel of the old church of St. Mary some vestiges are still standing; and adjoining thereto are the remains of a Benedictine nunnery. Two crosses formerly stood in the market-place. Of these one was taken down in 1810; the remaining one is crowned with a figure of Justice. The church of the Holy Trinity is an ancient edifice with a round tower, supposed by some to be of the time of

Edward the Confessor. St. Mary's church, though said to have been built about 1696, has a north aisle, with a beautiful exterior and a fine west window, which probably dates from the early part of the 15th century. The Roman Catholics, Wesleyan Methodists, Independents, and Baptists have places of worship. The Endowed Grammar school, founded in 1591 had an income in 1837 of 577*l.* a year. The appointment of the master is in the gift of Emmanuel College, Cambridge. There are National and British schools; a savings bank; almshouses for 15 persons: and several charities. Five of the almshouses were erected and endowed in 1848 by a Mrs. Dwyer, "for the widows of unfortunate tradesmen;" the same lady also bequeathed 500*l.* to each of the two parishes, the interest to be expended annually in warm clothing at the discretion of the minister and parochial authorities. A dispensary and a lying-in charity are supported by voluntary contributions; also two clothing societies. The streets of Bungay are well-paved, and the town is lighted with gas. In consequence of an extensive conflagration by which Bungay was nearly destroyed in 1688, the houses are generally of modern date. A building formerly a theatre is now used as a corn-exchange on week days and a Baptist chapel on Sundays. A considerable trade is carried on in coals, malt, grain, and provisions, the river Waveney being navigable up to Bungay for small barges. The market is held on Thursday; there are annual fairs on May 14th and September 25th. Near the town is a large silk-mill; there are also paper- and flour-mills and malt-houses.

BUNKER'S HILL. [BOSTON.]

BUNTINGFORD, Hertfordshire, a small town, and the seat of a Poor-Law Union, chiefly in the parish of Layston and in the hundred of Edwinstree, is situated in 51° 57' N. lat., 0° 1' W. long.; distant 12 miles N. by E. from Hertford, and 31 miles N. from London by road. Ware station of the Eastern Counties railway, which is 10 miles from Buntingford, is distant 24½ miles from London. The population of the parish of Layston in 1851 was 1220. The living is a vicarage held with the perpetual curacy of Buntingford, in the archdeaconry of St. Albans and diocese of Rochester. Buntingford Poor-Law Union contains 16 parishes and townships, with an area of 29,040 acres, and a population in 1851 of 6590. Buntingford obtained the grant of a weekly market in the reign of Edward III. The market was held on Monday, but has long been discontinued. The chapel at Buntingford is a brick edifice erected in the early part of the 17th century. The Independents have a place of worship. The Grammar school founded in 1633 has an income from endowment of about 50*l.* a year, and had 18 scholars in 1851. It has four exhibitions at Christ's College, Cambridge, of 12*l.* each, tenable for seven years. There are National and British schools, a School of Industry for girls, and a savings bank. An hospital provides for four poor men and four poor widows.

BUNZLAU, JUNG, the capital of the circle of Buuzlau in Bohemia, is situated 30 miles N.E. from Prague, on a hill, the base of which is skirted by the Iser; and contains about 5100 inhabitants. It is well built, and has a handsome town-hall, a castle now used for barracks, six churches, some of them handsome structures, two monasteries, a Pietist gymnasium, a high school, an hospital, and besides an extensive cotton factory, manufactories of woollens, leather, soap, &c. It is said to have been founded by King Boleslaf in 975; at least its Bohemian name of 'Mlada Boleslaf' is derived from that monarch. 50° 23' N. lat., 14° 55' E. long.

BUNZLAU, a town in the government of Liegnitz, in Prussian Silesia, lies on the Bober, 25 miles by railway W. by N. from Liegnitz, and is surrounded by a double line of walls and a deep ditch; it possesses three churches (one Lutheran and two Roman Catholic), an orphan asylum and school, an hospital, a seminary for teachers; and manufactures of woollens, linens, stockings, earthenware, &c., and has well-frequented markets for horses, cattle, and grain. Population 7000. Much earthenware is exported. Topazes, agates, chalcidones, and other valuable stones are found in the neighbourhood. A cast iron obelisk in memory of the Russian general Kutusoff, who died here in 1813, is erected in the market-place.

BURA. [ACHÆA.]

BURBURRA. [BERBERRA.]

BURDWA'N, one of the 17 districts into which the province of Bengal is politically divided, is situated to the west of the river Hoogly, between 22° and 24° N. lat., 87° and 89° E. long. Burdwan is bounded N. by Birbhûm and Rajshahy, W. by Midnapore and Ramghur, S. by Midnapore and Hoogly, and E. by Hoogly and Nuddeah. Its area, which is computed at 2400 square miles, is covered with a dense population, supposed to be about 1,500,000, of whom five-sixths are Hindoos. The district of Burdwan, which forms part of the valley of the Ganges, is a level tract. The principal river flowing through it is the Dumdudâh, which is navigable only for a short time during the rainy season. The greater part of the soil is very fertile, and produces abundant crops of sugar, indigo, betel, tobacco, and cotton, besides the cereal grains usually cultivated in Bengal. A considerable quantity of silk is likewise produced. Compared with the surrounding districts, Burdwan has the appearance of a garden. The native zemindars are generally wealthy; the more considerable of them usually reside in Calcutta, leaving their properties to the management of resident agents. The Raja of Burdwan is the most considerable zemindar under the Bengal presidency, his

annual jumma, or rent, amounting to 40 lacs of rupees (400,000*l.*), which amount is said to be less than one-half of the sum collected by him from his tenants. These tenants form a numerous class, who, like the middlemen in Ireland, have divided their holdings among sub-tenants, reserving a profit-rent to themselves. Coal-mines have been worked in this district for many years, but the operations have not been extensive. The extent of the coal-field has not been ascertained, but is known to be great; the mines now worked are in the possession of an English company, whose rights extend over 4 miles of surface. The seam is 9 feet thick, and is found 90 feet below the surface. The coal is brought down the Hoogly to Calcutta, but it is of very inferior quality. Iron ore, and stone suitable for building are also obtained. The town of *Burdwan*, the capital of the district and the residence of the British agent, is situated in 23° 15' N. lat., 87° 57' E. long., about 60 miles north-north-west from Calcutta. The Raja of *Burdwan* resides in the town, in which he has a palace with large gardens.

BURFORD, Oxfordshire, a market-town in the parish of Burford and hundred of Bampton, is situated on an ascent on the right bank of the river Windrush, in 51° 45' N. lat., 1° 39' W. long., distant 18 miles W. by N. from Oxford, and 72 miles W. by N. from London. The population of the township of Burford in 1851 was 1593; of the entire parish 1818. The living is a vicarage held with the perpetual curacy of Fulbrook in the archdeaconry and diocese of Oxford.

Burford was in 752 the scene of conflict between Cuthred, king of Wessex, and Ethelbald, king of Mercia; Ethelbald was vanquished, and his standard, a golden dragon, taken. The scene of the engagement is still called Battle Edge. The town had a charter of incorporation from Henry II. A corporate officer retaining the name of alderman has for the most part the management of the affairs of the town. The market chiefly for corn is held on Saturday; and there are three annual fairs. The county magistrates hold petty sessions in the town. Burford possesses a savings bank.

Burford church, dedicated to St. John the Baptist, is a commodious cruciform structure, chiefly perpendicular; it has a central tower of Norman date, surmounted with a spire in the perpendicular style. The roof of the nave, now much mutilated and altered, has been of remarkably fine wood-work. The Baptists and Wesleyan Methodists have places of worship in Burford. There are a National school for girls and a school for young boys. The Free Grammar school founded in 1571 has an income from endowment of 85*l.* a year; the number of scholars in 1851 was 32. There is a parochial library. Many of the houses in Burford are ancient; some of them are interesting to the archaeologist and architectural student. There was formerly a small priory or hospital in Burford parish, dedicated to St. John the Evangelist: its site is now occupied by a mansion called 'the Priory,' interesting as having belonged to Lord Falkland, and to the Speaker Lenthall. The present mansion contains some valuable historical portraits by Holbein, Vandyke, and Cornelius Jansen.

BURG, a town in Prussian Saxony, is situated on the Ihle, 64 miles S.W. from Berlin, 16 miles by railway N.E. from Magdeburg, and has about 15,000 inhabitants. It is surrounded by a wall with five gates, contains three squares, three Lutheran churches, one Calvinist church, a civic school, an hospital, and a poor-house. In 1817 the population was 9101. Burg has been famous for many centuries for its extensive woollen manufactures. Many of its factories are worked by steam power. Engineering factories for the fabrication of machinery and millwork have been recently established. Yarns and linens, pottery, &c., are made; it has also some tanneries and dye works, and a brisk wool trade. Agriculture, including the growth of tobacco, hops, and chicory, and the rearing of cattle and sheep, are carried on in the immediate environs.

BURGDORF. [BERX.]

BURGH. [LINCOLNSHIRE.]

BURGH CASTLE. [SUFFOLK.]

BURGOS, a city of Spain, capital of the ancient kingdom and province of Castilla la Vieja (Old Castile) and of the modern province of Burgos, is situated on the northern or right bank of the Arlanzon, an affluent of the Pisuerga, in 42° 21' N. lat., 3° 42' W. long., 140 miles N. from Madrid, by the road. It is the see of an archbishop, and is the residence of a captain-general. The population is about 12,000.

Burgos is built partly at the foot and partly on the acclivity of a rugged hill, which is crowned by the keep and other remains of the ancient castle now forming part of the fortifications constructed by the French during the Peninsular War. Three stone bridges cross the river, and connect the city with the Barrio de la Vega (Suburb of the Plains) and the public walks and gardens on the left bank. The Esplanade (Esplanado) consists of handsome modern houses, and extends along the right bank from the highest bridge, the Puente de San Pablo, to the central bridge, the Puente de Santa Maria, where the roads from Madrid and Valladolid unite, and crossing the bridge enter the city by the arched gate of Santa Maria. Thence the principal and widest street ascends the hill to the principal square, the Plaza Mayor, in which are the cathedral, the archbishop's palace and the town-hall (Casa de Ayuntamiento). The city forms an irregular semicircle, with considerable portions of the old walls still standing towards the river front. The streets are mostly narrow, crooked, and dark; but the Calle Alta, Calle de San

Lorenzo, and other streets above the Plaza Mayor, are wider, and contain several of the half-fortress mansions of the old nobility, such as that of the Constable of Castile, in the Plazuela de la Libertad, with its towers, arms, and rope over the portal, whence it is called the Casa del Cordon (House of the Rope). A structure called El Solar del Cid marks the site of the house occupied by the Cid Rodrigo Diaz de Vibar, who, as the inscription on its records, was born in 1020, and died in 1099, in the city of Valencia. His remains however were interred in the monastery of San Pedro de Cardeña, two or three miles from Burgos, where the statue of the Cid mounted on his charger Babieco surmounts the entrance-gateway. A short distance below the city a branch of the Arlanzon separates itself from the main stream, and sweeping round re-enters it, thus forming La Isla (the Island), which is laid out in public walks and pleasure gardens. The lowest bridge across the Arlanzon is called the Puente de la Merced (Bridge of Mercy), and there are two small bridges cross the branch-stream to La Isla. A stream called La Vena enters the Arlanzon a little above the city, and a small stream, El Pico, divided into watercourses called Esquevas, traverses and cleanses the streets. The fountains are abundantly supplied with good water.

The arched gateway of Santa Maria (El Arco de Santa Maria), massy and battlemented, is crowned by a statue of the Virgin Mary, seated, with a child on her knees. In the centre of the Plaza Mayor is a bronze statue of Carlos III. This square has an arcade running along three of the sides, with small shops beneath and handsome houses above. The Plaza Mayor however is too small to afford a good view of the cathedral, which is besides much encumbered with houses. The cathedral is very large, and one of the finest works of gothic architecture in Spain. It was commenced in 1221, and is of various styles, but mostly florid. The two western towers are surmounted by spires of the most delicate open work in stone, almost transparent, and looking like lace that the wind might blow away. These towers were built about 1400 by Juan de Colonia (Cologne) and his son Simon. The central octagonal tower, which surmounts an interior cupola, rising 180 feet from circular buttresses, was completed in 1567, the original cupola and transept having fallen in 1539. This tower is elaborately ornamented, and has numerous pinnacles. A magnificent rose-window surmounts the western entrance, with a gallery beneath, but the deeply-recessed triple doorway has been removed and replaced by modern work in bad taste. The cathedral contains seven or eight large chapels, one of which, the Chapel of the Constable (Capilla del Condestable), is a church of itself, with a tower, choir, and chapels, all of beautiful florid gothic. This chapel was erected as the burial-place of the Velasco family, the hereditary constables of Castile. The interior of the cathedral is much crowded by the lofty choir, with its reja, or railing, the chapels, organs, archbishop's throne, retable of the grand altar, carved stalls, and tombs. The chapels, as well as the cathedral, are full of sculpture, much of it in the national painted style, by the Hayas. The cloisters belong to the same period as the two western towers, that of Enrique III. They are perfect in design, in proportion, and in ornament, and contain several monuments adorned with interesting sculptures. There are other churches well worth inspection, among which that of San Esteban is distinguished by its rich façade, and the Dominican church of San Pablo for its fine cloisters.

Burgos contains several hospitals and other charitable establishments; among which may be mentioned the three united hospitals of San Juan, San Julian, and San Quirce, the Hospital del Rey, the Hospital Militar, and the Hospicio y Casa de Epósitos. It contains also a theatre, a museum, and a prison. Among the educational institutions are the Instituto Superior Burgales with 20 professors of sciences, arts, and languages; the Colegio de San Nicolas, in the suburb of the Vega; and four primary schools in the city, which give gratuitous instruction to about 350 scholars.

In 1845 there were 80 looms employed in making woollen goods, and 140 looms in making linen goods; there were 14 shops employed in making articles of leather, such as saddles and bridles, 7 hat manufactories, 14 flour-mills, 3 chocolate-mills, and a large paper-mill in the suburb of the Vega. The chief support of Burgos however arises from its being on the great road to Madrid from France and the northern provinces of Spain.

In the neighbourhood of Burgos are the Carthusian convent of Miraflores, 1441-1483, of very fine florid gothic architecture, and the nunnery of Santa Maria la Real, commonly called Las Huelgas, because built in some 'gardens of recreation' which belonged to Alonzo VIII.

Burgos was founded in the year 884 by Diego de Porcelos, who erected the castle as a means of defence against the Moors. The town grew up beneath the castle, the citizens became powerful, and elected judges to govern them, among whom were Lain Calvo and others who are mentioned in the old ballads. It afterwards became a large city with from 40,000 to 50,000 inhabitants, and shared alternately with Toledo the honour of being the residence of the counts, constables, and kings (the condes, condestables, and reyes) of Castilla. When Charles V., in the beginning of the 16th century, removed the court to Madrid, Burgos lost its importance, and its population immediately began to diminish. In 1812 the fortress was besieged by Wellington, who, after four assaults, which all failed, retreated before the advancing French army to the neighbourhood of Ciudad

Rodrigo, where he remained in winter-quarters till the spring of 1813, when he commenced his great campaign against the united French armies of the south and centre, took the fortress of Burgos, fought the battle of Vittoria, and drove the invaders over the Pyrenees.

(Ford, *Hand-Book of Spain*; Hoskins, *Spain as it Is*, 1851; Widdrington, *Spain and the Spaniards*, 1844; Mudoz, *Diccionario de España*.)

BURGUNDY. [BOURGOGNE.]

BURLINGTON, United States, the capital of Chittenden County, State of Vermont, is situated on the left bank of the Wouooski, or Onion River, at its entrance into Lake Champlain, in 44° 27' N. lat., 73° 10' W. long., distant 440 miles N.E. from Washington. The population in 1850 was 7505. The streets are regularly laid out, and intersect at right angles: in the centre is a spacious area containing the court-house. Many of the dwelling-houses are substantial and handsome. Besides the county buildings and several churches and schools, the chief building is the University of Vermont. The University was founded in 1791; it has 7 instructors and 107 students, with a library of 13,000 volumes. The amount of tonnage of vessels trading from Burlington was 4530 tons in 1850, of which 3096 tons belonged to steam vessels. In the foreign trade in 1849-50 there cleared from the port 342 vessels of 82,856 tons; the entries for the same time amounted to 404 vessels of 99,435 tons. A railway 43 miles long from Burlington to Rousse's Point affords facilities for communication with Canada. In the vicinity of Burlington are several manufacturing villages.

BURLINGTON, U.S. [NEW JERSEY.]

BURLOS. [EGYPT.]

BURMAN EMPIRE. [BIрман EMPIRE.]

BURNHAM. [BUCKINGHAMSHIRE.]

BURNHAM WESTGATE. [NOBFOLK.]

BURNLEY, Lancashire, a manufacturing and market-town and the seat of a Poor-Law Union, in the parish of Whalley and hundred of Blackburn, is situated in 53° 47' N. lat., 2° 14' W. long., 36 miles S.E. from Lancaster, 210 miles N.N.W. from London by road, and 219 miles by the North-Western railway via Trent Valley. The living is a perpetual curacy in the vicarage of Whalley, archdeaconry and diocese of Manchester. Burnley Poor-Law Union contains 26 parishes and townships, with an area of 44,378 acres, and a population in 1851 of 63,870.

The town is pleasantly situated, chiefly in a narrow vale, forming a tongue of land on the banks of the Brun or Burn, from which it derives its name, about a mile and a half above the confluence of that river with the Calder. Many remains of Roman antiquities—coins, pottery, and urns containing ashes and calcined bones—have been discovered about the place. Some Saxon remains have also been found; and at a small distance east of the town is a place called 'Saxifield,' which tradition has marked as the scene of a battle in the times of the heptarchy. Adjoining the town and near the church is an ancient cross.

Though an old town, the greater part of Burnley is of recent erection, and the houses are chiefly built of freestone, which is found in the neighbourhood. The town is well lighted with gas, and has a good supply of water.

The parochial chapel of Burnley, dedicated to St. Peter, has undergone much alteration: the present edifice had originally four chantries, namely, the rood altar, placed upon the rood-loft at the entrance of the choir, now removed; the altar of St. Peter; the altar of St. Mary; and the altar of St. Anthony. It combines various styles of architecture. The chapel of the Virgin Mary contains some shields of arms, and a monument to the memory of Charles Townley, Esq., whose collection of marbles is now in the British Museum. The new church of St. James was consecrated in 1849. The Wesleyan Association and Primitive Methodists, Independents, Baptists, and Roman Catholics have places of worship. The Roman Catholic chapel is a large and handsome building, consecrated in 1849.

The Free Grammar school in North Parade, founded about 1650, has an income from endowment of about 150*l.* per annum, and had about 40 scholars in 1851, under the care of a head and a second master. The school has an interest in 13 scholarships in Braeouse College, Oxford; but from disuse this interest has in effect been forfeited. In a room over the school is a valuable library, left by the Rev. Henry Halsted, rector of Stansfield, for the use of the scholars. The Rev. Dr. Whitaker, the learned master of St. John's College, Cambridge, and the historian of the 'original parish of Whalley,' received his early education in this school. There are several National, British, and other schools, including a Roman Catholic school. Several benevolent institutions are maintained for the benefit of the sick and the indigent. A mechanics institution and reading-room is in St. James's Street, and a Church of England literary institution is in Market Street. There is a savings bank. The chief building in the town for public purposes is the court-house, situated in Keighley Green; it serves for a county constabulary station, a magistrates' room, and a room for public meetings, lectures, and exhibitions. There are two markets; one held on Mondays in the principal streets, and another on Saturdays in the new market-place, which has accommodation for the vendors of meat, fish, ruit, and vegetables. A county court is held in Burnley.

The trade of Burnley was formerly confined to woollens; but the cotton manufacture is now the staple. There are some extensive cotton-spinning and weaving mills, one or two calico-printing establishments, three worsted mills, four corn mills (one of them very large), iron foundries, machine-making works, brass foundries, roperies, tanneries, breweries, and collieries.

The Leeds and Liverpool Canal, which nearly surrounds the town, affords communication for the conveyance of goods across the whole line of country from the German Ocean to the Irish Sea. Besides its manufactures Burnley sends coal, freestone, and slate from the vicinity. The East Lancashire railway passes through Burnley on its way from Bury to Colne. A branch from Burnley to Todmorden connects it with the Lancashire and Yorkshire railway.

BURNTISLAND, Fifeshire, Scotland, a town, royal burgh, and seaport, in the parish of Burntisland, on the north or left side of the Frith of Forth, is situated in 56° 4' N. lat., 3° 13' W. long., about 5½ miles nearly due north from Leith: the population of the royal burgh in 1851 was 2329, of the parliamentary burgh 2724. The burgh is governed by 2 bailies and 10 councillors, of whom one is provost; and united with Kirkcaldy, Dysart, and Kinghorn in returning one member to the Imperial Parliament.

Burntisland was made a royal burgh in 1568. At the General Assembly which met here in 1601 James VI. took the oath to the Covenant. The town was fortified in the reign of Charles I., and besieged and taken by Cromwell, who repaired and considerably improved the harbour. The town chiefly consists of two parallel streets terminated by the harbour on the west. The harbour is deep and well sheltered. Being now the principal ferry station, the town has much increased of late years. There is a good dry dock; and on the eastern pier is a lighthouse, the light of which may be seen a distance of seven miles. Burntisland formerly possessed a considerable trade. About 1656 there were twelve ports, including St. Andrew's and the now extensive port of Kirkcaldy, which were subordinate to Burntisland. For many years past its traffic has been confined to that arising from the curing of herrings and from distilleries in the neighbourhood. Ship-building is carried on. There is daily steam communication with Granton on the opposite coast, and the Edinburgh and Northern railway opens up a direct communication with the whole north-east of Scotland, the passage across the Frith being effected here by a floating railway.

The parish church was built in 1592. There are also a Free church, and chapels for United Presbyterians and Episcopalians.

North from the town, on the summit of Dunearn Hill, an eminence rising 695 feet above the sea, is a level space surrounded with a number of loose stones, which has been called Agricola's Camp, and supposed, very improbably, to mark the site of a Roman encampment. On another eminence overhanging the harbour stands Rossend Castle, erected about the 15th century.

BURRA BURRA. [SOUTH AUSTRALIA.]

BURRAMPOOTER. [BRAHMAPUTRA.]

BURSLEM, Staffordshire, a manufacturing and market-town, and conjointly with Wolstanton the seat of a Poor-Law Union, in the parish of Burslem and hundred of Pirehill, is situated on the sides of the river Trent, in 53° 3' N. lat., 2° 12' W. long., 18 miles N. by W. from Stafford, 151 miles N.W. from London by road, and 148 miles by railway via Trent Valley: the population of the township in 1851 was 15,954, being an increase of upwards of 25 per cent. since 1841. The township forms part of the parliamentary borough of Stoke-upon-Trent. The living is a rectory in the archdeaconry of Stafford and diocese of Lichfield. Burslem and Wolstanton Poor-Law Union contains the two parishes, with an area of 13,192 acres, and a population in 1851 of 41,914.

Burslem is governed chiefly under the provisions of an Act passed in 1826, which appoints trustees for the management of the town-hall and the market, and commissioners for lighting and police, in Burslem and a portion of its neighbourhood; each body having power to levy rates for carrying out the provisions of the Act. The county constabulary force was introduced into Burslem in 1842. In 1847 and 1848 Acts were obtained for supplying with water a large district of the potteries, including Burslem. The surface reservoir of the Staffordshire Potteries' Waterworks Company is within this parish, about one mile and a half from the town, and at a sufficient elevation to serve a wide district. The town is on a height, favourably situated for the discharge of surface water; but the character of the soil is such as to retain a large quantity of moisture. The lower part of the town is liable to occasional inundations from the overflow of brooks which inclose the town on the west, south, and east. A Local Board of Health has been recently established.

The principal streets of Burslem are moderately well paved, but the poorer streets very badly. In Burslem town the foot-paths are mostly paved with hard blue bricks, but in some cases with ashes obtained from the burning of argillaceous ironstone. Burslem possesses few public buildings. The tower of the parish church is considered to be the oldest existing structure in the Potteries' district, but the body of the church is comparatively modern. In the parish are several other churches, besides chapels for Dissenters. In the market-place, in the centre of the town, is the market-house, town-hall, and news-room. A mechanics institution and reading-room is in

the town. About a mile from Burslem stands the North Staffordshire Infirmary, a very large establishment, which serves for the whole of the Pottery district, and is mainly supported by the manufacturers. There are barracks at Burslem.

Burslem often receives the name of the 'Mother of Potteries,' having been the first, and for a long period the chief of the pottery towns. From an early period it has been distinguished for the variety and excellence of the clays in its vicinity. All the subsoil of the town is clay, varying from 2 to 10 feet in thickness: it is called in the neighbourhood 'tough Tom,' and is employed in the manufacture of red, brown, and yellow wares. Below the subsoil is a very thick stratum of fire-clay, of which the saggars or baking-vessels for the pottery-kilns are made. Below the fire-clay is coal. Most of the early improvements in the pottery manufacture were made at Burslem, and the town took the lead in this art until Wedgwood removed thence to Etruria. Longport is now so closely united to Burslem that the two form in effect one large town, every part of which is occupied by the pottery works, the houses of the workpeople and employers, or the shopkeepers. No town in England, perhaps, is more dependent on one particular branch of manufacture than Burslem is on that of porcelain and earthenware. There are in the parish about 40 pottery establishments, besides glass-works at Longport. The increase of coal-mines and potteries and an improvement in trade have led to the recent great increase of population. The town is accommodated by the Grand Trunk Canal, and by the North Staffordshire railway, a station of which is at Longport.

(*Shaw's Staffordshire; Communication from Burslem.*)

BURTON-IN-KENDAL, Westmoreland, a market-town in the parish of Burton-in-Kendal and ward of Lonsdale, is situated in the southern part of the county, close to the border of Lancashire, in 54° 11' N. lat., 0° 42' W. long.; distant 34 miles S.S.W. from Appleby, 251 miles N.W. by N. from London by road, and 243 miles by railway via Lancaster. The population of the township of Burton-in-Kendal in 1851 was 791. The living is a vicarage in the archdeaconry of Richmond and diocese of Chester, but is to be transferred to the diocese of Carlisle. Burton is a small but neat and regularly built town. The market-place is a spacious area, with good houses and shops. A stone cross stands in the centre of it. The parish church, dedicated to St. James, is an ancient but plain edifice, with side aisles and a square tower. The church has been lately well restored. Burton has an old Grammar school; also a National school, a parochial library, and several charities. The linen and canvass manufacture employs some of the inhabitants. The market is held on Tuesday; at one time it was of considerable importance as a corn-market, but it is now of little consequence. Two fairs are held yearly. The trade of the town is inconsiderable in amount. The scenery in the neighbourhood of Burton is interesting. The climate is healthy. A county court is held in the town.

BURTON-UPON-TRENT, Staffordshire, a market-town and the seat of a Poor-Law Union, in the parish of Burton-upon-Trent and hundred of North Offow, is situated on the river Trent, in 52° 48' N. lat., 1° 38' W. long.; distant 21 miles E. from Stafford, 124 miles N.W. by N. from London by road, and 133 miles by the North-Western and Midland railways. The population of the town of Burton-upon-Trent in 1851 was 7934. The living is a curacy in the archdeaconry of Stafford and diocese of Lichfield. Burton Poor-Law Union contains 53 parishes and townships, with an area of 86,738 acres, and a population in 1851 of 31,842.

The town is not incorporated, although usually called a borough. The manor, which formerly belonged to the abbey of Burton, was given by Henry VIII. to an ancestor of the Marquis of Anglesey, the present lord of the manor. The government is in the hands of a steward and bailiff, appointed by the lord of the manor. The paving and lighting of the town are in the charge of commissioners under a local Act. The abbey of Burton was founded in the 11th century by an Earl of Mercia, and had privileges granted to it by several kings. Some of the abbots sat in Parliament. The bridge at Burton is constructed of freestone, has thirty-six arches, and measures 1345 feet long. The parish church is dedicated to St. Modwena, the patron saint of the abbey. There are two district churches: Trinity church, erected about 1823; and Christ church, erected in 1843. The Baptists and Independents have chapels. The Free Grammar school, founded in 1520 by the then abbot of Burton, has an income from endowment of nearly 400l. a year, and in 1852 had 81 scholars, of whom 65 were free. Considerable estates, bequeathed for charitable and other purposes for the benefit of the town, are vested in trustees. There is a savings bank. Of the two principal streets in Burton, one runs parallel to the river, the other cutting it at right angles. In the market-place is the town-hall. The market-day is Thursday; there are four annual fairs, one of which (in October) continues for five days. According to Leland, Burton was in his time noted for its alabaster works. In more recent times it has become more extensively known by the ale which bears the name of the town. The Grand Trunk Canal, which is called also the Trent and Mersey Canal, passes Burton, and communicates with the Trent about a mile below the town. The Trent, which falls into the Humber, is navigable for barges up to Burton-upon-Trent. The Midland railway, and the North Staffordshire and Leicester and

Swanington lines, place Burton in railway communication with all parts of England.

BURTSCHIED. [*AIX-LA-CHAPELLE.*]

BURY, Lancashire, a manufacturing town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Bury and hundreds of Blackburn and Salford, is situated on the banks of the Irwell, in 53° 36' N. lat., 2° 19' W. long.; 9 miles N. by W. from Manchester; 48 miles S.S.E. from Lancaster; 195 miles N.N.W. from London by road, and 198 miles by the North-Western railway via Trent Valley. The population of the parliamentary borough in 1851 was 31,262; that of the entire parish was 70,143; in 1801 it was 22,300. Bury returns one member to the Imperial Parliament. It is governed by the county magistrates and a board of commissioners. The living is a rectory in the archdeaconry and diocese of Manchester. Bury Poor-Law Union contains 12 parishes and townships, with an area of 33,208 acres, and a population in 1851 of 88,797.

The town of Bury, though it stands on rising ground, appears as if it occupied a low position in consequence of being placed among hills which surround it on the north and east. The river Irwell, which first takes this name at Bury, flows through the west end of the town, and is joined by the Roche about two miles to the south. In ancient times, one of the 12 baronial castles of the county stood close to this town, not far from the parish church, on the banks of what was then the course of the Irwell; but the river now takes a more north-westerly course, and leaves a fertile tract of land in the valley between its present and its ancient bed. The castle was destroyed by the parliamentary forces in 1644. Fragments of stone are occasionally dug out of its ancient foundations. The place where it stood is still called Castle Croft, from which may be seen Castle Steads, in the adjoining township of Walmersley, where the besiegers threw up an intrenchment which enabled them to batter down the walls of the castle. The manor of Bury was in the reign of Henry II. in the possession of John de Lacy. It passed to the families of the De Burys and Pilkingtons. The town of Bury has been very much enlarged and improved within the last few years. It is well lighted with gas and supplied with water. New sewers have been constructed. Many of the streets have been paved by the commissioners; and a series of improvements is being carried out under the powers conferred by an Improvement Act obtained in 1846.

The parish church is dedicated to St. Mary; in 1776 it was rebuilt, all but the steeple, which was not rebuilt till 1844. St. John's chapel, in Stauley Street, erected in 1770, is a neat building. There is another church just erected, dedicated to St. Paul. The oldest of the Dissenting chapels in Bury is the Presbyterian chapel in Silver Street, belonging to the Unitarians. There are places of worship for Wesleyan, Primitive, Association, and New Connexion Methodists; three for Independents; a new Unitarian chapel; and a Roman Catholic chapel of some elegance, built in 1840.

The Free Grammar school, founded in 1726 by the Rev. Roger Kay, has an income from endowment of about 430l. a year, and had 70 scholars in 1852. A Charity school for 80 boys and 30 girls, founded in 1748, has been converted into a National school. Two other schools, the Bell school and the Irwell school, are connected with the Established Church. There are also schools connected with the Dissenting chapels, and Infant schools; a public subscription library, a news-room, a mechanics library, a medical library, and a billiard-room. An Athenæum has been recently opened in very encouraging circumstances.

Bury has a moderately large subscription library, established upwards of 80 years ago. There is a dispensary in the town. A new market-place was erected in 1840 by the Earl of Derby. There is a savings bank. A county court is held at Bury.

The manufacture of woollen cloth became a staple article of trade in this place in the 14th century, and flourished to such an extent that in the reign of Elizabeth one of her aulgiers was stationed in the town to stamp the cloth. On the introduction of the cotton-trade into the county many of the inhabitants of Bury became weavers of cotton fabrics, and the woollen trade has been gradually retiring into Yorkshire and other parts of the country where the cotton manufacture is less paramount. The different branches of the cotton manufacture are carried on to a considerable extent. Several important improvements in the cotton manufactory took their rise in this place. A new method of throwing the shuttle by means of the picking-peg instead of the hand, and thence called the fly-shuttle, was invented by John Kay, a native of the town; and in 1760 his son, Robert Kay, invented the drop-box, by means of which the weaver can at will use any one of three shuttles—an invention which led to the introduction of various colours into the same fabric, and made it almost as easy to produce a fabric consisting of different colours as a common cloth of only one. Bury is indebted for one branch of its present trade to the father of the late Sir Robert Peel, who established his extensive print works on the banks of the Irwell, near this town. He resided at Chamber Hall, in the immediate vicinity, where, or at a smaller house close by it, the late Sir Robert Peel was born.

There are in Bury more than a dozen large factories for spinning and manufacturing cotton, several large woollen manufactories, calico-printing and bleaching establishments, dye-works, three large foundries,

several smaller ones, and manufactories of hats and other articles. The market-day according to the charter is Thursday, but Saturday has been adopted in practice. The market is well attended. Three or four fairs are held in the course of the year. A branch of the Manchester, Bolton, and Bury Canal accommodates Bury. The East Lancashire railway and the Lancashire and Yorkshire railway both pass through Bury.

BURY ST. EDMUNDS, the chief town of West Suffolk, a borough and market-town in the hundred of Thingoe, stands on the banks of the river Lark, in 52° 16' N. lat., 0° 43' E. long.; distant 26 miles N.W. by W. from Ipswich, 71 miles N.E. by N. from London by road, and 94½ miles by the Eastern Counties and Eastern Union railways. The parishes of St. James and St. Mary, which compose the borough, are also united for poor-law purposes under a board of guardians, but are not under the operation of the Poor-law Amendment Act. The town is governed by 6 aldermen, one of whom is mayor, and 18 councillors; and returns two members to the Imperial Parliament. The population of the municipal and the parliamentary borough, which are coextensive, was 13,900 in 1851. The livings are perpetual curacies in the archdeaconry of Sudbury and diocese of Ely.

The origin of Bury St. Edmunds, or St. Edmunds Bury, as it is called by old writers, has been a subject of much discussion. Some suppose it to be the Villa Faustina of the 'Itinerary of Antoninus.' Numerous Roman antiquities have been dug up in the neighbourhood. At the time of the dissolution of the Heptarchy the manor belonged to Beodric, and was hence called Beodric's-worthe, or Beoderic-cortis, the 'villa or mansion of Beodric.' Beodric bequeathed it to Edmund the King and Martyr, after whom it was called St. Edmunds Bury—bury, like burh, burg, burgh, &c., being the Saxon word for a castle or strong town. Edmund, having succeeded to the throne of East Anglia, was crowned at Bury on Christmas-day, 856. In 870 he was taken prisoner and put to death by the Danes. Soon after the death and canonisation of King Edmund, six priests devoted themselves to a monastic life under the patronage of the royal saint, and founded a monastery, which, in after ages, by its magnificence and splendour, and its valuable immunities and privileges, surpassed every other ecclesiastical establishment in Great Britain, Glastonbury alone excepted. In 1020 Ailwin ejected all the secular clergy from Bury, and established twelve Benedictine monks from the monastery of Hulin in the abbey, exempted them from all episcopal authority, and laid the foundation of a church, which was consecrated in 1032. The first three churches were built of wood, but in the year 1065 another was erected of hewn stone, under the auspices of Abbot Baldwin. It took twelve years building, and was embellished with numerous ornaments brought from Caen in Normandy. It was 505 feet in length; the transepts were 212 feet, and the western front was 240 feet in breadth; altogether it contained 12 chapels. Portions of the ruins of the western front still remain. The circular rubble wall of the southern tower which seems to bid defiance to time and weather, is now used as a shop; and the three arches, which once formed the entrance to the three aisles of the church, have been filled up with modern brickwork, and now form convenient dwelling houses.

There appear to have been four grand gates to the abbey, and its lofty embattled walls inclosed within their vast circumference the body of the monastery, the abbot's palace, garden, &c., chapter-house, towers, cloisters, infirmaries, the magnificent monastical church, an extensive churchyard, three smaller churches, and several chapels. The abbey contained 80 monks, 16 chaplains, and 111 servants. The abbot, who was a spiritual parliamentary baron, held a synod in his own chapter-house, and appointed the parochial clergy of the place. He inflicted capital punishment, and had the power to try by his steward all causes within the liberty of Bury. Beyond the circuit of the abbey-walls were several hospitals and chapels under the patronage and protection of the monks. Edward the Confessor granted to the abbot the liberty of coinage; and Edward I. and Edward II. both had mints here. It was at Bury that John was first met by the refractory barons, before he was compelled to sign Magna Charta. In 1272 Henry III. held a parliament here. A parliament was also held at Bury by Edward I. in 1296, when all the goods and chattels and all the revenues of the monastery were forfeited to the king, upon the monks refusing to pay a subsidy that was demanded from them; but on their afterwards complying, their goods were restored. In 1446 another parliament was convened at Bury. Henry VII. and Elizabeth both visited Bury, and were entertained with considerable pomp and magnificence. This celebrated monastery was 519 years in the possession of the Benedictine monks, and during that time had 33 abbots. At the dissolution of monasteries it was valued by the commissioners at 2366l. 16s., but that must have been considerably under its real value, for the commissioners, in their report, say, "We have taken in the said monastery in gold and silver 5000 marks, besides as well a rich cross with emeralds as also divers stones of great value, and yet we have left the church, abbot, and convent, very well furnished with plate of silver necessary for the same." Almost the only relic of the magnificence of this monastical establishment is the western, now called the abbey, gate. It was

erected in 1327, after the old gate was pulled down by the mob. It is a specimen of the decorated style of gothic architecture. It has been roofed over by Lord Bristol, whose property it now is, and is generally in a state of good preservation. Its height is 62 feet, its length 50 feet, and breadth 41 feet. The 'terrepleine' of the wall forms a terrace all round, and over each angle there formerly was a tower. The eastern side of this gate, although not so splendid as the west side, is the more elegant. The internal walls are beautifully decorated, and amongst other carved work are the arms of King Edward the Confessor. In digging up an old foundation there were found, with various other antiquities, four antique heads, cut out of blocks of freestone of gigantic dimensions, and probably representing some heathen deities.

Fragments of the ruins of various religious and charitable institutions connected with the abbey are still visible. The following are mentioned in Dugdale's 'Monasticon':—The Hospital of St. John or God's-house without the south gate, probably the chapel, or as it is sometimes called the Hospital of St. Petronilla, was connected with this house; St. Nicholas' Hospital without the east gate, now a farm-house; St. Peter's Hospital and Chapel, founded by Abbot Anselm in the time of Henry I., now belonging to the trustees of the Free Grammar school; St. Saviour's Hospital, founded by Abbot Sampson in the reign of King John; St. Stephen's Hospital, Jesus College and Guild, erected by King Edward VI. in 1481, now occupied as a workhouse; and the convent of Gray Friars at Babwell or North Gate, established in 1256.

The Norman Tower, or Church Gate, was the grand portal into the churchyard opposite to the western entrance of the abbey church. At the dissolution it was converted into a belfry for St. James's church, "and to this circumstance," says Mr. Yates, "most probably the antiquarian is indebted for the gratification of now surveying this venerable relic of ancient piety and taste." It is considered one of the finest specimens of its class in existence of Norman architecture. It is a quadrangular building 80 feet high, and is remarkable for its strength and simplicity. The date of its erection is unknown. The stoupe of which it is built abounds with small shells. The interior of the arch presents some grotesque figures. The tower has been thoroughly restored of late years under the direction of Mr. Cottingham. The structure has been strengthened by three parallel series of iron braces, and the ashlar-work has been repaired and reset.

St. Mary's church, erected about 1430, is 130 feet long (exclusive of the chancel) and 67½ feet wide. The chancel is 74 feet by 68 feet. There are three aisles, which are divided by two rows of elegant columns. The height of the middle aisle is 60 feet. The roof, which is elaborately and beautifully carved, is supposed to have been brought from Caen in Normandy. On the north side of the communion-table is a marble slab erected to the memory of Mary Tudor, third daughter of King Henry VII. of England, who first married Louis XII. of France, and subsequently Charles Brandon, duke of Suffolk. On each side of the chancel is a handsome altar-tomb: one to Sir W. Carew, who died in 1501, and his wife who died in 1525; and the other to Sir Robert Drury. The tower is of an earlier date than the church itself. The edifice was thoroughly repaired and restored a few years back under the direction of the late Mr. Cottingham.

St. James's church, like St. Mary's, is built of freestone, and is a very handsome building. It was not completed till the Reformation, when Edward VI. gave 200l. towards its completion. It is 137 feet long by 69 feet broad, and contains some handsome monuments. The churchyard is of considerable dimensions, and has a beautiful avenue of lofty lime-trees. It contains the two churches (St. Mary's and St. James's), the Saxon tower, abbey ruins, Clopton's hospital, the shire-house, and the mausoleum; the latter was formerly 'the Chapel of the Charnel,' where it is said Lydgate the poet resided. Not many years since it formed the residence and workshop of a blacksmith. St. John's church, erected in 1841 at a cost of 6000l., has 850 sittings, of which half are free. The Independents and Baptists have each two chapels in Bury: there are also places of worship for Methodists, Quakers, Unitarians, and Roman Catholics. The Free Grammar school, founded by Edward VI., has an income from endowment of upwards of 600l. a year; it is under the care of a head master and five other teachers: the number of scholars in 1852 was 80. The school possesses 13 exhibitions for Oxford or Cambridge. Under a decree of the Court of Chancery there have been recently established out of the rents of the Guildhall Feoffee a Commercial school for 150 boys, who pay 5s. a quarter; a Poor Boys' school for 300 boys, who pay 1s. a quarter; and a Poor Girls' school for 150 girls, who pay 1s. a quarter. There are in Bury National schools for boys and girls, Infant schools, and a Female School of Industry.

Bury is a borough by prescription, and its prescriptive rights were first confirmed by James I. in the fourth year of his reign. A sessions court is now held quarterly under the recorder; the assizes are held in Bury in March; the summer assizes being held in Ipswich. A county court is held in Bury. Bury first sent representatives to Parliament in the 30th year of the reign of Edward I., but made no subsequent return till the 4th of James I., since which time it has continued to return two members.

A great part of the town was burnt down in 1603, but was shortly

after rebuilt in its present regular manner. The houses are well built; the streets are paved and kept clean. The town is well lighted with gas, and has a good supply of water. A subscription library contains a valuable collection of books. Bury possesses handsome subscription-rooms, a subscription coffee-room and billiard-room, a mechanics institute, and a savings bank. A new theatre was built in 1819, and the old one converted into a concert-room. There is a good collection of plants in the Botanic Gardens, which are a part of the old abbey grounds, and contain some picturesque bits of the ruins. The shire-hall, a neat modern building, is situated on the ancient site of St. Margaret's church, and contains two good-sized courts. The Guildhall, where the borough courts are held, is a handsome structure, built of flint and freestone.

The county jail, erected in 1803 at a cost of 30,000*l.*, about half a mile from the south end of the town, is built on the radiating principle, and is surrounded by a wall 20 feet high, inclosing an octagonal area, the diameter of which is 292 feet. The house of correction for female prisoners is near the jail.

Among the parochial charities of Bury are 98 almshouses, founded by different persons. They are under the superintendence of trustees, and their funds altogether amount to about 2000*l.* per annum. Clopton Hospital, founded by Boley Clopton, M.D. for the support of six aged widowers and widows, is a neat brick building, with the arms of the founder over the principal entrance. A large building intended by the government for an ordnance depot, was purchased and converted into a hospital, which is supported by voluntary contributions; it has been since enlarged by the addition of two wings.

About a mile from Bury the river Lark becomes navigable to Lynn, whence coals and other commodities are brought in small barges. The Eastern Union railway has diverted a good deal of this traffic to itself. The market-days are Wednesday for corn, &c., and Saturday for meat and poultry. Fairs are held on the Tuesday in Easter week, and on the 1st of October and 1st of December for horses, cattle, cheese, &c. The great fair, which is justly celebrated, generally commences about the 10th of October, and lasts about three weeks. About three miles from Bury is Ickworth, the magnificent seat of the Marquis of Bristol. The house is circular, 140 feet in height and 90 feet in diameter, and stands in the centre of a park which has a circuit of 11 miles.

(Gage's *Suffolk*; *Communication from Bury*.)

BUSACO, the name of a convent situated on the summit of a mountain-ridge in the province of Beira in Portugal, called the Serra de Busaco, which is an offset from the great Serra de Alcoba. In September 1510 the united English and Portuguese army under Wellington, about 40,000 strong, took post on the Serra de Busaco, and successfully resisted the French army under Massena, 68,000 strong. Massena being unable to force the position, turned it by a mountain-pass over a neighbouring mountain-ridge, and then Wellington continued his retreat to the lines of Torres Vedras.

BUSHIRE. [ABOU-SHEER.]

BUSHMILLS. [ANTRIM.]

BUSSAHER, or **BUSSAHIR**, a principality in Northern Hindustan, occupying a mountainous tract on both sides of the Himalaya range. Bussaher lies between 30° and 32° N. lat., 77° and 79° E. long.; it is bounded on the N.W. by the Sutlej, S. and S.E. by the Jumna, S.W. by Sirmor, and N. and E. it extends to the empire of China. Over a considerable part of this territory, the boundaries of which are but imperfectly known, the Raja of Bussaher exercises only a kind of feudal superiority, the rulers of the petty states into which it is divided paying an annual tribute to him as their head. The area of the territory is stated at 3000 square miles, and the population at 150,000, with an annual revenue of about 15,000*l.* The subsidy or tribute paid to the British government is about 1500*l.*

Bussaher is divided into the districts of Kunawur; the tract containing Rampoor, the capital, and Seran; the valley of the river Paber; and Dasau, which contains the Tartar pergunnah of Hangarang. Kunawur is a rugged district, extending on the east to Shipke, the frontier town of Chinese Tartary, and on the west to Hangarang. The Keubrang Pass in the Himalaya Mountains, which is 18,130 feet above the level of the sea, forms the boundary between Kunawur and Chinese Tartary. The climate of Kunawur district is cold, and a great part of the soil is composed of eminences covered with snow. Little grain is raised, and the chief employment is breeding and rearing sheep, goats, ponies, asses, and mules. The inhabitants enjoy a good reputation for honesty and punctuality in their dealings. The largest villages do not contain more than 100 inhabitants; several exhibit the appearance of wealth and civilization. The majority of the inhabitants are Hindoos, but in some of the villages the people are adherents of the grand or Dalai Lama of Lassa. Rampoor, the capital of the principality, is situated in 31° 27' N. lat., 77° 38' E. long., on the left bank of the Sutlej, where that river is little more than 200 feet wide, and confined by lofty precipices, between which the water foams and dashes furiously. The stream is crossed by a bridge of ropes, traversed by a flock of wood, upon which the traveller sits and is drawn across. Rampoor is considered a place of much sanctity, and is much frequented by religious mendicants: it contains several temples. The town now contains only about 150 stone and slated dwellings: it is the usual place of residence of the raja, who has also a summer palace at Seran, about 22 miles higher up the river.

This residence of the raja is on a hill 3 miles from the banks of the Sutlej, and 4500 feet above its level.

The third district, that which contains the valley of the river Paber, is the most productive part of the principality, but some portion even of this is wild and barren. Iron ore is found in this district, and is worked, when the iron forms an article of export to the Sikh countries. Dasau produces wheat and barley, but not rice. Near the villages, and in sheltered spots, apricots, gooseberries, and currants are found, but the trees and bushes are stunted. The inhabitants possess considerable numbers of ponies and mules. Manufactures of coarse blanketing are carried on. In other parts of Bussaher woollen cloths of a superior texture are made, the wool being of excellent quality; a few shawls are likewise made of goats' and sheep's wool mixed. Bussaher receives from Hindustan sugar, cotton, hardwares, and indigo, and returns iron, opium, tobacco, turmeric, and blankets. From Tibet and the Chinese territories are brought shawl-wool, salt, tea, silk goods, musk, and horax: the returns are grain, iron, and opium, cotton cloths, indigo, and other articles received from the lower parts of Hindustan. The principality was conquered in 1810 by the Gorkas, and remained subject to them until 1814, when it was regained by the British for the raja, who with the other hill chiefs was confirmed in his possessions at the close of the Nepaul war in 1815.

(*Parliamentary Papers*.)

BUTE, one of the islands which compose the county of Bute, Scotland, is situated in the Frith of Clyde, between 55° 42' and 55° 56' N. lat., 4° 58' and 5° 10' W. long., distant about six miles from the opposite mainland of Ayrshire, and about half a mile from Argyleshire, from which county it is separated by a narrow and crooked but picturesque channel called the Kyles of Bute. The population of the island in 1851 was 10,661. The island is about 16 miles long, and varies from three miles to four miles in breadth. To the north it is elevated, rocky, and barren; the central part is diversified by hills, valleys, and fertile tracts; and the south end is hilly and divided from the rest of the island by a low and sandy plain called Langal-chorid. The coast is rocky and indented by bays. The soil of the island consists of clay, loam, and sand, with moss lying on gravel. The greater part of the arable land is inclosed and cultivated; barley, oats, potatoes, turnips, and the artificial grasses are all cultivated with success. About the middle of the island are three small lakes—Loch Fad, Loch Ascog, and Loch Quein. The climate, though damp, is mild and temperate, and the island is much resorted to by invalids, ROTUNAY being one of the favourite watering places of the Clyde. The minerals are limestone, freestone, slate, and some indifferent coal. Beds of coral and shells, of considerable thickness, are found in several places half a mile from the sea-coast.

Bute island contains many remains of antiquity. Dungle, or Dunganail, a vitrified fort, attributed to the Danes or Norwegians, and situated on a lofty crag in the south-west part of the island, is an object of interest and curiosity. In the southern extremity of the island are the ruins of an ancient chapel. Not far from the ruins are the remains of a circular erection about 30 feet in diameter and 10 feet high, known as the 'Devil's Cauldron;' the object for which it was erected has not been ascertained. Bute, and the adjacent islands, were long subject to the Norwegians. Haco of Norway in 1263 took possession of Bute, but after his defeat it returned to the allegiance of the King of Scotland. Edward of England held it till 1312, when it fell into the possession of Bruce. Robert III. and James III. made the island their occasional residence. It was garrisoned by Cromwell, and was the scene of the Earl of Argyll's unfortunate landing in 1685.

(*New Statistical Account of Scotland*.)

BUTESHIRE, a county in Scotland which comprises the islands of BUTE, ARRAN, the CUMBRAES, and INCHMARNOCK; with the small islands of Lamash and Pladda, which belong to Arran. The area of the county is given in the population returns of 1841 at 103,040 acres, which is equivalent to 161 square miles; the returns of the Census of 1851 state the area at 171 square miles; other accounts make it 257 square miles. The population of the county in 1851 was 16,608; in 1791 it was 10,563. Buteshire returns one member to the Imperial Parliament; previous to the passing of the Reform Act the county returned a member to Parliament alternately with the county of Caithness. The constituency of the county in 1853 was 483, including the electors of the royal burgh of Rothesay, the county town, who by the Reform Act were united to those of the county for parliamentary purposes. The islands of which the county is composed, as well as ROTUNAY the county town, are noticed in distinct articles. Lamash and Pladda are noticed under ARRAN.

BUTRINTO (Butrintum), an ancient town, now ruined, on the coast of Epirus, on the northern or narrow part of the channel which divides the island of Corfu from the mainland. It stood on a hill surrounded by marshy ground, and forming a sort of peninsula at the entrance of the harbour or lake Pelodes, and nearly opposite the promontory of Leucimne in the island of Corfu. (Strabo, vii.) The lake, which is connected with a bay of the sea by a river (now called Paula) three miles long, is now called 'Vutzindro.' Virgil calls it 'Lofty Butrintum' ('Æneid.' iii.), where he makes Æneas meet Helenus the son of Priam, who ruled over the country of the Chaonians after the death

of Pyrrhus the son of Achilles. (Justin, xvii.) After the conquest of Epirus by the Romans, Butthrot became a Roman colony. Pomponius Atticus had an estate near Butthrotum, where he spent great part of his time; and both he and Cicero interested themselves in favour of the Butthrotians, whose lands had been confiscated and given away to fresh colonists during the civil war. Under the Byzantine empire, Butthrotum was a bishop's see suffragan to the archbishop of Lepanto. It was afterwards ruined, probably at the Turkish invasion. The Venetians, in their wars with the Turks, settled on this coast, and built a square fort at the foot of the hill on the sea-side, where they kept a garrison to protect their fisheries. Butrinto and Parga were dependencies of the Venetian government of Corfu. The walls of the Roman colony still exist, as well as remains of Hellenic and later works; statues, pillars, medals, and canoes have been found on the site. In 1797, after the fall of the Venetian republic, the French put a garrison in the fort of Butrinto, but in the following year Ali Pasha drove them out of it.

BUTTERMERE. [CUMBERLAND.]

BUTTEVANT. [CORK.]

BUXAR, a fortified town in the district of Shahabad, province of Bahar, situated on the right bank of the Ganges, in 25° 33' N. lat., 83° 57' E. long., about 60 miles below the city of Benares. The fort is built on an eminence which projects into the river; the works are kept in good repair, and there is constantly an English garrison in it. A signal victory was gained at this place on the 23rd of October 1764, by Major (afterwards Sir Hector) Munro, who opposed and conquered a Mogul force of 40,000 men with an army of 856 European and 6215 native troops. (Mill, *History of British India*.)

BUXTON, Derbyshire, a market-town and chapelry in the parish of Bakewell and hundred of High Peak, is situated on the high road from Derby to Manchester, in 53° 15' N. lat., 1° 52' W. long., distant 33 miles N.W. by N. from Derby, and 160 miles N.W. by N. from London. The population of the chapelry of Buxton in 1851 was 1235. The living of Buxton is a perpetual curacy in the archdeaconry of Derby and diocese of Lichfield.

Buxton is situated in a deep valley or basin, surrounded by bleak hills and extensive tracts of moorland. It would be entirely environed with mountains but for the narrow ravine down which the river Wye flows on its way to the Derwent, parallel to the high road which leads to Bakewell. Chee Tor, a perpendicular and stupendous rock of limestone, 360 feet high, is situated near the village of Wormhill, and about five miles from Buxton. A little east, the lofty peaks of Winhill and Loschill may be distinguished by their form from all the mountains in the county. Extensive woods and plantations now clothe the sides and summits of many of the neighbouring hills.

The mineral springs at this place appear to have been known to the Romans. Buxton was a watering place in the 16th century. The baths were connected with a shrine, on which visitors for health presented their offerings. After the suppression of religious houses, these offerings were removed, and the baths locked and sealed up for a time. In Queen Elizabeth's time however they had more than regained their former reputation. Mr. Macaulay in his notice of Buxton (*History of England*, vol. i. p. 346) states that in the 17th century, visitors to Buxton were crowded into 'low wooden sheds,' but this is a mistake, as is shown in the 'Land We Live In,' vol. iii. pp. 215-221. There were in fact excellent and commodious buildings provided for visitors even in the 16th century. From Camden's time till now Buxton seems to have maintained and even increased its popularity. Additions and improvements have been made at different times; but the most important have been those carried into effect by the late and the present Duke of Devonshire. Buxton old town stands upon much higher ground than the new, and has still the remains of a cross in the centre of the market-place. The main street is wide, and contains a few good inns and lodging-houses, but the buildings in general are old and mean. The new part of the town may be said to begin at the Crescent and to stretch along the Bakewell road, the buildings of which form a handsome entrance to the town on that side.

The Crescent at Buxton is in the form of the segment of a circle. The basement story is a rustic arcade forming a piazza 7 feet wide within. Over the arches a balustrade runs along the whole building. Above the piers are Doric pilasters that support an ornamental architrave and cornice, which is terminated by another balustrade, in the centre of which are placed the arms of the Cavendish family. This extensive and elegant structure is three stories high; the span of the Crescent is 200 feet; and each wing measures 58 feet, making the whole extent of the front 316 feet; it contains 378 windows. In it are comprised two hotels, a library, an assembly-room 75 feet long, and a news-room, besides the baths and a few private residences.

At the west end of the Crescent and nearly adjoining it is the old hall, erected in the reign of Elizabeth by the Earl of Shrewsbury, in whose custody Mary, queen of Scots, was placed. In one of her visits to Buxton Mary occupied apartments in this building, which are still shown as hers. The house was considerably enlarged in 1670. The public baths at Buxton are very numerous, and are fitted up with every attention to the convenience of the visitors. The well from which the water is supplied to those who resort to Buxton is in a small building in the style of a Grecian temple, in front of the west

wing of the Crescent. In the centre of this building, called St. Ann's Well, is a white marble basin, into which the water issues from the spring. By the side of this basin is a double pump, from which either hot or cold water may be procured within a few inches of each other. The water flows at the rate of 60 gallons a minute. Besides what is properly called the Buxton water there is a chalybeate spring, of a rough strong taste issuing from a chalky stratum on the north side of the river Wye, over which a neat stone structure has been erected by the Duke of Devonshire. Mixed with the other this water proves purgative. A conduit for supplying the inhabitants with pure water for domestic purposes was constructed at the expense of the Duke of Devonshire in 1840.

The public walks at Buxton, of which there is great variety, are laid out with much taste, and ornamented with shrubs and plantations. Around Buxton there are many fine walks and drives. Sbirbrook Dell, Ashwood Dale, the Lover's Leap, and other spots in the valley of the Wye are all interesting, and the neighbouring eminences afford very extensive and beautiful prospects. The environs of Buxton abound with natural curiosities and romantic scenery. The high perpendicular crags on the Bakewell road bordering the valley of the Wye make that road the most interesting, as it is the most accessible of all the scenery in the immediate vicinity of Buxton. At the distance of about half a mile in a different direction are the limestone quarries and Pool's Hole. The latter is a cavern of considerable dimensions in a limestone rock contracted in its entrance, but spacious in the interior. Its roof and sides are covered with stalactites, one of which more remarkable than the rest about the middle of the cave is called the 'Fitch of Bacon.' Here the cave again contracts, but beyond it becomes wide and lofty, as far as a large massy column of stalagmite denominated the 'Queen of Scots' Pillar,' from a tradition that she stopped at this point. The further end of the cavern, comprising about 100 yards, is not very accessible. The whole length is 560 yards. The sides of the mountain are partly occupied with dwellings excavated out of the ashes which have been thrown here from the lime-kilns. A considerable quantity of lime is burnt, and sent into distant parts by the Peak Forest railway. The rocks about Buxton consist of beds of limestone and of lava or tuff-stone, which lie alternately one upon the other. There are many shops in Buxton for the sale of the mineral productions of the Peak, manufactured into various articles of ornament and use, besides fossils and specimens of natural curiosities. Among these is a beautiful spar denominated 'Blue John,' formerly used in repairing the roads, but now worked into the most elegant vases. This spar is found in the neighbourhood of Castleton.

Buxton church is a large and graceful edifice of the Tuscan order, built in 1812 by the Duke of Devonshire. An old building which originally served as the church was for a time used as a school after the opening of the new church; but it has been restored to its original purpose. A new school-room has been fitted up by the Duke of Devonshire. This school has endowments which amount to 94*l.* per annum. There are places of worship in Buxton for Presbyterians, Independents, and Wesleyan Methodists. An excellent institution at this place called the Buxton Bath Charity is for the benefit of persons in humble circumstances whose state of health may require the use of the Buxton waters. Every visitor to Buxton is requested to give a donation of one shilling to this charity the first time of dining in the town, whether at an hotel or a lodging-house. The number of visitors at Buxton varies from 12,000 to 14,000 annually. There are accommodations for nearly 2000 at one time. The season commences in June and ends in October. The market is held on Saturday; fairs are held on February 3rd, April 1st, and May 2nd, besides a cattle fair on September 8th.

(Rhodes, *Peak Scenery*; Adams, *Gem of the Peak*; *Land We Live In*, vol. iii.; *Communication from Buxton*.)

BYBLUS, a town of Phœnicia, now called Jubeil, situated nearly half way between Tripoli and Beirut near the sea-coast, and at the foot of the lower range of Libanus. The town of Jubeil is inclosed by a wall, some parts of which appear to be of the time of the Crusaders. Within the circuit, which is about a mile and a half, there is an ancient Roman theatre in a nearly perfect state; fragments of granitic columns are lying about. The celebrated Jewish writer Philo was a native of Byblus. Byblus was the fabled birth-place of



Coin of Byblus. Copper. 150 grs.

Thammuz, or Adonis, to whom it had a famous temple. The Hebrew name of the town seems to have been Gibleah, and its territory is assigned (Josh. xiii. 5) to the Israelites, but they never got possession of it. The Gibleites are mentioned in the Old Testament as stone-

squarers and caulkers of ships. Alexander took Byblus, whose king joined the Macedonian fleet with his ships. The city gave title to a bishop before it fell under the Moslems. The coins of Byblus have the type of Astarte, or of Isis, who came to Byblus in quest of the body of Osiris.

BYTOWN, Canada West, the chief town of Carleton County, is situated in a very beautiful part of the country on the Ottawa, near the junction of the Rideau Canal with that river, in 45° 20' N. lat., 75° 42' W. long.; distant 126 miles N.N.E. from Kingston, and 284 miles N.E. by R. from Toronto: the population of the town in 1851 was 7760. The lower town, which is the older part, is that in which business is generally carried on: the upper town is of more recent erection; it is situated about half a mile distant on a more elevated site, and consists chiefly of private residences. Considerable improvement has taken place in the appearance of Bytown of late years. Several handsome stone buildings have been erected. The town contains places of worship for Episcopalians, Presbyterians, Wesleyan Methodists, Baptists, and Roman Catholics; several schools, a commercial reading-room, a mercantile library association, a court-house, barracks, and a jail. Bytown is supported chiefly by the lumber trade, a term applied to the system of floating large rafts of rough timber down the rivers of America to the depôts and ports in the lower parts of their course. Timber cut on crown-lands and brought down the Ottawa River is measured at Bytown, and the owner gives bond to pay the duties at Quebec. The value of timber brought down the river in one year, 1844, was estimated at 341,756*l*. About three-fifths of the whole being cut on crown-lands was liable to duty, amounting to about 24,000*l*. Fairs are held at Bytown in April and September. Steamers ply between Bytown and Grenville on the Ottawa, and between Bytown and Kingston on the Rideau Canal.

BYZANTIUM (*Βυζάντιον*, on the coins sometimes *Βυζαντιον*), an ancient Greek city, which occupied part of the site of modern Constantinople. It was founded by a Doric colony from Megara in *b.c.* 667. The city was washed on the east by the Bosphorus, on the south by the Propontis, and on the north by the Golden Horn. Strabo, Pliny, and other ancient writers, speak of the abundance of fish in the sea of Byzantium, especially of the Pelamys kind, which coming down in shoals from the Palus Mœotis, and round by the eastern and southern coast of the Euxine, entered the Bosphorus; and the harbour of Byzantium was called 'the Golden Horn,' in consequence of the riches derived from the fishery. (Plin. 'Hist. Nat.' ix. 15.) The Byzantines salted the fish, which was an article of considerable trade. The harbour of Byzantium became a place of resort for vessels trading with the Euxine, the northern coasts of which already in the time of Herodotus supplied with corn, as they do now, Greece and other countries of the Mediterranean.

In the reign of Darius Hystaspes, the Persian satrap Otanes took Byzantium and Chalcedon, an earlier Megarensian colony on the opposite coast of the Bosphorus. After the battle of Plataea, Pausanias at the head of the united Greek forces took Byzantium, and a fresh colony of mixed Athenians and Lacedæmonians was sent to it. This second colony has given occasion to Justinus and other writers to say that Byzantium was founded by Pausanias. The Lacedæmonians kept possession of Byzantium till Pericles took it from them, but they retook it shortly after. Alcibiades again got possession of it by a stratagem and by holding communication with some persons within the place. (Plutarch, 'Alcib.') Lysander recovered it soon after, and it was under the Lacedæmonians when Xenophon, with the remnant of the 10,000 passed through it on his way home, and his men had a serious affray with the Lacedæmonian governor, which was with difficulty settled by the prudence of Xenophon. Thrasybulus drove the Lacedæmonians away, *b.c.* 390, and changed the form of government, which was before oligarchical, into a democracy. The native Bithynian inhabitants were treated as Helots. After the recovery of its liberty, Byzantium seems to have prospered for a time, and it became, in *b.c.* 356, the head of a confederacy of the neighbouring maritime towns. It also joined Rhodes, Cos, and Chios in the league with King Mausolus against the Athenians, who sent an expedition against Byzantium, which however failed. Some time after, Philip of Macedon having extended his conquests into Thrace, laid siege to Byzantium. The Byzantines made a bold defence, and Philip's army became distressed for want of provisions and money. Philip relieved his wants by seizing 170 ships and confiscating their cargoes. On a dark night Philip's soldiers were near surprising the town, when a "light shone suddenly from the north," and revealed to the inhabitants their danger. In gratitude for this the Byzantines built an altar to Diana, and assumed the crescent as the emblem of their city. The crescent is found on several medals of Byzantium, and the Turks, on their conquest of Constantinople, adopted it for their own device. Under Alexander the Great and Lysimachus, who after Alexander's death succeeded to the government of Thrace, Byzantium was obliged to submit to the Macedonians, but it afterwards recovered its municipal independence, which it retained till the time of the Roman emperors. Its maritime commerce was prosperous, but it was exposed on the land side to continual incursions of Thracians, Scythians, and other barbarians, who ravaged its territory, cut down the harvest, and reduced it to great distress. The most troublesome of these incursions was that of the Gauls, who overran Macedonia

and Northern Greece about *b.c.* 279. The Byzantines, in order to have some respite from them, were obliged to pay heavy sums, from 3000 to 10,000 pieces of gold a year, and at last as much as 80 talents, to save their lands from being ravaged in harvest-time. These and



Coin of Byzantium. Brit. Mus. Copper. 123 grs.



Brit. Mus. Silver. 206 grs.

other burdens compelled them to have recourse to extraordinary measures for raising money, one of which was the exacting of a toll from all ships passing through the Bosphorus, which became the cause of the war between Byzantium and Rhodes, about *b.c.* 221. The Gauls at last went over to Asia, and left Byzantium in peace. The Rhodians, a maritime trading people, refused to pay the toll on their ships passing through the Bosphorus, which led to a war with Byzantium, in which Prusias I., king of Bithynia, sided with the Rhodians, and Attalus I., king of Pergamus, took the part of the Byzantines. The latter had the worst of it, and peace was made by the mediation of Cavalus or Cavarus, king of the Gallo-Græci.

Byzantium allied itself to Rome against Philip II. of Macedonia, as well as against Antiochus and Mithridates. In return for its services it was made a free town confederate with Rome, and its envoys were treated as foreign ambassadors. Some domestic disputes however occasioned an appeal to Rome from the losing party, and Clodius the tribune carried a decree enjoining the Byzantines to readmit the emigrants. Piso was sent to enforce this decree, but his conduct there appears to have been that of a hostile conqueror rather than of an ally and mediator. After Piso's departure the Byzantines resumed their former independence. They were subject to a tribute however, at least under the first emperors, which Claudius remitted for five years, in consideration of their losses during the Thracian war. (Tacitus, 'Ann.' xii. 62.) In consequence of some fresh domestic broils however Vespasian took away their liberties and sent them a governor, and when Apollonius of Tyana remonstrated with the emperor on the subject, Vespasian replied that the Byzantines had forgotten how to be free. In the civil war between Severus and Pescennius Niger, the Byzantines took the part of the latter. After Niger's death Severus besieged the town, which the inhabitants defuded for three years with the courage of despair. At last famine obliged them to surrender (A.D. 196), and Severus treated them with his characteristic inhumanity. The armed men and the chief citizens were put to death, the walls were razed, and the remaining inhabitants were placed under the jurisdiction of Perinthus. Severus however relented afterwards, and, visiting Byzantium, took pains to embellish the town; he built magnificent baths, porticoes round the Hippodrome and other buildings, and gave it the name of Augusta Antonina, in honour of his son Antoninus Bassianus. The Byzantines having rebuilt their walls, and recovered their prosperity, had next the misfortune of somehow displeasing Gallienus, a worse man than Severus, who entered the town under a promise of amnesty, and had most of the inhabitants massacred. Trebellius Pollio says that in his time there were no old families in Byzantium, except those who had left the town before Gallienus entered it. The town however was restored, and it repelled an irruption of the Goths, who had entered the Bosphorus under Claudius II. After the defeat of Licinius by Constantine, Byzantium surrendered to the latter; who was so struck with its situation that he determined to build a new city by the side of old Byzantium, which he called Nea Roma, and which he chose afterwards for the capital of the empire. In May A.D. 330, the new town, which had been commenced only three years before, was dedicated to the Virgin Mary, and the feasts lasted 40 days. [CONSTANTINOPLE.]

Athenæus, Ælian, and other ancient compilers give rather an unfavourable account of Byzantine morals and manners. Idleness and debauchery prevailed, the citizens spent their time in the marketplace, or in the numerous public houses of the city, and let their houses and wives to strangers. The sound of a flute put them immediately in a merry mood, but they fled from that of a trumpet, and

their general, Leo or Leonidas, in the siege by Philip, had no means of keeping them to watch and defend the walls but by causing the sutlers and canteens to be established along the ramparts. (Athenæus, x. p. 442; *Ælian*, 'Hist.' iii. 14.) Byzantium was full of foreign and native merchants, sailors, and fishermen, whom the excellent wine sold in the town and supplied by Maronea and other districts seldom permitted to return sober to their ships. A democracy of such jolly carousers could not be expected to be very strict and orderly in its administration, and it is recorded of a Byzantine demagogue that being asked in some particular case what was the law of the country, he answered, "Whatever I please." Dion says that the walls of Byzantium were built of massive square stones fastened together with iron bolts, and fitting so well together that the whole wall appeared

to be one block. The Byzantines at one time had 500 ships, several of them with rudders at both ends, so as to be able to steer either way without veering or tacking. Tacitus speaks of such vessels being used in the Euxine in his time. ('*Histor.*' iii. 46.) Byzantium occupied the most eastern of the seven hills on which the city of Constantinople is built, and it is supposed to have extended over the three regions of the city that lie behind the present seraglio and gardens of the sultan. Diouysius Byzantinus gives it 40 stadia in circumference. The acropolis or citadel stood on the hill where the seraglio now is.

(Müller, *History of the Dorians*; Böckh, *On the Public Economy of the Athenians*; Sextus Empiricus, *Adversus Rhetores*, 37; Codinus, *Fragment of Hezychius on the Origin of Constantinople*.)

C

CABELLO. [PUERTO CABELLO.]

CABES, GULF OF. [KHAES.]

CABRA. [CORDOVA.]

CARRERA. [BALEARIC ISLANDS.]

CABUL (pronounced and sometimes spelt Caubool, also Kahool), the capital of the State of Cahul in the north of Afghanistan, is situated on the Cahul River, in a wide plain between 6000 and 7000 feet above the sea, in 34° 30' N. lat., 69° 6' E. long., at a distance of about 60 miles N. from Ghuznee, 200 miles N.E. from Candahar, and 120 miles W. from Peshawur: population about 60,000. The city is flanked on three sides by low hills, and inclosed by a wall. The north-eastern quarter forms the Bala Hissar (Palace of Kings), a fortified inclosure comprising the residence of the Khan of Cahul, the government offices, the palace gardens, and a small town. The outer town is about three miles in circuit, compactly built, chiefly with sun-dried bricks and wood to avoid the consequences of the frequent earthquakes. It is entered by four gates placed at the ends of the two principal streets that cross the city. One of these streets, running northward, led to the once magnificent bazaars destroyed by the British on their evacuation of Cahul, on which occasion also the Bala Hissar was greatly damaged. The city is divided into separate districts, each of which is walled, and may form on occasion a separate fortress. In general the streets are crooked, badly paved, and narrow; so much so, that two horsemen can with difficulty pass in some of them. The houses are two and three stories high, and, as in most parts of the east, they have flat roofs: those of the wealthy are built round courtyards, and surrounded by gardens. The tomb of the emperor Baber who made Cahul his capital is on a hill outside the city; it is surrounded by large beds of flowers, and commands a noble prospect: the tomb of Timur-Shah is a brick octagon surmounted by a cupola. The plain about the city is laid out in orchards and gardens, which in some seasons of the year are very beautiful. The climate of Cahul, owing to its great elevation above the sea, is very cold in winter, which is long and severe. [AFGHANISTAN.] The summer is delightful. Cahul is the centre of a very active transit trade in Russian, Chinese, and other northern products, which are sent by caravans to Hindustan and Persia. The routes by which this trade is conducted and the items of which it consists are given in the article on AFGHANISTAN. Cahul has also important markets for the sale of corn, horses, cattle, and fuel; it is particularly celebrated in the east for the excellence and abundance of its fruits and vegetables.

Cahul occupies probably an ancient site; some think it to be the Cahura of Ptolemy. The Arabian historians mention it as the residence of a Hindoo prince in the 7th century. It was taken by Tamerlane about 1394, and again in 1739 by Nadir-Shah, who plundered it. On the death of Nadir-Shah, Ahmed Khan, the founder of the Duranee monarchy, took possession of Cahul, and his son Timur made it in 1774 the capital of Afghanistan. The events that occurred in the city during the late Afghan war are noticed under AFGHANISTAN.

CABUL RIVER. [AFGHANISTAN.]

CACERES. [ESTREMADURA, SPANISH.]

CACHA'R, a province in the north-east quarter of Hindustan, is bounded N. by the Brahmaputra River and Assam, E. by Manipoor and the Birmeese territory, S. by Silhet and Tipperah, and W. by the principality of Jyntia. This province is situated between 24° and 27° N. lat., and between 92° and 94° E. long.: its length from north to south is about 140 English miles, and its breadth from east to west about 100 miles.

Cachar, the ancient name of which was Hairumbo, is divided into Cachar Proper and Dharmapore; the first occupying the south and the second the north part of the province. The country in general is mountainous; the greater part of the mountains is covered with forest trees, hamboos, and jungle, which frequently render them inaccessible; the passes are not practicable at all seasons, and few roads have been made in the district.

A great number of small streams have their sources in the high lands of Cachar. Those in the eastern mountains unite and form the

rivers Capili and Barak, both of which join the Megna or Brahmaputra: the Barak at the point (24° lat., 91° long.) where that river takes the name of the Megna. During certain parts of the year the Barak can be navigated; in the dry season it is fordable, the channel being obstructed by rocks; but soon after the rains have set in the river has a depth of from 30 to 40 feet of water. From June until November considerable tracts are inundated, and the difficulty of travelling is consequently increased.

The jungle fever, often fatal to Europeans, is common in Cachar. It does not however attack the natives with equal violence. The country is thinly inhabited. The entire population has been estimated at about 360,000, but the numbers are liable to constant fluctuation. The best peopled districts are those nearest to the south-west, and a level tract in the north near the Capili River and adjacent to the town of Dharmapore.

Cospore, the modern capital, is 20 miles south from Grobarg, the ancient capital of Hairumbo, in 24° 45' N. lat., 92° 45' E. long., on the banks of a small stream called the Madhura. The Raja of Cachar having in 1811 removed his residence to Doodputlee, a small town about 18 miles farther north, Cospore has since considerably fallen off. The town of Dharmapore, in the northern division of the province and about 60 miles from Cospore, was formerly a place of some strength, and enjoyed a considerable trade; but the fort has now fallen into decay, the trade has in a great measure left the place, and its population has decreased.

Cachar was invaded by the Birmeese in 1774, but the force first sent was destroyed by the jungle fever. A second expedition reduced the raja to submission, and forced him to become a tributary of the King of Ava. In 1810 the Raja of Cachar placed himself under the protection of the British. Some twenty years later the province became the scene of trouble and confusion. In 1830 the Raja Govind Chandra was murdered by his own guard. By desire of the people, as well as to insure peace on the north-east frontier, it was determined to annex the province to the British empire. The affairs of the province are administered by a native raja under the protection of the Company's government.

(Hamilton, *East India Gazetteer*; Wilson, *History of British India; Parliamentary Papers*.)

CADER IDRIS. [MERIONETHSHIRE.]

CADIZ, PROVINCE OF. [SEVILLA.]

CADIZ, a city and sea-port, is situated on the south-west coast of Spain, in 36° 31' N. lat., 6° 17' W. long., 70 miles S.S.W. from the city of Sevilla. It is the capital of the modern province of Cadiz, which is included in the ancient province of Sevilla and great division of Andalucia. It is the see of a bishop, suffragan to the archbishop of Sevilla. The population in 1845 was 53,922.

Cadiz is built on the end of a low and narrow isthmus or tongue of land, which extends from the island of Leon (Isla de Leon), about 5 miles in a north-north-west direction. The rocky extremity on which the city is constructed is considerably higher than the isthmus which connects it with the Isla de Leon; it has a circuit of six or seven miles, and is surrounded by the sea on all sides except where it joins the isthmus. The whole of the western sides of the city, the isthmus, and the Isla de Leon, are open to the Atlantic Ocean; to the north and north-east the projections of the mainland form with the isthmus the Bay of Cadiz, which includes a circuit of more than thirty miles. The outer bay, the entrance to which is between the city and the promontory of Rota, distant about five miles, is exposed to the south-west, but the inner bay is well sheltered, and affords in most places good anchorage. Some dangerous rocks called Las Puercas (the Sows) are scattered opposite the city, in the direction of Rota. The Guadalete enters the sea at Puerto de Santa Maria, where the inner bay may be said to commence, and within this port the harbour is formed by a well-constructed mole, but is not of sufficient depth to allow large vessels to come close up to the city. From Puerto de Santa Maria the coast trends south, and the bay becomes narrower, the mouth being defended by the cross-fires of the forts of Matagorda and Puntales. Here an islet, which contained Fort San Luis, is divided from the mainland by a channel called the Trocadero.

From the Trocadero the bay sweeps inwards, forming a small bay in the mainland, where the town of Puerto Real is situated, and opposite the narrow channel called the Rio de Santi Petri, which divides the Isla de Leon from the mainland, and is crossed by a bridge called the Puente de Zurzo. On the mainland, at the entrance of the Rio de Santi Petri, is La Carraca, one of the chief naval arsenals of Spain, formerly a station for the caracks, or galleons, and from the dock-yards of which were subsequently floated the grand three-deckers, most of which were destroyed by the British fleets during the last war with Spain. The Rio de Santi Petri is very deep, and at the entrance from the Atlantic is defended by a rock-built castle. Fort San Luis, in the inlet of the Trocadero, was much injured by Marshal Victor, and afterwards utterly destroyed by the Duc d'Angoulême. The fortifications generally are at present in a state of neglect and dilapidation.

The city of Cadiz is in form nearly a square, each side of which is about a mile and a half in length. It is surrounded by ramparts, and has five gates, one of which opens on the isthmus, which is itself intersected about the middle by a deep entrenchment called the Cortadura. Between the ramparts and the bay public walks have been formed. The principal walk, the Alameda, is on the eastern side of the city. It is planted with trees and provided with seats, and is thronged on the fine evenings. The streets are regularly laid out, mostly crossing each other at right-angles; they are in general narrow, but are well paved and lighted. The principal street however is of good width; it contains the Exchange (Bolsa), the houses of the nobility and chief merchants, and is the great resort for men of business and loungers during the early part of the day. It is connected with the principal square (Plaza San Antonio), which though not large is handsome, surrounded by large houses, and planted with trees, with marble seats beneath them. The houses of Cadiz are built of a white stone, which gives the city a remarkably bright and clean appearance, and the fronts of most of them are painted, and have balconies furnished with curtains to shade the inmates from the sun. The supply of water for general purposes is from rain collected in cisterns, but good water in abundance is brought in boats from Puerto Santa Maria. The lighthouse of San Sebastian is on the western side of the city; it rises 172 feet from the base, and is visible in clear weather at a distance of 20 miles. From the top of the Torre de la Vigia the white and smokeless city, with its look-out towers (miradores), its flat roofs, and flags, is seen to great advantage.

Cadiz contains two cathedrals. The old one was built in 1597. The new one (La Nueva Catedral) was commenced in 1720, by the corporation, to supply the want of dignity of the old one, but was not completed till about 1840. It is however of small size and poor architecture. There are two theatres (in the larger of which operas are sometimes performed), and a new bull-arena (Plaza de Toros). The Museo contains about 100 paintings by Zurbaran, Murillo, Giordano, and others, but they are not of the highest class. The chapel of the suppressed convent of San Francisco contains the last work of Murillo, who fell from the scaffolding while painting it, and died in consequence at Sevilla. There are artillery-barracks, a naval college, a custom-house, a House of Refuge (Casa de Misericordia), which sometimes contains 1000 inmates, and several smaller charitable establishments. The city also contains a college, a school of navigation, and several other educational institutions.

Cadiz for a long period enjoyed a very high degree of commercial prosperity. In 1792 the imports from Spanish America amounted to 7,295,833*l.*; but this commercial activity was almost wholly destroyed by the defection of the Spanish colonies at the commencement of the present century. The foreign trade, which is now in a state of great depression, arises out of the importation, in Spanish ships, of colonial produce from Cuba, Puerto Rico, and the Philippine Islands; hides, cocoa, indigo, and other produce from South America; salt-fish from Newfoundland, in English vessels; and manufactured goods from England, France, and Germany; but a great amount of this last branch of trade is contraband. The exports consist mostly of wine, olive-oil, fruits, salt, and quicksilver. In 1849 the export of sherry amounted to 130,170 butts. The annual value of the exports is under 2,000,000*l.*, and that of the imports (exclusive of the contraband trade) is not much more than 1,000,000*l.* Mail-steamer go once a week between Cadiz and the Canary Islands. The coasting trade is carried on in small craft, not exceeding 60 tons burden, which import provisions, grain, charcoal, &c. from the other maritime provinces, and export colonial produce, and linen and woollen goods. The manufactures carried on in the city consist of soap, glass, coarse woollen fabrics, cotton and silk goods, and hats. There are also some sugar-refineries and tanneries.

Cadiz is one of the most ancient towns in Europe. It was founded by the Phœnicians several hundreds of years before the Christian era, and was the great mart whence the tin of Britain and other products of western Europe were distributed over the eastern world. The Phœnician name of the town was *Gadir*. The Greeks named it *Γαδίζα*; the Romans *Gades*, and under them it was made a municipium, and became one of the richest cities in the Roman empire. It then received the title of 'Angusta Urbs Julia Gaditana,' and was the seat of one of the four *Conventus Juridici* of Bœtica. It was taken by the Goths, and from them by the Moors. From the Moors it was recovered by

Alonso el Sabio, September 14th, 1262. It has often been besieged. It was taken by assault, pillaged, and burnt by the English in 1596. It was long blockaded by admiral Blake, who there captured two galleons laden with treasure, and sunk eight others. Two English expeditions against it failed, one in 1628, and another in 1702. It was invested by the French during the Peninsular War in 1810, and the investment continued till August 25th, 1812, when, in consequence of the movements of the Duke of Wellington, the blockade was discontinued, and about 1000 guns were destroyed, as well as the vast works at Chiclana, Puerto Santa Maria, and the Trocadero. In August, 1823, it was besieged by the Duc d'Angoulême, and in October the same year was delivered up to him. The French troops retained possession of it till the summer of 1828.

(Strabo, iii. p. 168, &c., ed. Casaub.; Pliny, *Hist. Nat.* iv. 22, &c.; Ford, *Handbook of Spain*; Borrow, *Bible in Spain*; Napier, *Peninsular War*.)

CADORE. [BELLUNO.]

CADSAND. [ZWEELAND.]

CAEN, the capital of the department of Calvados, in the north of France, the seat of a high court of appeal for the departments of Calvados, Manche, and Orne, of tribunals of first instance and of commerce, of a chamber of commerce and exchange, of a provincial university, an endowed college, and an inferior school of navigation, is situated at the confluence of the Odon with the Orne, 127 miles W. from Paris, in 49° 11' N. lat., 0° 21' W. long., and has 40,569 inhabitants including the whole commune.

The city stands at a distance of 7 miles from the mouth of the Orne in the English Channel. There is no evidence of its existence before the 9th century, when it was called *Cathom* or *Cathem*, from which the modern name is said to be derived. When Charles the Simple in 912 ceded *Neustria* to the Northmen, Caen was a large and important town. The Conqueror and his wife Matilda resided in it for some time, and contributed greatly to its embellishment. The Conqueror commenced the castle of Caen, which was finished by Henry I. of England, and the town became the capital of Lower Normandy. In 1346, soon after it had been walled in perhaps for the first time, Edward III. took Caen after a siege, and plundered it. "The town was then," says Froissart, "large, strong, and full of drapery and all other sorts of merchandize, rich citizens, noble dames and damsels, and fine churches." The English took it again in 1417, and held it till 1450, when it capitulated to Count Dunois. Since that time it has belonged to the French.

Caen is situated in a level tract, almost wholly consisting of uninclosed fields of buck-wheat and other corn, extending with monotonous continuity as far as the eye can reach. The appearance of the town from a distance is grand, both from its extent and the number of towers and spires that rise from it. The streets are wide and clean, and the houses are built of stone. The finest streets are those of St.-Jean and St.-Pierre, which cross each other at right-angles, and lead right through the town. The city is intersected by a canal from the Odon, which drives the machinery of several factories. The banks of the rivers are in many places formed into walks, and adorned by avenues of noble trees. There are some ancient houses with the gable to the street, and presenting on the front elaborate carvings of wood. The town has few fountains, the want of which is supplied by wells. There have been considerable improvements of late years in the outskirts of the town, which are facilitated by the circumstance of stone being quarried in the immediate neighbourhood. Much of this stone is exported for building purposes to England. There are but slight remains of the ancient walls and towers by which the town was defended. The bed of the Orne forms a tide-harbour, and its banks are lined with quays. Vessels of 200 tons only can come up to the town owing to the sand-banks at the mouth of the Orne, but a canal is in course of construction which will admit larger craft; the funds for its completion were voted in 1853.

In the town there are several squares; the finest are the Place St.-Sauveur and the Place Royale, in which is a statue of Louis XIV. The public buildings are interesting as well for their architecture as for their historical associations; and, owing to the solidity of the Norman masonry, most of them date from an ancient period. The cathedral, one of the finest ecclesiastical edifices in Normandy, is the ancient church of the abbey of St.-Etienne, which was founded by the Conqueror between 1061 and 1070. It consists of nave and aisles, transept and choir, terminating in a sanctuary of circular plan, shut off by a screen, and surrounded by eleven chapels of symmetrical construction. Galleries run along the whole length of the aisles. The deep portal, flanked by two majestic towers, is greatly admired. The abbey, called also *Abbaye-aux-Hommes*, being outside the town, was regularly fortified in the 14th century. It was sacked in 1562 by the Protestants, on which occasion they demolished the town and dispersed the bones of the Conqueror, who was buried in the abbey church; a second monument erected soon after subsisted till 1742, when the few remains that had been recovered were removed into the interior of the abbey, and a third monument erected over them; this in its turn was demolished at the revolution of 1793. The abbey buildings are now occupied by the college.

The church of La-Trinité belonged to the former abbey of La-

Trinité, called also *Abbaye-aux-Dames*, which was founded by Matilda, the Conqueror's wife, in 1066. This structure is built in the form of a Latin cross; it is remarkable for the severe elegance of its architecture, and for the beauty of its nave; the sanctuary is raised several steps above the pavement, and is canopied by a cupola painted in fresco. Under the sanctuary is a crypt, the vault of which is supported by thirty-four massive pillars. A magnificent mausoleum long stood in the centre of the choir in memory of Matilda, who was buried in this church; in 1562 her coffin and bones shared the same fate as the Conqueror's. A second monument erected to her in 1708 was destroyed in 1793. The buildings of this abbey have been turned into an hospital since 1323. The church of St.-Pierre is a structure of different ages; its tower erected in 1308 is considered a masterpiece. The church of St.-Jean dates from the beginning of the 14th century, and is remarkable for its tower, which leans sensibly to the north. The church of St.-Nicholas is considered the purest specimen of the Norman architecture of the 11th century extant. It has long been desecrated, and is now used as a shot-factory. The castle commenced by the Conqueror, finished by Henry I., and afterwards repaired by Louis XII. and Francis I., still ranks as a place of defence, though the keep and some of the towers were destroyed in 1793. The church of *Nôtre-Dame*, built by the Jesuits in 1634, in the Italian style, is a very elegant structure. The angel hovering over the grand altar is considered to be finely executed. The Prefect's hotel, and the court-house, are elegant modern structures.

Other remarkable objects at Caen are the *Hôtel-Valois*, now used as an exchange; the public library, which contains 25,000 volumes, the museum, the botanical garden, the new fish-market, the abattoir, and the granite bridge over the Orne. The city contains many beautiful promenades, the finest of which are the *Grand Cours*, which runs along the Orne; the *Petit Cours*; the boulevards, which are shaded by horse-chestnut trees; and the *Cours Caffarelli*, which run along both banks of the new canal, and are bordered with fine trees.

The town is famous for the manufacture of Angora gloves, &c. A writer in the '*Dictionnaire de la France*' says that these gloves are made of the down of the Angora rabbit, great numbers of which are reared in the country about Caen; they are plucked (plumés), he adds, every year, and the fur, which is gray or sometimes white, is worked up without either washing or dyeing. Its industrial products comprise also hosiery and lace, broadcloths, flannel, fine and table linen, cotton cloths, fustians, druggets, straw hats, cotton thread gloves, glazed pottery, porcelain, room-paper, cutlery, &c. There are several dye-houses, breweries, timber-yards, tan-yards, and slips for building small coasting vessels in the town.

Caen is an entrepôt for salt. There is a considerable coasting and export trade in paving granite, and building stone. Other articles of trade are corn, wine, brandy, cider, clover-seeds, hemp, cattle, horses, poultry, butter, fish, salt provisions, ironmongery, steel and hardware, and millstones. A railway in course of construction from Rosny near Mantes on the Paris-Rouen line to Cherbourg passes through Caen.

(*Dictionnaire de la France*; *Annuaire pour 1853*; *Official Papers*.)

CAERGWRLY. [FLINTSHIRE.]

CAERLAVEROCK. [DUMFRIESHIRE.]

CAERLEON, Monmouthshire, a market-town in the parish of Llangatock and lower division of Usk hundred, is situated on the right bank of the river Usk, in 51° 37' N. lat., 2° 56' W. long.; distant 22 miles S.W. by S. from Monmouth, 148 miles W. from London by road; Newport station of the South Wales railway, which is 153 miles from London, is about 4 miles from Caerleon. The population of the town of Caerleon in 1851 was 1231; that of the entire parish of Llangatock was 1539. The living is a vicarage in the archdeaconry of Monmouth and diocese of Llandaff.

Caerleon is believed to have been at an early period the capital of Wales, and the seat of an archbishopric shortly after the introduction of Christianity into Britain. The Romans had here a station named by them *Isca Silurum*. Its site is now for the most part covered with fields and orchards. A space of ground 222 feet by 192 feet, which has received the name of Arthur's Round Table, is conceived to have been a Roman amphitheatre. Portions of the ancient walls remain, about 14 feet in height and 12 feet in thickness. The ruins of a fortress, said to be Norman, existed here about a century ago: portions of the buildings then standing were 40 feet high. On an eminence by the river Usk are the remains of the ancient castle of Caerleon. Antiquities of various kinds, chiefly Roman, have been dug up in the town and vicinity. Previous to the Reformation there existed at Caerleon an abbey of Cistercian monks.

The parish church has a tower of early English date and style; the nave, aisles, and chancel are perpendicular. The interior has been modernised. The Wesleyan and Primitive Methodists and Baptists have places of worship in the town. There are an Endowed school, a National, and an Infant school. A handsome building has been erected as a museum for Roman and other antiquities. There is little trade in the town; tin-plate works give employment to some of the inhabitants. The market-day is Thursday; there are fairs on the third Wednesday in February, May 1st, July 20th, and September

21st. St. Julian's, the residence of the celebrated Lord Herbert of Chisbury, is about a mile and a half from Caerleon.

(Cliffe, *Book of South Wales*; *Communication from Caerleon*.)

CAERMARTHEN, or in Welsh *CAER FYRDDYN*, the capital of Caermarthenshire, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 51° 51' N. lat., 4° 19' W. long.; 218 miles W. by N. from Loudon by road, and 245 miles by the Great Western and South Wales railways. It stands on the right bank of the river Towy, or Tywi, near where that river bends to the south to empty itself into Caermarthen Bay. Caermarthen is a borough and county of itself. The population of the county of the borough of Caermarthen in 1851 was 10,524. Caermarthen returns one member to the Imperial Parliament. The corporation consists of 6 aldermen and 18 councillors, who annually elect a mayor. For sanitary purposes the borough is governed by a Local Board of Health. The living is a vicarage in the archdeaconry of Caermarthen and diocese of St. David's. Caermarthen Poor-Law Union contains 29 parishes and townships, with an area of 156,459 acres, and a population in 1851 of 38,119.

Caermarthen has been identified with the *Maridunum* of Ptolemæus, one of the towns of the *Demetæ*. Remains of two Roman camps and several other vestiges of the Roman occupation have been discovered in and near the town. It was afterwards the residence of the princes of South Wales. In the contests between the neighbouring Welsh chieftains for the possession of the district, and in the wars between the natives and the Anglo-Saxons and Normans, the castle of Caermarthen was a post of importance, and frequently changed hands; in these struggles it suffered much. In the time of Charles I. the castle was garrisoned by the Royalists, from whom it was taken by the Parliamentarians. It was probably dismantled shortly afterwards, and allowed to go to decay; part of it was however occupied as the county jail till towards the close of the last century.

The situation of Caermarthen is very beautiful, and the inequality of its site gives it a picturesque appearance. The streets are irregular and steep, and many of them narrow; the leading streets however are well paved, and lighted with gas. The principal edifice is the guildhall in the centre of the town, a capacious modern building, raised on pillars, with a covered market underneath. The county jail occupies part of the site of the castle. There is a good market-place out of the town. A substantial bridge of several arches crosses the Towy, by which the road from Swansea enters Caermarthen. The parish church, dedicated to St. Peter, is a plain large building, with a square tower. Sir Richard Steele lies buried here. Some remains of a former church dedicated to St. Mary are still left, as also of two religious houses, a priory of the canons of St. Augustine, and a house of Franciscan or Gray Friars. There are several places of worship belonging to Baptists, Wesleyan Methodists, Calvinistic Methodists, Independents, and Unitarians; in most of these chapels service is performed in the Welsh language.

Sir Thomas Powell's Grammar school, founded in 1720, is free to boys dwelling in Caermarthen and its neighbourhood, and had 25 scholars in 1852. The college for the education of young men for the Presbyterian ministry had 25 students in 1852. The South Wales Training College, established in 1848 at Caermarthen by the Welsh Education Committee in connection with the National School Society, had 42 students in residence in the college in 1852. There are also in the town National, British, and Infant schools; an infirmary; and a literary and scientific institution.

There are tin works and iron foundries in the neighbourhood, and the trade of the place is considerable. The chief fisheries, which are mostly of salmon and sewin, are here carried on in coracles with dragnets. The quay extends along the banks of the Towy: the vessels which come to Caermarthen are chiefly coasters: the communication with Bristol is great. Vessels of from 50 to 150 tons burden are built here. Among the exports are timber, bark, marble, slates, lead-ore, bricks, grain, butter, and eggs.

General Sir Thomas Picton and General Lord Nott were natives of Caermarthen. A monument to the memory of Picton was erected on an eminence adjoining the town, but having fallen into a dilapidated state it was taken down in 1846, and rebuilt on a smaller scale.

(Cliffe, *Book of South Wales*; *Communication from Caermarthen*.)

CAERMARTHENSHIRE, a county of South Wales, situated in the western part of that principality, between 51° 41' and 52° 9' N. lat., 3° 38' and 4° 48' W. long., is bounded N. by Cardiganshire, E. by Brecknockshire, S.E. by Glamorganshire, S.W. by the sea, and W. by Pembrokehire. Its greatest length is about 53 miles, its greatest breadth about 33 miles. The area of the county is 606,331 acres; it is the largest of all the Welsh counties. The population in 1841 was 106,326; in 1851 it was 110,632.

Surface, Hydrography, Communications.—Caermarthenshire partakes of the mountainous character which is general in Wales, but the elevation of the mountains is not so great as in some other counties. In the northern part of the county a range, distinguished by different names, runs nearly parallel to the boundary between this county and Cardiganshire, about four miles within the county. This range separates the vale of the Teify from that of the Cothy, a feeder of the Towy. The highest point is probably New Inn Hill, 1168 feet above

the level of the sea. Nearly parallel to this range, but more to the south-east, is another smaller range, separating the valley of the Cothy from that of the Towy. To the south-east of the last river is the range of the Mynydd Dŵ, or Black Mountains, of which the highest point, Caermarthenshire Van, more correctly Y Fan or Ban Sir Gaer (the Caermarthenshire Beacon), has an elevation of 2596 feet. Besides these there are to the north-east Talaarn and Treacastle Mountains and several detached eminences.

The coast-line of Caermarthenshire is wholly included within Caermarthen Bay. This noble bay is 15 miles across, and affords good anchorage. The western side, where it is sheltered by Caldy Island, which forms a natural breakwater, serves as a secure harbour for shipping, except during easterly gales. The principal river of Caermarthenshire is the Tywi, or Towy, which rises in Cardiganshire in a large morass near or upon the border towards Brecknockshire; whence, flowing southward, and receiving the waters of many brooks, it enters Caermarthenshire near the north-eastern extremity of the county. Near Llandovery it receives the united stream of the rivers Braen and Gwydderig, or Gwthrif, and thus augmented runs to the south-west past Llangadock and Llandilo-vawr, receiving many small feeders on each bank. Below Llandilo-vawr the Towy bends more to the west, and flows to Caermarthen; this bend takes place at Grongar Hill, celebrated by the pen of the poet Dyer. Between Llandilo-vawr and Caermarthen, the Towy receives the waters of the Cothy or Gothy, the most important of its feeders, and the waters of several other streams. From Caermarthen the river flows southward into the Bay of Caermarthen, its estuary being combined with those of the Gwendraeth-vawr and the Tave. The whole course of the Towy is about 60 miles, of which about 50 miles are in the county of Caermarthen. It is navigable to Caermarthen town, about eight or nine miles up the river. This river abounds with fish, especially salmon, sewin, trout, and eels; also lampreys and lamperns in the months of June and July. It affords great diversity and beauty of scenery. Its banks are in many places well wooded. The Cothy rises on the border of the county towards Cardiganshire, and has a south-west course of about 25 miles before its junction with the Towy. The Tave rises in Pembrokeshire, east of Precelly Mountain, but has only a small part of its course in that county. The valley through which it flows is well wooded. Near the village of St. Clear it receives the Cathgenny and the Cowin or Cowen. The Tave becomes navigable at St. Clear, and flows into Caermarthen Bay just below the town of Laugharne; its whole course is about 26 or 28 miles. The *Gwendraeth-vawr* (or Great Gwendraeth) rises in the hills which occupy the south-east part of the county towards Glamorganshire, and flows south-west into Caermarthen Bay. The mouth is much obstructed by sand, which by its accumulation has formed a dangerous bar, much to the injury of the trade of Kidwelly. Its course is only about 15 miles. The *Lloughor* rises in the Mynydd Dŵ, or Black Mountains, and flowing south-west forms, during the greater part of its course, the boundary between Caermarthenshire and Glamorganshire. It is a very copious stream from its source, near which it has a fall of 18 feet; and it receives several tributaries. Its estuary has the name of the river Burry. It is navigable to above Lloughor, which is on the Glamorganshire side. It has been supposed that the Lloughor really issues from a lake near the Caermarthenshire Van; and the supposition was confirmed by the circumstance that some husks of corn thrown into the lake reappeared six hours afterwards at the apparent source of this river. The *Teify* divides this county from Cardiganshire.

There are no lakes of any extent in Caermarthenshire. One on Mynydd-mawr (the Great Mountain) which overlooks the valley of the Towy is of circular form, about half a mile across, and abounds in fine perch and other fish. Another lake of very limpid water lies at the foot of the steep declivity of the Caermarthenshire Van: it is remarkable for the beauty of the scenery by which it is surrounded. Its greatest depth is 16 fathoms, and its greatest diameter about a mile: it abounds with fine perch and eels of extraordinary size. It is the source of the Sawddy, a feeder of the Towy.

There are properly only two navigable rivers in the county, the Towy and the Tave: the navigation of the Lloughor and the Gwendraeth-vawr is confined in reality to their estuaries. There is one short canal from Kidwelly to Llanelly, with a cut to Pembrey Harbour; one (the Caermarthenshire) railway 16 miles long from the limestone quarries of Castell y Garrog to Llanelly, where is a small dock for shipping; and another (the Llanelly) railway little more than 2 miles long, with a dock or basin at its termination at Machynis Pool, near Llanelly. These railroads are chiefly designed for conveying the mineral produce of the county to the sea. The South Wales railway enters Caermarthenshire at its south-eastern extremity near Llanelly, and after passing Kidwelly proceeds up the valley of the Towy to Caermarthen, and through the south-western side of the county in a nearly western direction. It quits the county near Whitelad Abbey, a few miles from Lampeter.

Caermarthenshire is intersected in almost every direction by turnpike-roads. Two mail-roads, both leading to Haverfordwest and Milford, cross the county; one passes through Oxford, Gloucester, and Brecon, enters Caermarthenshire between Treacastle and Llandovery, and runs by Llandovery and Llandilo-vawr to Caermarthen; the

other through Bath, Bristol, Cowbridge, and Neath, enters Caermarthenshire near Pontarddylais, and runs to Caermarthen. This road is the chief communication between Swansea and Caermarthen. There are several other important roads in the county.

Geology and Mineralogy.—The southern part of the county bordering upon Glamorganshire and the sea forms part of the great coal-field of South Wales and the most extensive of the coal-fields of Great Britain, though yet comparatively little worked. The coal is chiefly what is called stone-coal; the large coal of this quality is used for drying hops and malt; the small coal called culm for burning limestone. Towards the coast the coal is more bituminous. Culm constitutes the principal fuel of the district; it is mixed with clay till it acquires the consistence of mortar, and is then formed into balls of a moderate size, which are piled in the grate and give out a strong heat. Iron-stone is procured from the coal-measures near Llanelly, where are considerable iron-works. The northern outcrop of a basin of carboniferous limestone crosses the county in a waving line, and at Caermarthen Bay divides the coal-field into two parts, separating that which is in Pembrokeshire from that in Caermarthenshire and Glamorganshire. From this belt of limestone the farmers of this county obtain their lime for manure. Some marble of a blue colour slightly veined with white, which bears an excellent polish, is quarried in it: it is wrought into chimney-pieces and sent to Bristol. The tombstones in the neighbourhood are all made of it.

The old red-sandstone, which rises from beneath the mountain limestone, occupies in the county only a comparatively narrow strip of the surface bounding the coal-field and the limestone district to the north. About Caermarthen the rocks are chiefly of the Silurian system. Clay-slate and grauwacke-slate underlie the sandstone, and rising from beneath it occupy the rest of the county. (Conybeare and Phillips, 'Geology of England and Wales;' Murchison, 'Silurian System;' 'Memoirs of the Geological Survey of Great Britain;' 'Ordnance Maps;' 'Geological Map of the Society for the Diffusion of Useful Knowledge.')

Divisions, Towns, &c.—Gough, in his additions to Camden, says that Caermarthenshire contains six hundreds; but this is not correct. There are altogether eight hundreds, namely, Catlinog and Cayo in the north, Perfedd in the east, Iskennen in the south-east, Carnwallon and Kidwelly in the south, Derllys in the west and south-west, and Elvet in the north-west. The three hundreds of Iskennen, Carnwallon, and Kidwelly form a district distinct from the rest of the county, having a coroner of its own.

There are in this county one borough, CAERMARTHEN, with its contributory borough LLANELLY, and six market-TOWNS, besides the two already mentioned:—Kidwelly, Laugharne, LLANDILO-VAWR, LLANDOVERY, Llangadock, and NEWCASTLE EMLYN. Those printed in small capitals will be described in separate articles; the remainder we shall briefly notice here.

Kidwelly, or Cydweli, a borough, is upon the Gwendraeth-vechan, or Lesser Gwendraeth, near its junction with the Gwendraeth-vawr; 8 miles S. from Caermarthen: the population of the parish in 1851 was 1648. Old Kidwelly was once surrounded with walls and had three gates, one of which is yet standing. The trade of New Kidwelly has declined, owing to the sand obstructing the navigation of the river. The church, dedicated to the Virgin Mary, is in the new town, and is a plain ancient structure containing an aisle and two ruined transepts: there is a tower at the west end surmounted by a spire 165 feet in height. A good stone bridge crosses the Gwendraeth-vechan. The ancient castle occupies a rocky eminence on the western side of the Gwendraeth-vechan: its external appearance is grand and imposing; it is on the whole in tolerable preservation. The magnificent gateway towards the west which formed the principal entrance is yet standing. This fortress is said to have been built about the close of the 11th century by a Norman knight who had assisted in the conquest of Glamorganshire. There is a Free school. Some slight remains of a religious house are traceable. Kidwelly has several Dissenting meeting-houses.

Laugharne is on the right bank of the estuary of the Tave, about 12½ miles from Caermarthen: the population of the parish in 1851 was 2011. The town is built on the edge of a marsh open to the sea, and backed by high grounds: it contains a considerable proportion of respectable houses. The parish church, dedicated to St. Martin, is large and handsome. The castle of Laugharne is a picturesque and noble ruin. It was probably built by some of the Norman lords who invaded this coast soon after the Conquest: it was an object of frequent hostility in the wars between the Welsh and the English, and was again contested in the war between Charles I. and the Parliament. There are also the remains of a building called Roche's Castle, but supposed to have been really a monastery. The town of Laugharne is incorporated. The trade of the place consists chiefly of the export of small quantities of butter and corn. There are several Dissenting places of worship and some parochial endowments. This town was the birthplace of an eminent political and theological writer, Dean Tucker, who died in 1799.

Llangadock, or Llan Gadog Fawr, is in the vale of Towy, near the junction of the Sawddy with that river, about 8½ miles from Llandilo-vawr: the population of the hamlet of Above Sawtbe, which contains the town of Llangadock, was 825 in 1851. The town occupies a

delightful situation, and has a very respectable appearance. The church, an old and substantial edifice, is dedicated to St. Cadog, whence the name of the town is derived. There are several Dissenting meeting-houses. A modern bridge of five arches crosses the Towy. Coal and limestone are worked in the neighbourhood. The coal is sent partly by canal to Swansea, and exported from thence. A short distance to the south of Llangadock is a hill called Tri Chrŷg, or the Three Hillocks; on the summit are three barrows, whence it has received its name; near them are vestiges of a British encampment.

The village of *St. Clear*, 9 miles from Caermarthen towards Milford, is situated at the confluence of the Gynan with the Taf, and exports a considerable quantity of corn, butter, and other agricultural produce: the parish had in 1851 a population of 1240. There are some remains of an alien priory of Cluniac monks. *St. Clear* had once a strong castle, the site of which is indicated by an artificial mound of earth. This village attained considerable notoriety a few years back from having been the head-quarters of the 'Rebecca' rioters. *Abergwili*, two miles E. from Caermarthen, is a small town, in which is the palace of the bishop of St. David's. There is an Endowed school in the town: the population of the parish in 1851 was 2325. *Pembrey*, on the right bank of the Burry estuary, 12 miles S. from Caermarthen: the population of the parish in 1851 was 3310. In this parish is *Pembrey Harbour*, or *Burry Port*, which has been rendered capable of containing 80 large coasting vessels. A small mineral railway connects some mines with the harbour, and a canal unites *Pembrey* with the *Kidwelly* and *Llanelly* Canal. The coal-mines and iron-works furnish considerable employment. *Ferryside* is a small watering-place on the left bank of the estuary of the Towy, about 8 miles S. from Caernarvon. The parish of *St. Ishmael's*, in which it is situated, had in 1851 a population of 968. *Ferryside* is a good deal resorted to for bathing by the inhabitants of Caermarthen, and is a very quiet pleasant little village.

Divisions for Ecclesiastical and Legal Purposes.—This county is in the diocese of St. David's, and for the most part in the archdeaconry of Caermarthen; a very small part is in the archdeaconry of Cardigan. The number of parishes, according to the population returns, is 76. The county is divided by the Poor-Law Commissioners into five Unions:—*Caermarthen*, *Llandilo-vawr*, *Llandovery*, *Llanelly*, and *Newcastle-in-Emlyn*. These Poor-Law Unions include 83 parishes and townships, with a population in 1851 of 123,738. The area included within the boundaries of the Unions is larger than that of the county. The county is in the South Wales circuit; the assizes are held at Caermarthen, also the Epiphany, Easter, and Michaelmas sessions; the Midsummer sessions are held at *Llandilo-vawr*. County courts are held in Caermarthen, *Llandilo-vawr*, *Llandovery*, *Llanelly*, and *Newcastles-in-Emlyn*. The county returns two members to the Imperial Parliament; before the Reform Act it returned only one. Caermarthen with *Llanelly* returns one member; and *Newcastle* is united with *Adpar* (*Cardiganshire*) as a contributory borough to *Cardigan*.

History, Antiquities, &c.—To the Roman general *Julius Frontinus* are ascribed two Roman roads, the 'Via Julia Maritima' and the 'Via Julia Montana,' which cross this county; the first near the coast, probably through *Neath* and *Loughor* (*Glamorganshire*), and *Caermarthen*; the second, more inland, by *Llangadock* and *Llandilo-vawr*. These roads seem to have united at *Maridunum* (*Caermarthen*), and thence to have been continued to the neighbourhood of *Menapia* (*St. David's*), probably in a direction nearly due west. Other Roman roads have been traced. Near *Llanboidy*, west of *Caermarthen*, are the remains of a British or Roman camp, at the entrance of which in 1692 were found 200 Roman silver coins, of early date, buried in two leaden boxes just under the surface of the ground.

The Romans appear to have been aware of the mineral riches of *Caermarthenshire*. On the left bank of the *Cothy*, near *Pumpsant*, is a mine called the *Gogofau*, or *Ogofau*, which, according to the traditions of the county, was wrought by the Romans in search for gold.

After the departure of the Romans this district was included in the principality of *Ceredigion* (*Cardigan*); but in the 9th century it was subject to *Rhodri Mawr*, or *Roderick the Great*, who united the whole of Wales into one kingdom. Upon the division of his territories among his three sons, *Ceredigion*, including *Caermarthenshire* and nearly all the rest of South Wales, fell to the lot of *Cadell*, the seat of whose government was at *Dinas Fawr*, or *Dynevor*, where *Rhodri* had built a palace. The division of Wales among the sons of *Rhodri* was a fatal step; dissensions broke out among the brothers; *Cadell* conquered *Powis* (a district between the *Wye* and the *Severn*), the heritages of his brother *Merfyn*. He was himself subsequently attacked by his other brother *Anarawd*, king of *Gwynedd*, or *North Wales*; and in this war *Caermarthenshire* was ravaged by *Anarawd* with a powerful force supported by some Saxon auxiliaries. *Cadell* was succeeded in 907 by his son *Hywell*, who subsequently united the whole of Wales under his sceptre; and became, under the name of *Hywell Dda* (or *Howell the Good*), celebrated as the legislator of his kingdom. A fresh division of the kingdom after *Hywell's* death brought new troubles; the occasional re-unions which resulted from mere force were not permanent; and to the misery of these civil broils were added the ravages of Danish invaders. In these contests

Caermarthenshire had its share, and two remarkable engagements were fought within its borders; one in 1020 at *Abergwili*, near *Caermarthen*, in which *Llewellyn*, at that time sovereign of the whole of Wales, defeated and slew a Scottish adventurer, *Run*, who personating one of the Welsh princes had raised a force among the disaffected chieftains; another in 1021, in which *Llewellyn* defeated two native princes, who were supported against him by the Irish and Scots, but fell himself in the action through treachery. This battle was fought near *Caermarthen*. Throughout these contests *Dynevor* continued to be the seat of government for South Wales.

Some years after the conquest of England by the Normans, the great feudal lords whose possessions bordered upon Wales began a series of encroachments upon the principality of South Wales, by which it was gradually reduced to the counties of *Caermarthen* and *Cardigan*; even these were for some time in the possession of *Henry I.* of England. A considerable part of the principality of *Dynevor* was given up by *Henry I.* to a Welsh prince who appears to have been a feudal subject of the crown of England. Gradually the princes of Wales sunk into the character of subjects of England, and their hostilities with each other and with the neighbouring Norman lords assumed more the character of the struggles between a powerful and restless nobility for territory or pre-eminence than of the resistance of one nation to the aggression of another. In the wars between *Llewellyn*, prince of *North Wales*, and *Henry III.*, *Caermarthenshire* became the scene of contest; and in a severe action the English, who were besieging *Dynevor* castle, were entirely defeated by the troops of *Llewellyn*, aided by some chieftains of South Wales. In the final contest between *Llewellyn* and *Edward I.* the Welsh were entirely defeated near *Llandilo-vawr*, and *Llewellyn* was subsequently beset by the English and killed while apart from his army. When the complete subjugation of Wales took place in the reign of *Edward I.*, *Caermarthen* became the seat of courts of law which that prince established for South Wales. The subsequent revolts of the natives were repressed and punished as acts of treason. During the revolt of *Owen Glyndwr*, at a subsequent period, *Caermarthen* castle was taken by a body of French sent to support that chieftain.

Of the troublous period which preceded the conquest of South Wales this county possesses several memorials in the baronial castles, the remains of which are so numerous. Those of *Caermarthen*, *Kidwelly*, *Laugharne*, *Llangadock*, *Emlyn*, and *St. Clear*, have been already noticed; *Dynevor* and *Carreg Cennen* are noticed under *LLANDILO-VAWR*; and *Llandovery* under *LLANDOVERY*. Two others call for notice here, *Llanstufan*, or *Llan Stephan*, on a rock of great height on the right bank of the *Towy*, near its mouth; and *Dryslwyn*, in the vale of *Towy*, on the right bank of the river between *Llandilo-vawr* and *Caermarthen*. *Llan Stephan* Castle commands the entrance of the river; and from it there is a fine prospect on the one side towards *Caermarthen*, and on the other towards *Tenby* in *Pembrokeshire*, across a fine bay. The ruins form a picturesque object, whether viewed from the land or the water; and there is sufficient of them to show that the area inclosed by the castle walls must have been large. The ecclesiastical ruins at *Caermarthen*, *Kidwelly*, and *St. Clear*, have been mentioned; to these we may add *Tallagh* or *Talley Abbey*, in the vale of the *Cothy*, founded by *Rhuys ap Gruffydd*, prince of South Wales, who died in 1197, for *Præmonstratensian* canons; *Albaland*, or *Whiteland Cistercian Abbey*, on the left bank of the *Tave*, the time of whose foundation is disputed; the yearly revenue at the dissolution was 153*l.* 17*s.* 2*d.*

In the civil war of the 17th century this county, together with the counties of *Pembroke* and *Cardigan*, was held for the king by *Richard earl of Carberry*. The Parliamentary forces opposed to him were commanded by *General Laugharne*, who took from the Royalists the castles of *Caermarthen* and *Laugharne*. At a subsequent period *Laugharne* went over to the Royalists; and upon his defeat with his coadjutors by *Colonel Horton*, several skirmishes took place in *Caermarthenshire* as the defeated party retreated towards *Pembroke* castle, where they were besieged by *Cromwell* and forced to surrender.

There were in 1851 three savings banks in *Caermarthenshire*; at *Llandilo*, *Llanelly*, and *Newcastle-Emlyn*. The total amount owing to depositors on the 20th November 1851 was 30,162*l.* 17*s.* 4*d.*

CAERNARVON, the chief town of *Caernarvonshire*, and the capital of *North Wales*; a port, borough, market-town, and the seat of a Poor-Law Union, in the parish of *Llanbeblig* and hundred of *Is-Gorfa*, is situated on the east side of the *Menai Strait*, in 53° 9' N. lat., 4° 15' W. long.; distant 235 miles N.W. by W. from *London* by road. *Bangor*, the nearest railway station, 8 miles from *Caernarvon*, is 238 miles from *London* by the *North-Western* and *Chester* and *Holyhead* railways. The population of the borough of *Caernarvon* in 1851 was 8674. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and with the contributory boroughs of *Pwllheli*, *Nevin*, *Criccieth*, *Conway*, and *Bangor*, returns one member to the Imperial Parliament. The living of *Llanbeblig* is a vicarage held with the curacies of *Caernarvon* and *Waenfawr* in the archdeaconry and diocese of *Bangor*. *Caernarvon* Poor-Law Union contains sixteen parishes and townships, with an area of 43,405 acres, and a population in 1851 of 30,211.

At *Llanbeblig*, about half a mile from *Caernarvon*, are the remains of the Roman station *Segontium*, or *Caer-seint*. Only some fragments

of the walls now exist, of which on the south side there are extensive portions in a tolerably perfect state. In 1845 a Roman villa and baths were traced, and a number of coins found, including one struck on occasion of the subjugation of the Jewish people by Vespasian. A well in the neighbourhood still bears the name of Helena, the mother of Constantine. In the local museum are deposited numerous specimens of gold and copper coins, personal ornaments, and other Roman remains discovered on the site of the ancient Segontium. A Roman road is still traceable leading to Dinas Dinorddwig, a Roman station a few miles to the east. On the left bank of the Selont is a Roman fort still nearly entire. The walls are about 11 feet high and 6 feet thick, with three parallel rows of circular holes about 3 inches in diameter running all round the walls.

Caernarvon owes its importance, if not also its origin, to the erection by Edward I. of the castle, a great part of the remains of which still exist. The erection of the castle was commenced in 1283 or 1284, and the work was carried on during the succeeding 10 years: the walls of Segontium furnished a part of the materials; limestone was brought from Anglesey, and other materials from Vaenol, between Caernarvon and Bangor. At Caernarvon, in 1284, the first English 'Prince of Wales,' afterwards the unhappy Edward II., was born. Upon an insurrection of the Welsh in 1294, under Madoc, an illegitimate son of Llewellyn prince of Wales, the castle and town were taken by the Welsh, the English inhabitants massacred, and the place burnt. After this the works appear to have been commenced afresh, and continued till their completion. The tower called the Eagle Tower, from the figure of an eagle carved on it in stone, was completed in 1317; it could not therefore have been, as popularly supposed, the birthplace of Edward II., the first Prince of Wales. The castle was defended for Henry IV. against Owen Glyndwr, by two Welsh captains, to whom it had been intrusted. In the civil war of Charles I. and the Parliament the castle was alternately in the hands of the opposing parties, but in 1640 it was taken by the Parliamentarians who retained possession of it.

The external walls of the castle are nearly entire, inclosing a space of 3 acres, of an oblong shape: they are from 8 to 10 feet thick, and have within their thickness a covered gallery with loopholes for the discharge of arrows. There are in the circuit of the walls 13 embattled towers with turrets: some are pentagonal, while others have six or eight sides. The principal entry to the castle is by a gateway originally defended by four portcullises, under a massy tower, on the front of which is a statue of Edward I. The interior of the castle is much dilapidated: but the walls have been recently repaired under the direction of Mr. Salvin, and it is now carefully preserved. The mayor of Caernarvon is during his term of office deputy-governor of the castle.

Caernarvon was made a free borough by Edward I. The charter dated September 1284 was the first granted by Edward I. to Wales. The name of the borough, *Caer-y-n-Arfon*, signifies the town or fortress in Arfon, the district opposite Anglesey. The town walls are defended by round towers, and had originally only two gates: other openings have been subsequently made to form a communication with the suburbs on the east, which have so far increased as to make a new town. The streets are narrow but regularly laid out, crossing each other at right angles; they are well paved and lighted. Much improvement has taken place in the appearance of the town of late years. Outside the town wall and along the shore of the Menai is a terrace extending from the quay to the north side of the town; there is here a landing-pier, recently built. Another pier projects into the Seiont. The guild-hall is over one of the ancient gates of the town. The county-hall in which the assizes are held is a commodious building; the county prison is small. A county court is held in the town. There are a market-house and a corn-market. An establishment for warm and cold baths, with reading-room, &c., has been constructed at a cost of about 9000*l.* by the Marquis of Anglesey.

At the parish church of Llanbellig divine service is conducted in the Welsh language; at St. Mary's, the chapel of ease in Caernarvon, the services are in English. There are seven places of worship for Dissenters, at one of which (the Wesleyan) the services are conducted in English. Model National schools were erected in Caernarvon in 1843 at a cost of 3000*l.* There are two other National schools, a British school, an infant school, and a Ragged school. An institution for training Welsh national schoolmasters had 21 students in 1852. A mechanics institution and two reading-rooms are supported in Caernarvon, and there is an excellent local museum in connection with the Caernarvon, Anglesey, and Merioneth Natural History Society.

There is no manufacture of any importance in Caernarvon: the chief trade is the exportation of copper-ore and of slates from the quarries of Llanberris and Llanllyfni in the interior. The average annual amount of slate exported is 90,000 tons. The number and tonnage of vessels registered as belonging to the port of Caernarvon on December 31st 1852 were—under 50 tons 177, tonnage 5697; above 50 tons 245, tonnage 21,573; and 1 steam vessel of 89 tons. During 1852 there entered at the port in the coasting-trade 1342 sailing vessels, tonnage 50,190; and cleared 283 of 9814 tons: of steam vessels there entered 44 of 3322 tons; and cleared 30 of 2688 tons. In the colonial and foreign trade there entered 25 vessels of 3966 tons; and cleared 90 of 8656 tons. The port has been much improved, and

there is a railroad from the slate-quarries of Tallyraen and Llanllyfni to the town. There is an extensive iron and brass foundry. Ship-building is carried on. Some of the inhabitants are engaged in fishing.

Caernarvon is resorted to as a bathing-place, and many genteel families reside in the town and neighbourhood. It is also one of the towns generally visited by tourists in Wales, for whose accommodation there are excellent hotels. The communication with Anglesey is kept up by a small steamer which plies every half-hour during the day. Caernarvon has two weekly markets, on Wednesday and Saturday; that on Saturday is of most importance. There are five annual fairs. (Parry, *Cambrian Mirror*; Bingley, *North Wales*; Cliffe, *Book of North Wales*; *Communication from Caernarvon*.)

CAERNARVONSHIRE is situated at the extremity of the mainland of Wales, being farther to the north-west than any other county, except the island of Anglesey. It lies between 52° 47' and 53° 21' N. lat., 3° 40' and 4° 45' W. long. It is bounded on the N. by the Irish Sea; on the N.W. by the Menai Strait, which separates it from Anglesey, and by Caernarvon Bay; on the S. it is bounded by the great Bay of Cardigan, which forms on this coast the smaller bays of Aberdaron, Hell's Month, Ceiriad Road, and St. Tudwal's Road; on the S.E. it is bounded by Merionethshire; and on the E. by Denbighshire, from which, for a large part of the boundary, it is separated by the river Conway. Caernarvonshire is thus on every side, except the east and south-east, washed by the sea; while inland the boundary is for the most part formed by two streams, the Conway and a stream which separates Caernarvonshire from Merionethshire. There are three detached portions on the east or Denbighshire side of the Conway: one of these at the mouth of the river comprehends the promontories of Great Orme's Head and Little Orme's Head. The form of the county is an irregular oblong, having its greatest length about fifty-five miles and its greatest breadth about twenty-two miles. The county contains 370,273 acres: the population of the county in 1841 was 81,093; in 1851 it was 87,870.

Coast and Islands, Surface, Hydrography, and Communications.—There are no remarkable headlands on the coast, except Great Orme's Head, near the mouth of the Conway. Penmaen-mawr, a lofty mountain, rises abruptly from the beach, between Conway and Bangor; the high road winds along its side, and the Chester and Holyhead railway is carried through it by a tunnel and cuttings. From the foot of Penmaen-mawr the Lavan sands extend towards Bangor, and contract the navigable part of the otherwise wide north-east entrance of the Menai channel. South-west of Caernarvon a tongue of low land projects into the Menai, and with its connected sands, narrows the navigation of that channel in the south-west entrance. In the south-western extremity of the county the Braich-y-Pwll, the promontory of the Cancani (*Καγκανών άκρον*) of Ptolemaeus, abruptly rises from the ocean. To the north of this craggy coast, there are numerous little creeks or inlets which form safe retreats for fishermen; about this part is abundance of samphire, which sheep and cattle eagerly feed on and grow very fat. The herring, the lobster, and the dory are caught on this coast. Opposite to the headland of Braich-y-Pwll is the small island of Bardsey, on which was a religious establishment of very early date. The south-eastern boundary of the county is more irregular than that to the north-west: nearly half of it is washed by the sea. From the headland of Penrhyn Dŷ the coast stretches to the north-east, being for the most part low and sandy, especially at the point where Caernarvonshire and Merionethshire meet, where a sandy inlet or wash is traversed by one or two streams which here find an outlet to the sea. Across these sands is a passage dangerous indeed, but shorter than round the head of the inlet. Not far from the promontory of Penrhyn Dŷ are the two small islands of St. Tudwal; on the larger of the two, now inhabited only by sheep and rabbits, and in the season by puffins, was formerly a religious house dedicated to St. Tudwal.

Caernarvonshire is traversed in its whole length by mountains, some of which are the loftiest in South Britain. From the western side of the mouth of the Conway the mountains run south-west, receding gradually from the coast, and presenting in succession the following summits; Tal-y-Fan and Penmaen-mawr (1540 feet), Carnedd Llewellyn (3471 feet), Carnedd Dafydd (3429 feet), Glider Vechan and Glider-vawr, Snowdon (3571 feet, the highest mountain in South Britain). From Snowdon the mountains vary their direction a little, so as gradually to approach the coast; the chief summits are Craig Goch, Bwlch-mawr (1673 feet), Gyrngoch, and Rivell (1867 feet), which is close upon the shore. These summits may be considered as belonging to the main range of the Caernarvonshire or Snowdonian mountains. From the main mass of Snowdon, a branch running in the direction of the town of Caernarvon has the summit Moel Eilio (2306 feet). Other branches from the central mass occupy the greatest part of the interior of the county, and extend into Merionethshire.

The name of Snowdon is the Saxon translation (Snawdun, 'Snow-mountain') of the ancient Welsh name Creigic-r-Eira, according to Pennant; but some other Welsh writers make the native name to signify the eagle's rock or hill. Snowdon is the centre of the great mountain range which traverses Caernarvonshire from north-east to south-west. Its highest point is named Y Wyddfa, the Conspicuous,

and is 3571 feet above the level of the sea. From this central point proceed four great buttress-like ridges, separated from each other by deep cwms, or hollows, their sides in many places forming lofty precipices; in the hollows lie several tarns or mountain lakes. Llyn Llydaw, the largest of the lakes, is rather more than a mile long. The view from the summit of Snowdon is of extraordinary extent. Besides a large part of North Wales (including the Isle of Anglesey which lies like a map at your feet), the view is said to embrace the Ingleborough Mountains in Yorkshire, the mountains of Westmorland and Cumberland, the Highlands of Scotland, the Isle of Man, the mountains of Wicklow, and a large part of the Irish coast. The whole of this wide space cannot of course be seen at any one time when the sun is above the horizon; but a large portion may be seen on a clear day. Some of the other mountains of the range are, as already shown, very lofty, and form noble and picturesque objects. The almost inaccessible fastnesses of this district formed the last stronghold of the native Welsh; and when Edward I. penetrated into the recesses of Snowdonia this struggle was virtually at an end. To secure the passes, Edward erected the castles, the ruins of which still attest the importance attached to the possession of this wild district. The Snowdon mountain tract he converted into a royal forest, and it continued a royal forest till 1640, when it was disafforested: but a ranger and deputy-ranger are still appointed.

From the small size and peninsular form of this county, and the consequent nearness of the mountains to the sea, the rivers are small though very numerous. Many of them rise from or expand into lakes or mountain tarns, which bear the general native name of Llyn, lake or pool. The *Conway*, or *Cyn-wy*, that is, 'chief water' (the *Toisobius* of Ptolemaeus), rises in that part of the county which lies between Merionethshire and Denbighshire. Llyn Conway, from which it flows, is about a mile long and three-quarters of a mile broad, surrounded with deep bogs and masses of rock, and producing a sort of char or red trout. From the south corner of this lake the river flows with great rapidity, and is swelled by many small streams from the neighbouring hills, some of which, as well as the Conway itself, are distinguished by several fine cataracts. Below the junction of the Llugwy, near Capel Curig, the Conway passes the town of Llanrwst (Denbighshire), where the navigation commences, and receives on the left several streams which flow from the llyns or lakes of Caernarvonshire, and render it navigable to vessels of about 100 tons, with freights of timber and slates. Near its outfall the river widens into an estuary, and flows under the walls of Conway Castle into the Irish Sea. Its length is about 23 or 30 miles, for 12 or 13 of which it is navigable. The *Glas Llyn* rises from the Pffynnon Llas, and flows for the most part to the south-west into Cardigan Bay, between Criccieth (Caernarvonshire) and Harlech (Merionethshire). Near its source it forms a very lofty cascade, and is altogether one of the most romantic rivers of Wales. It passes through Llyn Gwynan and Llyn-y-Dinas, two lakes in a most beautiful valley. A portion of the sandy soil at the mouth of this river has been reclaimed by means of an embankment. The whole course of the *Glas Llyn* is about 16 or 17 miles. It is navigable to Pont Aberglasllyn. The *Gwrfai* rises on the west side of Snowdon, and flows north-west through Llyn Cywellyn into the Menai, south-west of Caernarvon. The *Seint*, rising from the same mountain, flows in a similar direction through the two lakes of Llanberris into the Menai at Caernarvon: the *Llyfni*, which has its source also in Snowdon, flows west through the lakes Llynniau Nant-y-llef, or Nantle pools, into Caernarvon Bay; and the *Ogwen* rises in Mount Trevaen, and flows through Llyn Ogwen into the Menai near Bangor.

There are no canals in Caernarvonshire. A railroad connects the Penrhyn slate quarries with Port Penrhyn, near Bangor; another connects the slate quarries of Llanllyfni with Caernarvon; and another connects the slate quarries of Glogwyn-y-Gigfran with Port Dinorwig, north of Caernarvon. The Chester and Holyhead railway skirts the northern part of the county from Conway to about two miles beyond Bangor, where it crosses the Menai by the Britannia tubular bridge, and enters Anglesey. The parliamentary road from London through Shrewsbury to Holyhead crosses the county in a north-west direction from the river Conway, near Bettws-y-Coed, to the suspension-bridge over the Menai near Bangor. From this road there is a branch on the right from Bettws to Llanrwst and Conway, and another branch on the left from Capel Curig to Caernarvon. There are several other important roads.

Geology and Mineralogy.—The rocks of Caernarvonshire belong chiefly to the lower Silurian system. Almost the whole of the county is composed of the Cambrian slates and related rocks. Slate is quarried extensively at Nantfrancon, Llanberris, and elsewhere in this county. Roofing-slates and writing-slates are procured, and chimney-piers and a great variety of fancy articles are made. Slabs are procured large enough for tomb-stones and paving-slabs. Grauwacke, serpentine, porphyry, hornblende, indurated slate, and various metamorphic rocks with veins of quartz occur in the mountains region, at Snowdon, and elsewhere. Along the coast-line of the Menai Strait between Caernarvon and Bangor is a strip of carboniferous limestone of which also the Great and Little Orme's Head are composed. Mica and chlorite slates, of the primary or Cambrian slate system, are met with along the south-western coast from Porth-dynllaen to Braich-y-Pwll; and also by the Menai Strait south-west of Bangor. Between

Conway and Bangor the old red-sandstone is found: it also forms the headland of Braich-y-Pwll. Copper is the chief metal of Caernarvonshire. Extensive copper mines are worked at Orme's Head and on the sides of Snowdon. Lead is worked on the slopes of Snowdon and between Llanrwst and Capel Curig.

Divisions, Towns, &c.—Caernarvonshire is divided into ten hundreds. The south-west extremity of the county is occupied by the hundred of Commitmaen or Cymytman; adjacent to this are the hundreds of Dinlaen or Dülleyn on the north-west coast, and Gafflogian or Gyfflogion on the south-east; the hundred of Evionydd or Yffonydd occupies the remainder of the coast of Cardigan Bay; and those of Uwch-Gorfai or Gwrfai, Is Gorfai, or Gwrfai, and Llechwedd Uehaf, occupy the north-west coast, each extending far inland: the upper part of the vale of the Conway is occupied by the hundred of Nant Conway, the lower part by that of Llechwedd Isaf; and the parts on the coast east of the Conway form the hundred of Creuddyn.

The county town is CAERNARVON, on the shore of the Menai Strait, 235 miles N.W. by W. from London. There are one city, BANGOR, four market-towns, Pwllheli, Conway, Nevin, and Criccieth, and the new town of Tremadoc. Criccieth, Nevin, and Tremadoc may be noticed here: the other towns will be found under their respective titles. *Criccieth* or *Crickieth* lies on the Bay of Cardigan, about 24 miles south from Caernarvon by the road. The population of the parliamentary borough, which is contributory to Caernarvon, was 530 in 1851. It is a poor straggling place, with houses built without any regard to order, and having nothing worthy of notice save the ruins of the ancient castle, which was rebuilt by Edward I. about 1236. The castle stands on an eminence jutting into the sea. It was probably of some importance from its position. There is a Free school. *Nevin* or *Nefym* lies on a small bay on the N.W. coast of the county, 21 miles from Caernarvon along the coast. The population of the parliamentary borough, which is contributory to Caernarvon, was 1854 in 1851. It was made a free borough by Edward the Black Prince. Edward I. had previously held a grand tournament here, just after the conquest of Wales. The town consists of a few straggling houses; it has a small port, but little or no commerce. The church is a plain building; and there are several dissenting meeting-houses. The market is on Saturday, and there are four annual fairs. The little harbour of Porth-yr-Lleyn, or Dynnlaen, near Nevin is supposed to have been used by the Romans, as strong entrenchments, apparently the work of the Romans, may be observed in the neighbourhood. The bay affords excellent shelter, for which purpose a thousand vessels have availed themselves of it in the course of a year. The pier serves as a breakwater.

Tremadoc, a place of quite modern date, is 20 miles S. by E. from Caernarvon. The population of the parish of Ynyscynaiarn, which includes both Tremadoc and Portmadoc, was 2347 in 1851. It stands upon a portion of the *Traeth-mawr*, a sandy wash at the mouth of the river *Glas Llyn*, recovered from the sea by the enterprise of W. A. Madocks, Esq., who built the town, to which he gave his name, Tremadoc (tree, a house, homs, township, or village). Mr. Madocks laid out the town in the form of an oblong square, having a market-house on the east side, a handsome building, with the upper story laid out in good assembly-rooms. On the other sides of the area are well-built houses: a church in the pointed style, a place of worship for Dissenters, a bank, and a good inn are to be found here. There is a market on Friday. A mile and a half from Tremadoc is *Portmadoc*, which has come to be a place of considerable size, and one of the chief ports for the export of slates. It is also in some repute for sea-bathing. There are good quays at Portmadoc, at which vessels of 300 tons can lie. Slates, lead, and copper-ore are exported. Timber coal, and lime are the principal imports.

A few of the villages may be briefly noticed:—*Aberdaron* lies in the hollow of a bay near the extremity of the promontory of Llyu—the south-western termination of the county. The entire parish contained 1239 inhabitants in 1851, but the village itself consists merely of a few mean houses. A decrease of 111 in the population of the parish since 1841 is accounted for by emigration. The coast scenery here is remarkably fine. The deserted church, a Norman structure, stands close by the sea, and is a picturesque building. A few miles from Aberdaron is a cromlech of much interest from the peaked form of the cap stone. *Boddgelert*, 13 miles S.S.W. from Caernarvon, population 947, one of the head-quarters of tourists in North Wales, is very retired, and in the midst of much grand scenery. The celebrated pass of Aberglasllyn is in the neighbourhood. In this village was a priory of Augustine monks. There is an excellent hotel at Boddgelert. *Bethesda*, about 12 miles E. from Caernarvon, is a modern village which has grown rapidly: the population of Llandwrog parish, in which Bethesda is situated, was 2323 in 1851. Bethesda owes its rise to the neighbouring slate quarries of Braich-y-Cefn, in Nantfrancon, the largest in the kingdom. Bethesda has a broad street, numerous shops, a church, and several places of worship for Dissenters. *Bettws-y-Coed* (the 'Station in the Wood'), 23 miles E. from Caernarvon, population 478 in 1851, is situated on the Llugwy near the picturesque bridge of Pont-y-Pair, and is one of the places visited by tourists. The river scenery here is remarkably fine. *Moel Siabod* is seen to great advantage. Six miles west from Bettws-y-Coed is *Capel Curig*, a very small village consisting of hardly a dozen houses,

with a little church, it being a chapelry of the extensive parish of Llandegul. It possesses however one of the largest and best hotels in the principality, and is a favourite station with tourists and anglers. A fine view of Snowdon, across the lakes, is obtained here. Many celebrated or picturesque scenes and objects are in the vicinity. *Clynnog*, 9 miles S.W. from Caernarvon, population 1650 in 1851, is situated in a picturesque spot on the coast of Caernarvon Bay, and is sometimes chosen for a summer residence. The church is an ancient cruciform edifice. Here is said to have been a religious establishment as early as the 6th century, founded by St. Bueno. An ancient chapel is now used as a school-room. In a field between the church and the sea is the *Bachwen cromlech*: several other antiquities are in the neighbourhood. *Llanberis*, 10 miles W. by S. from Caernarvon, population 1111 in 1851, is generally chosen as the point from which the ascent of Snowdon is commenced. There are two hotels at Llanberis. The village is a poor straggling place. The church has been recently restored. There are extensive slate quarries here, and also copper mines. The Llanberis lakes form the largest sheet of water in the county. Dolbadern Castle stands on a rocky eminence at the head of the narrow strip of land which divides the lakes. The magnificent pass of Llanberis is at the east of the village. *Llandudno* is a village on the eastern side of the promontory forming Great Orme's Head: the population in 1851 was 1131. Llandudno is a very sequestered place in a rather wild spot; but the bay is open, very beautiful, has a good sandy beach, and is said to be well adapted for bathing. There are several British antiquities in the vicinity.

Divisions for Ecclesiastical and Legal Purposes.—The number of parishes given in the population returns is 63, and there are five parishes which are partly in this and partly in the adjoining counties, Denbigh or Merioneth. Nearly the whole of the county is in the diocese and archdeaconry of Bangor. Caernarvonshire is divided by the Poor-Law Commissioners into four Unions—Bangor with Beaumaris, Caernarvon, Conway, and Pwllheli. The Unions contain 88 parishes and townships, with a population in 1851 of 97,710; but the boundaries of the Unions are not strictly co-extensive with those of the county.

Caernarvonshire is in the North Wales circuit. The assizes and sessions are held at Caernarvon. The county returns one member to the Imperial Parliament. The borough of Caernarvon, with its contributory boroughs of Conway, Criccieth, Neviu, and Pwllheli, and the city of Bangor, returns one member. County courts are held at Bangor, Caernarvon, Conway, Pwllheli, and Portmadoc.

History and Antiquities.—There is some difficulty in determining by what tribe of native Britons Caernarvonshire was inhabited at the Roman conquest. The neighbouring districts of North Wales were peopled by the Ordovices, and we incline to comprehend Caernarvonshire in the territory of that tribe. Ptolemaeus mentions the Conway under the name of *Toisobius*. The Romans crossed this county under Suetonius Paulinus when they attacked Mona (Anglesey), about A.D. 59. The Ordovices were not however subdued until the time of Agricola, who nearly extirpated them about A.D. 78. In the 'Itinerary of Antoninus' two stations within this county are given; *Segontium*, now *Caer Selont* [CAERNARVON]; and *Conovium*, now *Caer-Rhyn*, near Conway, where Roman bricks have been found inscribed *LXX. X.*, and the foundations of buildings discovered. The British or Celtic remains are numerous. Vestiges of camps and hill forts occur in several places, especially about Snowdonia. *Castell Caer Lleion*, on the summit of the Town Hill, about 2 miles from Conway, exhibits considerable remains of a British citadel. *Braich-y-Dinas*, on the summit of Penmaen Mawr; and *Tre'r-Celri*, on the summit of Yr-Fif, are also remarkable examples of British fortresses. There are several cromlechs and stone circles. In the division of the territories of Rhodri Mawr, or Roderick the Great, between his sons (A.D. 877), Caernarvonshire formed part of the kingdom of Gwynedd (Latin *Venedotia*) or North Wales, allotted to Anarawd. When the cessation of the northern piracies allowed the English kings (now of the Norman race) to turn their arms against Wales, this county, from its remote situation, difficult access, and mountainous character, became the last asylum of the Independents of Wales. It was however subdued by Edward I. in 1283. In the subsequent revolt of the Welsh under Madoc, the illegitimate son of Llewellyn, prince of Wales, Caernarvon was taken, and the English settlers massacred. Conway castle was besieged, but without effect.

Dolbadern Castle, supposed to be of British origin, is on a rocky eminence near the junction of the two lakes of Llanberis. Of Dolwyddelan Castle, the residence in the 12th century of Yorwerth Drwddwn, and the birth-place of the famous Llewellyn the Great, little more than one of the towers remains. The foundations of Diganwy Castle, near Great Orme's Head, may be traced. The older part of Penrhyn Castle, near Bangor, is of the time of Henry VI., and up to the period of the alterations made some years since presented a fair specimen of the domestic architecture of that time.

Caernarvonshire has very few monastic ruins. There was a priory of Black or Augustine Canons at Beddgelert, supposed to be the oldest religious foundation in Wales except Bardsey, but there are few remains of it. Bardsey Isle also possessed an extensive religious establishment, but of it also there are few vestiges remaining.

There were in 1851 savings banks at Portmadoc and Pwllheli. The

total amount owing to depositors on the 20th of November 1851 was 14,692*l.* 9*s.* 3*d.*

CAERPHILLY. [GLAMORGANSHIRE.]

CAERWYS. [FLINTSHIRE.]

CÆSAREIA-PHILIPPI. [PÆNEAS.]

CÆSAREIA, a city and sea-port of ancient Palestine, founded by Herod the Great, and so named in compliment to Augustus Cæsar, was situated on the coast of the Levant, about 22 miles S. from Mount Carmel, near the point 32° 32' N. lat., 34° 54' E. long. A town named *Turris Stratonis* previously occupied part of the site: this was enlarged and embellished with white marble palaces and other large buildings common in important Roman provincial towns. The city, which had a temple to Cæsar and Rome, a rock-hewn theatre, and a circus, was built round a large harbour, the greatest wonder of the place, which was formed here by Herod, at a point of the coast where before there was only an open roadstead. The entrance to the harbour was on the north, and it was sheltered from the south-west winds by a massive mole, constructed with enormous blocks of stone. These great improvements raised Cæsareia to be the metropolis of Palestine, and here Roman prefects and titular kings of Judæa had their seat of government. It received the name of Flavia from Vespasian, who planted a colony in Cæsareia, but the old name always prevailed. It was at Cæsareia that "the door of faith was first opened to the Gentiles;" the city early became a metropolitan see, and was conspicuous for the firmness of its martyrs and confessors during the persecutions of the Christians. Eusebius, the father of ecclesiastical history, was made bishop of Cæsareia about A.D. 315. Cæsareia continued to be a place of considerable importance during the crusades, and it was one of the Christian strongholds along the coast. Among the ruins which now cover all the site may be traced the ancient walls; the wall and ditch of the Crusaders' town, which was of less extent than the ancient city; the substructions of a cathedral which stood on a platform near the centre of the town, previously occupied by the temple to Cæsar and Rome; massive fragments of the towers and substructions of the mole; and prostrate columns of granite, porphyry, and marble, which formed the portico of the terrace-walk along the harbour. The ruins of Cæsareia have long served as a quarry, and its stones have been carried away to build the houses and fortifications of Jaffa, Acre, and Sidon. (*Dictionary of Greek and Roman Geography*.)

CÆSAREIA. [KAISARIYEH.]

CAFFA. [KAFFA.]

CAFFRARIÆ. [KAFFRARIÆ.]

CAFFRISTAN, properly KAFFIRISTAN, a region of Asia extending eastward from the valley of the Panschir, between Hindu-Koosh and the Himalaya Mountains, which respectively separate it from Kunduz and Badakhshan on the north, and Cahul on the south. Its boundary to the east is probably the Kuner River, which riseth in the Hindu-Koosh near 36° 10' N. lat., 72° E. long., runs south-west, and breaking through the Himalaya Mountains joins the Cahul River below Jellalahad. To the east of the Kuner is the mountain region of Chitral. The Hindu-Koosh runs like a gigantic wall along the north of Kaffiristan, its crest rising far above the snow-line; the depressions in it which form the passes into Kunduz and Badakhshan being open only during a few months in summer. The Himalaya on the other hand is rent by many deep breaches, and numerous rivers which drain the valleys of Kaffiristan break through it on their way to join the Cahul River. As may be supposed, Kaffiristan is a land of mountains and valleys, and exhibits great extremes of temperature and climate. On the Hindu-Koosh the snow remains throughout the summer, while the thermometer in the nearest valley stands at 113° Fahrenheit. There are no roads, properly speaking, the only travelling being along foot-tracks, which are frequently obstructed by rivers and mountain-streams, and these are crossed either by wooden bridges or by swing bridges made of the pliant withes of trees.

No cultivation is carried forward on the hills, some of which are covered with pine forests, while others afford sustenance to numerous flocks of goats. The valleys are mostly of small extent but very fertile, and produce abundant crops of wheat and millet with large quantities of grapes, which form an important object of cultivation. These valleys besides furnish pasturage for sheep and cattle. The wild animals of the country are similar to those mentioned under BADAKHSHAN.

The accounts we have of the character and habits of the Kaffirs are chiefly derived from the various tribes of Mohammedans by whom they are surrounded, and with some of whom they are frequently at war. In their persons the Kaffirs are a fine race of people, with handsome features, blue eyes, and fair complexions; the distinction made between different tribes, some of whom are called *Siah-Posh*, or Black-vested Kaffirs, and others *White Kaffirs*, is derived from a peculiarity in the dress of the former, who clothe themselves in black goat-skins with the hair outside; other tribes wear dresses made of white cotton.

As regards their civil government the Kaffirs seem to be divided into clans, each of which is governed in all things by its own chief, and engages at times in feuds with other tribes. The name Kaffir (unbeliever) is that by which the Mohammedans distinguish them, as they have never been able to convert them to Islamism. Lieutenant

Wood says that they are part of the wide-spread race of the Tajiks, who sooner than conform to the religion of the early Moslem invaders retired to the plain country northward, and finally settled down in this inaccessible region. Their hostile feelings towards their Mohammedan neighbours are no doubt of ancient date, and they are kept alive and embittered by the incursions which these are constantly making for the purpose of carrying off the Kaffirs as slaves. The governor of Badakhshan is bound by the conditions on which he holds his power of the Meer of Kunduz to make a yearly inroad into Kaffiristan for slaves. The Kaffirs in their turn are not slow to retaliate, and entering Badakhshan by the valley of the Kokcha they plunder villages and sometimes massacre the inhabitants. Peace is sometimes made between the Kaffir tribes and their neighbours, when they are ready to extend towards their former enemies all the rites of hospitality. Their warlike weapons are a bow about 4½ feet long and arrows of reed with barbed heads, which are sometimes poisoned. For closer conflict they are each provided with a dagger and a knife: recently they have begun to adopt the use of swords and muskets.

The Kaffir villages are mostly built on the slopes of hills, the houses, which are made of wood, being placed one above another, the roof of the lower house forming a pathway to the one above it. The Kaffirs sit on chairs or stools, never cross-legged like other eastern peoples. Their Mohammedan neighbours testify to their intelligence, and say that one Kaffir slave is worth two of any other nation.

In their religion the Kaffirs are said to believe in one supreme God and in a future state; but they worship numerous idols, the representatives of great men of former times, and who are supposed to intercede with the Deity in favour of their worshippers. When he dies the Kaffir is dressed in his best clothes, and is placed upon a bier with his weapons beside him; his male relations then carry him about with singing and dancing, while the females give themselves up to lamentation, after which the body is inclosed in a sort of coffin and left in the open air, usually under the shade of a tree.

A Kaffir man procures his wife by purchase, paying to her father sometimes as many as twenty head of cattle, or sheep and goats in proportion. Domestic slavery is practised, the slaves being natives of Kaffiristan, sometimes taken in feuds with hostile tribes, and sometimes being orphans of their own tribe, it being not uncommon for the more powerful men to seize children who are unprotected, and either to sell them to some neighbouring country or to retain them in slavery.

The more usual food of the people is bread, cheese, butter, and milk; they likewise eat beef, mutton, and bears' flesh. They have a variety of fruits, among which are grapes, apricots, apples, almonds, and walnuts. Honey and wax are exchanged with the Badakhshis for salt. Wine is very abundant. They make three sorts of wine—red and white, and a kind having nearly the consistence of jelly, which is very strong: both males and females are said to drink occasionally to excess. The favourite amusement when they meet together is dancing: their music consists of a pipe and tabor.

Several dialects are spoken by the different clans; but the base of their language, as among all the Tajiks, is Persian. No estimate has been made of the numbers of the people.

(Elphinstone, *Cabul*; Lieutenant Wood, *Journey to the Source of the Oxus*.)

CA'GLIARI (the Roman *Caralis* or *Carales*), the capital of the island of Sardinia and of the province of Cagliari, is situated on the south coast on the bay of Cagliari, in 39° 13' N. lat., 9° 7' E. long., and has about 28,000 inhabitants. The town is divided into four districts. It is built partly on the sea-side and partly on a hill, on the highest part of which is the castle-citadel, the vice-royal palace, the cathedral, and the residences of the nobility. From the Castello district to the shore is the Marina, a well-built region, in which the principal merchants and foreign consuls reside; here also are the bonding warehouses, arsenal, and lazaretto. The two other districts of the city are called Stampace and Villanova; and besides these there is a suburb named St. Avandré. Cagliari is an archbishop's see, which dates from the beginning of the 4th century. It has a university with faculties of theology, law, medicine, and philosophy and belles-lettres; a library of 15,000 volumes; a museum with good collections of minerals, birds of the island, and medals; a college for the nobility; a diocesan seminary; a grammar school; a theatre; and a mint. The cathedral, a large building rich in marbles, was built by the Pisans during their possession of the island. There are nearly 30 other churches, 20 convents, several hospitals, and an orphan asylum. The reale audienza, or high judicial court for the south division of the island, sits at Cagliari, as well as the commercial tribunal. The town enjoys great municipal privileges and revenues. The harbour is safe, and large ships find good anchorage in the bay. Cagliari is the chief port of Sardinia, and almost the only one frequented by foreign vessels. It exports cheese, wine, oil, salt, flax, hides, and horses. The industrial products of the town are tobacco, cotton manufactures, soap, furniture, leather, gunpowder, &c. Near Cagliari are extensive salterns.

Carales was founded by the Carthaginians, who no doubt selected the spot not only on account of its well-sheltered roadstead, but also

because of its opportune situation for communication with Africa. After the Roman conquest of Sardinia it became the chief naval station of the Romans in this land, and the residence of the pretor. In the war between Cæsar and Pompey Carales declared for the former; it was subsequently taken after a short siege by Menas, lieutenant of Sextus Pompeius. It continued to be the capital of the island during the Roman empire, after the island fell into the hands of the Vandals, and all through the middle ages. A large salt-water shore-lake to the west of the town, and communicating with the bay by a narrow channel, appears to have been used in ancient times as an inner harbour. Among the remains of the ancient city are an amphitheatre, an aqueduct, vast cisterns, a small circular temple in ruins, and on a hill outside the town numerous sepulchres.

The Bay of Cagliari extends northward from a line joining Cape Carbonara with Pula; the length of this line is about 22 miles, and the depth of the bay is about 10 miles. It affords good anchorage and shelter from all winds except the south. Vessels lying close in near the shore are further sheltered by Cape St. Elias. Along the shore of the bay a great deal of salt is made.

The province of Cagliari includes the southernmost part of the island, with a population of 106,388. It is bounded N. by the province of Isili, N.E. by that of Lanusei, and W. by that of Iglesias. The principal town besides Cagliari is *Quarto*, which stands on the salt-marsh of Quarto, about five miles east from Cagliari: population 6000. It is known for its Malmsey wine. The east and west districts of the province are mountainous, but the central tract north of Cagliari is a fine and rich plain called Campidano, watered by the Ulla and its affluents. The Ulla enters the sea west of Cagliari. The air of the plains is rather unwholesome in the summer months. A good carriage-road leads from Cagliari to Sassari and Porto Torres through the whole length of the island.

CAHERSIVEEN, county of Kerry, Ireland, a market- and post-town and the seat of a Poor-Law Union, in the parish of Caher and barony of Ivragh, is situated in a valley embracing an arm of the sea which runs inland from the northern extremity of Valentia harbour, in 51° 57' N. lat., 10° 13' W. long., distant 227 miles S.W. from Dublin and 23½ miles W. by S. from Killorglin. The population in 1851 was 3155, but this number included 1293 persons in the Union workhouse which is situated in the town. Cahersiveen Poor-Law Union comprises 22 electoral divisions, with an area of 197,541 acres, and a population in 1851 of 29,090.

The valley in which the town is situated is bounded on the north by mountains of considerable elevation, which separate it from Dingle Bay. To avoid these elevations the coast-road from Tralee strikes off from the shore of Dingle Bay at Drung, from whence it passes inland through the valley of Cahersiveen. The road for a considerable distance is carried along the precipitous declivities of Drung Mountain at a height of 200 feet above the sea. A late eminent traveller states that this road "in the magnificence of its mountain and sea views is little inferior to any of the celebrated roads along the shores of the Mediterranean, and is in every way superior to the road from Bangor to Conway in North Wales." (Ingli's 'Tour in Ireland.') The town consists of one principal street, with a cross street leading to the creek, on which there is a quay with a small breakwater, and higher up is a pier for small craft. The roadstead for vessels of burden is two miles farther west, at Rinard Point, where the Cahersiveen creek joins the harbour of Valentia. The court-house and bridewell, and the Roman Catholic chapel and convent, are grouped together at the eastern end of the town. The parish church stands at the west end near the new quay. The chief trade carried on is in the import of timber, salt, and iron, and in the manufacture of flour, for which there are extensive mills half a mile east of the town on the river Cashan.

CAHIR, Tipperary, Ireland, a market- and post-town, is pleasantly situated on the banks of the river Suir, at the eastern end of the valley between the Galtees and the Knockmeleadow Mountains, at the intersection of the roads from Dublin to Cork and from Waterford to Limerick, 10½ miles S. from Cashel: population 3719 in 1851. The town is remarkably neat and clean. The parish church and the Roman Catholic chapel are both handsome edifices; and the sessions-house, the bridewell, the market-house, and the schools are tastefully built, and add greatly to the appearance of the town: for much of this improvement the town is indebted to the exertions of the Earls of Glengall, whose seat, Cahir Castle, is on an island in the Suir, and its extensive and beautiful grounds lie along both sides of the river. This castle is of very ancient date, and of large size; it was taken by the Earl of Essex, by Sir G. Carey, and by Oliver Cromwell. It afterwards fell into a dilapidated state, but has been recently restored in a substantial manner and in correct taste. There are a Quakers' meeting-house, a fever hospital, a dispensary, a loan-fund office, and a police-station. A cavalry barrack is about a mile from the town. The market is well attended. Fairs are held on February 8th, April 12th, May 26th, July 20th, September 18th, October 20th, and December 7th, at which considerable business is done, particularly in corn. Several flour-mills in the neighbourhood employ many of the inhabitants. A few miles up the river are the ruins of Cahir Abbey, founded, it is said, in the reign of John.

CAHORS, a city in the south of France, capital formerly of the district of Quercy, now of the department of Lot, is situated on the

right bank of the river Lot, on a small peninsula formed by a bend in the stream, in $44^{\circ} 26' 52''$ N. lat., $1^{\circ} 26' 52''$ E. long., 105 miles E. by S. from Bordeaux, 358 miles S. by W. from Paris, and has 12,102 inhabitants including the whole commune. Cahors is a very ancient place. Its name is erroneously written *Bibona* in the Theodosian table. Ausonius in his 'Claræ Urbis' gives it the true Celtic name, *Diosca*, and explains the meaning to be 'a fountain sacred to the gods.' It was the capital of the Cadurci, from whom the modern name of the town, Cahors, and that of the province, Quercy, are both derived. On the downfall of the Roman empire it came successively into the hands of Goths and Franks; was afterwards subject to the counts of Toulouse, then to its own bishop; was taken by the English during their wars in France, and retaken from them; and carried by assault and pillaged in 1580 by Henry IV.

The town is situated partly on a rocky eminence, and has steep, narrow, crooked streets. The houses in what is called the upper town are commonly built with terraces commanding a wide prospect. There are few remarkable buildings: the cathedral is supposed to be the remains of an ancient temple, with the addition of a portico and other parts of modern date; the theological seminary is a fine and large building. The other noteworthy objects in the town are—the former episcopal palace, now the residence of the prefect of the department; the theatre; the public library; and an obelisk erected in memory of Fénelon in 1820, who studied in the university of Cahors, which was founded by Pope John XXII., and has been long suppressed. Four Roman roads met at Cahors, and one of the greatest of Roman aqueducts brought water to the town from a distance of 19 miles by a very winding course across valleys and along mountain sides. It crossed the valley of La Roque, near Cahors, by a bridge of three tiers of arches, the summit of which was nearly 180 feet high. There are still some remains of this magnificent work. There are also a ruined theatre and baths; a marble altar in honour of Lucretius Leo, a native of Divona, has been found in Cahors, and some beautiful mosaics on the site of the Roman baths. The fountain Divona is still an abundant spring, now called Des-Chartreux, from its having formerly belonged to the Carthusian convent. The stream from it drives several mills before its clear blue waters join the muddy Lot. This fountain is outside the modern town. The Lot is crossed at Cahors by three bridges, one of which called Pont Louis-Philippe replaces the old bridge of Notre-Dame. The Pont Valendré, so called from the person who constructed it in the 13th century, is surmounted by three square towers, one at each end and one in the centre. The old ramparts are formed into a public promenade. Cahors has given title to a bishop since about A.D. 257; the diocese includes the department of Lot. The town is the seat of tribunals of first instance and of commerce, of a provincial university and an endowed college. The chief manufactures of Cahors are china-ware and delft, cotton-yarn, some woollen stuffs, and leather; there is also a considerable trade in leaf-tobacco, wine, brandy, truffles, oil, cattle, and hides. The wine of the neighbourhood of Cahors combines deep colour with good flavour and strength: a great quantity is sent to Paris.

CAICOS ISLANDS. [BARBADOES.]

CAIRNGORM. [ABERDEENSHIRE; BANFFSHIRE.]

CAIRO. [KAHIRA.]

CAISTOR, or CASTOR, Lincolnshire, a market-town and the seat of a Poor-Law Union, in the parish of Caistor, chiefly in the wapentake of Yarborough (a portion of the parish being in the wapentake of Walshcroft) and in the parts of Lindsey, is situated in $53^{\circ} 30' N.$ lat., $0^{\circ} 18' W.$ long., distant 24 miles N.N.E. from Lincoln, and 153 miles N. by W. from London by road: the population of the parish of Caistor in 1851 was 2407. The living is a vicarage held with the curacies of Holton-le-Moor and Clixby in the archdeaconry and diocese of Lincoln. Caistor Poor-Law Union contains 76 parishes and townships, with an area of 164,890 acres, and a population in 1851 of 34,073.

Caistor is supposed to have been the site of a Roman station. It was called by the Saxons Thong Caistor. Roman and Saxon antiquities have been discovered in the vicinity. The town stands on an elevated site. The parish church, dedicated to St. Peter and St. Paul, stands on Castle Hill, within the area inclosed in ancient times by a fortress. The lower part of the tower is Norman, the nave and chancel are early English, with insertions and additions in the decorated and perpendicular styles. The Independents and Wesleyan and Primitive Methodists have places of worship. The Grammar school, founded in 1630, open to all boys, has an income of 200*l.* a year for the head master and 165*l.* for the second master: the number of scholars in 1851 was 25. Caistor has improved in appearance of late years. The manufacture of chairs of elm and ash is carried on to a considerable extent. Saturday is the market-day, but the market is small. Fairs, chiefly for cattle, are held on the Saturdays before Palm Sunday and Whit-Sunday, and on old Michaelmas Day: these fairs are well attended.

CAISTOR. [NORFOLK.]

CAITHNESS, the most northern county of the mainland of Scotland; bounded W. by Sutherlandshire and N. and S.E. by the North Sea, lies between $58^{\circ} 5'$ and $59^{\circ} 40' N.$ lat., $3^{\circ} 0'$ and $3^{\circ} 55' W.$ long. In form it is triangular, having its greatest length along the coast on the south-east. Its length from north to south is about

40 miles, and its breadth from east to west about 30 miles. The area of Caithness is 613 square miles, or 395,030 acres, of which upwards of 100,000 are cultivated or in pasture, the rest being moor and mountains. The population in 1851 was 38,709.

Coast-line.—The coast line is in general bold and rocky, and presents numerous indentations or bays. On the north, where it is separated from the Orkneys by the Pentland Frith, the projections of the coast form two bold precipitous headlands; the one on the north-east, called Duncansbay Head ($58^{\circ} 39' N.$ lat., $3^{\circ} 1' W.$ long.), the other on the north-west, called Dunnet Head ($58^{\circ} 40' N.$ lat., $3^{\circ} 21' W.$ long.), and the most northern point of Great Britain. The distance between these two promontories is about 13 miles. The small island of Stromia, which is part of the county, and is about a mile in length and half a mile in breadth, lies about 3 miles off the mainland. The navigation of the Pentland Frith is somewhat dangerous from the strength of the currents, and the reefs. On the north side of Stromia there is a small vortex or whirlpool, named Swalchie, and nearer the mainland there are breakers, called the Merry Men of Mey, which are probably produced by a current setting strongly on a hidden reef. The tall white steeple of Canisbay, near Duncansbay Head, serves as a landmark, and there is a lighthouse on Dunnet Head. The Stalks of Duncansbay are two insulated columns of freestone, detached from the cliff, of which they originally formed a part; they are inhabited during the summer by thousands of aquatic birds. Near Duncansbay Head is the ferry to the Orkneys, a village consisting of a few houses, and a place of entertainment, called the Houna Inn. What is termed John O'Groat's House is a piece of green turf on the east side of Duncansbay Head, on which it is possible a house may have stood, but there has long ceased to be any trace of it.

Formerly the only harbour on the east coast was at the mouth of the river of Wick, $58^{\circ} 24' N.$ lat., $3^{\circ} 5' W.$ long. It was small and inconvenient. In 1810, a harbour capable of containing a hundred decked vessels was constructed at a cost of 14,000*l.*, but being found inadequate, a new one was planned and completed in 1831, at a cost of upwards of 40,000*l.* There are small harbours at Sarclet, a few miles to the south of Wick, and at Staxigoe a few miles to the north. On the north coast, in addition to the harbour of Thurso ($58^{\circ} 35' N.$ lat., $3^{\circ} 32' W.$ long.) where vessels of 12 feet draught of water may lie, a commodious harbour has been constructed by the enterprise of a private gentleman, at Sandside Bay ($58^{\circ} 32' N.$ lat., $3^{\circ} 47' W.$ long.). On the south-east coast of the county, at Clyth ($58^{\circ} 18' N.$ lat., $3^{\circ} 13' W.$ long.) there is a small pier, and at Lybster ($58^{\circ} 17' N.$ lat., $3^{\circ} 16' W.$ long.) a small stone pier has been built, forming a convenient harbour. Scattered roads, in the Bay of Thurso, afford good and safe anchorage for vessels of any size.

Surface and Geology.—The surface of Caithness is in general flat and uninteresting; the greater portion being moorland, and there being but few trees. The mountain-range which separates the tableland of Sutherland from the plains of this county attains a mountain character in the southern parts of Caithness, where it turns to the east, forming two distinct and high ridges, of which the northern contains the Maiden Paps, with the high summit of Morbheim or Morven, rising about 2334 feet above the sea; and the southern terminates on the east coast with the Ord of Caithness, which advances into the sea. The plain of Caithness, which lies between the ridge of the Maiden Paps, the Pentland Frith, and the mountains that bound the county on the west, comprises about four-fifths of the county, but it is not a level. Where it borders on the mountains to the south it contains many small hills, which form nearly a continuous chain terminating in the Cape of Clyth Ness. North of this range the county extends in wide levels, covered with moors, and slopes gradually to the beds of the rivers. A few insulated hills are of moderate elevation. Agriculture is confined to the tracts of level land along the water-courses, and to the slopes of the elevated plains. These elevated moorlands sink lower towards the north-east, and terminate in a low plain between Sinclair Bay on the east coast, and Dunnet Bay on the north coast. From the innermost part of Dunnet Bay there extends a very low tract of land, covered with heath and rough grass, and about two miles wide, in a straight line to Keiss Castle on Sinclair Bay. North of this tract the peninsula inclosed between Sinclair and Dunnet Bays runs to the Pentland Frith and terminates in Duncansbay Head and Dunnet Head. The greater and more elevated part, which may be 100 feet above the sea, has a light sandy soil, and contains a considerable amount of land under cultivation. Limestone is found on the north coast and is much used in agriculture. Sandstone is found in some places; and slate, freestone, and flagstone quarries are wrought in two or three parts of the county. These stones are shipped to Leith, Aberdeen, London, Newcastle, and Glasgow.

Hydrography.—There are several sheets of water throughout the county, but none are of any extent or remarkable for beauty. Many of them contain excellent trout. There are no navigable rivers. The waters of Dunbeath, Berriedale, and Langwell rise in the mountains in the south-west part of the shire, and fall into the sea, the former at Dunbeath, a small bay capable of being formed into an excellent harbour, and the two latter at Berriedale, both places on the south-east coast. These streams abound with trout. The river of Wick, from the inland loch of Wattin, falls into Wick Bay; in its progress

it receives several small tributaries. The water or river of Thurso rises in the hills in the south-west bounding Sutherland, traverses from south to north three-fourths of the county, and after a course of 30 miles falls into Thurso Bay.

Communications.—From Wick, which is nearly in the centre of the eastern coast of the county, a steamer runs twice a week to the Forth, calling at Aberdeen. Between Thurso and the Forth there is weekly steam communication during the summer, besides regular sailing vessels. The post road runs along the whole eastern and western coasts of the county; and there are two cross roads, one from Wick to Thurso, on which runs the daily mail-coach, the other from Wick to Castletown, a village about 5 miles east of Thurso: the roads are good. There is a daily dispatch and arrival of mails from the south at both Wick and Thurso, the latter being the most northern post-town in the empire. The postal communication with the neighbouring villages is less frequent.

Climate.—On the north coast the atmosphere is variable but healthy. From September to June the prevailing winds are from the north and north-west. During the remainder of the year the winds vary between the south-east and south-west. In winter and spring the north and north-westerly winds are frequently hard gales, and the exposure of the coast makes the inclemency of the weather to be severely felt. On the east and south-east coast westerly winds prevail. In winter the weather is frequently very tempestuous. Snow seldom lies for more than a day or two, and thunder is rare. The aurora borealis is visible almost every night.

Soil and Agriculture.—The soil of Caithness where under cultivation is generally a strong clay, mixed with earth and capable of producing green crops of all kinds. Since the improvements introduced by the late Sir John Sinclair, who was a large landowner in Caithness, the county has made great progress in agriculture and husbandry generally. Many farms are now of as large extent and as well cultivated as in any other district of Scotland. Cattle of the Highland and Teeswater breeds are reared for the southern markets; sheep of the Leicester and Cheviot breeds are also much kept. A considerable part of the land is still in the hands of small farmers, and a part is held by a class of persons who trust more to the results of the fisheries than to the cultivation of the soil. Many of both classes however raise green crops and endeavour to follow a kind of rotation of cropping. Leases of large farms extend from 7 to 19 years; small farms are held without leases; the farm buildings are generally good and comfortable. Crops are late in ripening, being generally about 20 days behind those of the Lothians. There are weekly corn markets at Thurso and Wick.

Industry.—Throughout the county the several quarries of flagstones, freestone, and slate engage the labour of a considerable portion of the population, but the general employment of the people is in agriculture or in fishing, with the attendant occupations of coopering, curing, and packing. On the coasts all are fishermen. After spring sowing comes the lobster fishing, chiefly for the London market. In May and June turf is cut for the winter fuel. In July the herring fishing begins, and lasts for two months; then the crops are cut and potatoes dug; and after that the fishing for cod, ling, and largo sea-fish is resorted to. The herring fishery however is the principal business of the county. "The herrings are got all round the coast; but Wick and the surrounding fishing villages are the principal places of resort. . . . The number of persons partially or wholly employed is about 12,000. The number of boats employed may be about 1000, of which 700 are owned in the county, and the rest come from the Frith of Forth and various places in the Moray Frith. Each boat is manned by five men." (New Statistical Account of Scotland.) There are several salmon fisheries on the coast and on the rivers; that on the coast of Thurso let formerly at 1000*l.* per annum. Salmon are dear in the county, nearly all being 'kitted' for the London market.

Divisions, Towns, &c.—The county of Caithness forms a Presbytery, and is within the ecclesiastical jurisdiction of the synod of Sutherland and Caithness. Of 23 clergymen within the bounds of the synod Caithness possesses 13. In addition to the 13 churches of the Establishment there are about 20 other places of worship, the greater proportion of which belongs to the Free Church, the others to United Presbyterians, Roman Catholics, and others. The county contains one royal burgh, which is the county town, Wick. The only other town besides Wick is *Thurso*, a post- and market-town on the north coast, about 20 miles N.W. from Wick: population 2908 in 1851. It lies in a valley or bay formed by the two promontories called Holburn Head and Dunnet Head. Thurso Water enters this bay close to the town. The town has been a burgh of barony since 1633. It consists of an old and a new town. The church is a handsome building, and the new town contains a few regular streets and some well-built houses. There are a Free church and two other places of worship for Presbyterians and Dissenters. Thurso is a post-town, and courts are held there for the northern part of the county. Straw plait, leather, ropes, and linen and woollen cloths are manufactured. At a short distance from the town the late Sir John Sinclair erected a low circular building surmounted by a sort of embattled parapet, intended to mark the grave of Harold, an earl of Caithness, who was killed somewhere about this spot many centuries ago. It is a con-

spicuous object, in a country comparatively bare and desolate. The parish of Thurso, owing to Sir John Sinclair's exertions, is considered to be the most improved district in the county.

The following villages may be mentioned:—*Broadhaven*, a small fishing station on the east coast about 1 mile N. from Wick. *Castletown*, a populous village on Dunnet Bay on the north coast, about 5 miles E. from Thurso. *Louisburgh* and *Pulleneytown*, two villages adjacent to and forming suburbs of Wick. *Sarcelt*, a small fishing village 5 miles S. from Wick, where there is a good harbour for fishing boats. *Staxigoe*, another village 2 miles N. from Wick, with a good natural harbour.

Population, &c.—The language generally spoken is the Scottish dialect of English. Gaelic is still talked and understood by the older inhabitants, especially in the inland districts. In a majority of the churches a portion of the service is conducted in Gaelic. The county gives the title of earl to the family of Sinclair; it returns one member to the Imperial Parliament: the constituency in 1852 was 652. In 1851 there were two savings banks in the county, at Thurso and Wick: the total amount owing to depositors was 9018*l.* 16*s.* 2*d.*

History and Antiquities.—The earliest inhabitants of Caithness are supposed to have been Celts. These were succeeded by the Picts, who in their turn gave way before the repeated descents of colonies of Danes and Norwegians. As early as the reign of David II. of Scotland the Caithness weights and measures were ordered to be adopted as the standards of the whole kingdom. At that time Scotland traded through Thurso with Norway, Sweden, and the Baltic, and these weights and measures being those of the chief and nearly sole trade of the country were considered the most convenient. About 1350 the Keith family acquired lands in Caithness by marriage, and in the same way the Sinclairs and Sutherlands became lords in the district. Its history and traditions present the usual annals of mutual robberies, treacheries, and murders. Sinclair is now the prevailing name. The names of localities are principally Norwegian. There are a great many remains of round towers and small forts which are attributed to the time of the Danish possessors. The ruins of Catholic chapels are to be met with in every parish, and till comparatively a late period in the history of the Reformed Church the inhabitants seem to have formed pilgrimages to different holy spots, to which tradition assigned peculiar virtues. On the Pentland Frith, the northern shore of the county, is Barrogill Castle, a seat of the earls of Caithness; and on the eastern coast north of Wick are to be seen the ruins of Bucholic Castle, mentioned by Pennant, and some ruins of buildings attributed to the Picts and the Danes, of the tower of Keiss, and of the castles of Girmigoe and Sinclair. Lord Duffus has a seat on the Bay of Keiss about 6 miles N. from Wick. The ruins of Auld Wick Castle are on the south side of the Bay of Wick. In the parish of Halkirk, and about 6 miles S. from Thurso, are the very remarkable ruins of the castle of Braal, popularly stated to have been the residence of the ancient bishops of Caithness and Sutherland. On the south-east coast of the county are the ruins of eight castles, all of them possessing their own traditions of war and bloodshed. These are Clyth, Swiney, Forse, Latheron, Knockinnan, Duuhealth (still inhabited), Achastle, and Berriedale.

CALABAR, OLD, a river of Africa which falls into the Bight of Biafra about 52 miles N. by W. from Fernando Po. It is the largest river on this coast, and forms an estuary 9 miles wide, which is full of shallows and sand-banks. The Cross River, which used to be considered a feeder of the Old Calabar, was discovered to be the main stream by Captain Bechoft in 1841-2. The river is navigable by steamers for 200 miles above its mouth. The principal place on the river is called Duke's or Ephraim Town, which stands on the estuary about 5 miles from the entrance. Twelve miles above Duke Town is another large village, called Creek Town. The United Presbyterian Church of Scotland has several missionary agents in Old Calabar.

The river is very winding, and the shores are low and swampy. The country is overrun with bushes, principally of the mangrove species, and there are few cleared spots on the banks of the river. The right bank is much intersected by creeks, through which the natives assert they can in their canoes communicate with all the rivers that fall into the Gulf of Guinea between this and the Benin, forming the great delta of the Quorra. To the eastward of the Calabar is the high land of Camaroons. The river abounds in alligators: there are few fish. The water is not considered good.

CALABAR, NEW, a branch of the Quorra, which enters the Atlantic 52 miles E. from Cape Formosa by the same estuary with the Bonny. It is a wide but sluggish stream with a bar across the entrance, which renders it accessible only for vessels drawing about 12 feet: 5 miles up however there is an average depth of 30 feet. By the Portuguese it was called Rio Real. The town of New Calabar stands on an island formed by two branches of the river.

The district to which the name of Calabar is given is very undefined and variable, as the chiefs are generally at war with each other, and overrun the neighbouring territories whenever they feel themselves sufficiently powerful. All this part of the African coast is low and swampy for 40 or 50 miles inland from the sea-coast, with few places fit for cultivation, though on these spots the soil yields plentifully not only yams, which are the chief food of the natives, but also the sugar-cane and other tropical productions. Polygamy is customary

among the natives, and human sacrifices are often made to propitiate good and evil spirits at funerals, and likewise periodically to the Spirit of the River, when the victims are carried out to the bar and there thrown overboard to be devoured by the sharks. Every eighth day is a holiday, and is passed by both sexes in drinking palm-wine in a state of fermentation till they become quite intoxicated.

CALABRIA, a division of the kingdom of the Two Sicilies, extending southward from Basilicata to the Strait of Messina between the Gulf of Taranto and the Mediterranean Sea. Its length from Monte Pollino on the southern border of Basilicata to Cape Spartivento at the extremity of the Italian peninsula is about 145 miles. The country consists of two peninsulas of very nearly equal length, joined by a narrow neck only 16 miles broad, between the gulfs of Squillace and Sant' Eufemia. The greatest breadth of the northern peninsula from sea to sea is about 60 miles, and that of the southern peninsula is in few places above 30 miles. The total area of Calabria is 5923 square miles, and the population in 1851 was 1,136,650.

The Apennines run southward through Calabria, forming large and irregular masses with numerous offsets towards both seas, and occupying the greater part of the surface. In the north the main ridge runs close to the Mediterranean coast as far as the Savuto, to the south of Cosenza, where it spreads eastward across the breadth of the peninsula, forming a mountain region of about 35 miles in length from west to east, and 25 miles in breadth from north to south. This region, which is called La Sila, and from which in ancient times the Athenians and Sicilians supplied themselves with masts and ship-timber, is a table-land traversed by numerous ranges of high hills, the summits of which are covered with pine forests, and the lower slopes with oaks, beeches, and elms. The plains between the hills are watered by numerous streams, and produce rich pasture. The whole region abounds with beautiful scenery, combining forest and mountain, rock and glen, river and plain. Landed proprietors from all the neighbouring towns migrate annually in the spring with their families, shepherds, and flocks to this healthy and beautiful table-land. In these mountains the rivers Crati, Neto, Savuto, and many smaller streams have their rise. Near Nicastro, and between the sources of the Lamato and Corace, the Apennine ridge becomes narrow, and as it approaches the isthmus above mentioned the elevation is so small that Charles III. of Naples proposed to cut a canal through it to connect the gulfs of Sant' Eufemia and Squillace. To the southward of this remarkable depression the mountains rise again and form another large mass called Aspromonte, which fills nearly the whole width of the country above Reggio. The Aspromonte is a very imposing range as seen from the coasts of south Italy; its sides are covered with forests of beech and oak, and its crest with pines. The highest summits of the Calabrian Apennines do not exceed 5000 feet, except Monte Pollino on the borders of Basilicata, which rises to 5000 feet. The highest point of La Sila is nearly 6000 feet, and the summit of Aspromonte is 4500 feet above the sea. The Calabrian Apennines are chiefly of limestone; primary rocks appear only in the southern portion of the chain, particularly in the range of the Aspromonte, which in its geological structure and physical character more nearly resembles the neighbouring mountains of Sicily than the Apennines. Between the various mountain masses and their offsets are some extensive valleys along the banks of the principal rivers, which terminate in plains near the sea. The valleys of Cosenza and Mouteleone, and the plain of Gioja, are the most extensive and fertile. The olive, the vine, the mulberry, the orange, and the lemon grow luxuriantly. Calabria produces a variety of good wines, some of which keep very well for years. Raw silk and oil are the staple productions of the country. Manua is gathered in large quantities in several districts from a species of ash. Cotton is also grown, and the sugar-cane succeeds. Vast quantities of liquorice are produced. Saffron grows wild in the pasture-grounds about Cosenza, and the caper on the stony districts of all three provinces. The climate is suitable for the production of raisins and currants; the best are those grown in the island of *Dino*, close to the coast between the mouth of the Lao and the Treccina, and on the little island of *Cirella*, a few miles south of the Lao. Calabria has a fine breed of horses of the true classical shape; they are not very numerous, mules being in more request from the nature of the country. Other stock includes milk cattle, oxen, buffaloes, and pigs. Bees are very numerous.

Calabria is divided for the purposes of administration into three intendence, or provinces, Calabria Citra, Calabria Ultra II., and Calabria Ultra I., which are severally governed as already explained in the article *BARI, TERRA DI*.

Calabria Citra, which is the most northern part of the division, formerly had an extensive trade in timber, but from waste and improvidence in the management of the forests this source of wealth has rather declined. The destruction of the timber, besides enhancing the price of fuel, has caused in many places the drying up of the mountain springs, and exposed the vegetable soil, formed by the decomposed foliage of the forests for thousands of years, to be washed away by torrents during the winter rains. The lowland rivers are thus in many instances choked with alluvial deposits, and once fertile districts are converted into unhealthy marshes. The ship-timber of La Sila is brought to Corigliano, near the coast of the Gulf of Taranto, which is also the centre of the manna trade, and has several

liquorice factories. In Calabria Ultra II. there is also a considerable trade in manna and saffron; silk is manufactured in its capital Cantanaro. At Briatico, on the Gulf of Sant' Eufemia, to the north of Mouteleone, and at Maida, near the great depression in the Apennine chain above noticed, coal has been found; at Maida antimony also and alabaster occur. There are iron-furnaces in the south-east of the province for smelting the iron-ore from the mines of Lo Stilo, which are situated just within the boundary of Calabria Ultra I. The iron is formed into cannon at the foundries of La Serra, a little further inland. The ores of Lo Stilo are said to be very rich; they form part of the royal domain, and are not profitably worked. The prince of Satriano has a foundry on his own estate, at which a small quantity of iron is smelted. Iron is found also in the southern part of the Aspromonte range. At Reggio, the neighbourhood of which is famous for its dried fruits, cedrat and other essential oils are produced. Other industrial products are silk stuffs at Scylla and its neighbourhood, and soap. The sea-fisheries give employment to many of the inhabitants of the coast towns; vast quantities of tunny, sword-fish, anchovy, and mullet are taken. The tunny, which measures 6 to 8 feet in length, and as much in circumference, frequently weighs above 4 cwt. The fish swim in shoals, and are caught in chambered nets. The sword-fish always attends the tunny shoals, which frequent the Mediterranean between June and August, and is sometimes taken in the chambered nets, but is more frequently harpooned during the passage of the shoals through the Strait of Messina. Its length including the sword varies from 8 to 12 feet, and it weighs about 2 cwt.; the flesh is more delicate than that of the tunny, and somewhat resembles veal. The anchovy is taken in nets from March to May, cured and packed on the spot, and exported to all parts of Europe. The mullet abounds on all parts of the coast, especially at the mouths of the rivers; it is taken chiefly for the roe which is salted and dried like caviare, and under the name of *bottarga* eaten as a delicacy with oil and lemon-juice.

The northern boundary of Calabria Citra is formed by the little river Cana, which flows into the Gulf of Taranto to the north of Rocca Imperiale; by the offset of the Apennines which runs southward from the source of the Canua to the source of the Sinno and Monte Pollino; and thence by a line westward to the Noce or Treccina, and along this river to its mouth in the Gulf of Policastro. The province extends southward to an irregular line, running in a general direction of west-south-west from the Laconica or Fiumenica which falls into the Gulf of Taranto, a few miles north of the promontory of Punta dell' Alice, to the mouth of the Savuto. The northern part of the province includes a portion of ancient Lucaia (which extended south as far as the Crati and the Lao); the rest of this province, and the whole of the other two Calabrias anciently belonged to Bruttium. The principal rivers of Calabria Citra are the Crati and the Neto. The *Crati* (ancient Crathis) rises to the south of Cosenza, within about 12 miles of the Mediterranean coast, and runs north between the Apennines and the region of La Sila to below Bisignano, where it receives the Mucone (which drains the north-west part of La Sila) on its right bank. Below Bisignano, it turns north-east to its mouth in the Gulf of Taranto. About three miles from its mouth it is joined on the left bank by the Coscile, the ancient Sybaris, which drains a large district. The whole length of the Crati is about 60 miles. The *Neto* rises east of Cosenza in the Sila region, of which it drains the central parts. It flows rapidly in a broad channel and in a general eastern direction into the Adriatic, about midway between Punta dell' Alice and Cape Nau or Colonua. The *Savuto* rises at the foot of Mouto Spineto, one of the highest summits of the Sila, and flows with a deep impetuous stream westward to the Mediterranean. The eldest son of the emperor Frederick II. was accidentally drowned in the Savuto. The rest of the rivers are short, being for the most part mountain torrents running directly into the sea. None of the rivers is of any importance to navigation.

The province of Calabria Citra contains an area of 2613 square miles, and had a population of 435,341 in 1851. It is divided into four districts or arrondissements named from the chief town of each—Cosenza, Rossano, Paola, and Castrovillari—and into 146 communes.

Cosenza, the capital of the province, occupies the site, and retains the name of the ancient *Cosentia*, the chief city of the Bruttii. It is situated at the junction of the Busento with the Crati, 160 miles S.S.E. from Naples, and has about 9000 inhabitants. The city stands partly in a deep glen and partly on higher ground, on the left bank of the Crati. The lower part of it is exposed to malaria, the higher part is healthy, and contains the tribunale, or court-house, a fine building, several public establishments, and many mansions of the opulent proprietors of the province. The streets are generally narrow and crooked, but the shops are good. There are important silk-factories in the town. Philip the Hardy on his return from Tunis with remains of St. Louis lost his wife, Isabella of Aragon, in Cosenza. Cosenza gives title to an archbishop. The cathedral contains the tomb of Duke Louis III. of Anjou. Alaric, king of the Goths, was hurried in the bed of the Busento.

Among the other towns the following may be noticed:—*Acri*, north-east of Cosenza, on the Mucone, a feeder of the Crati; population about 7000. *Aprigliano*, situated on a steep hill, a few miles

S.E. from Cosenza: population, 5000. *Bisignano*, an episcopal town, with about 4000 inhabitants, built on a high hill near the junction of the Mucone with the Crati. *San Giovanni-in-Fiore*, near the southern frontier, in the fork between the Neto and its feeder the Arvo: population, 5000. *Rende*, north-west of Cosenza, at the foot of the Apennines: population, 4000. *Scigliano*, south of Cosenza, on a height near the Savuto, is a collection of seven agricultural villages, which form as many separate quarters, and have a total population of 12,600. The environs are very fertile in corn, wine, and silk.

Rossano, an archiepiscopal town, north-east of Cosenza, and on the road that skirts the Adriatic shore, is the capital of the district of Rossano. It is situated on a rocky height, and has 12,300 inhabitants. It is a well-built walled town defended by a castle; and contains a fine cathedral, 14 other churches, a diocesan seminary, and an hospital. Among the other towns of the district are the following:—*Cariati*, a small episcopal town situated on a lofty hill, 5 miles N. from the Fiumenica; the town is entered by a gate and draw-bridge; and at one extremity of it are ruins of a feudal castle: population, 2000. *Corigliano*, a handsome town of 13,000 inhabitants, is built in form of an amphitheatre on the side of a steep hill, the summit of which is crowned by a fine feudal castle, and commands magnificent views. The town which is 7 miles W. from Rossano, is supplied with water by an aqueduct, and is considered the most agreeable place of residence in Calabria next to Reggio. It contains many liquorice-factories and extensive timber-yards, in which the ship-timber of the Sila is stored for the supply of the shipwrights of Naples. The castle is a residence of the Duke of Corigliano; it is a square building flanked with massive towers, and surrounded by a deep moat. *Longobucco*, a small place on the eastern flank of the Sila, near the source of the Trionto, deserves mention on account of its silver-lead mines. It has a population of about 5000, most of whom have employment connected with the mines and with charcoal-burning.

Paola, the capital of a district which lies north of the Savuto and between the Apennines and the shore of the Mediterranean, is 14 miles N.W. from Cosenza, and has 5000 inhabitants. The town stands on the shore and on the edge of a deep ravine, which is crossed by a handsome bridge. It contains some good houses and a feudal castle, and has extensive silk-factories, and a pottery. The Apennines in this district are very difficult to pass; the only road that traverses the chain is the new cross-road from Cosenza to Paola; the mountain passes are infested by brigands, so that many interesting towns along the coast are inaccessible to travellers, and many of them communicate with each other only by water. Among the most important of these coast-towns are *Ajello*, population, 3800; *Amantea*, 2800; *Belvedere*, 3900; *Cetraro*, 5700; *Fiumefreddo*, behind which rises the conspicuous and lofty peak of Monte Cocuzzo, population, 2800; *Foscaldo*, 7000; *Scalea*, 3000; and *Verbicaro*, 4500.

Castrovillari, the capital of a district which comprises the territory north of the Crati and east of the Apennines, is situated on an eminence surrounded by lofty mountains on the great Calabrian road from Naples to Reggio, 30 miles N. from Cosenza, and has 7000 inhabitants. The modern portion of the town has handsome streets, and contains the mansions of the rich proprietors of the district. The town is defended by a massive feudal castle, supposed to be of Norman erection. A cross-road leads from Castrovillari to Rossano, where it joins the Via Trajana, which runs along the Adriatic coast. Of the other towns the most important are the following:—*Cassano* is a well-built episcopal town, beautifully situated on the Ejjano, a feeder of the Coscile, 8 miles E. from Castrovillari, and has 6000 inhabitants. The scenery and climate of Cassano are not surpassed in South Italy. It has hot sulphurous baths. On the summit of the rocky mass round which the city is built are the ruins of a feudal castle, one of the strongholds of the Serra family. The view from the castle commands the beautiful valleys of the Coscile and the Crati. Cassano is said to be the Roman Cosa, at the siege of which T. Annius Milo was killed by a stone thrown from a tower, which still stands and bears the name of Torro di Milo. The village of Civita, higher up the valley and near the Ragonello, is according to others the site of Cosa; there are some ancient buildings near it. The district between the mouths of the Ragonello and the Crati, or according to others the fork between the Coscile and the Crati, is the site of the ancient *Sybaris*, founded by the Achæans and Trezenians, B.C. 720. It traded extensively with Carthage, numbered at the time of its greatest prosperity and luxury (for which it was proverbially notorious) 300,000 inhabitants, and was utterly destroyed by the Crotoniata, B.C. 510. *Terranova*, higher up the Crati and on its left bank, is a small place of about 2500 inhabitants, but important as marking the site of the ancient *Thuri*, which was founded by the Athenians, B.C. 446, in order to supply the place of the destroyed city of Sybaris. Herodotus, the historian, and Lysias, the orator, were among the first colonists of Thuri. The city soon rose to eminence. It submitted B.C. 190 to the Romans, who made it a colony and gave it the name of Copia. A few miles north of Castrovillari is *Morano*, a town of 9000 inhabitants, situated on a conical hill crowned by a fine feudal castle at the western base of the Monte Pollino ridge. In the neighbourhood of the town are some beautiful wooded dells, up

one of which, to northward, the great Calabrian road is led by well constructed zig-zags to the bleak dreary plain of Campotenese, which extends to the frontier of Basilicata. Morano has some silk and woollen manufactures. In the north-east of the district near the Cana, which here forms the boundary, is *Rocca Imperiale*, a small place of 2000 inhabitants, built like most of the towns along the coast and in other parts of Calabria round a conical hill.

Calabria Ultra II. extends southward from Calabria Citra, to the mouth of the Mesima in the Gulf of Gioja on the west, and to the mouth of the Callipari on the east shore of the peninsula. It contains an area of 2099 square miles, and had 381,147 inhabitants in 1851. The province is divided into four districts—Catanzaro, Cotrone, Nicastro, and Monteleone—and into 151 communes.

Catanzaro, the capital of the province and the seat of one of four Gran Corti Civili, or Courts of Appeal, in the continental dominions of the king of the Two Sicilies, is a well-built and important city, situated a few miles from the Gulf Squillace, 26 miles S. by E. from Cosenza, and has 12,000 inhabitants. It is built on the slope of a high and rocky hill that rises above a deep ravine between the Alli and the Corace and at the southern extremity of the Sila. The city gives title to a bishop, and is the residence of numerous wealthy proprietors. It is defended by a castle originally founded by Robert Guiscard; and contains a cathedral, several other churches, and a new theatre. The court of appeal of Catanzaro has jurisdiction over the three Calabrias; the lyceum established in the town confers academical degrees, and is one of the largest and best conducted colleges in the kingdom. *Squillace*, a small ill-built episcopal town, situated on a steep rocky eminence 9 miles S. from Catanzaro, has 2600 inhabitants. This town gives name to the Gulf of Squillace and represents the ancient Scylacæum which had the epithet of 'Navifragum,' from the bold precipitous promontory (now Monte Moscia) which projects opposite Squillace into the sea. There are fine views near Squillace, comprising the isthmus and the shores of the gulfs of Squillace and Sant' Eufemia. Squillace is the birth-place of Cassiodorus, the enlightened minister of Theodoric and historian of the Goths, who died here in a monastery founded by himself about A.D. 560. *Badolato*, a small town built on a hill a few miles N. from the Callipari, has a population of 3400. The Callipari is said to be the ancient Helleporus, on the right bank of which Diouysius the Elder totally defeated the Crotoniata and other confederate Greeks in B.C. 339.

Cotrone, the capital of the north-eastern district of the province, derives its name from the ancient Croton or Crotona, one of the most famous Greek cities in Italy, celebrated for its powerful athletes and for the beauty of its women, the residence of Pythagoras, and the seat of one of the earliest schools of medicine. The town has given title to a bishop since the earliest age of the church; Diouysius the Areopagite is said to have been its first bishop. It is now a small place with only about 5000 inhabitants; but is important for its castle and fortifications founded by Charles V. Cotrone is 37 miles N.E. from Catanzaro. It is built on a projecting point of land near the mouth of the Esaro, which partly surrounds the town. It has a small harbour, which is formed by a mole built with materials from the temple of Juno on the Lacinian Promontory, now Cape Nau or Colonne, which is a few miles S.E. from the town. One of the Doric columns of the temple still stands erect, whence the cape has received the name of Cape Colonne. The *Esaro*, now almost choked with weeds and little better than a stagnant ditch, is the ancient *Æsarus*, the scene of one of the Bucolics of Theocritus.

Among the other towns of the district is *Ciro*, said by some to occupy the site of the ancient Crimissa, founded by Philoctetes. It is a small place of 3000 inhabitants, situated near the Punta dell' Alice, the ancient promontory of Crimissa, on which Philoctetes is said to have built a temple to Apollo and to have suspended therein the bow and arrows of Hercules. *Isola*, a small town of 2000 inhabitants, chiefly rich proprietors, stands between Cotrone and Capo Rizuto. *Santa Severina*, a small place of only 1000 inhabitants W. of Cotrone on the cross road to San Giovanni-in-Fiore, gives title to an archbishop. *Strongoli*, an episcopal city with 2000 inhabitants, situated on a barren height near the coast north of Cotrone, is supposed to occupy the site of the ancient Petilia, another city founded on the coast by Philoctetes. The town was burnt by the French in 1806; it now contains many good houses. Two stones let into the exterior wall of the cathedral are covered with Latin inscriptions, which if genuine confirm the opinion that this was the site of Petilia. A steep descent leads down from Strougli to the plain of the broad and rapid Neto, the Neæthus of Theocritus, in which the Trojan women are said to have set fire to the Grecian fleet in order to put a stop to the wanderings of their conquerors. *Umbriatico*, a small ill-built episcopal town with only one church (the cathedral) and 2500 inhabitants, is situated a few miles W. from *Ciro* on a steep hill in which gypsum and alabaster are quarried.

The north-western district is named from its chief town *Nicastro*, which is situated to the north-west of Catanzaro on the slope of a mountain commanding extensive views of the plains and the coast to southward. The town gives title to a bishop, and has a population of 6600. In the castle, which is now in ruins, Henry, the eldest son of the emperor Frederick II., was confined on account of his taking part with the Guelphs against his father. Among the other towns of

the district are the following:—*San Biaggio*, a few miles west from Nicastro, is famous for its hot sulphurous baths and its wine; population 3000. Nearer the coast is *Santa-Eufemia*, a small town built near the site of the monastery of Santa-Eufemia, founded here by Robert Guiscard and swallowed up in the great earthquake of 1638. The monastery gave name to the Gulf of Sant' Eufemia, which extends from Cape Suvuro on the north to Cape Zambrone near Briatico on the south. *Philadelfia* in the plain south of Nicastro: population 3200. *Maida*, further south, is situated between two feeders of the *Lamato*, which is the principal river that falls into the Gulf of Sant' Eufemia: population 2800. Sir John Stuart, at the head of a British force, defeated the French under General Regnier in the plain of Maida in 1806. *Martorano*, not far from the Savuto in the north of the province, is an episcopal town with 2000 inhabitants.

Monteleone, capital of the south-western district, is situated on the road to Reggio, 25 miles S. from Nicastro, and has 7200 inhabitants. It is a flourishing place and stands in a commanding situation rendered picturesque by the feudal castle which was erected by Frederick II., and overlooks the town. Between the town and the sea is the village of *San Pietro di Virova*, which marks the site of the ancient Hipponium, a colony of the Locri Epizephyrii, which afterwards became a Roman colony under the name of Vibona. Cicero resided here previous to his exile from Italy. In the neighbourhood was a celebrated grove and temple of Proserpine. Six miles S. from Monteleone is *Mileto*, a small episcopal city with about 1500 inhabitants. It was originally built by the Normans, and was a considerable and well-built town till 1783, when it was totally destroyed by an earthquake. The abbey of the Holy Trinity was founded by Count Roger of Sicily, who embellished it with marble columns from the temple of Proserpine mentioned above. The count and his wife were buried in the abbey church; the sarcophagi containing their remains are now in the museum of Naples. A few miles east of Mileto are numerous villages with Greek names, and inhabited by the descendants of Albanian and Greek colonists. In the same direction and in a valley among the Apennines are the ruins of the monastery of San Stefano del Bosco, in which St. Bruno first established his order of monks. *Nicotera*, near the coast of the Gulf of Gioja and a little north of the mouth of the *Mesima*, gives with *Tropea* title to a bishop. It is a thriving place with 3800 inhabitants, built on the slope of a hill about a mile from the sea. It was destroyed in 1783 by the earthquake, and the present town has been erected since then. *Nicotera* is famous in the province for the beauty of its women. *Il Pizzo*, 6 miles N.N.E. from Monteleone, a port on the shore of the Gulf of Sant' Eufemia, has about 5700 inhabitants, who are engaged in the fisheries and the coasting trade. Joachim Murat landed at Il Pizzo in 1815, in his vain endeavour to recover the throne of the Two Sicilies. The people of the town took him prisoner and lodged him in the castle of Pizzo, in an apartment of which he was shot on the 13th of October. His body lies in the vault of the church of Il Pizzo. *Soriano*, 8 miles E. by S. from Monteleone, is situated among rugged mountains near the course of the *Mortaro*, a feeder of the *Mesima*, and has about 3000 inhabitants. *Tropea*, an episcopal town situated on a deep well-sheltered bay 8 miles S.W. from Monteleone, midway between Capes Zambrone and Vaticano, has 4300 inhabitants. The city is built upon cliffs, which rise behind the beach that lines the shore, and presents a beautiful appearance from the sea with its lofty churches and conventual buildings. Behind the city lower slopes are richly cultivated and well-wooded, and behind these rises a line of higher hills. *Tropea* is famous for its mild and healthy climate; the vicinity produces abundantly wine, fruits, cotton, silk, aromatic plants, and flowers of all kinds. The town is surrounded by walls flanked with towers and pierced by three gates with draw-bridges. The cathedral, six churches, one of which is built on a cavernous conical rock in front of the city, the diocesan seminary, an hospital, and a poor-house are the most noteworthy objects in the town. Steamboats from Naples to Messina and Malta touch at *Tropea*.

Calabria Ultra I., the most southern province of Italy, includes all the rest of the peninsula south of the *Mesima* and the *Callipari*. It has an area of 1251 square miles, with a population of 319,662 in 1851. It is very rich in iron ore, which is found in the mountains between the *Alaro* and the *Callipari*, and also at the southern end of the *Aspromonte* range, not far from Reggio; but the *Aspromonte* mines are not now worked. Raw silk, cotton, oil, fruits of all descriptions, liquors, manufactured silk, soap, perfume, essential oils, wine, brandy, orange and lemon and citron quacks, &c., are the most important products. The province is divided into three districts—Reggio, Gerace, and Palmi—and into 104 communes.

Reggio, the capital of the district of Reggio and of the whole province, is the ancient Rhegium, and is described in a separate article. [RHEGIUM.] It may be enough here to say that for salubrity of climate and beauty of scenery this city is hardly surpassed in Europe. The plain around it is for miles covered with plantations of the orange, lemon, and citron: the American aloe and cactus grow luxuriantly along the road-sides: the castor-oil plant and the date palm flourish; and the fruits and flowers of both hemispheres and of temperate and tropical countries are here produced. The city has extensive silk manufactures, and produces 70,000 lbs. of essential oil

yielding 18 ducats a pound; it has besides an important general commerce. The Bay of Reggio is remarkable for the singular phenomenon called the *Fata Morgana*. The distance across the strait from Reggio to *Messina* is not quite 7½ miles.

Among the other towns of the district we notice the following:—*Bova*, situated on a hill at the southern base of the *Aspromonte* and not far from Cape Spartivento, the ancient *Herculis Promontorium*, and the most southern point of Italy, is an episcopal city with 3000 inhabitants. *Bova* is said to have been founded by one of the numerous Albanian colonies that settled in Calabria after the death of Scanderbeg. It was destroyed by the earthquake of 1783, and has been since rebuilt. *Scylla* or *Scilla*, built on the sloping sides of a rock which connect the mainland with the famous rock or promontory of *Scylla* at the northern entrance of the *Faro* or Strait of *Messina*, has important silk factories, and a population of about 5000, many of whom are skilful mariners and intrepid divers. The wine of *Scylla* is of good quality; and the town derives some profit from the mushroom-stone found in the neighbourhood. The fishery of the tunny and the sword-fish is actively plied during the season. The town is built in zigzag terraces rising one above another from the sandy bays which lie on each side of the promontory. The streets are consequently steep; there are many fine buildings and handsome fountains in the town, which has been rebuilt since 1783, when it was almost entirely destroyed by the earthquake. The castle of *Scylla* is built on the edge of the cliff at the extremity of the promontory, and is considered an important military post. The British held it for some time during the last French war, but were forced to evacuate it in 1808 by the French. The Rock of *Scylla*, whose terrors to the ancient mariners are immortalised by the poets, inspires no fear in modern seamen; even the whirlpool of *Charybdis* opposite to *Scylla* is now represented by mere currents, which produce some rotation in the water, not of a dangerous character, but at times strong enough to turn a ship quite round. A whirlpool below the port of *Messina*, called *Galofaro*, answers the description of *Charybdis* given by the ancient poets; but its distance from *Scylla* prevents us from pronouncing it to be the same. The distance from the castle of *Scylla* to the *Faro Point* on the Sicilian coast is 6047 yards, or nearly 3½ miles. A beautiful road runs close along the shore from *Scylla* to Reggio, commanding splendid views of the strait and the broken shores of Sicily. It is diversified by villages and neat country houses; the shore is almost lined with the cottages of fishermen, and inland the country glows with the foliage of the orange, the pomegranate, the palm, the aloe, and the chestnut. A few miles south from *Scylla* is *Villa-San-Giovanni*, a small but thriving town of 3000 inhabitants, delightfully situated on the shore of the *Faro* and much frequented on account of its salubrious climate. It is the nearest point of embarkation for *Messina*. The town has large silk factories.

The district of Gerace is named from its chief town *Gerace*, a town of about 4800 inhabitants, situated on a hill between the Apennines and the Ionian Sea, at a distance of 30 miles N.E. from Reggio. The town is supposed to have been built from the ruins of *Locri*. It was greatly injured by the earthquake of 1783, when its gothic cathedral and strong citadel were reduced to ruins. It gives title to a bishop and contains several silk manufactories and some good buildings. Its wines are in high repute; in the neighbourhood are several mineral springs. In the plain between Gerace and the sea are ancient ruins supposed to mark the site of *Locri Epizephyrii*, founded by the *Locri Ozolæ*, B.C. 750, immortalised by *Pindar*, and celebrated for the code of *Zaleucus*, the earliest collection of written laws possessed by the Greeks. Coins of *Locri* have been found on the spot. The city derived its surname from its position near the *Zephyrium Promontorium*, now Cape Bruzzano. A cross road leads over the Apennines from Gerace to Gioja on the western coast. The scenery of the pass combines the richest forest scenery with the wild and rocky glens of the mountains. The highest part of the pass commands wide and splendid prospects, embracing both seas, and extending in fine weather westward as far as the *Lipari Islands*. *Castelvetere*, on the right bank of the *Alaro* north of Gerace, has a population of above 5000. The *Alaro* is the ancient *Sagras*, on the banks of which 130,000 *Crotonians* were defeated by 10,000 *Locrians*, B.C. 360. Among the other towns of the district along the coast are *Gioiosa*, population 7600; *Grotteria*, 4500; *Mammola*, 7800; *Lo Stilo*, celebrated for its iron mines, 2600; *Roccella*, 5000.

Palmi or *Palme*, the capital of the third district of Calabria Ultra I., is beautifully situated on a steep cliff that rises from the Gulf of Gioja, above a narrow creek which shelters the fishing-craft of its inhabitants. In construction and in situation this is one of the most beautiful towns along this remarkable coast. The platform on which it stands is covered with gardens and plantations of oranges and olives, and the higher hills in the background are clothed with forests of chestnut-trees. The streets, wide, straight, and well built, abut on a central square decorated by a fine fountain representing a palm-tree; and from various points of the town are seen the entrance to the *Faro*, the town and harbour of *Messina*, the rock and castle of *Scylla*, and the summit of *Ætna* to the south; the north coast of Sicily and the *Lipari Islands* to the west; and the shore of the Gulf of Gioja as far as Cape Vaticano to the north. The town contains several houses of fine architecture, three churches, one of which is

collegiate, and several silk factories: population, 8000. *Bagnara*, on the shore road, south of Palmi, is famous for the beauty of its women, and has about 3000 inhabitants. *Casalnuovo*, finely situated at the western base of the mountains, high enough to be above the influence of malaria which in summer and autumn infects the plain of Gioja, on the cross-road from Gerace to Gioja, is almost entirely built of wood, having been destroyed by the earthquake of 1783: population, 8500. *Gioja*, supposed to occupy the site of the ancient Metaurum Bruttiorum, gives name to the Gulf of Gioja. It is a small town situated near the coast and the mouth of the Marro: population about 5000. The Marro is the ancient Metaurus Bruttiorum, in whose seven head-streams Orestes is fabled to have purified himself from the stains of his mother's blood. The mouth of the river is famous now as in ancient times for its tunny fishery. *Oppido*, an episcopal town, on the western flank of the Aspromonte, and east of Palmi, has a population of 8000. It is supposed to occupy the site of the ancient Mamertium. The earthquake of 1783, which damaged so many towns in this part of Italy, has left numerous marks of its violence throughout the whole district, consisting of landslips, subsidences and chasms in the earth, funnel-shaped hollows (some of them filled with water), and suddenly-formed defiles. In *Oppido* several houses were engulfed, and in the neighbourhood an olive-plantation for a width of 500 feet subsided 200 feet below the surrounding surface. Among the other towns are *Rosarno*, picturesquely seated among olive-groves, near the Mesima, population 2000; *Laureana*, a thriving village situated on an eminence at the junction of the Metoro with the Mesima; *Polistena*, in a high plain watered by a feeder of the Marro, N.E. from Palmi, population about 4000; this town is built since 1783, the old Albanian town of Polistena was then thrown bodily by the earthquake into the ravine between the two hills on which it stood; *Seminara*, close to Palmi, population 3000. The French under D'Aubigny defeated the Spaniards under Gonsalvo de Cordoba in the plain of Seminara in 1495; and on the 21st of April 1503 the French army under D'Aubigny was signally defeated by the Spaniards commanded by Ugo de Cardona, one of Gonsalvo's best generals. The low parts of the coast along the Gulf of Gioja and near the rivers are subject to malaria.

The extensive region now known by the name of Calabria was in the Roman times chiefly occupied by the Brettii or Bruttii, whom some historians have represented as runaway slaves and outlaws, and others as a wild aboriginal race, living in the extensive forests which then extended over the greater part of the country. The eastern coast was early colonised by the Greeks, and became known, with the rest of the coast as far as Tarentum, by the general denomination of Megalé Hellas, or Magna Græcia. But the oldest name of the most southern peninsula of Calabria (that bounded on the north by the gulfs of Squillace and Sant' Eufemia), was Italia, a term which was afterwards extended to comprise the country as far as Taranto (Taras or Tarantum), and finally became the name of the whole peninsula of Italy. (Aristot. 'Polit.' vii. 10.) The name of Calabria was given by the Greeks to quite a different country, namely, the north-eastern coast of the Iapygian or Messapian peninsula from Brundisium to Hydruntum; the Salentines occupied the southern part of the same peninsula. The name of Calabria, as applied to that part of Iapygia, continued in use under the Romans, and afterwards under the Byzantine emperors, as we find in Paulus Diaconus in the 8th century, and Luitprand of Cremona in the 10th, who both speak of Apulia and Calabria as one province, while they call the modern Calabria by the name of Bruttia, which by Constantine's division of the empire made one province with Lucania. How the name of Calabria came to be transferred to the country of the Bruttii is not clearly ascertained; but it would appear that the Byzantines having lost in the 11th century the old Calabria, and still retaining several towns on the coast of the former Magna Græcia, transferred the name of the former province to their last remaining possessions in Southern Italy. The first Norman conquerors took the title of Dukes of Apulia and Calabria. Under the Angevins the presumptive heir to the throne was styled Duke of Calabria, which custom has continued to this day. Calabria made a determined resistance against the French, first in 1799, when the Calabrians under Cardinal Ruffo reconquered the kingdom, and afterwards in 1806-7, when they waged a partisan warfare against the invaders. They were not ultimately subdued till 1810.

The Calabrians are a proud, thoughtful, and warm-hearted fiery race. They are personally brave and faithful to their word; are generally good marksmen, and make good soldiers under proper discipline. Their dialect resembles the Sicilian. The crimes which in former times were frequent in Calabria have greatly diminished; murders are no longer frequent; and banditti have all but disappeared. The higher orders are sociable, well-informed, and hospitable. "Most of their towns," says Keppel Craven, "are built on conical hills, which they crown to the very top; the lower houses being joined together by thick walls, constitute a kind of rampart. The women wear a body with the full shirt sleeves, and a thickly-plaited petticoat of coarse cloth, and on the head a cloth folded like a napkin, as in other parts of the Neapolitan and Roman states. The men wear short jackets and close hose, generally of black cloth, leather gaiters or coarse stockings, with shoes of undressed skin tied by thongs half-way up the leg, sandal fashion. Their hats are conical and high, with hardly any brim to them. The principal deficiencies

of Calabria are want of harbours along the coasts, and the malaria which prevails in most of the large valleys. By embanking the rivers and draining the marshes the atmosphere is in parts improving. The great carriage-road from Naples, which has been continued to Reggio through the whole length of Calabria, with branch roads towards both seas, is another essential improvement.

(Strabo; Gibbon, *Decline and Fall*; H. Gally Knight, *Normans in Sicily*; Keppel Craven, *Tour in the Southern Provinces of Naples*; *Dictionary of Greek and Roman Geography*; Blewitt, *Handbook for South Italy*; Afan di Rivera, *Considerazioni sulle Due Sicilie*; Colletta, *Storia del Reame di Napoli*; Serrao, *De' Terremoti di Calabria*; *Dictionary of Classical Biography*; *Biographic Universelle*.)

CALAHORRA. [CASTILLA LA VIEJA.]

CALAIS, a fortified town and sea-port of France, in the department of Pas-de-Calais, is situated on the south shore of the Strait of Dover, 20 miles N.E. from Boulogne, 22 miles S.E. from Dover, and 190 miles N. from Paris (by railway as far as Boulogne), in 50° 58' N. lat., 1° 51' E. long., and has about 13,000 inhabitants, many of whom are English. The first mention made of Calais occurs in certain title-deeds of the 9th century, when it was a mere fishing village. The harbour, which was naturally formed by a small stream called De Hames, was improved by order of Baldwin IV., Count of Flanders, about the year 997. Philippe of France, count of Boulogne, surrounded the town with a wall flanked at regular distances by small towers and defended on the outside by wet ditches. Such was the solidity of the masonry that this wall still remains. In 1227 Philippe also erected a vast keep, which was called the castle of Calais; this was demolished in 1560, when the present citadel was erected. After the battle of Crecy Edward III., king of England, on the 1st of August 1346 invested Calais, which was defended by the townsmen commanded by Jean de Vienne. After the siege had lasted eleven months, the King of France at the head of an army of 60,000 men approached to relieve the town, but judging the English position to be unassailable he left Calais to its fate. The townfolk, pressed by famine, offered to capitulate, having nobly defended their town for above twelve months. The cruel terms imposed by Edward, the noble self-devotion of Eustache de St-Pierre and his companions, and the generous and successful intercession of Queen Philippa, are well known. Edward entered the town on the 29th of August 1347, drove all the inhabitants from the town, re-peopled it with English, and sent the garrison prisoners to the Tower of London. The English improved the town and added to its defences; they held it till 1556, when the Duke of Guise stormed it after a seven days' siege, and drove all the English from the town. Since that time Calais has remained in the hands of the French, with the exception of about two years—1596-8—when it was held by the Spaniards till the peace of Vervins.

The ramparts, forts, and citadel which defend the town render Calais a fortress of the first class. The sea washes it on the north and west, and on the south and east low marsh land, which can be easily flooded, stretches up to the walls except for a space of about 250 yards, and this approach is commanded by the cross fire of the forts.

The town and citadel form a parallelogram, having one of the longer sides towards the sea. The citadel is at the western end of the town; it is large and strong, and commands at once the town, the port, and the country around. The harbour, which is a tidal one, small and shallow, is entered by a channel formed by two moles built of stone and three quarters of a mile long; it admits vessels of 400 to 500 tons, and has steam communication with Dover twice a day, and with London. The spot on which Louis XVIII. landed in 1814 is marked by a pillar. From the port the town is entered by a draw-bridge and gate erected by Cardinal Richelieu in 1685. The town is pretty well built; the streets are straight, clean, and well paved; the houses constructed of stone and brick. The centre of the town is occupied by the Place-d'Armes, a spacious square which serves for a market-place. In this square stands the Hotel-de-Ville, in front of which are statues of Eustache de St-Pierre, the Duke of Guise, and Cardinal Richelieu. A tower 124 feet high stands in the centre of the Place-d'Armes, which serves as a landmark by day and a light-house by night. The cathedral was built during the English occupation of the town; it is a handsome gothic building, contains 11 side chapels, and a picture of the Assumption by Vandyke. The other remarkable objects in the town are the Hotel-de-Guise, in which Henry VIII. used to lodge, the public library, the theatre, and the barracks. The outer ramparts and the mole afford excellent promenades. The town is entered from the land side by a strongly defended gate and drawbridges.

Calais possesses a tribunal and chamber of commerce, and schools of design and hydrography; it has some foreign and a brisk coasting trade; vessels belonging to the town are employed in the cod, herring, and mackerel fisheries. Corn, wine, oil, brandy, linen, wood, coal, eggs (of which above 50 millions are annually sent to England), and colonial produce are the principal articles of commerce. The town has communication by canals with Arras, Dunquerque, Gravelines, and St-Omer; and by railroad with Belgium and with Paris through Lille and Douai. It has instantaneous communication with Dover by submarine electric telegraph-wires, which were first employed for messages, September 27, 1851. Calais used to be the principal landing-place for English travellers in France, but in this respect it is now

surpassed by Boulogne. The town however has still a considerable share in this traffic; as many as 53,864 travellers to and from England passed through Calais in 1850. The English and French mails pass by the route of Calais. Calais is becoming a manufacturing town, and mills are encroaching upon the inner ramparts. The principal fabric is bobbin-net; this manufacture gives employment to great numbers in the town, the suburb of St. Pierre, and the villages of the neighbourhood. Other articles of manufacture are soap, straw bonnets, and leather. There are also steam flour and oil mills, salt and sugar-refineries, and yards for boat and ship-building. The herring and mackerel-fisheries give employment to a good many hands.

(*Dictionnaire de la France*; Macgregor's Statistics.)

CALAIS, ST. [SARTHE, Department of.]

CALATAYUD. [ARAGON.]

CALATRAYA, formerly a town of Spain, was situated on the south bank of the Guadiana. In the middle ages the town was strongly fortified, but is now reduced to a single tower, with the appellation of Calatrava la Vieja (Old Calatrava), in contradistinction to the great convent (erected in 1214) for the military order called Knights of Calatrava, three leagues from it, and named Calatrava la Nueva (New Calatrava).

CALCUTTA, the capital city of Bengal, and the seat of the supreme government of British India, is situated on the left or east side of the river Hoogly, in 22° 23' N. lat., 85° 23' E. long.; about 100 miles from the sea.

In the beginning of the last century Calcutta was only an insignificant village, inhabited by native husbandmen; and a great part of its present site was completely covered with jungle. The proximity of the low and damp region of the Sunderbunds, a woody tract containing eight mouths of the Ganges, is necessarily unfavourable to the salubrity of the city, which is still further impaired by a dense forest on the east, and some extensive muddy lakes on the south. The English have somewhat mitigated this evil by draining off the surface-water near the town, by filling up stagnant ponds, and by clearing away the surrounding jungle to a considerable extent.

In 1698 the English factory was removed from Hoogly to this place, then occupied by the village of Govindpore, but in 1756 there were not more than seventy houses in it occupied by Europeans. Suraja ud Dowlah, the soubahdar, or viceroy of Bengal, attacked the place in June 1756. On this occasion the factory was deserted by the governor, the commandant, and many other of the European functionaries and residents. On the capture of the place the English who had remained to defend the factory were thrust into a small unwholesome dungeon called the Black Hole, and of 146 individuals who were thus shut up at night only 23 were found alive in the morning. In the beginning of the following year a squadron consisting of five ships of war, accompanied by 2400 troops under the command of Colonel Clive, arrived in the Ganges from Madras and re-took the town of Calcutta, from which the garrison of the soubahdar retired, after an attack of only two hours' duration. The citadel, to which the name of Fort William was given, was constructed by Clive soon after the battle of Plassey, fought in June 1757. This fort stands on the bank of the Hoogly, about a quarter of a mile below the city. Its form is octagonal; five of the sides which are towards the land are regular, and three which front the river have their lines varied according to local circumstances. Fort William is the most regularly constructed fortress in India. The works are low and mount 619 guns, and there are but few buildings within the walls, which are so extensive that it is said 10,000 men would be required to defend it in case of attack; the citadel contains accommodation for 15,000; it is computed to have cost in its construction altogether two millions sterling, of which one-half was paid by Meer Jaffir. Its principal batteries are towards the river, from which side only an attack is to be apprehended. The space between the fort and the city, called the Esplanade, contains the Government-house, built by the Marquis Wellesley, which is the finest building in Calcutta; it consists of a centre with four wings, one at each corner, connected together by circular passages. The centre building contains two very fine rooms. The lower of these, the hall, is paved with marble, and supported by Doric columns; over this is the ball-room supported by Ionic pillars. The private apartments, the council-room and other offices are contained in the wings. On a line with this building is a range of magnificent dwelling-houses with spacious verandahs.

The town extends for above six miles in the direction of the river: the average breadth is about two miles. The parts in which Europeans reside are mostly occupied by handsome detached houses, built of brick and stuccoed with chunam, which gives them the appearance of marble palaces. The principal square measures 1500 feet on each side, and in the middle has a large tank, from which it takes its name. This tank, which is 60 feet deep, is surrounded by a handsome wall and balustrade, and has steps in the interior reaching to the bottom. During the administration of Lord Hastings large sums were expended in improving the ventilation of Calcutta; a street 60 feet wide was opened through the centre in its longest diameter, and several squares were made, which, like the one already described, have each a tank in the middle surrounded by planted walks. A quay, called the Strand, between two and three miles long, was formed,

which extends upon the river-bank along the city. This quay is 40 feet above low-water mark, and is furnished with many ghauts, or broad flights of steps, which are useful for the landing of goods, and for the accommodation of the natives in making the frequent abstinions prescribed by their religion.

The principal public buildings, besides the government-house, are—the town-hall, the mint, the courts of justice, numerous Protestant churches, a cathedral, Roman Catholic chapels, a Greek and an Armenian church, several Hindoo colleges and pagodas and Mohammedan mosques, and a Sikh temple. There are also the Ochterlony monument; the Cossipore foundry; the Asiatic Society's rooms; the Bishop's college, and numerous other buildings. On the south side of the town are an hospital and a jail. The quarter in which the natives principally reside is to the north, and consists of narrow streets, with lofty houses whose lower apartments are usually occupied as shops or stores. The upper portions are pierced with loop-holes, and the backs of the houses usually look on the street. This quarter swarms with inhabitants. The total number of inhabitants in the city and suburbs has never been regularly estimated; and several calculations which have been attempted vary in their results between 82,000 and 2,225,000. There are no public registers of births, except irregular ones under the orders of the superintendent of police, and the memoranda of deaths noted at the burning ghauts of the Hindoos. Of the Christians and Jews there is no enumeration. From careful calculations prepared by Captain Birch in 1837 the population is stated at 229,705 residents in the city, which added to the immense numbers dwelling in the suburbs, who daily pour in vast crowds to their occupations in the town, must make the whole nearly 400,000. The population is divided into numerous classes, the Eurasians, or progeny of white fathers and native mothers, the Portuguese, the French, the Chinese (almost all of these are shoe-makers), the Armenians, the Jews, the Moguls, the Parsees, the Arabs, the Birmese, the Madrasses, the native Christians, and the English. With so large and varied a population, Calcutta presents at all times an animated scene. The great mass of the population speak the Bengali language; and many, including the servants attending upon Europeans, speak the Hindustani also.

The botanic garden, a splendid establishment of the East India Company, is situated on the right side of the Hoogly, where that river makes a bend, to which the name of Garden Reach has been given. Above is an extensive plantation of teak, which wood does not occur naturally in this part of India. The introduction of this species of tree is considered desirable, as ship-building forms an important branch of industry. On the right bank of the river, both above and below as well as opposite to the city, there are several private yards for ship-building.

The soil in and about Calcutta is so deficient in water, that after boring to the depth of 140 feet no springs have been found. The city however is supplied with plenty of good drinking water from numerous extensive ponds or tanks situated within and without it. The periodical rains annually fill them. Many trunks of trees have been discovered 60 feet under the surface standing erect, with their roots and branches perfect. Thin strata of coal and blue-clay have been met with between 50 and 60 feet below the surface.

The external trade of the province being almost wholly carried on at Calcutta, its nature and amount have been given in our description of the province. [BENOAL.] The river is about a mile wide at high-water, and trading vessels of the largest size ascend as high as the town. The attention of strangers is much excited on first visiting Calcutta, by the number of vultures, kites, crows, and a species of crane, which from its stately walk has received the name of 'adjutant.' These birds clear away the surplus food provided for Europeans, which is thrown at night into the streets, as it cannot be kept in that climate, and there are few poor persons to consume it whose religious prejudices will allow of their doing so. These scavengers are assisted by numerous foxes, jackals, and wild dogs from the neighbouring jungles, who prowl through the city at night, and whose mingled howlings produce a very unpleasant effect. The markets are abundantly supplied with game, meat, fish, vegetables, and fruits, the whole of which are sold at moderate prices. The game consists of wild-ducks, teal, ortolans, snipe, hares, and venison. Among the fish is one—the mango fish—which is described as a great luxury: it has derived its name from the fact of its appearing in the river only at the season when the mangoes ripen. Fruits are furnished in an infinite variety, and of delicious flavour; pine-apples, melons, mangoes, oranges, guavas, peaches, loquats, and strawberries are among the more usual descriptions. The inhabitants indulge largely in these luxuries, and their pleasure is greatly enhanced by the abundant store of ice always contained in the ice-house of Calcutta.

The European inhabitants have established several institutions for literary, scientific, and educational objects. The Asiatic Society, formed by Sir William Jones, was founded at Calcutta in 1784. The Metcalf Hall for the accommodation of the Agricultural Society of India, and the Calcutta Public Library, are of recent date. The theatre was erected in 1841, after the destruction by fire of one built many years ago. Among the institutions for promoting education are the Bishop's College, founded in 1819, and the College of Fort William, a government establishment for the instruction of young men who have

been partially educated in the college at Hailybury. A Sanscrit college, a Mohammedan college, and an Anglo-Indian college, are likewise supported by government. The residents of Calcutta support a variety of charitable institutions and of societies for religious objects. Calcutta is the seat of the supreme court of judicature for the presidency of Bengal. This court is under the control of a chief justice and three puisne judges appointed by the queen. The courts of Suddur Dewanny Adawlut, and Nazamut Adawlut, established in Calcutta, the first for civil, the last for criminal causes, are courts of appeal from the provincial courts in all parts of India.

In 1814 a bishop's see was erected within the company's dominions in India; the bishop, under the title of Bishop of Calcutta, has his residence in that city: his salary was fixed by Act of Parliament at 5000*l.* per annum.

(Rennell, *Memoir of a Map of Hindustan*; Mill, *History of British India*; Tennant, *Indian Recreations*; Reports of Committees of House of Commons on the Affairs of India.

CALDER, one of the rivers of Yorkshire, rises in the high grounds on the borders of Lancashire, in a marsh in Cliviger Dean, south-west of Burnley; and from the same marsh rises a branch of the West Calder, which runs in an opposite direction and joins the Ribble. The course of the Yorkshire Calder is easterly, through the deep valley of Todmorden; at Sowerby the river passes within two miles of Halifax, and by Dewsbury and Wakefield, at which latter place it is crossed by a bridge of nine arches. From Wakefield the course of the Calder is nearly north-east to Castleford, near Pontefract, where it joins the Aire, which enters the Ouse five miles from Snaith. A little below Salterhebble, about two miles south-west from Halifax, the Calder receives the Hebble, a small but rapid stream, which rises above Ovenden, and passes round the north and east sides of the town of Halifax; and a few miles farther east it receives the river Coln, which rises near Holm Moss, and runs past Huddersfield. The Calder is an important feature in the canal system of Yorkshire and Lancashire, and forms part of the line of internal navigation between the eastern and western coasts. The Rochdale Canal, 31½ miles in length, commences in the Calder and Hebble navigation at Sowerby bridge wharf, and terminates by a junction with the Bridgewater Canal at Manchester. The Calder and Hebble navigation is 22 miles long, from its junction with the Aire and Calder navigation, about a quarter of a mile from Wakefield, to the basin at Sowerby bridge, in which it terminates. The Calder forms a considerable portion of the line, except where cuts are made to avoid the circuitous course of the river. There is a branch to Halifax. The Barnsley Canal commences in its lower part of the Calder, near Wakefield, and joining the Dearne and Dove Canal, which terminates in the river Dun navigation, opens a communication with Sheffield and Rotherham. The Ramsden Canal commences in the Calder and Hebble navigation, and terminates at Huddersfield, from which a line of canal, called the Manchester, Ashton, and Oldham Canal, extends to Dukensfield in the parish of Ashton-under-Line, near which place it is joined by the Peak Forest Canal. The canals of Lancashire and the West Riding of Yorkshire are connected with the Ouse by the Aire and Calder navigation, which includes the Selby Canal and the new canal from Ferrybridge to Goole. In 1625 an attempt was made to obtain an Act "for the making and maintaining the rivers Ayre and Cawlder," but no Act was passed before 1699. The clothiers of Leeds and Wakefield, in a petition presented to the House of Commons in favour of the bill, complained heavily of the difficulty of transporting their manufactures: "the expense whereof," they state, "is not only very chargeable, but they are forced to stay two months sometimes while the roads are unpassable to market, and many times the goods receive considerable damage, through the badness of roads, by overturning." Within the present century the Aire and Calder navigation has been rendered one of the most efficient lines of water communication in the kingdom. The Aire is not navigable above Leeds. A little above Leeds bridge the Leeds and Liverpool Canal locks down into the Aire. The branch of the Aire and Calder navigation to Wakefield is 12½ miles in length from the junction of the two rivers at Castleford; and with the Calder and Hebble navigation and Rochdale Canal forms the line of communication with South Lancashire, while the Leeds and Liverpool Canal is carried through the middle and western parts of that county, and terminates at Liverpool. At Huddersley, ½ miles from the Ouse, the Aire and Calder navigation has a branch to Selby, which facilitates the interchange of commodities between Leeds and Wakefield and the populous districts to the west, and the agricultural districts of the East and North Ridings of Yorkshire. A fine canal, 60 feet wide at top, and 18½ miles in length, has been formed from Ferrybridge to Goole. At Goole capacious docks have been constructed, and a custom-house established, so that goods can be shipped thence to foreign parts. [GOOLE.] About 1828 further improvements were effected in the Aire and Calder navigation, by which vessels of 100 tons burden can go to Leeds and Wakefield. Additional cuts have also been made in order to avoid the circuitous course of the river, and the line has by this means been rendered several miles shorter. But the commercial value of this important water communication has been considerably affected by the great development of the railway system in this part of the country. Many of the above-mentioned canal-branches have been purchased by railway companies;

and those which have not been so purchased are exposed to the competition of railways running very near them.

CALEDONIA, the name given by Tacitus and other ancient writers to the most northern part of Britain, north of the estuaries of Glota and Bodotria (the Clyde and the Forth), which formed the permanent boundaries of the Roman province. Tacitus calls the natives the "Britons who inhabit Caledonia," and he says that the reddish colour of their hair and their large limbs denoted them to be of German extraction. ('Agricola Vita,' 11, 25.) Agricola was the first Roman general who came in contact with the Caledonians. In the sixth year of his government he advanced beyond Bodotria by land, while his fleet followed along the coast. He met with a sharp resistance, and the ninth legion was surprised by night in its camp by the natives, who were at last repulsed after much loss on both sides. In the following year Agricola marched again into Caledonia as far as the Grampians, where more than 30,000 of the natives were posted under the command of Galgacus, their principal chief. The battle, which was won by Roman tactics, and attended with a dreadful slaughter of the Caledonians, is described in a most lively manner by Tacitus. In the night the natives retreated into the interior, after burning their houses or huts, and Agricola could not tell which way they had gone. Accordingly he moved back his army to the south of the borders of Glota and Bodotria, the line between which he had fortified by strong outposts. [ANTONINUS, WALL OF.] There is no evidence of the Romans having ever after advanced much beyond those limits. The name of Caledonia has been often applied to Scotland in general, though improperly.

CALEDONIA, NEW. [NEW CALEDONIA.]

CALEDONIAN CANAL, a connected series of lakes and canals extending through Glenmore, or the 'Great Glen of Albion,' and connecting the Western Ocean with the North Sea. In 1773 the trustees for forfeited estates employed the celebrated James Watt to report on the practicability of a canal from sea to sea through Glenmore. Watt's report was most favourable; but the forfeited estates having been soon after restored to the families to which they had formerly belonged, the office of trustee was abolished, and the project dropped. In 1802 the scheme was revived, and government employed Mr. Thomas Telford, the civil engineer, to re-survey the district, and to report the result of his investigations. This report was in favour of the construction of the canal, and the work was immediately proceeded with under Mr. Telford's direction. Operations were commenced in 1803. In 1820 the eastern division of the canal was opened for navigation. The whole line was opened towards the close of 1823. The Caledonian Canal commences on the south-west on the shore of Loch Eil at Corpach near Fort William, in 56° 50' N. lat., 5° 12' W. long., and joins Loch Lochy by a cutting 8 miles in length; a short cutting of about 2 miles connects Loch Lochy with Loch Oich; a canal nearly 6 miles long continues the navigation from Loch Oich to Loch Ness; from the north-east end of Loch Ness a canal of about 7 miles in length continues the passage to Clachnaharry near Inverness; whence by another short artificial cutting, it opens into the Moray Frith on the shores of Loch Beaully, in 57° 26' N. lat., 4° 15' W. long. The length of this communication between the west and east seas is in all about 60 miles, of which rather more than 37 miles are through natural lochs or lakes, and about 23 miles through artificial cuttings. The summit level is at Loch Oich, which is about 94 feet above high water on the east coast at spring tides. There are 28 lochs in the range, 14 being to the west of Loch Oich and 14 to the east. The locks are about 170 feet in length and 40 feet in width, the rise at each lock being 8 feet. The width of the canal at the water surface is 120 feet; at the bottom 50 feet; the depth of water is 17 feet. There were considerable engineering difficulties to be overcome in the construction of the canal. The object proposed in this national work was the avoidance of the tedious and often dangerous voyage by the Orkneys and Cape Wrath. From Kinnaird's Head on the east coast to the Sound of Mull on the west coast the passage by the Orkneys and Cape Wrath is about 500 miles, while by the inland navigation the distance is only 250 miles. By the Cape Wrath passage also many shipwrecks had occurred. A large amount of public money has been expended on the works. The returns have been very small in comparison with the cost; one chief source of expected revenue was indeed cut off by the act of the legislature in imposing duties upon the import of timber from the Baltic in order to encourage the employment in this country of timber of Canadian growth. For a number of years after the opening of the canal-vessels were often detained in the lochs by calms and contrary winds: since 1847 this has been remedied by the establishment of steam-tug vessels, causing a considerable increase in the number of vessels using this line of navigation. The amount of public money granted by Parliament at various periods from 1803 to 1847 was 1,232,387*l.* 8*s.*; the amount received for canal dues, shore dues, &c., to 30th April, 1849, was 57,134*l.* 18*s.* 0½*d.*; for towages, 1216*l.* 9*s.* 8*d.*; for rent of houses, stables, lands, materials sold, &c., 9119*l.* 12*s.* 3*d.*; for interest on Exchequer bills, interest from bank, &c., 11,411*l.* 15*s.* 2*d.* The cost of construction, repairs, management, law expenses, shipping, roads, &c., from 20th October, 1803, to 5th May, 1849, was 1,296,846*l.* 11*s.* 7*d.*; cost and maintenance of steam-tug vessels, 13,142*l.* 8*s.* 2*d.* The canal rates are in most cases one farthing per

mille per ton for the whole passage, the rate for towage being similar. The charge on steam-vessels passing wholly through the canal is 2s. per register ton, whether laden or unladen. In 1848 the commissioners, with the view of inducing a greater number of the Baltic traders to use the passage by the canal, reduced the dues on trading sailing vessels exceeding 125 tons register to 1s. per register ton for the through passage; and to encourage the traffic connected with the fisheries, the towage rates on vessels laden with herrings or salt were reduced by one half. The opening of the Caledonian Canal has given rise to an increased intercourse and traffic between Inverness and Glasgow, and generally between the northern and western districts of Scotland. Much damage was sustained by the works of the canal in December 1845 and January 1849 by a severe storm and heavy rains. The damage was repaired with great skill and promptitude, and at less cost than was anticipated, under the direction of Mr. Walker, consulting engineer to the commissioners, and Mr. George May, their resident engineer. To cover the expense, Parliament granted 10,000*l.* to the commissioners in 1849.

(*New Statistical Account of Scotland; Forty-fourth Report of the Commissioners for Making and Maintaining the Caledonian Canal; Life of Telford*, edited by Rickman.)

CALENBERG. (HANOVER.)

CALICUT, a sea-port town in the province of Malabar, in 11° 15' N. lat., and 75° 50' E. long. Calicut was the first Indian port visited by Vasco de Gama in 1498. The name of the place is properly *Colicodu*. Previous to the Mussulman invasion it was the chief residence of the Tamuri rajas, and was a very flourishing city, owing to the success that its lords had in war, and the encouragement they afforded to commercial pursuits. In 1766, the town was taken by Hyder Ali, when he enlarged the fort. His son Tippoo afterwards destroyed both the fort and the town, and removed the inhabitants to Nelluru, the name of which place he changed to Furruckabad. When the province of Malabar was conquered by the English, in 1790, the former inhabitants of Calicut returned to their old abode. Before its destruction by Tippoo the town contained between 6000 and 7000 houses. In 1800 Calicut again contained more than 5000 houses. The inhabitants are mostly Moplas, who are of Arab descent and profess Mohanmedanism. The manufacture of cotton goods was formerly carried on here to a great extent and furnished a considerable supply of those goods to Europe; but at the present time the greater part of the clothing used in the country is imported. The exports now consist principally of cocoa-nuts, betel-nuts, pepper, ginger, turmeric, teak-wood, sandal-wood, cardamoms, and wax.

(Ronell, *Memoir of a Map of Hindustan*; Mill, *History of British India*; Dr. Hamilton (Buchanan), *Journey through Mysore, Canara, and Malabar*.)

CALIFORNIA. The country formerly known as California extended along the shores of the Pacific Ocean from 22° 45' N. lat. to 42° N. lat. It consisted of two parts, Upper or New California and Lower or Old California, and formed the north-western portion of the territory of the republic of Mexico. By the treaty of February 1848, Upper California, the northern and larger part of this territory, was ceded to the United States of North America, and now forms the State of CALIFORNIA, the Territory of UTAH, and, in part, the Territory of NEW MEXICO, under which titles it will be found described. Lower California still belongs to the republic of Mexico, and will be most conveniently noticed here.

Lower California is a peninsula divided from the mainland by the Gulf of California, and extends from Cape San Lucas, 22° 45' N. lat., to the northern extremity of the gulf, 32° N. lat., where it is bounded by the State of California. Its area is upwards of 60,000 square miles: the population, which consists principally of Indians, is probably much under 10,000. This tract of country may be considered as a continuous mass of high, bare, and steep rocks, with numerous ravines intersecting them. With the exception of two or three places, it hardly contains any level ground that can be called a valley. Nearly all the places which contain a small tract of cultivable ground are on the eastern declivity of the mountains; the western side generally sinks with a rapid descent to the Pacific; the shores are consequently steep and rocky. Towards the northern extremity of the gulf, from about 30° N. lat., the mountains recede to a considerable distance from the shore, and leave a large tract of flat country between them and the sea; but this surface, being composed of fine sand, is entirely sterile.

The bareness of the rocks is chiefly owing to the climate, which is exceedingly dry and hot. Only the southern portion has the annual rains, which last for six weeks or two months, in September and October. At Loreto it only rains at intervals of from five to six years, when the rains descend in great abundance, but do not last for a long time. Farther north, as far as is known, it never rains. The heat is excessive. The thermometer rises to 100° Fahr., and even higher. Lower California may consequently be considered one of the hottest countries of America. Earthquakes are not known, but there is a volcano near 28° N. lat., in a group of mountains called *Castres Virgineas*.

The vegetation is very scanty, occurring only in sheltered valleys which are watered by the mountain streams. The number of trees is small, but some of them are valuable, such as the mosquito tree, on whose leaves cattle feed when there is no grass, which happens very

frequently. The bark of some of the trees is used for tanning; and others produce edible fruits, which grow very well in the hot and dry valleys, especially figs, quinces, olives, dates, and grapes, which have been introduced by the Spaniards. A good sort of wine is made. In a few places maize, mandioc, and some other plants are cultivated; but the produce is not sufficient for the consumption of the scanty population, and therefore maize and wheat are brought from the mainland and exchanged for fruit, spirits, soap, salt, pearls, and tortoise-shells.

Cattle, horses, and mules are rather numerous in proportion to the population. Hogs are still more numerous. Among the wild animals are wolves, foxes, deer, and different kinds of goats, of which one, called *berenda*, is distinguished by enormous horns. Ground-squirrels, rattle-snakes, lizards, and scorpions abound.

The mineral riches are supposed to be considerable, but they have been little worked. Gold is extracted near La Paz, but the metal is not abundant. It is supposed that the western declivity of the mountains contains a considerable quantity of minerals, but if this be the case they will probably not be worked, as this part of the peninsula is quite uninhabitable. Lead is said to have been found towards the southern extremity of the peninsula. The pearl-fishery was formerly prosecuted along the Gulf of California south of 38° 30' N. lat. with considerable success; but the pearl-beds appear to have been for some time unproductive.

Though Lower California was discovered by Hernando de Grixalva in 1534 no settlement was formed by the Spaniards before 1698, when the Jesuits established themselves here, and began to collect the wandering Indians into their missions, and to convert them. But the population was scanty, and so it is still. All the Jesuit stations have been abandoned. The Indians belong to several tribes, of which the *Perieues*, *Monquis*, and *Colimics* are the most known. They speak different languages, and go nearly naked.

Loreto is considered the capital of Lower California. It is situated on a bay in the Gulf of California, about 26° 20' N. lat., at the foot of a valley between 2000 and 3000 feet wide, and surrounded by wild and sterile mountains, of which *La Giganta* (the *Giantess*) perhaps rises to 5000 feet. The town is small, and inhabited by only about 300 persons. Two gardens in the valley belong to the community, and their fruits supply the principal article of trade. The anchorage of the bay is open to the winds from north-north-west and south-east.

La Paz, the most important town, is farther to the south (about 24° 10' N. lat.). It stands at the head of a deep bay, but is a place of little trade. In its vicinity is a considerable quantity of cultivated land, and near it is the gold mine of *S. Antonio*. Fruit and vegetables of excellent quality are raised. Its whole population is about 2000. The harbour of *Pichiluigo*, which lies near *La Paz*, is good; but only small vessels can enter it, the water being shallow. At the latter end of 1858 an attack was made on *La Paz* by an armed party of about thirty Americans from Upper California, who landed, overcame what little resistance was made by the inhabitants, declared a republic, and nominated a government; but on a force being assembled in the neighbourhood the expedition was re-embarked, and sailed away.

CALIFORNIA, GULF OF, which was first visited by Hernando de Grixalva in 1534, and received the name of the *Sea of Cortes*, extends along the west coast of America, between the mainland and the peninsula of Lower California, beginning on the south between *Cape Palmo* on the peninsula (about 23° 10' N. lat.) and the port of *Mazatlan* on the mainland (about 23° 30' N. lat.), and extending north-west to the mouth of the *Rio Colorado* (32° N. lat.). Its length is above 700 miles, and its breadth varies between 150 and 40 miles. To the north of 27° N. lat. it is hardly more than 80 miles across at any place.

Its western shores are in general rocky and high, except to the north of 30° N. lat., where the coast is sandy and flat. This low coast continues on the east side of the gulf to the island of *Tiburón*, where it begins to be somewhat higher, and continues so as far as the mouth of the *Rio Yaqui*. From this point to the vicinity of *Punta Arriques* the coast is again low and sandy. At the *Punta Arriques* it is rocky and lined with cliffs. Between this cape and the port of *Mazatlan* it is of moderate height, but in general not rocky. The eastern shores are lower and less rocky than the western, but like them they decline towards the northern end, where they are flat and sandy. Along the western coast, principally towards its southern end, are numerous islands, most of them of small size. Nearer the middle of the gulf, though still towards the western shore, is the island of *Angeles*, by far the longest island in the gulf, extending from 29° 5' to 29° 40' N. lat.; somewhat south-east of it is one of larger area, the island of *Tiburón*, which lies at the mouth of *Brnja Bay* on the east coast.

Fish are plentiful, and among them are some species of enormous size, which are much dreaded by the pearl-divers of the Californian peninsula. These are especially the *meros*, *tintareros*, and the sharks. The sharks as well as seals are most numerous to the north of the island of *Tiburón*. Turtles and tortoises also abound, principally along the shores of the mainland north of *Tiburón*, where the shells of the latter are collected by the Indians. The sea at the entrance of the gulf is much frequented by the spermaceti whale, and on that

account is annually visited by a few English and American vessels. The southern portion of the gulf is visited by a few foreign vessels, which supply Sonora with European goods, and take the produce of its copper-mines to China. These vessels go principally to the harbour of Guaymas on the east coast (25° N. lat.). The same part of the gulf is also navigated by a few Mexican vessels, which carry maize in exchange for the produce of the peninsula. A few small vessels are employed in the pearl-fishery. The northern portion of the gulf is seldom visited, the coasts being only inhabited by wandering tribes, who have nothing to offer in exchange. The navigation in the gulf is entirely interrupted in the month of September by the terrible hurricanes called *cordonzos* (gales), which blow at that time with great violence.

CALIFORNIA, STATE OF, one of the United States of North America, is bounded N. by the United States territory of Oregon, N.E. by that of Utah, S.E. by that of New Mexico, and S. by the Mexican territory of Lower California. Its western boundary is the Pacific Ocean, along which it extends from 32° to 42° N. lat.; its eastern boundary is defined by a line which runs along 120° W. long. from 42° to 39° N. lat., thence in a south-eastern direction till it intersects the Rio Colorado in 35° N. lat., whence it is continued down the mid-channel of that river to its mouth in the Gulf of California, 32° N. lat. The area is 188,981 square miles: the population in 1852 was about 300,000. The tract of country which now forms the State of California was until lately the coast section of the territory of Upper (Alta) or New (Nueva) California, the north-western part of the Mexican republic. It was ceded to the United States of North America by treaty in February 1848, and has since been admitted into the Union as a sovereign state. The extraordinary increase of its population will be seen by the following statement:—In 1802 Humboldt, from materials supplied by the padres at the head of the missions, estimated the entire population of Upper California, which included, besides the present State of California, the territory of Utah and (in part) that of New Mexico, at 16,862, of whom 15,562 were 'converted Indians.' The official return of persons resident in the missions of Upper California in 1828 was 23,105, of whom 18,763 were converted Indians. After the suppression of the missions the Indians became more scattered, and no official statement of the population was made. The first federal census after the cession of California to the United States was in 1850, when the State of California had a total population of 117,538. In 1852 a census was taken by the State authorities, when the agents' returns gave the population as 264,435; but the Secretary of State in his official Report states that all the census agents declare their inability to obtain the numbers of "the whole population of their respective counties," and he thinks it necessary, in order to render an approximately correct statement, to add one-sixth to the number returned. He therefore gives 308,507 as the population in 1852: of whom 210,858 were whites, little more than 30,000 being females, and 105,344 being citizens over 21 years of age; 2090 were negroes, of whom the females were under 300; 572 mulattoes; 33,539 domesticated Indians; and 59,991 foreign residents, of whom about 25,000 were Chinese. California sent in 1853 two members to the Congress of the United States, and like each of the other states two members to the Senate.

Coast-line, Surface, Hydrography.—The State of California owes its characteristic features to two great ranges of mountains, the Sierra Nevada and the Coast Range, which traverse it from north-west to south-east, having between them the splendid valley of the Sacramento and the Joaquin; on the eastern side wide sandy plains, and on the western the narrow slip of coast. The coast of California is generally rugged and precipitous. Beginning at its southern extremity, it makes a bold semicircular sweep to the north-west as far as Point Concepcion. Off this part of the coast there are several small islands and rocks, and the coast-line is indented by several bays and harbours. The only valuable one of these is San Diego Bay (32° 41' N. lat.), which has an excellent natural breakwater at its mouth, formed by a narrow strip of shingle beach projecting into the sea. The bay itself is wide and spacious, and forms an excellent though at present little-used harbour. The harbours of San Pedro and Santa Barbara are also available for craft of considerable burden. From Concepcion Point the coast bears north-north-west to Point Pinos, the southern extremity of Monterey Bay, one of the safest and most capacious harbours on this coast; it is said to be capable of containing at one time the navies of the world. From Monterey Bay the coast continues as before for about 70 miles, in a direct line, to the almost unrivalled bay of San Francisco. The entrance, which is nearly in the centre of San Francisco Bay, is only about a mile wide, but the bay itself opens out for more than 30 miles both on the right and left; its entire length is 70 miles, with an average breadth of 8 miles, and it has a coast of 275 miles. By projecting points of land several small inner bays are formed, the principal being San Pablo and Suisun bays. It is land-locked on every side and quite safe within, but a bar at the mouth renders the entrance sometimes dangerous. This harbour is the natural outlet of the valleys of Sacramento and Joaquin, with their wondrous mineral riches and vast agricultural capabilities. Beyond San Francisco Bay is Port Bodega, where was formerly a Russian station. From thence the coast continues in the same north-west direction, but less broken than before, to Point Delgado, beyond

which is the bold headland of Cape Mendocino, 40° 21' N. lat., which forms the southern point of the Bay of Trinidad, in which the coast of California terminates.

The mountain masses which constitute the peninsula of Lower California extend undivided into the State of California as far north as the snow-capped peak of San Bernardino, 84° N. lat., where they divide into the two great ranges already mentioned. These ranges both run in a north-western and generally parallel direction. The eastern range, called the Sierra Nevada, or Snowy Range, is by far the loftiest, many of its peaks being above the line of perpetual snow: the Saddle Peak is 7200 feet high, the Table Mountain 8000 feet, the Butte 9000, Mount St. Joseph above 10,000, and Mount Shasté at the northern extremity of the range (41° 34' N. lat.) 14,390 feet above the sea. This range is traversed by few and those very elevated passes. North of 39° N. lat. its slopes, especially on the western side, have vast forests of pine, and lower down of oak. The distance of the Sierra Nevada from the coast averages about 200 miles. The Coast Range runs at a short distance only from the coast, to which it is generally nearly parallel. Its usual height varies from 2000 to 3000 feet: its highest peak, Monte Diavolo, at the head of San Francisco Bay, is 3770 feet above the sea. This range is broken near Monte Diavolo by the united Sacramento and Joaquin rivers; decreases in altitude towards the north; and finally re-unites with the Sierra Nevada near Mount Shasté. From this point northward the surface of the country is wholly mountainous and little known; the Sierra Nevada with its offsets and connected ranges occupying the entire breadth of northern California, and extending northward till it is lost in the Cascade Range of Oregon. Between the highest mountains of the Sierra Nevada and the great valley is a line of lower mountains; and from both the Sierra Nevada and the Coast Range lesser lateral ranges and offsets diverge throughout California, forming numerous narrow valleys and ravines.

The basin included between the two main ranges, though really one geographical formation, bears the names of the Sacramento and Joaquin valleys, from the rivers which rise respectively at its northern and southern extremities, unite near the centre of the valley, and flow into San Francisco Bay. This fine valley is upwards of 500 miles long and 50 miles wide. It has evidently at some remote period been the bed of a vast lake of which the Sierra Nevada and Coast Range formed the margin. The water of this great lake has been drained by some convulsion of nature having broken a passage through the Coast Range at San Francisco Bay. At the southern extremity of the valley are the Tulare (Bulrush) Lakes, which during the wet season extend above 100 miles in length, but in the dry season have little water, and are fordable in many places. Within the last year or two a commencement has been made towards embanking these lakes and draining the rich tract of country hitherto subject to the annual floods. The soil and climate of this great valley vary considerably, but a large part of it is very fertile, including most of the eastern side, which is intersected by numerous streams, along which the land is extremely rich and productive. The surface of the valley is greatly diversified, being broken into rugged bills at its northern end, and in many places along its eastern side by well-wooded spurs from the Sierra Nevada. Towards its southern end by the Tulare Lakes, and along the banks of the two great rivers, it is low and level, rising gently at some distance from the rivers into undulating slopes, which break into low hills as they approach the bases of the mountains. The richest and most picturesque part of this fine valley is that central portion of it which incloses San Francisco Bay and the delta of the Sacramento.

The coast district west of the Coast Range—almost the only part of California inhabited previous to the American occupation, but now by no means the most populous part of the country—is full of narrow fertile valleys, the seats in former days of the mission stations, around which the industry of their occupants had caused most of the cereals and fruits of temperate climes to flourish abundantly. Along a good part of the coast the mountains come close down to the sea; but along a still larger portion there extends a tract of low sand-hills, which in some places reach many miles inland. The country east of the Sierra Nevada, and west of the Rio Colorado, comprising the remaining portion of California, is mostly level, and a good part of it is sandy and barren. It is however but little known, owing mainly to the superior attractiveness of the mountains and great valleys, and partly to its being occupied by hostile tribes of Indians. It is believed that while much of it is of comparatively small account, there are very extensive tracts of valuable and hitherto unappropriated land. The country along the Colorado is supposed to have a rich alluvial soil; but near its entrance into the Californian Gulf the country about it is dry and barren, and the climate extremely hot.

The two most important rivers of California are the Sacramento and the San Joaquin: the value of the Colorado remains to be fully ascertained. The Sacramento rises at the northern extremity of the valley of the same name; its head-streams issuing chiefly from Mount Shasté or some of its spurs. Its course throughout is generally south, and it receives on its left bank a great number of affluents from the Sierra Nevada. Most of these are mere mountain torrents; but several of them, as the Feather, the American, Cosumnes, and the San Juan rivers are of some importance. Near Monte Diavolo the

Sacramento receives the San Joaquin, and the united river turns abruptly to the west, and soon after expanding to a considerable width opens into San Francisco Bay. The entire length of the Sacramento is about 300 miles; its width for many miles above its junction with the Joaquin varies from 200 to 300 yards, and it is navigable at all seasons up to Sacramento city, 150 miles from its mouth. The Sacramento is subject to great floods during the wet season, and on the melting of the snow on the Sierra Nevada. The San Joaquin issues from the Tulare Lakes at the southern end of the great valley. Its course is north and north-west, and like the Sacramento it receives numerous tributaries from the Sierra Nevada. During the wet season the San Joaquin is greatly augmented, and apt to flood much of the lowland on its borders. It is navigable for vessels drawing 9 feet of water up to Stockton, 3 miles above its junction with the Sacramento, and for vessels under 15 tons up to the Tuolumne River. The San Joaquin abounds in fine fish, and the taking and curing of salmon afford employment to many persons. The banks of the river and its tributaries are generally extremely fertile, and agriculture is pursued with much diligence. The country watered by the San Joaquin and its affluents is becoming rapidly settled. The Colorado, the lower part of which drains the south-eastern portion of California, and which falls into the Gulf of California, belongs rather to New Mexico, under which it will be noticed. Except during the wet season this river, though draining a vast extent of country, is said to have a depth of only 6 feet of water for some distance above its mouth: that part of California which lies in its basin is almost unknown. Along the coast are numerous rivers which rise in the Coast Range and after a short course fall into the Pacific. Among these are the San Buenaventura, San Felipe, San Pedro, and the Smith; many of them are of considerable value for irrigation, and may at some future period be rendered available for mechanical purposes, but none are navigable.

Numerous roads have been formed in the state since its cession by Mexico in addition to those previously existing, and many bridges have been built and ferries established across the principal rivers; but the communications of the state are of course yet very incomplete. Of the railways planned the most important is the Great Pacific and Atlantic line; but besides it the Benicia and Marysville and the Oro City and Bear River railways are spoken of as determined on; neither has however been constructed.

Geology, Mineralogy, &c.—The Sierra Nevada, with its connected ranges, has for its substratum schistose or talcose slate; quartziferous rocks are the prevalent strata covering the slate. In many places a fine white quartziferous granite occurs. In the Coast Range quartz also abounds. Sandstone is found throughout the lower ranges of hills. Bituminous coal is worked in the neighbourhood of San Francisco Bay; it has also been found about San Diego Bay, and is believed to occur in various other localities.

Sir Francis Drake, who visited California, which he named New Albion, in 1578, received such reports of the existence of gold from the natives that he declared it to be his conviction that there was "no part of this country wherein there is not some special likelihood of gold." Yet thought his statement was often repeated in the subsequent collections of travels, and occasionally in geographical works, no search seems to have been made for the precious metal. The remarkable discovery of the auriferous wealth of California was at last made by mere accident in December 1847, by a Mr. Marshall, who was engaged in erecting some saw-mills on the estate of Captain Suter, a wealthy American settler on the Sacramento River. The effect of the publication of this discovery was most extraordinary. The rush of adventurers to the 'diggings' and of immigrants into the country was quite without parallel in the history of the world. California was at this time occupied by American citizens, and its formal cession soon after to the United States happily placed it in the possession of a people as distinguished for capacity of self-government as for energy, instead, as it had hitherto been, of a singularly indolent and incapable race; thereby affording as it were opportunity for the full development of its marvellous capabilities, and at the same time providing against the frightful anarchy which might else have ensued. As it was, towns and cities as they were termed, though the houses were commonly only of wood or canvas, sprang up with a rapidity hitherto unknown; the magnificent San Francisco Bay was for the first time alive with vast fleets of merchant vessels, crowded with anxious adventurers from almost every part of the world. All ordinary labour was neglected in the rage for gold seeking, which seized indiscriminately on all classes, and the value of food and labour rose to almost fabulous prices. The quantity of gold discovered continued for awhile to increase even beyond the proportion of new searchers for it. By the end of the year 1851 it was estimated that gold to the amount of nearly 150 millions of dollars had been found. No correct estimate is possible, as no official account has been taken of the gold obtained, but from what appear to be unexaggerated estimates the quantity found in 1849 was valued at 40 millions of dollars, and it is believed that the average yearly find has since increased to between 50 and 60 millions of dollars. The quantity of gold-dust and coin manifested and shipped on board steamers and sailing vessels from San Francisco during 1852 was 46,256,574 dollars; but this does not show the entire amount exported, as

large quantities are taken abroad in ships without being entered on the manifests. If 10 millions be added for this the total quantity shipped in 1852 from San Francisco would be about 56 millions of dollars. The quantity received at the mint of the United States and its branches up to September 30, 1852, was 136,747,935 dollars. Since that date an Act of Congress has been passed for establishing a mint in California. What is known as the Gold Region of California extends for some 500 miles in length, with a breadth of from 40 to 50 miles, following the range of the Sierra Nevada. It occupies the lower mountains of that range lying between the central mountains and the valley of the Sacramento and the San Joaquin. These mountains average from 4000 to 5000 feet in height, and the gold is generally found either in the gulches and ravines, or in the sandy beds of the mountain streams on their way towards the two great rivers. The geological formation of this region is very similar to that of the gold mountains of Australia and the Ural Mountains of Russia. [AUSTRALIA.] Wherever the gold has been found *in situ* it has been in connection with quartz; and the water-worn gold found in the debris of the rocks and the sands of the rivers in like manner shows, by its frequently being attached to small particles of quartz, that it was derived from a quartzose bed. The main gold region as we have said is the lower mountains on the western side of the Sierra Nevada, but gold has been also found in the loftier central heights of the Sierra Nevada, and on its eastern side. Gold is likewise reported to have been found in the Coast Range, especially in the narrow valleys on its western side, and also in the connected ranges. Indeed Drake's words seem now singularly applicable; for there appears to be hardly any "part of this country where there is not special likelihood of gold."

Nor is gold the only important metal which abounds, though it is the only one to which much attention is at present given. A mine of quicksilver has long been worked in the neighbourhood of San José, in which the cinabar from which it is produced lies near the surface and is easily procured. But the metal is believed also to be widely spread and in valuable veins in other parts of the state. Silver ore of great richness has been found at Monterey and elsewhere. Copper, iron, and other of the more important metals are also believed to abound. Coal is profitably worked at San Francisco, and is supposed to exist in extensive beds in other parts.

Botany and Zoology.—The botany of California is of a peculiar and interesting character. It contains among other striking plants some noble pines, especially one called from its discoverer, the Douglas pine (*Pinus Douglasii*), which occurs on the mountains about San Francisco Bay, and grows frequently to the height of 240 feet, with a circumference at the base of the trunk of 60 feet. The cones are eaten by the Indians. The *P. Sabiana*, *P. Lambertiana*, and *P. nobilis* are of less magnificent but still very large dimensions, and great beauty. The live oak (*Quercus vivens*) grows to a considerable size on the lower hills of the west side of the Sierra Nevada, and on it Fremont found unusually large quantities of mistletoe. The white oak is common in the valleys. The maple, ash, hech, and chestnut are the other more usual denizens of the Californian forests, which however do not generally extend south of 39° N. lat. Two or three kinds of *Arbutus* abound on the banks of the rivers and the margins of the forests. The *Scilla esculenta* grows everywhere along the coasts; its root is the quamash of the Indians, with whom it is a common article of food. The fibres of the *Helonias tenax* are made by the natives into a very tough cord for snaring deer, &c.; and the awole and samate are used by them for soap. Large numbers of *Polemoniaceae*, especially some beautiful specimens of the *Leptosiphon* and *Gilia*; some curious plants belonging to the genera *Nemophila* and *Emmenanthe*; several new genera of poppies, *Escheholtzia*, lupines, *Calochortus*, *Cyclobothra*, *Calliphora*, *Brodiaea*, &c., stamp the vegetation with a character quite unlike that of any other part of America.

The black bear, the grizzly bear, and the barren-ground bear; racoon, American badger, glutton, ermine, weasel, mink, martin, and skunk are common in many parts; as are also the beaver and the muskrat about the mouth of the Sacramento: all of these are much sought after for their skins. Several kinds of wolves, foxes, and lynxes abound in the denser forests of the north, where they prey on the numerous deer and other animals which frequent those regions. Of the deer the moose, the black-tailed, and the long-tailed or jumping-deer, the elk, and the prong-horned antelope (*A. furcifer*) are the most plentiful. Mountain sheep abound. The bison is only occasionally met with.

Among birds the first place is due to the great Californian vulture (*Sarcoromphus Californianus*), which is inferior only to the South American condor in size, and very similar to it in its habits. The black vulture, the turkey buzzard, the golden eagle, the bald eagle, the peregrino falcon, the jer falcon, the osprey, and several other hawks and conuected species as well as owls are more or less common. Most of the ordinary European singing birds, swallows, woodpeckers, &c., or birds to which similar names have been given, also abound. The humming-bird is common in the south. Grouse are said to be more numerous, and of more various kinds than have been found in any other country. The boys and inlets of the coast swarm with swans, geese, ducks, curlews, and most of the other ordinary wading

and swimming birds. Large numbers of white pelicans frequent the coast, and albatrosses are sometimes shot, measuring 10 or 12 feet across the wings.

The coasts and rivers of California alike yield an astonishing number and variety of fish. In some of the rivers as many as 3000 salmon, many of them weighing from 20 to 30 lbs., are often taken in a single day. Salmon-trout and trout also largely abound. Sturgeons are sometimes taken in the mouths of the rivers measuring 8 or 10 feet long and weighing nearly 500 lbs. Mackerel, pilchards, and sardines swarm off the coast. The halibut, skate, turbot, bonito, &c. are caught. Oysters of excellent flavour and most other shell-fish are found. But though fish is so abundant, the fisheries are at present little heeded.

Climate, Soil, Agriculture, &c.—California has a dry and a wet season; the dry season lasting from about the middle of May to September or October, the wet season setting in early in November and lasting till May. But there are considerable variations, both in the temperature and in the amount of moisture in different parts of this extensive tract of country. In its northern part, north of 39° N. lat., for example, the air during the dry season is much less parched, and rains occur earlier than in the southern districts. Along the coast the climate is much more temperate than in the great valley; while east of the Sierra Nevada the air is excessively hot and parching. In summer the coast is visited by heavy fogs, and a cold wind sets in regularly towards noon from the Pacific, and continues to blow with increasing force and keenness till late at night. Some few miles inland the cold is modified, and the temperature becomes equable and agreeable. Throughout the great valley of the Sacramento and San Joaquin, the mid-day heat is so great as to render labour in the open air everywhere unpleasant, and in many places impracticable.

The soil along the great valley is generally extremely rich. This valley has evidently been at some remote period the bed of a vast lake, and the rich alluvial soil only needs judicious irrigation to render it capable of producing almost every variety of crop. The banks of the rivers however require proper embankments to prevent the present often destructive floods, and to permit the full development of its agricultural capabilities. Tobacco, rice, maize, and most of the plants except cotton which grow in the warmer parts of the United States, flourish in the sheltered lateral valleys connected with this principal valley, while in the main valley itself most of the cereals produce extraordinary crops, and grapes, peaches, and nearly all other fruits of a moderately warm climate thrive admirably. The grasses are luxuriant and nutritious, affording excellent pasturage for cattle. North of 39° N. lat. are extensive forests of pine and oak. The valleys along the coast produce all the cereals, and all or nearly all of the fruits and vegetables of the temperate and colder parts of Europe. Onions are grown in large quantities; the produce from nine counties in 1852 was returned at 5,553,655 lbs. Tomatoes are extensively cultivated in parts of the great valley; 1,039,800 lbs. were raised in 1852 in Sacramento county alone, and in the same county 335 acres were planted with melons. In the county of Santa Barbara, on the southern part of the coast, 1370 barrels of olives were gathered; and in this and the adjoining county of Los Angeles 73,462 gallons of wine, and 73,056 gallons of brandy were made. Agriculture has however hitherto been comparatively neglected, but as more attention is being paid to it the various capabilities of the soil are becoming more apparent, and there can be little doubt that California is destined to take high rank as an agricultural country.

It is usual in taking the census of the various states of North America to ascertain the quantity and value of the various productions. In the state census of California for 1852 these returns are very incomplete, but they were sufficient to enable the Secretary of State to "take a comparative view of the position of California in reference to other states of the Union," which is at once so curious and interesting that it may be worth while to quote a few of the items. In barley California surpasses every other state in the Union except New York, and already raises half as much as is produced in the whole Union besides; in oats it cultivates more than three-fourths of its sister-states; in wheat it surpasses ten of the states; of maize it produces less than any other; in potatoes it stands next to New York, and grows one-fifth of the quantity produced by the rest of the Union; in beans it surpasses nine of the states; in hay, though only half of the counties made returns, it surpasses nine states; and in fruits it exceeds all the states in variety, and one-half in quantity. In the number of horses it exceeds 15 of the states; of mules 26; of milch-cows 12; of work-oxen 8; of sheep 4, and of swine (though the returns of both these are very imperfect) 3. In live-stock it surpasses 22 of the states. In trade and merchandise it already exceeds half of the states. The number of horses returned in the state in 1852 was 64,773, mules 16,574, cows 104,339, oxen 344,457, sheep 82,867, hogs 38,976, poultry 96,230—of the last three the returns are from only 20 counties.

The vast and rapidly increasing extent of the commerce of the State of California, is partly shown by the statement of the number and tonnage of the vessels which entered and cleared at San Francisco in 1852:—

Entered—Sailing vessels	876	of	326,135 tons.
Steamers	127	"	118,876 "
Total	1003		445,014

Of these, 40 vessels of 13,286 tons burden were British, and 594 vessels of 317,262 tons burden were American.

Cleared—Sailing vessels	1333	of	356,092 tons.
Steamers	158	"	127,047 "
Total	1491		483,139

Of these, 1121 vessels of 361,166 tons burden were American. In 1849 the tonnage of the vessels entered at San Francisco amounted to 313,351 tons, of which 247,417 tons belonged to the United States. The number of passengers arriving at San Francisco in 1849 was 41,709. In the year ending December 28, 1852, there arrived 64,190, of whom 5223 were females; and there departed 22,946, of whom 390 were females.

Of the manufactures we have no very exact account. At present, owing in a great measure to the high price of labour and the superior demands of other branches of industry, the articles manufactured are chiefly such as cannot be profitably imported. Bricks for example are now made in immense quantities to meet the enormous demand for new buildings: the county of Marin alone reported to the census agents the manufacture of 1,500,000 bricks a month during 1852, of the value in the year of 360,000 dollars; the total population of Marin county during the same year was only 1036.

Divisions, Towns, &c.—The state is divided into 35 counties. The original capital of the state was San José, the present nominal capital is Vallejo, but the Legislature of 1853 sat at Benicia. The chief town is SAN FRANCISCO on the bay of the same name, which had a population in 1852 of 34,786; and next in importance to it is SACRAMENTO CITY, the capital of the 'diggings,' which had 10,000 inhabitants in 1852; these will be noticed under their respective titles. Numerous other towns and 'cities' have sprung up in various parts of the state, but most of them are built only of wood, or even canvass, and many of them disappear almost as rapidly as they arose. The following are among the more important and may require a brief notice:—

Stockton, on the Stockton Slough or Canal, formed by the junction of the Sacramento and Joaquin rivers, 100 miles E. from San Francisco by water, was founded in 1848; population about 3000. It is the port of the southern mining district and of the valley of San Joaquin, and is likely to remain one of the first towns in the state. Vessels drawing 9 feet of water can discharge their cargoes alongside the shore. Constant steam communication is maintained with San Francisco. At present there is no public building of any consequence, but a state hospital is erecting. *San José*, population 1200, the original capital of the state, is pleasantly situated near the south extremity of San Francisco Bay about 50 miles S. from San Francisco city. It has some trade, but is chiefly agricultural. Near this town is the principal quicksilver mine. *Vallejo*, the present capital of the state, is situated on the Napa Strait, 25 miles N.N.E. from San Francisco. It is merely an agricultural village and the site marked out as the future 'capitol' as yet bears only its sounding title. The legislature of 1853 adjourned its sittings to an equally unimportant village, *Benicia*, on the west side of Suisun Bay, about 5 miles E. from Vallejo. *Monterey*, population about 1600, on the south side of Monterey Bay, was one of the largest and most frequented towns of Upper California prior to its cession by Mexico, and will eventually become again an important commercial place when the fine bay on which it stands is resorted to, as no doubt it will be, by shipping. At present being away from the mining districts it is comparatively deserted. *San Diego* is another old town which has fallen into neglect, but will doubtless again grow into importance. It stands on the safe and spacious bay of the same name near the southern extremity of the coast. Coal has been found near it. *Marysville*, on the Yuba, 98 miles N.N.E. from Vallejo, is a busy new town with a court-house, several hotels, mills, and stores, two newspapers each having "tri-weekly and weekly issues," and nearly 8000 inhabitants. *Oro City* on the Feather River, the capital of the Placer mining district, has 3000 inhabitants. *Placerville*, 112 miles N.E. from San Francisco, was one of the oldest and most flourishing of the gold district towns, but the 'diggers' have deserted its neighbourhood, its newspapers have ceased to be published, and the place itself is worn out and fallen into decay: in 1852 its population had decreased from 4000 to 2000. Among the other towns which either have been, are, or are expected to be flourishing and important places, it must suffice to name Auburn, Downieville, Los Angeles, Mariposa, Napa, Nevada, Santa Barbara, Santa Cruz, San Luis Obispo, Shasté, Sonoma, Suisun, Tuolumne, Vernon, and Yuba: in all of these the population is constantly shifting, and a statement perfectly correct to-day would be wholly inaccurate in a month or two.

Government, Judicature, &c.—The constitution of California resembles in its general features the constitutions of the other states of the Union. Slavery is not permitted. The legislative power is vested in a General Assembly, consisting of a Senate of 16 members, elected for two years, and a House of Representatives of 36 members, elected for one year; the sittings of the General Assembly are held annually. The governor is elected for two years; his salary is 10,000 dollars per annum. The

annual expenditure is about 500,000 dollars. The public debt was 485,460 dollars in 1853.

The judicial power is vested in a supreme court and district and county courts. The supreme court consists of a chief justice and two associate justices, each of whom has a salary of 8000 dollars a year. The justices are elected by the people for six years, and are so classified that one goes out of office every two years. The senior judge in office is the chief justice. The first judges of the district courts were chosen by the legislature, but all future judges are to be elected by the people: there are eleven district judges, each having a salary of 7500 dollars. A county-court judge is elected in each county for four years.

The constitution directs that a superintendent of public instruction shall be elected, to hold office for three years; and that the legislature shall establish public schools, in which instruction shall be given during at least three months in the year: it also provides funds for their support. A superintendent of public instruction has accordingly been elected; but few schools have as yet been established.

History.—California was discovered by Cabrillo in 1542. It was next visited in 1573 by Sir Francis Drake, who named it New Albion. It was first colonised in 1768 by the Spaniards, who established in various places, chiefly west of the Coast Range, military posts (presidios) and religious stations (missions). There were four of these military stations and twenty-one missions; and while California remained subject to Spain the actual direction of the country was in the hands of the priests, the governor having scarcely any civil authority. The priests collected the native Indians in villages, and taught them to cultivate the soil, but gave them little other instruction either religious or secular. According to the latest account published by the priests there were above 18,000 of these nominally 'converted Indians,' who spoke twenty different languages. On the separation of Mexico from Spain the missions were broken up, and the Indians returned pretty generally to their native state. After the declaration of Mexican independence a good many Americans and other foreigners visited California for the purpose of hunting or traffic, and several Americans settled in the neighbourhood of San Francisco Bay. The governors appointed by Mexico were unable to maintain tranquillity in the province, and the discontent increased till, in 1836, it issued in a successful revolt, mainly excited it is said by the foreign residents. The government was overthrown without bloodshed, and the governor and other officials were put on board a schooner and shipped off to Mexico. The Mexican government agreed to permit the Californians to choose their own governors, and the country continued nominally subject to Mexico. It remained however in a state of anarchy, and for some time before its cession had become virtually under the control of American citizens. On the termination of the war between Mexico and the United States California was, as already mentioned, formally ceded to the United States by treaty in February 1848; and on its rapid growth in wealth and population, consequent on the gold discoveries, it was a year or two later admitted into the Union as a sovereign state.

(Colton, *Statistical Gazetteer of the United States*, 1853; *American Almanac*; Fremont, Wilkes, and various *Travels, Journeys, &c.*, in *California*; *Visits to Gold Diggings, &c.*)

CALLAN, EL. [ALGÉRIE.]

CALLAN, county of Kilkenny, Ireland, in the parish and barony of the same name, a market and post-town and the seat of a Poor-Law Union; 82 miles S.W. by S. from Dublin, and 10 miles S.W. from Kilkenny. It lies in 52° 33' N. lat., 7° 23' W. long. The population in 1851 was 2638, besides 2102 in the Union workhouse. Callan Poor-Law Union comprises 20 electoral divisions, with an area of 104,011 acres, and a population in 1851 of 32,730.

Callan is situated in a flat and open district on the Owenree, or King's River, a tributary of the Nore. It was formerly a walled town, and the remains of some of the ancient fortifications are still standing. The four principal streets intersect on the south side of the river. The principal objects on the north side, on which the smaller portion of the town is situated, are the barracks and the ruins of an Augustinian friary, including a tower 90 feet high. These ruins are connected by a wooden bridge with a convent and chapel of the same order on the opposite side of the river. In the chapel are some good sculptures and a well-painted altar-piece. The parish church, formerly an abbey of the Augustinian order, is a large and interesting building. The parochial Roman Catholic chapel is situated on elevated ground opposite the court-house and jail at the southern extremity of the town. Quarter sessions are held at Callan in rotation. By the encouragement of the guardians of the proprietor, a minor, the Earl of Clifden, the town has recently been much improved. Callan was formerly a municipal and parliamentary borough, but was disfranchised in both respects by the Act of Union and the Irish Municipal Reform Act. The care of the streets is now vested in town commissioners under the Act of the 9th Geo. IV. c. 82.

CALLANDER. [PERTHSHIRE.]

CALLAO, on the coast of Peru, in South America, is situated in 12° 4' S. lat., 77° 10' W. long., distant about 6 miles W. from Lima, the capital, of which it is the sea-port. The two places are united by a good level road skirted on each side by trees; along this road there is regular communication by omnibuses. The population of Callao is

estimated at 20,000. The bay is formed by the isles of San Lorenzo and Fronton, and a low sandy point projecting from the main, between which however there is a safe passage half a mile wide, called the Boqueron. Vessels are well sheltered from all winds, except between the north and west, which seldom blow with violence. Callao is the safest and most convenient port along the coast to Concepcion in Chili. The sea is always tranquil, and there is anchorage everywhere in the bay from 7 to 10 fathoms without any danger. A shoal extends about 400 yards from the beach, except immediately opposite the town, where a mole has been formed by sinking old hulks, within which vessels of large burden may lie and discharge their cargoes. During the war of independence they were secured by a boom across, and it was from this situation that Lord Cochrane in 1820 so gallantly cut out the Esmeralda Spanish frigate. The heavy surf on the beach renders it generally impracticable to land to the southward of the mole. Supplies of all sorts may be had in abundance—meat, live stock, vegetables, and fruit, cocoa, sugar, and spirits; but good water and wood are very scarce.

The commerce of Lima causes an influx of vessels from Europe, chiefly from Great Britain, into Callao Bay, besides which there is a large traffic with the other states of western America. Bullion, specie, copper, cotton, hark, soap, vicuña wool, and hides are exported. The exports for the year 1840 amounted to nearly a million of pounds sterling; the customs duties on British goods, chiefly cottons and linens, amounted to about a quarter of a million. The total value of imports into Callao in 1840 was estimated at 1,171,642. The vessels entering the port in 1841 were 498, of 101,084 tons; the departures were 494, of 99,944 tons.

The town was originally built in the reign of Philip IV., and stood farther out on the point than its present site. In 1746 it was entirely destroyed by an earthquake, which demolished three-fourths of Lima itself; of the inhabitants about 4000 perished, and nineteen vessels were lost, some of which were thrown to a considerable distance inland. Vestiges of the old town are still on the point, buried in the sand. Callao has been rebuilt on the same plan as before, but farther removed from the sea, and on a much firmer soil. The houses are flat-roofed and slightly constructed of cane wicker-work, plastered with mud, on account of the frequency of earthquakes, which take less effect on such frail edifices. The rare occurrence of rain in Peru, and its generally mild climate, render substantial dwellings unnecessary. Very heavy dews at night supply the want of fertilising showers.

Callao consists almost entirely of the forts, barracks, custom-house, and other government buildings; the other houses, or rather huts, being chiefly pulperias (a low wine and chandler's shop): but Bellavista, a suburban village, offers more convenience for residence. The fortifications of Callao consist of two round castles connected by a curtain, and another on the point stretching towards San Lorenzo, all commanding the bay, towards which they present a battery of above sixty pieces of cannon, chiefly of large calibre. The principal fort was called San Philip, but is now named La Independencia; beneath its walls is the arsenal. The great strength of the forts enabled the Spaniards to hold out long after Lima had fallen into the hands of the patriots, to whom however they ultimately surrendered in September 1821, supplies being cut off both by land and sea. Their fall may be said to have determined the independence of Peru.

The tides in Callao Bay are very uncertain and irregular, being greatly influenced by the strength and direction of the wind.

CALLINGTON. [CORNWALL.]

CALMAR, or KALMAR, Sweden, a fortified town, sea-port, and the seat of a bishopric, is situated about 66° 40' N. lat., 16° 20' E. long., distant about 190 miles S.S.W. from Stockholm. The town stands on the island of Quarnholm in the straits or sound of Calmar, by which the island of Öland is separated from the Swedish continent. It is included in that part of the ancient province of Smaland, which now forms the political division of Calmar Län. The population of the town is about 5600. Calmar is united by a bridge of boats to the suburb on the continent. This suburb, built on the site of the ancient town which was burnt in 1647, contains the old castle in which the union of Calmar was agreed to in 1397, by which Sweden, Denmark, and Norway were united under one sovereign. The castle, which is still a strong building, is now used as a house of correction. Calmar town is regularly built, but the houses are chiefly constructed of wood, though there are excellent stone-quarries in the island of Öland, distant about five miles across the sound. The cathedral, the castle, and a few other principal public buildings are of stone. The cathedral, a handsome edifice, stands in the middle of the great square. It contains an altar-piece by Ehrenstahl. Calmar has a good grammar school and several other educational institutions. The library of the academy contains about 4000 volumes. The harbour is good, and the commerce of the town is still active, although it has declined in amount of late years. The exports consist of iron, alum, pitch, tar, timber, &c., and stone in large quantities from the Öland quarries. Ship-building is carried on. The manufactures include woollen stuffs, tobacco, snuff, and potash.

CALMONT TOWN. [SIERRA LEONE.]

CALNE, Wiltshire, a municipal and parliamentary borough and

market-town and the seat of a Poor-Law Union, in the parish and hundred of Calne, is situated on the Bristol road, in 51° 26' N. lat., 1° 59' W. long., distant 31 miles N.N.W. from Salisbury, and 87 miles W. from London. The population of the municipal borough in 1851 was 2544; that of the parliamentary borough was 5195. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. For sanitary purposes the borough is under the care of a Local Board of Health. The living is a vicarage in the archdeaconry of Wilts and diocese of Salisbury. Calne Poor-Law Union contains eleven parishes and townships, with an area of 27,689 acres, and a population in 1851 of 9173.

This place is of remote antiquity; many Roman remains have been found in the neighbourhood. The West Saxon kings had a palace at Calne, and an hospital of black canons existed here. In 977 a synod was held here for adjusting the differences between the monks and the secular clergy, at which the celebrated Dunstan presided: the floor of the room gave way, and the whole assembly, with the exception of Dunstan himself, fell with it. Calne is described in Domesday Book as 'Terra Regis,' and is called 'Cauna.' The town is built in one of the numerous valleys hollowed out of the great chalk escarpment. The high ground east and south of the town forms the tableland of Marlborough Downs and Salisbury Plain. The Calne brook rises about three miles to the north-west of the town in a hollow near Compton Bassett, and is joined by two other streams near the town. The brook divides the town. Calne is paved and is lighted with gas. The houses are fronted with stone, and the town has a cheerful appearance.

The church is a lofty and handsome edifice of great length; the nave is narrow; exhibiting various styles of architecture, the round Norman arch and billet moulding being found along with the pointed gothic. The tower, which stands at the north side of the church, and contains a peal of eight deep-toned bells, is remarkable for the beauty of its proportions: it was built by Inigo Jones after 1628, in which year the tower and spire standing on the transept of the church fell.

A new church called Christ church was built about twelve years back on Derry Hill at the extremity of the parish, to which was annexed a district containing 1511 inhabitants in 1851. There are chapels belonging to Wesleyan Methodists and Baptists. The Grammar school, founded in 1660 by John Bentley, Esq., has attached to it two exhibitions at Queen's College, Oxford, given by Sir Francis Bridgeman in 1730; but these have not been claimed for many years. There are National and Infant schools, and a school for training female servants.

The town-hall was repaired a few years ago at the expense of the Marquis of Lansdowne. In this building the public business of the town is conducted. A county court is held in the town. Calne formerly possessed a share of the Wiltshire clothing trade; but the cloth-mills have been closed or converted into corn-mills. A branch of the Wilts and Berks Canal comes up to the town. The market is held on Wednesday. Fairs are held on May 6th and September 29th. The air is salubrious, and the views of the adjacent country are very fine. At Cherhill, about three miles east of the town, is the figure of a white horse 157 feet in length, remarkable for the symmetry of its proportions, cut in the chalk down about the year 1780 under the direction of C. Allsup, Esq., surgeon. Bowood, the delightful residence of the Marquis of Lansdowne, is about a mile west of the town.

CALOTSA (also Kolotza and Kolosen), county of Pesth, Western Hungary, an archiepiscopal town, is situated in a marshy flat on the Vayna, an insignificant arm of the Danube, in 46° 32' N. lat., 19° 3' E. long., about 74 miles S. from Pesth. Calotza was known to the Romans, and was of much greater importance before the Turks overran the country. It has several handsome public buildings, the most spacious of which is the archbishop's residence, with its extensive library; a chapter-house and cathedral, an ecclesiastical seminary on a large scale; a college and gymnasium of the Piarist order, &c. There are fine gardens attached to the archbishop's seat: an artificial hill in them is laid out as a vineyard. The town once possessed a celebrated printing establishment. The inhabitants, about 6000 in number, carry on extensive fisheries on the Danube, and rear much cattle. The steam packets which ply on the Danube call at Calotza.

CALPENTYN. [CEYLON.]

CALTURA. [CEYLON.]

CALVADOS, a department in the north of France, formed out of portions of the former province of Normandie, lies between 48° 46' and 49° 25' N. lat., 0° 26' E. and 1° 10' W. long.; and is bounded N. by the English Channel (called by the French La Manche), E. by the department of Eure, S. by that of Orne, and W. by that of Manche. Its greatest length from east to west is 65 miles, from north to south 44 miles. The area is 2132 square miles, and the population according to the census of 1851 was 491,210, which gives 230.39 to the square mile, being 55.68 in excess of the average per square mile for the whole of France. The population of the department in 1840 was 496,198, and in 1846 it was 498,385; but in those years the area is returned at 2147 square miles. It seems probable then that a portion of Calvados has been recently annexed to some of the neighbouring

departments, probably to that of Manche, the area of which, as given in the returns of 1851, is considerably in excess of the amount stated in previous returns.

One of the vessels of the Armada, named Calvados, was wrecked in 1588 on a ledge of rocks that runs parallel to the coast for about 15 miles, and at the distance of a mile from the shore to the west of the mouth of the Orne. The ledge soon came to be known by the name of the Spanish ship, which has been extended to the whole department. The districts of Normandie out of which Calvados is formed are the following:—*Bessin*, extending between the Dive and the Vire, and consisting of Bessin Proper, which had Bayeux for its capital; the *Bocage*, or southern Bessin, of which Vire was the chief town, and which has been always remarkable for the very moderate stature of its inhabitants; and the plain of Caen: *Auge*, which comprised the valley of the Touque below Lisieux, and extended westward to the Dive; and the western part of Lieuvin, of which Lisieux was the capital. The eastern part of Lieuvin is included in the department of Enre.

The south-western angle of the department is crossed by offsets from the range of hills which separates the basins of the Loire and the Seine. The rest of the department consists of extensive plains, separated by low hills, and each drained by one or more rivers. The plains all incline from south to north, and all the rivers fall into the English Channel. The coast, which extends from the mouth of the Seine to that of the Vire, is generally high and difficult of access; but on either side of the mouth of the Dive the shore is lined with sand-hills. At the mouths of the Vire, the Orne, and the Dive are tide-harbours for vessels of considerable size. [CAEN.]

The principal rivers are—the Touque, which rises at Champhaut, in the department of Orne, and, running past Lisieux and Pont-l'Évêque, enters the Channel a little below the town of Touques after a course of 50 miles: the Dive, which also rises in the department of Orne and enters the Channel below the town of Dives; it is joined by the Vire, which drains the country between it and the Touque: the Orne, which rises at Anouin, in the department of Orne, flows north-west past Sées, Argentan, and Pont-d'Ouilly, where it enters Calvados; then turning north-north-east it passes Caen, and falls into the Channel after a course of 62 miles: and the Vire, which rises in the south-west of the department, and passing Vire, Pont-Parey (where it enters the department of Manche) and St.-Lô, falls into the Channel below Isigny in Calvados. All these are tide rivers, and are navigable for several miles from the sea at high water; on the left of the embouchure of each lighthouses are established. The Seullles and the Drome (which receives the Aure below Bayeux), flow into the Channel through the plain between the Orne and the Vire. The department is crossed by 9 national and 18 departmental roads. The most important of the national roads is that from Paris to Cherbourg, which passes through Lisieux, Caen, and Bayeux. The parish roads also are numerous and well kept up. A railroad in course of construction from Rosny (near Mantes on the Paris-Rouen line) to Cherbourg crosses the department and passes through Lisieux, Caen, and Bayeux. A branch line, also in course of construction, leaves this railway about midway between Lisieux and Caen, and runs south through Falaise and Alençon to the Paris-Brest line at Le-Mans.

In its agricultural productions the department maintains a high rank. It contains 1,364,251 acres, and all this surface, with the exception of a small portion of heathland, is productive; but except in the plains corn-growing is not the principal object of the farmers' care. On the rich pastures great numbers of cattle and horses are reared. The system of green feeding is extending rapidly, and large numbers of cattle are fattened for the markets of Paris and the interior. Dairy farming is extensively followed, and a great quantity of fresh and salt butter is made for export. The centre of this trade is Isigny at the mouth of the Vire. The horses are of the true Norman breed, and much valued for their shape and serviceable qualities. The poultry of the department is abundant and excellent. Great numbers of capons are sent to Paris. Wheat, potatoes, and cider apples are grown in large quantities: early potatoes especially and other vegetables are largely grown for export. Of cider, the annual produce is 30,272,000 gallons. The best kind is that made in the Auge district; it will keep for years, and contains a large proportion of alcohol. Melons, haricots, onions, &c., are extensively cultivated. Building stone, marble, slate, brick, potter's clay, and iron are found. Marl abounds in the arrondissement of Lisieux and Pont-l'Évêque, and is used for manure. Coal mines are worked at Litry, in which several steam-engines are employed. Coal is also imported from Belgium and England.

The chief industrial products of the department are cotton and woollen yarn, fine and coarse woollen cloths, linen, flannel, blankets, shawls, calicoes, lace, porcelain, and cutlery. [CAEN.] Throughout the department the manufacture of lace alone gives employment to 50,000 persons, and the value of the lace annually exported amounts to many millions of francs. The department contains several paper-mills, sugar refineries, tanneries, oil-mills, and establishments for the manufacture of chemical products and bleaching linen. The commerce of the department consists of its industrial products, together with horses, fat cattle, wheat, butter, cheese, poultry, cider, honey,

brandy, clover-seed, hemp, flower-bulbs, wood, oil, &c. The imports are iron, wool, raw cotton, hides, and colonial produce. Great quantities of lobsters, oysters, and other fish are taken along the coast and conveyed to the markets of Paris and of the interior. Above 180 fairs are held in the year.

The department is divided into six *arrondissements*, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Caen	9	185	139,922
2. Falaise	5	121	60,534
3. Bayeux	6	145	79,976
4. Vire	6	97	87,075
5. Lisieux	6	125	67,059
6. Pont-l'Évêque	5	116	56,614
Total	37	703	491,210

1. Of the first *arrondissement* and of the whole department the capital is Caen. [CAEN.] *Douvres* on the coast, 8 miles from Caen, population 2100, and *Villers-Bocage*, population 1146, which exports great numbers of eggs, are the only other towns worth mention.

2. Of the second *arrondissement* the chief town is Falaise, 20 miles S.E. from Caen, on the Ante, a feeder of the Dive. It stands on very uneven ground, and is divided into three distinct parts—the suburb of Guibray, which is built on the top of a hill; the town itself, which occupies the slope; and the faubourgs of Val-d'Aute and St.-Laurent, which are situated on the low ground. The churches of St.-Laurent, St.-Gervais, and Guibray; the hospital, the public library, and above all the ancient castle, which contains the apartment where the Conqueror was born, are the most remarkable buildings in the town. Falaise has tribunals of first instance and of commerce, a college, and a population of 8109. Cotton, hosiery, bohhiu-uet, and coarse calicoes are manufactured; there are also tanyards, paper-mills, dye-houses, and bleaching establishments. In the suburb of Guibray an important fair is held from the 10th to the 25th of August, at which great numbers of horses, cattle, and manufactured goods are sold. At *Harcourt-Thury*, a small place of under 1000 inhabitants, which formerly gave the title of Duke to the family of Harcourt, the ducal castle, a vast structure, still stands in a beautiful situation near the Orne; it is surrounded by well-laid-out gardens, and contains a large picture gallery.

3. In the third *arrondissement* the chief town is BAYEUX. *Isigny*, at the mouth of the Vire and the Aure, has a harbour for small vessels, and exports butter, cider, hams, cattle, and other agricultural produce. It has a tribunal of commerce, and a population of 2500. The Vire is here crossed by a fine granite bridge. *Litry*, 10 miles W.S.W. from Bayeux, has 2482 inhabitants, many of whom are employed in connection with the coal-mines of the neighbourhood.

4. In the fourth *arrondissement* the chief town is Vire, the capital of the Bocage, which is built on two steep hills, separated by the river Vire. The largest portion of the town stands on the right bank; here are the general and the foundling hospitals. The part on the left bank contains the sub-prefect's hotel and several large well-built houses. The other remarkable buildings are the church of Notre-Dame, the Hôtel-Dieu, founded by the dukes of Normandy, the public library, and the corn-market. The town has a college, tribunals of first instance and of commerce, and contains a population of 7400, who manufacture fine linen, woollen cloths for the army, woollen yarn, and paper; and trade also in corn, wine, brandy, flax, hardware, and iron. There are the remains of an ancient castle at Vire, the possession of which was often contested by the English, French, and Bretons. *Condé-sur-Noireau*, at the junction of the Durance and the Noireau, is 14 miles E. from Vire, and has 5976 inhabitants. It was held by the English till 1449, and was one of the first places to embrace the reformation. It is a very ancient looking place. The churches of St.-Sauveur and St.-Martin are the most remarkable buildings. The town has a tribunal of commerce; manufactures woollens, calicoes, cotton-yarn, cutlery, and leather; and trades also in cattle, flax, yarn, and honey.

5. In the fifth *arrondissement* the chief town is Lisieux (Norio-magus, *Civitas Lexoviorum*), which was also the capital of the Lieuvin. It stands in a beautiful valley, watered by the Orbec and the Touque. The road from Caen to Evreux runs through the best and widest street in the town. The other streets are narrow and winding, the houses high, old, and mostly timber-framed. The gothic cathedral, a structure of the 12th century, which contains a beautiful Lady chapel (built by Pierre Cauchon, bishop of Beauvais, afterwards of Lisieux, and one of the judges of Joan d'Arc), and the former episcopal palace, are the finest buildings in Lisieux. The old ramparts have been formed into promenades. The town contains 11,378 inhabitants, and has tribunals of first instance and of commerce, a college, and an ecclesiastical seminary. Linen, woollen cloth, flannels, swan-skins, horse covers, tape, woollen and cotton yarn, are manufactured. There are also tanyards, paper-mills, dye-houses and fulling-mills. These products, together with corn, cider, butter, hemp, flax, and cattle, form the items of a brisk trade, which is much facilitated by the Touque, this river being navigable at high water from Lisieux

to its mouth. Orbec, 12 miles from Lisieux, stands in a lovely valley on the Orbec, a feeder of the Touque, and has 3350 inhabitants, who are engaged in agriculture and in the manufacture of hosiery, tape, woollen stuffs, and leather.

6. In the sixth *arrondissement* the chief town is Pont-l'Évêque, the capital of Auge, which stands in a wide plain at the junction of the Touque and the Calonne, 25 miles E. from Caen, and has 3300 inhabitants. It was in this town that the Conqueror held the meeting of the states of Normandy, at which it was resolved to invade England. Lace is the principal manufacture. Cider, cheese, butter, fat cattle, and wood, are the chief articles of trade. The town has a tribunal of first instance. *Honfleur* stands at the foot of a high hill on the south shore of the estuary of the Seine. It has a small harbour, which consists of two basins; the entrance to it is formed by jetties. A third basin is now nearly completed. The town is irregularly built; it has two churches, a royal school of navigation, and a population of 9580. The public buildings of Honfleur are remarkable for the oddness of their ancient architecture. Vessels belonging to the town are engaged in the cod, herring, and mackerel fisheries. Hosiery, lace, chemical products, ironmongery, and hardware are manufactured. There are also saw-mills, sugar refineries, rope-walks, and ship-building yards. Corn, cider, melons, sausages, and fish are the chief articles of trade. There are two lighthouses at Honfleur. *Dives*, at the mouth of the Dive, from which the Conqueror sailed against England in 1066, is now a mere fishing village with about half a thousand inhabitants.

The population of the department is scattered over the surface, living mostly in hamlets and farm-houses. This accounts for the small number of towns of any considerable size. The department forms the bishopric of Bayeux. It is included in the jurisdiction of the high court of Caen in which town there is a provincial university of high repute with faculties of law, science, and languages; and it belongs to the second Military Division, of which Rouen is head-quarters.

CALVARY. [JERUSALEM.]

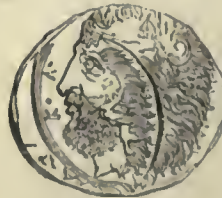
CALW, or CALBE, the chief town of the bailiwick of Calw in the Würtemberg circle of the Black Forest, is situated in 48° 42' N. lat., 8° 44' E. long., on the river Nagold in the bottom and on the side of a narrow valley of the Black Forest: the population is about 4300. The town is of very ancient date, and was until the early part of the 14th century the capital of the former earldom of Calw. It was burned by the French under Melac in 1692. The ruins of the castle of the former counts of Calw stand on the hill above the town. The river divides the upper town from the lower town. Calw contains several churches. It has long been the seat of a considerable trade. The inhabitants are employed in the woollen and kerseymere manufactures, in the spinning of woollen yarn, in dye-works, and in manufactures of stockings and leather. Lime and charcoal form considerable items of traffic. The charcoal is prepared in the surrounding districts of the Black Forest. The roads in the neighbourhood are very imperfectly attended to, so that travelling is difficult. Calw was the birth-place of Pope Victor II., one of the counts of Calw, and of Weese, the surgeon who saved the life of Augustus, king of Poland, at Bialystock in 1727.

CALYCADNUS, RIVER. [ANATOLIA.]

CAMARES. [AVEYRON.]

CAMARGUE. [BOUCHES-DU-RHÔNE.]

CAMARINA (*Kαμαρίνα*), a town in the south of Sicily, on the river Ihipparis, very near the sea. Camarina was a Dorian town (Thucyd. iii. 86), the most considerable of the Syracusan colonies (Strab. vi. p. 272, *a*, Casaub.), founded B.C. 600 (Clinton, F. II., vol. i. p. 226, 2nd edit.), 135 years after the foundation of Syracuse from Corinth (Thucyd. vi. 5). The situation was unhealthy, owing to the neighbourhood of a marsh which was formed by the river Ihipparis; this marsh however was so great a safeguard against the attacks of enemies, that it was considered that the draining of it would be fatal to Camarina. Hence the proverb *μη κίσει Καμαρίναν* (*ne moveas Camarinam*); which implied that, although the marsh was an evil, the danger which would attend its removal would be a greater one. Only a few ruins now remain, bearing the ancient name. Few towns have undergone so many and so remarkable revolutions as Camarina. About 46 years



Coin of Camarina.
Brit. Mus. Actual size. Silver. 266 grains.

after its foundation it revolted from the mother state, and the town was destroyed. The Syracusans were afterwards forced to cede Camarina to Hippocrates, tyrant of Gela, who however colonised it afresh. Gelon, the successor of Hippocrates, destroyed the town again

(Herod. vii. 156), and removed the inhabitants to Syracuse. The town appears to have been again rebuilt by the people of Gela about B.C. 461. In the great Carthaginian invasion of Sicily the territory of Camarina was ravaged by Himilco in the spring of B.C. 405; the city itself was not attacked, but Dionysius, unable to protect it from the Carthaginians, induced or constrained the inhabitants to remove from it to Syracuse, which they afterwards left for Leontium. (Diodor. Sicul. xiii. 103, 111, 113; Xen. 'Hell.' ii. 3, § 5.) By a subsequent treaty the inhabitants were allowed to return to their homes, but only as tributaries to Carthage. Camarina afterwards assisted Dionysius in his war with the Carthaginians. On the death of the elder Dionysius the people of Camarina supported Dion in his march upon Syracuse. Camarina was afterwards restored and enriched by Timoleon (Diodor. Sicul. xvi. 83), B.C. 336.

The inhabitants of Camarina took the side of the Romans early in the first Punic War. In B.C. 258 the town was betrayed to the Carthaginians, but being recovered by the Romans, many of the citizens were sold as slaves as a punishment for their defection.

In B.C. 255 a serious disaster befel the Roman fleet on the coast near Camarina: of 364 ships 284 suffered shipwreck in a violent tempest. The town existed in the 2nd century of the Christian era, but its history is not traceable to a later period. Its site is now desolate. The remains of the town include only some scattered portions of the old walls, and a church, which was originally a temple. Remains of the port and portions of buildings on the shore were still visible in the 17th century; these are now for the most part buried in sand.

CAMBAY, a large city, supposed to be the *Camanes* of Ptolemaeus, situated at the mouth of the Mhye River and at the head of the Gulf of Cambay, in 22° 21' N. lat., and 72° 48' E. long. When Gujrat was an independent state, Cambay, as the sea-port of its capital Ahmedabad, enjoyed a high degree of commercial prosperity, which it has since lost. The city contains several mosques and Hindoo temples, and the remains of many more religious edifices, the greater part of which appear to have belonged to the sect of Jains, whose religion was formerly predominant in this part of India. The trade of Cambay formerly embraced the export of silk and chintz goods, jewellery, and indigo, but at present nearly all its export trade consists of grain sent to Bombay. The surrounding country is fertile, and furnishes oil, seeds, wheat, and other graius. The silversmiths of Cambay still retain their superiority in the art of embossing. Until the beginning of the present century, the city and territory of Cambay were governed by a native prince, who was tributary to the Mahrattas, but on the overthrow of the Peishwa the British succeeded to his rights, and the prince now pays tribute to the East India Company. The territory includes an area of 500 square miles, with a population of 37,000, and a public revenue of about 30,000*l.* The amount of tribute paid to the British government is about 6000*l.*, besides half the customs duties of the port of Cambay. The Nawaub maintains a force of 200 cavalry and 1500 infantry.

CAMBAY, GULF OF, formerly known as the Gulf of Barygaza, is situated on the north-west coast of India, and extends from the southern extremity of the peninsula of Gujerat, in 20° 40' N. lat., and 71° 7' E. long., to the city of Cambay, a distance of 130 miles. In consequence of the currents and the *borc* which occur in this gulf, its navigation is dangerous. The waters of the Saubermuty, the Mhye or Mahy, the Dhandur, the Norbudda, and the Tapti rivers discharge themselves into this gulf.

CAMBERWELL. [SURREY.]

CAMBODIA. [COCHIN CHINA.]

CAMBORNE. [CORNWALL.]

CAMBRAI, a fortified city of France, in the department of Nord, stands on the right bank of the Escaut (Schelde), 100 miles N.E. from Paris, 19 miles S. from Douai; in 50° 10' 37" N. lat., 3° 13' 32" E. long., and has a population of about 20,000.

In the latter period of the Roman empire this city rises to notice under the name of *Camaracon*, by which it is mentioned in the 'Itinerary of Antoninus' and the Theodosian table. It was one of the chief towns of the Nervii; Turnacum (Tournay) being the other. Cambrai is said to have been the capital city of Clodion, the son of Pharamond (A.D. 427-448), and to have given title to his kingdom. Charlemagne fortified the town, and Charles the Bald ceded it to its bishops, by whom the sovereignty of it was long retained. In 1510 the emperor Maximilian I. erected Cambrai into a duchy and principality of the empire in favour of the then bishop and his successors. In 1543 the emperor Charles V. rendered himself master of the place, and erected the citadel, one of the strongest in Europe, on a height at the eastern extremity of the city. The fortifications were much strengthened by Vauban. The English took Cambrai by escalade, June 24, 1815.

The city is large. It is entered by four gates. The streets are of tolerable width, but not regularly laid out, and there are a great number of old houses with their gables to the streets. The Place d'Armes is capable of containing all the garrison drawn up in order of battle. There are some handsome public buildings, among which is the cathedral church of St. Sepulchre, which contains the remains and a monument by David of Pénelon the great archbishop of Cambrai; and is surmounted by a steeple remarkable for delicacy of architecture. In the first French revolution Fénelon's remains were torn from the grave, and the leaden coffin which contained them converted into

bullets by the sacrilegious madmen of the time. The principal of the other buildings are—the church of St.-Géry; the public library which is established in the church of the former hospital of St.-Jean, and contains 30,000 volumes besides a large number of manuscripts; the town-house; the theatre; and the archiepiscopal palace. Among the educational establishments of the town are—a college, a school of anatomy, and an ecclesiastical seminary. Tribunals of first instance and of commerce are held in Cambrai. The see was founded in the 5th century; it was erected into an archbishopric in 1559, suppressed at the first French revolution, and re-established in 1841. The only suffragan of the archbishop of Cambrai is the bishop of Arras; his own diocese is formed by the department of Nord.

Cambrai is favourably situated for trade, in consequence of its position on the Escaut (which here begins to be navigable), and the canal of St.-Quentin, which connects the town with the Oise and the Seine. The chief manufactures are cambric (which derives its English name from the town), lawn, linen, thread, and cotton-yarn, lace, hosiery, fine muslin, leather, black soap, starch, beet-root sugar, beer, brandy, salt, and saltpetro. The commerce of the town consists of these articles, and of corn, wine, wool, iron, cattle, coal, hops, &c.

(*Dictionnaire de la France.*)

CAMBRESIS, a district formerly in the Low Countries, now forms the greater part of the arrondissement of Cambrai, in the department of Nord in France. It is a small district with a level surface, watered by the Escaut and its tributaries (the Senset and the Selle), and by the Sambre, a tributary of the Meuse. It produces grain of all sorts, and flax, and affords pasturage to many sheep and horses.

It was in ancient times part of the territory of the Nervii. On the downfall of the Western empire it came into the hands of the Franks. Being subsequently comprehended in the Germanic empire it was erected by the emperors into a county, held for 400 years by laymen, but afterwards ceded to the bishops of Cambrai. It was appropriated by Charles V., and remained in possession of the Spaniards till 1677, when it was conquered by Louis XIV. and confirmed to France by the peace of Nimeguen in 1678.

The capital was Cambrai, or according to some Le Cateau. The small town Crevecoeur was also in Cambresis. [CAMBRAI; NORD.]

(*Dictionnaire de la France.*)

CAMBRIDGE, the county town of Cambridgeshire, a municipal and parliamentary borough, university town, and forming of itself a Poor-Law Union, is situated in 52° 13' N. lat., 0° 7' E. long., distant 50½ miles N. by E. from London by road, and 57½ miles by the Eastern Counties railway. The population of the town of Cambridge, comprising 14 parishes and including the University, was 27,815 in 1851. The borough is governed by 10 aldermen and 30 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. Cambridge is in the archdeaconry and diocese of Ely. Cambridge Poor-Law Union, which is co-extensive with the 14 parishes comprised within the borough, includes an area of 3470 acres.

Cambridge is situated on the river Cam, from which the town derives its name. The town is called *Grantebride* in the Domesday Survey; *Granta* was the ancient name of the river, and the name is retained by it above Cambridge. A small village about 2 miles S.W. from Cambridge is still called *Grantchester*. It appears certain that the Romans had a station here, and there is little doubt that it was the *Camboricum* of Richard of Cirencester, the *Camboritum* of the 'Itinerary of Antoninus,' though Horsley supposes the site of *Camboricum* to have been at Icklingham in Suffolk. [BRITANNIA.] The Roman town appears to have occupied the site of the north or castle end of the present town. Some entrenchments are still traceable. Bede speaks of Cambridge as being at the close of the 7th century a deserted city. It was burned by the Danes in 871, and again in 1010. While the Isle of Ely was held against William the Conqueror by the English nobility, that monarch built a castle at Cambridge—Grose says in the first year of his reign; but according to Ordericus Vitalis in 1068. That the town had risen to considerable importance at the time the Domesday Survey was made is evident from the description of it in that record. In 1088 Cambridge shared the fate of the county in being laid waste with fire and sword in the cause of Robert Curthose. In 1174 a fire happened at Cambridge which, among other extensive damages, injured most of the parish churches and destroyed that of the Holy Trinity. King John among other privileges granted the townsmen of Cambridge a mercatorial guild, and the liberty of being governed by a provost to be chosen annually by themselves. The style of their government was afterwards altered by King Henry III. to that of a mayor and four bailiffs. The town has sent members to Parliament from the earliest period of our parliamentary records. King John was at Cambridge on the 16th of September, 1216, about a month before his death. On his departure he intrusted the defence of the castle to Fulke de Brent, but it was soon after taken by the barons; and after the king's death a council was held at Cambridge between the barons and Louis the dauphin. In 1249 we have the first notice of serious discord between the townsmen of Cambridge and the scholars of the University. Subsequent dissensions between them frequently occur in different periods of their annals. From about 1266 to 1270 the town appears to have suffered on several occasions from the attacks of the turbulent inhabitants of the Isle of Ely. On one occasion they

plundered and burnt the town, and the king (Henry III.) came with an army to the relief of the inhabitants. In 1351 in consequence of the lawless proceedings of the townsmen in destroying the charters of the University and those of Corpus Christi College, King Richard II. deprived the burghesses of their charter, and bestowed the privileges with which they had been invested upon the University. The charter was however renewed to the corporation in the following year, the privileges formerly enjoyed being to some extent taken away. The mayor is required upon entering into office to take an oath to maintain the privileges, liberties, and customs of the University. Confirmations of the charter have been granted to the corporation by successive sovereigns on numerous occasions from Henry IV.'s time downwards. Queen Victoria and Prince Albert visited Cambridge in October, 1843, and again in July, 1847, on occasion of the installation of Prince Albert as Chancellor of the University.

Upon the first symptoms of an approaching war between King Charles I. and his Parliament, the University of Cambridge demonstrated its loyalty; but in 1643 Cromwell, who had twice represented the borough, took possession of the town for the Parliament, and put in it a garrison of 1000 men.

Of the parish churches the most remarkable is that of St. Sepulchre, usually called from its form the Round church. It was built in imitation of the church of the Holy Sepulchre at Jerusalem, and was consecrated in 1101. The building was restored in 1843 with the greatest possible care and at considerable cost. Great St. Mary's is the University church; it stands in Trumpington Street, near the centre of the town. It is a spacious and externally a rather handsome edifice in the perpendicular style. The first stone of the church was laid in May, 1478, and the body of the church was finished in 1519; the tower was not completed till 1608. The church consists of a nave, two side aisles with a chapel at the end of each, a chancel, and a tower at the west end in which is a peal of ten bells. Service is performed in this church on Sundays in the morning for the parishioners; and a sermon is preached in the afternoon to members of the University, and on holidays by graduates appointed by the University. In this parochial church the University has certain seats by faculty. The gallery, added to accommodate the members of the University, is no addition to the architectural beauty of the interior. Great St. Mary's church is so called to distinguish it from another called St. Mary the Less, near St. Peter's College. St. Benedict's or Bonet's may be noticed for its tower, one of the few remaining examples of Anglo-Saxon church architecture. St. Botolph's, St. Michael's, Trinity, and Little St. Mary's churches are among those most worthy of notice for their architectural merits. St. Michael's church was a short time back greatly injured by fire; it has since been restored and improved. Most of the churches contain monuments of interest.

There were formerly as many as 77 ancient edifices in the town, consisting of guilds, priories, convents, hostels, &c. Among the religious foundations not connected in their origin with the University were the house of Austin Canons, founded in 1092, originally placed in or near the church of St. Giles; the Benedictine nunnery of St. Rhadegund, now forming a part of Jesus College, founded in 1130; the Gray Friars or Franciscans, founded soon after 1224; the Bethlehemite Friars in 1257; the Friars de Sacco, 1258; the Dominican, or Black Friars, founded before 1275; the house of Brethren of St. Mary, in the parish of All Saints, 3 Edward I.; the Austin Friars, founded in or near the Fish-market, called Ease Hill, about 1290; the White Friars, brought from Newenham in 1291; the Gilbertine Canons, established about the same time; the Hermitage of St. Anue and Hospital of Lepers, founded by Henry Tangmer before 1397; and the ancient Hospital of St. Mary Magdalene for Lepers at Stourbridge.

There are in Cambridge places of worship for Baptists, Independents, and Wesleyan and Primitive Methodists. The Free Grammar school, founded by Stephen Perse, D.M., Senior Fellow of Caius College, in 1615 for 100 scholars, is open to natives of Cambridge, Barnwell, Chesterton, and Trumpington. The system of tuition has recently been considerably improved and extended, and the school buildings have undergone extensive repairs. Scholars who have been educated at the school for three years have a preference to the Perse Fellowships and Scholarships at Caius College. The school has an income of 450*l.* a year, with houses for the master and usher rent free: the number of scholars in 1851 was 100. There are National schools, with which have been united Whiston's Charity schools founded in 1708. Several new schools have been erected within the last few years. An Industrial school has lately been established. Addenbrooke's Hospital, opened in 1766, is so called from its founder, John Addenbrooke, M.D., Fellow of St. Catherine's Hall: the number of patients annually amounts to about 1000. In 1813 a bequest of 7000*l.* in the three per cent. consolidated annuities was made to the institution by Mr. John Bowtell, a bookbinder and stationer in Cambridge, for enlarging the building and extending its benefits. Crane's Charity, founded in 1660, is for the relief of scholars of the University in the time of sickness; for affording temporary loans without interest to young men to set them up in trade; for relief of persons confined for debt, and of poor men and women of

good character. Nine sets of almshouses provide in all for 64 poor persons. The Victoria Friendly Societies' Asylum, established in 1837, provides a retreat for the infirm members of friendly societies. The buildings are adapted to accommodate 12 families. A mechanics institute, and a literary institution called the Philo-Union have each a news-room and a small library.

The town of Cambridge is situated on level ground; the greater portion of the town being on the right side of the river. The leading street crosses the river by a neat cast-iron bridge of one arch, erected in 1823 by subscription. The market-place, which has been considerably enlarged and improved within the last three years, is situated nearly in the centre of the town; it is now probably one of the finest market-places in England. At the south end of the market-place is the Guildhall. The front part of this structure was built in 1747 at the cost of the county. The other portion of the building was renewed in 1782. It contains a large court-room, with other rooms for committee meetings and for the transaction of public business. Close to the iron railings of the market-place and opposite to the guildhall stands the conduit, erected chiefly from the bequest made by Thomas Hobson, the Cambridge carrier, whom Milton has immortalised in a well-known epitaph. The conduit was erected in 1614, and ever since that time has supplied the inhabitants of Cambridge with a tolerably ample supply of wholesome water. The sewerage of the town has been lately much improved. The town is lighted with gas. The numerous public walks connected with the grounds of the colleges are of very great benefit to the town, and a plot of ground nearly 20 acres in extent, denominated Parker's Piece, has been appropriated for the recreation of the inhabitants. At the north-western extremity of the town stands the county court house, a rather elegant structure of recent erection. Near this building is the new county jail. The castle was suffered to go to decay as early as the reign of Henry IV. The gate-house, the last important relic of the ancient edifice, was pulled down a few years back to make way for the new county court.

The University buildings and the colleges will be noticed under CAMBRIDGE UNIVERSITY.

From Castle Hill an interesting view of the town and colleges and of the surrounding country is obtained. Ely cathedral may be discerned from it by the naked eye. Quarter sessions for the county and town and the assizes for the county are held in Cambridge. A county court is also held here. The town possesses a savings bank.

A fair was held at Cambridge from very ancient times in Rogation week. It was recognised and confirmed in a charter of the 2nd of King John. Another at the festival of the Assumption of the Virgin Mary was granted by King Henry VI. to the nuns of St. Rhadegund in 1438. In the parish of Little St. Andrew, or Barnwell, are held the Midsummer fair and Stourbridge or Sturbridge fair, which are annually proclaimed by the principal officers of the University with much solemnity; the former was held for a fortnight on a common called Midsummer Green; Stourbridge fair, supposed to be of great antiquity, is proclaimed on the 18th of September, and used to continue for three weeks. The duration of both fairs has been considerably shortened. The chartered market-days are Wednesday and Saturday, but there is a market every day in the week except Monday for vegetables, poultry, eggs, and butter. Abundant supplies of provisions are furnished for the market, but the consumption being great in consequence of the number of residents connected with the University the prices are comparatively high. Corn, brawn, and Stilton cheese are considerable articles of trade. By means of locks the Cam is navigable up to Cambridge, and by it the town is supplied with coals, &c., through Lynn, where the Ouse enters the sea.

(Gough's edit. of Camden's *Britannia*; Lysons, *Magna Britannia*; Ingram, *Memorials of Cambridge*.)

CAMBRIDGE, UNIVERSITY OF. The first establishment of this University is involved in much obscurity. It seems probable that Cambridge first became a seat of learning in the 7th century, when, as Bede (*Hist. Ecc.* lib. iii. c. 18) informs us, Siebert, king of the East Angles, with the advice of Felix the Bishop, instituted within his kingdom a school for learning, in imitation of what he had seen in France: this school is presumed to have been fixed at Cambridge. It is certain that from a very early time Cambridge was the residence of numerous students, who at first lived in apartments hired of the townsmen, and afterwards in inns or hostels, where they formed a community under a principal at their own charge. Some say that Edward the Elder, when he repaired the ravages of the Danes at Cambridge, erected halls for students and appointed professors; others maintain that a regular system of academical education was not introduced till the year 1109, when the Abbot of Croiland having sent some learned monks well versed in philosophy and other sciences to his manor of Cottenham, they repaired to the neighbouring town of Cambridge, whither a great number of scholars flocked to their lectures, which they arranged after the manner of the University of Orleans. Recent inquiries have shown that there was a resemblance between the earliest known arrangements of the Universities of Cambridge and Orleans; and there appears to be reason to believe that there was some connection between them. There is no reference in the Domesday Survey to any university or important school of learning at Cambridge at the Conquest. The first charter known to have been granted to Cam-

bridge as a university is that of the 15th Henry III., which grants the privilege of appointing certain persons called Taxors to regulate the rent of lodgings for the students, which had been raised to an exorbitant height by the townsmen. This was almost 50 years before the foundation of Peter House, the first endowed college. In 1333 King Edward III. granted the University some important privileges. These favours made the townsmen still more jealous of the University; and their discontents broke forth into open violence in the succeeding reign, when emboldened by the temporary success of Wat Tyler and his associates they seized and destroyed the university charters. In 1430 Pope Martin V. determined from the testimony of ancient evidences that the University was exclusively possessed of all ecclesiastical and spiritual jurisdiction over its own scholars. Queen Elizabeth in the third year of her reign granted an extensive charter to this University; and by an Act of Parliament, 13 Eliz. c. 29 (for the incorporation of both the English universities), this and all preceding grants were confirmed, and the University of Cambridge was declared to be incorporated by the name of the Chancellor, Masters, and Scholars. The office of Chancellor, as chief magistrate of the University, had existed from a very early date: it was only annual till 1504, when Bishop Fisher was chosen chancellor for life. At present the office is biennial, or tenable for such a length of time beyond two years as the tacit consent of the University may allow. The other principal officers are the High Steward; the Vice-Chancellor; a Commissary, who holds a court of record for all privileged persons under the degree of M.A.; a Public Orator; an Assessor to assist the Vice-Chancellor in his court; two Proctors, whose business it is to regulate the discipline and preserve the peace of the University; a Librarian; a Registrar; two Taxors, who regulate the market, examine the assize of bread, and inspect the weights and measures; two Moderators, who superintend the exercises in the schools and the examinations for degrees of arts; two Scrutators, who regulate the business of the congregations; two Proctors; three Esquire Bedels; and some inferior persons.

The University may be regarded as a commonwealth resting upon the union of the several colleges; though it is an error to regard it, as is often done, as a mere aggregate of colleges. It is in fact a sort of federal union of which the colleges are members. There are 17 colleges and halls in Cambridge, all of which possess equal privileges. Each college is a lay corporate body bound by its own statutes; but the members of each college are also subject to the general laws of the University. The present university statutes were given by Queen Elizabeth in the 12th year of her reign, and are the foundation upon which all new laws are framed. Each of the 17 colleges furnishes members both for the executive and legislative branch of university government. The place of assembly is the senate-house. All persons who are masters of arts or doctors in one of the three faculties, namely, divinity, the civil law, or physic, having their names upon the college boards, holding any university office, or being resident in the town of Cambridge, have votes in this assembly. The Senate is divided into two houses, denominated the Regent and the Non-Regent house: the Regent, or Upper house (or, as it is frequently called, the White Hood house, from the members wearing their hoods lined with white silk), consisting of the doctors of less than two and the M.A.'s under five years' standing; the Non-Regent, or Lower house, or Black Hood house, consisting of the M.A.'s above five years. The doctors of more than two years' standing vote in either house at pleasure. There is also a council called the Caput, chosen annually on the 12th of October, by which every university grace or proposition must be approved before it can be introduced to the Senate. The Caput consists of the vice-chancellor, a doctor in each of the faculties, and two masters of arts, who are the representatives of the Regent and Non-Regent houses. Any single member of the Caput has the power of putting a veto upon any grace that is proposed.

The annual income of the University arises from various sources, including the rectory of Burwell and a farm at Barton, which produce about 1000*l.* per annum, fees at matriculations, for degrees, &c., and the trading profits of the university press. The whole income from every source is believed scarcely to exceed 5500*l.* per annum. The funds are managed by the Vice-Chancellor, or by specific trustees; and the accounts are examined annually by three auditors appointed by the Senate.

Some of the public professors of the University are paid from the university chest, others by her Majesty's government, or from estates left for that purpose. They are the Lady Margaret's Professor of Divinity; the Regius Professors of Divinity, Civil Law, Physic, Hebrew, and Greek; two Professors of Arabic, one of whom is called the Lord Almoner's Reader; the Lucasian Professor of Mathematics; Professors of Moral Theology, or Casuistry; Chemistry; Astronomy and Experimental Philosophy; Anatomy; Modern History; Botany; Geology; Astronomy and Geometry; the Norrisian Professor of Divinity; Natural and Experimental Philosophy; the Downing Professors of the Laws of England, and of Medicine; the Professors of Mineralogy, Political Economy, and Music; besides which there are various endowed lectureships. By a grace of the Senate, October 31, 1843, a Board of Mathematical Studies was appointed, to consist of the Lucasian Professor of Mathematics, the Plumean Professor of Astronomy, the Lowndean Professor of Geometry and Astronomy,

and the Jacksonian Professor of Natural and Experimental Philosophy, as well as the Examiners for Mathematical Honours, "whose duty it is to consult together from time to time on all matters relating to the actual state of mathematical studies and examinations in the University, and to prepare annually and lay before the Vice-Chancellor a report, to be by him published to the University in the Lent or Easter term of each year." The Cambridge Philosophical Society was established in 1819, and incorporated by royal charter dated 3rd of August 1832. It includes most of the resident graduates of the University.

The privilege of sending two representatives to Parliament was conferred upon the University by charter, in the 1st of James I. The right of election is vested in the members of the senate, in number about 3900. The Vice-Chancellor is the returning officer.

The number of members on the boards of the University in 1748 was 1500; in 1840 it was 5696; in 1853 it was 7336. The number of resident members averages about 2000. The number of undergraduates (students) is usually about 1700.

It does not belong to the present work to describe the course of study through which the students at Cambridge have to pass. As is generally understood it comprises Theology, Natural and Moral Philosophy, and the literature and languages of Greece and Rome.

There are three University terms which are fixed by invariable rules. They are—the Michaelmas or October term, which begins on the 10th of October and ends on the 16th of December; the Lent or January term which begins on the 13th of January and ends on the Friday before Palm Sunday; and the Easter or Midsummer term, which begins on the 11th day after Easter Sunday, and ends on the Friday after Commencement day, which is always the first Tuesday in July.

Before a candidate can proceed to the examination for Bachelor of Arts, he must, after having been duly matriculated into the University and entered on the boards of one of the colleges, have resided ten terms or the major parts of them, have undergone the "previous examination," or "little-go," and made a declaration that he is *bona fide* a member of the Church of England. The candidates are divided into two classes: "questionists for honors," and "questionists, not candidates for honors," who are familiarly known as the *πολλοι*. The examination extends over a period of 20 days. The candidates of both classes are examined in the higher branches of arithmetic and mathematics, and in the Greek and Latin languages and literature: the examination for honors being of course much the most comprehensive and searching. The names of those who obtain honors are arranged in lists in the order in which they distinguish themselves. The lists are called Triposes. The names of the three classes of merit in the Mathematical Tripos are Wranglers, Senior Optimes, and Junior Optimes: the first man being termed Senior Wrangler. In the Classical Tripos the names are placed under first, second, and third classes; the first man being known as First Classic. These Triposes are published regularly in the University Calendar. In accordance with the terms of a grace adopted by the Senate, October 31, 1848, a similar examination in the moral sciences was commenced in 1851, the names of the successful candidates being arranged in lists called the Moral Sciences Tripos. The subjects of examination are Moral Philosophy, Political Economy, Modern History, General Jurisprudence, and the Laws of England. By a grace which passed the Senate on the same day, an examination for honors in the Natural Sciences was likewise commenced in 1851. The subjects in the Natural Sciences Tripos include Anatomy, Comparative Anatomy, Physiology, Chemistry, Botany, Geology, and Mineralogy, excluding the Mathematical part of Crystallography.

The public buildings belonging to the University are the senate-house, the university library and schools, the university or Pitt press, the Fitzwilliam museum, the anatomical museum, and the observatory. The Senate-house, an edifice of the Corinthian order, erected in 1722, from a design by Sir James Burrell, is a large building, forming the north side of the spacious square, of which the west side is formed by the university library and schools; the east by St. Mary's church; and the south by King's College. In the grand-room of the senate-house all the more important public ceremonies take place. The original building known as the Schools was erected about the middle of the 15th century; the part which fronts the square was rebuilt in 1775, at the expense of the University, assisted by liberal benefactions. The noble library of the University, a collection comprising about 170,000 volumes of printed books, and 2000 valuable manuscripts, is contained partly in the upper story of the public schools; the remainder is in the new University Library, a handsome edifice, erected from a design by C. R. Cockerell, Esq., R.A. The Botanic Garden occupies three or four acres; the ground with a large and ancient edifice, formerly belonged to the Augustine Friars: it was purchased by the late Dr. Richard Walker, vice-master of Trinity College for 1600*l.* This site having become insufficient, an Act of Parliament was obtained which empowered the University to procure a fresh one and dispose of the former. A piece of ground of about 30 acres, within a mile of the town, was accordingly purchased, and has been in part laid out and planted. The old schools still remain and belong to the Jacksonian professor for the time being; and a new building has been erected for the use of the lecturers in chemistry,

botany, and anatomy. The Geological Museum, and the Mineralogical Museum, both very extensive and valuable collections, are now deposited in one of the wings of the new library. The valuable Anatomical Museum has been placed in a commodious building erected by the University. The Observatory was erected between 1822 and 1824, after the designs of Mr. J. C. Moad, at an expense of upwards of 18,15*l.*; about 6000*l.* of which was raised by subscriptions, and the remainder was granted from the university chest. The building is considered to be well adapted for its purpose. There is an excellent collection of astronomical instruments; the great telescope, of nearly 12 inches aperture and 20 feet focal length, made by M. Cauchoix of Paris, and presented to the University in 1835 by the Marquis of Northampton, stands in a building erected especially for it near the observatory. The Pitt press or University Printing-house, was begun in 1831 and finished in 1833, from a design by Mr. Blore.

Richard Viscount Fitzwilliam, who died in 1816, bequeathed to the University his collection of books, paintings, engravings, &c., with the interest of 100,000*l.* South Sea Annuities for the erection and endowment of a museum. The building was commenced in 1837, from the designs of Mr. G. Basevi, but that gentleman having been killed by a fall from the tower of Ely cathedral, it was completed, in 1847, under the superintendence of Mr. Cockerell. The Fitzwilliam Museum is a spacious and ornate structure of the Corinthian order, with a noble portico, and is by far the most splendid modern building in Cambridge. The Fitzwilliam collection is a very valuable one. Many of the paintings are undoubtedly original specimens of some of the great masters. The engravings fill 520 folio volumes, and there is a numerous collection of drawings. The books also form a rich library. The pictures bequeathed to the University by Mr. Meaman are now placed in the Fitzwilliam Museum; as well as various other pictures, statues, models, books, manuscripts, &c., which have been presented to the University.

The following are the colleges of this University; with the date of foundation and a few other particulars:—

St. Peter's College, commonly called Peter House, the most ancient college or hall in Cambridge, was founded in 1257 by Hugh N. Balsham, bishop of Ely, for a master and 14 fellows. Besides the 14 foundation fellows, there are 10 bye-fellows, and 62 scholarships. The buildings of St. Peter's College are not remarkable for architectural beauty. A new wing was added a few years back by the Rev. Francis Gisborne, who also founded two bye-fellowships and four scholarships. Cardinal Beaufort, Colonel Hutehinson, the celebrated parliamentary officer, Gray the poet, and Jeremiah Markland the critic, are among the eminent men educated at St. Peter's College.

Clare Hall was founded in 1326 by Lady Elizabeth, sister and co-heir of Gilbert, earl of Clare. The present society consists of a master, 10 senior or foundation fellows, 9 junior, and 3 bye-fellows; and about 50 scholars and exhibitioners. Geoffrey Chaucer was, it is said, a student of Clare Hall. Archbishop Tillotson and John Parkhurst are among its eminent men.

Pembroke College was founded in 1347 by Mary de St. Paul, the widow of Aymer de Valence, earl of Pembroke, under the name of Valence Mary. There are 14 foundation and 2 bye-fellows, 30 scholars, and several exhibitioners, chiefly for students from Christ's Hospital, London. Spenser, Gilbert Harvey, and Crashaw, the poets, Ridley the martyr, and William Pitt are among the eminent men of Pembroke College.

Gonville and Caius College, originally styled Gouville Hall, was founded in 1348 by Edmund Gonville, for a master and three fellows. The college was in 1533 removed to its present situation and much added to by William Bateman, bishop of Norwich, who is considered its second founder. But it was re-founded under a royal charter in 1558 by John Caius, M.D., and entitled Gonville and Caius College. It is commonly known as Caius College. It has now 29 fellowships, 42 scholarships, and 26 exhibitioners. William Harvey, the discoverer of the circulation of the blood, Bishop Jeremy Taylor, and Dr. Samuel Clarke are among the eminent scholars of Caius College.

Trinity Hall was founded in 1350 by William Bateman, bishop of Norwich, but has been largely indebted to subsequent benefactors. There are 13 fellowships and 15 scholarships. Four law scholarships were established by the college in 1849. Trinity Hall is more particularly appropriated to the study of the civil law.

Corpus Christi College was founded in 1351 by two Guilds in Cambridge, named 'Gilda Corporis Christi' and 'Gilda Beate Mariæ Virginis.' There are 12 fellowships and 59 scholarships. Among the treasures possessed by this college is a remarkably fine collection of manuscripts left to the college by Archbishop Parker. The principal part of the college buildings is modern. It was erected from a design by Wilkins. Archbishops Parker, Tenison and Herring; Sir Nicholas Bacon and Fletcher the dramatic poet are among the more eminent of the scholars of Corpus Christi.

King's College was founded in 1441 by Henry VI., about which time he also founded and endowed Eton College. The society of King's College consists of a provost and 70 fellows and scholars; the vacancies in the scholarships being supplied by a regular succession from Eton. "Some peculiar privileges appertain to King's. The provost has absolute authority within the precincts, and by special

composition between this society and the university its undergraduates are exempt from the power of the proctors and other university officers within the limits of the college; and they are in no way examined by the university for their Bachelor of Arts' degree." ('University Calendar.') The whole of the buildings, &c., of King's College are on a scale of great grandeur. The chapel is the finest gothic building in Cambridge, and the finest of its kind in existence. It is the standard example of the perpendicular style. The extreme length of the chapel is 316 feet; the breadth 84 feet. The stone-vaulted roof, 76 feet high, is unsupported, save by the walls. The building is lighted by 26 windows, each nearly 50 feet high, and filled with stained glass. The erection of the chapel was commenced by Henry VI.; the architect appears to have been one Close or Klaus, the father of Nicholas Close, bishop of Lichfield. The remainder of the buildings are mostly of more recent date. The hall, screen, &c., were constructed from the designs and under the superintendence of Mr. Wilkins; they were intended to accord with the chapel in style, but are wholly unworthy of it. Sir Francis Walsingham, Sir William Temple, Sir Robert Walpole, and Bishop Pearson are among the eminent men who have been educated in King's College.

Queen's College was founded in 1446 by Queen Margaret of Anjou, consort of Henry VI., and re-founded in 1465 by Elizabeth Widville, consort of Edward IV. There are besides the president 20 fellows and 21 scholars on the foundation. Thomas Fuller, the author of 'British Worthies,' belonged to Queen's College.

St. Catherine's Hall was founded by Dr. Robert Wodcliffe, chancellor of the University and provost of King's College, in 1473. The society consists of 14 fellows and bye-fellows, and 43 scholars. Archbishop Sandys, Dr. John Lightfoot, and Ray the botanist were students of St. Catherine's Hall.

Jesus College was founded in 1496 by John Alcock, bishop of Ely. There are 16 fellowships and 49 scholarships and exhibitioners. The buildings are pleasantly situated and very interesting. The chapel, the most attractive feature of the college, is of the 12th century, but has been altered a good deal at different times. It was the church of the nunnery which occupied the site of the college. Archbishop Cranmer, Flamsteed the astronomer, and the poet Coleridge are among the more famous men of this college.

Christ's College was originally founded by Henry VI. under the name of God's House; but in 1505 Lady Margaret, countess of Richmond and Derby, mother of Henry VII., incorporated the former society and changed the name; at the same time endowing it liberally for the maintenance of a master, 12 fellows, and 47 scholars. The present society consists of a master, 15 fellows, and 54 scholars. There are besides about 38 exhibitions, most of which are tenable by the foundation scholars. Bishop Latimer, Archbishop Bancroft, Henry More, and Paley are among the eminent men of Christ's College: but the most famous of its scholars is John Milton. The college possesses several relics of the great poet. In the garden is a mulberry-tree which is affirmed to have been planted by him.

St. John's College was founded in 1511 by Lady Margaret, countess of Richmond, the foundress of Christ's College. This, after Trinity, is the most important college of Cambridge. The present society consists of the master, 57 fellows and 114 scholars. There is a considerable number of exhibitions. The buildings consist of four extensive courts, three of which are ancient, while the fourth or new court is of recent date. The New Court was constructed from a design by Rickman. Among the eminent men of this college may be named Cecil, Lord Burleigh, the Lord Keeper Williams, and the celebrated Earl of Stafford; Ben Jonson, Otway, and Matthew Prior; Cave the ecclesiastical historian, and Richard Bentley the famous critic.

Magdalene College was founded in 1519 by Thomas Baron Audley. There are 4 foundation and 13 bye-fellowships, and 43 scholarships. The college possesses a very valuable and curious library bequeathed to it by Samuel Pepys, who was a student of Magdalene.

Trinity College was originally endowed by Henry VIII. out of the funds of some suppressed religious houses, and afterwards augmented by his daughter, Queen Mary, for maintaining a master, 60 fellows, and 69 scholars. It occupies the site of several ancient halls and hostels, and is by far the most magnificent establishment in Cambridge. The master is appointed by the crown. The buildings comprise three very spacious quadrangles and one of smaller size. The chapel and the hall are the most remarkable of the old buildings. The library, designed by Sir Christopher Wren, is the most interesting of the more modern buildings; it is a noble room, of its kind perhaps unsurpassed; and it contains a splendid collection of books and manuscripts. The master's lodge, an extensive edifice, is the official residence of the sovereign when visiting Cambridge. The walks of Trinity are very beautiful. Among the eminent men of Trinity are Bacon, Newton, Barrow; the celebrated Earl of Essex, Sir Edward Coke, Donne, Herbert, Dryden, Cowley, Marvell, and Byron.

Emmanuel College was founded in 1584 by Sir Walter Mildmay, Chancellor of the Exchequer and Privy Councillor in the reign of Queen Elizabeth. There are 15 fellowships, about 50 scholarships, besides several exhibitions. The buildings, which are mostly modern, are neat and spacious. Bishop Bedell, Ralph Cudworth, Joshua Barnes, and Dr. Samuel Parr are among the eminent men of Emmanuel.

Sidney Sussex College was founded in 1598 by Lady Frauces Sidney, countess of Sussex. The present society consists of a master, 12 fellows, and 26 scholars. There are several exhibitious. Oliver Cromwell was a student of Sidney Sussex College.

Downing College, the most recent in the University, was founded by Sir George Downing, who bequeathed funds for its endowment in 1717; but it was not till 1800 that the University obtained an order from the privy council empowering the establishment of the college. Eventually the college is to consist of a master, two professors (one of the laws of England, and one of medicine), 16 fellows, and 6 scholars. At present only the master, professors, and three fellows are appointed. The appointment of the remaining fellows and the scholars is reserved until the completion of the buildings. The college was opened in 1821. The buildings are to consist of a spacious quadrangle. Two sides only of this quadrangle are completed; the cost was upwards of 60,000*l.* They were designed by Wilkins and are in a so-called Greek style, but are by no means a favourable example of architectural taste.

(Camden, *Britannia*, edited by Gough; Lysons, *Magna Britannia*; Fuller, *History of the University of Cambridge*; Dyer, *Hist. of Universities and Colleges of Cambridge*; Carter, *Cambridge*; *Memorials of Cambridge*, by T. Wright, and H. L. Jones; Deighton, *Cambridge Guide*; *Cambridge University Calendar*, &c.)

CAMBRIDGE, Massachusetts, United States, a city and the capital of Middlesex County, is situated in 42° 23' N. lat., 71° 8' W. long., distant 3 miles N.N.W. from Boston, with which it is connected by bridges and by railway across Charles River: the population in 1850 was 15,215. When founded by the New England settlers this place was called New Town; but after the founding of Harvard college the town received its present name, in compliment to the English University of Cambridge. For particulars in reference to Harvard college, now university, we refer to the article BOSTON. Mount Auburn cemetery, which is situated at Cambridge, is also noticed under Boston. The city possesses an observatory and several fine public buildings. A weekly newspaper with several monthly and quarterly literary journals are published in Cambridge. The first printing executed in British America was performed at Cambridge in 1639, with an apparatus sent from England in the preceding year by the Rev. J. Glover, a Dissenting minister. The first thing printed was 'The Freeman's Oath'; the second was an almanac. The first book that issued from the Cambridge press was a version of the Psalms in metre, printed in 1640. In 1663 an edition of the Bible, translated into the Indian language, was printed. Cambridge was for thirty-five years the only place in New England in which printing was carried on.

CAMBRIDGESHIRE, an inland county of England, lying between 52° 1' and 52° 45' N. lat., 0° 31' E. and 0° 16' W. long. It is of an irregular oblong form, having its greatest length about 51 miles, and its greatest breadth 32 miles; and is bounded N. by Lincolnshire; E. by Norfolk and Suffolk; S. by Hertfordshire and Essex; and W. by Bedfordshire, Huntingdonshire, and Northamptonshire. Cambridge, the county town, is 43 or 49 miles in a direct line N. by E. from London. The area of the county is 893 square miles, and the population in 1841 was 164,459; in 1851 it was 185,405.

Surface, Hydrography, and Communications.—The whole northern part of the county and a considerable part of the centre are comprehended in the vast tract of fen-land known as the Bedford Level. The inclosures in this part are chiefly formed by ditches, and the country presents few trees except pollard willows. The towns and villages are on spots which rise above the general level of the fens, and the churches crowning these slight elevations may be distinguished at a considerable distance. To these insulated eminences the designation of 'ey' (island) appears to have been applied; and hence Thorn-ey, Whittles-ey, Rams-ey (Huntingdonshire), and other places, derive part of their name. The designation of 'the Isle of Ely' was at first restricted to the insulated eminence on which Ely stands, though it has now a much more extended signification. The southern part of the county has gently-rising hills, with some wood in the parts bordering on Suffolk. The Gogmagog hills, south-east of Cambridge, are the highest in the county. Coach and Horses hill, or Orwel hill, south-west of Cambridge, is about 302 feet above the level of the sea; and Madingley hill, west of Cambridge, 238 feet.

The chief rivers of the county are the Nene and the Ouse, with its tributaries the Cam, Lark, &c. The Nene has only the lower part of its course in this county, the border of which it touches just below Peterborough, where it is divided, and flows in three channels. One arm, under the name of Catswater and the Shire Drain, winds to the north-east and forms the boundary between Cambridgeshire on the one hand and Northamptonshire and Lincolnshire on the other. Another arm, under the names of Whittlesey Dyke and the Well Creek (or the Old Nene River) passes to the east by Whittlesey and March, and joins the Ouse at Salter's Lode Sluice. The third arm (Morton's Leam) proceeds in a tolerably direct line east-north-east to Wisbech, and from thence north into the Wash. The Shire Drain joins this just at its outfall. The natural channel of the river can now hardly be distinguished, so much has the river become connected with the immense system of artificial drainage and navigation carried on in this part of the country. The Ouse first joins this county below St. Ives, and winds north-east to the Hermitage Sluice, dividing

Huntingdonshire from Cambridgeshire. At Hermitage Sluice the river in its natural course turns to the south-east, and again gradually to the north-east, receiving the river Cam. It then passes the city of Ely, below which it is joined by the Lark. From the junction of the Lark it flows north-east for a few miles, receiving the Little Ouse from Thetford and Brandon; at this point it leaves Cambridgeshire and enters Norfolk, through which county it flows northward till it enters the Wash below Lynn. From Hermitage Sluice a navigable cut, called the New Bedford River, runs north-east in a direct line across Cambridgeshire into Norfolk, after entering which it joins the Ouse at Denver Sluice, where the Old Nene River also joins the Ouse. The natural channel between Hermitage and Deuver Sluice is now only navigable, or at least is only used for navigation, so far as is requisite for the navigation of its tributary streams, the Cam and the Lark. A canal from Wisbech to the Old Nene River connects the navigation of the Nene and the Ouse.

The *Cam*, or *Granta*, is formed by the junction of several small streams which rise in Essex, the principal one of them rising between Saffron Waldon and Dunning. From Cambridge, where the navigation commences, the Cam runs north-north-east and falls into the Ouse about three miles above Ely. The *Lark*, navigable as far as Bury St. Edmunds, properly belongs to Suffolk. It separates that county from Cambridgeshire for about seven miles from its junction with the Ouse; and the Kennet brook, a feeder of the Lark, forms the boundary between these two counties about seven miles before it falls into the Lark.

The canals of these counties are not numerous, except those connected with the fen district, the principal of which have been already noticed. [BEDFORD LEVEL.] There is a canal from the neighbourhood of Ramsey, Huntingdonshire, called the Forty Foot, or Vermuiden's Drain, to the Old Bedford River, which is a cut now scarcely used for navigation, parallel to the New Bedford River. There are navigable cuts from the Ouse to Soham and Reche, and a canal running nearly north and south (the London and Cambridge Junction Canal) connecting the Cam below Cambridge with the Stort (at Bishop Stortford) and the Lea, and ultimately with the Thames. There is a branch from this canal at Great Shelford to Whaddon, between Royston and Huntingdon.

The chief coach roads are those from London to York and Edinburgh (the Great North Road), to Norwich by Newmarket, and to Cambridge; from Cambridge to Huntingdon, Newmarket, and Lynn; and from the Great North Road by St. Ives to Wisbech. The Great North Road enters the county at Royston, 38 miles from London, and traverses it in a direction about north by west through Huntingdonshire. The road from London to Cambridge through Royston turns off from the Great North Road at Royston and runs north-east to Cambridge, about 13 miles. Another road to Cambridge, branching off from the Great North Road at Puckeridge in Herts, enters Cambridgeshire near Fulmere or Foulmire, and unites with the road through Royston at Hawkston, about five miles short of Cambridge. The Norwich and Newmarket road enters the county just beyond the village of Great Chesterford, about 46 miles from London, and runs north-east to Newmarket, and finally quits the county to enter Suffolk about five miles beyond Newmarket and 66 miles from London. The north part of the county is traversed by a road which branches off from the high North Road just where this leaves Cambridgeshire to enter Huntingdonshire, and running north-north-east through St. Ives, re-enters Cambridgeshire at Chatteris' Ferry, runs through March to Wisbech, and to Holbeach, Spalding, and Boston in Lincolnshire. There are several other roads in the county.

The Yarmouth branch of the Eastern Counties railway enters the southern border of Cambridgeshire near Great Chesterford, runs past Cambridge to Ely, where it turns eastward and soon after quits the county. But the East Anglian line continues the railway communication northward to King's Lynn. From the Eastern Counties line a branch belonging to a separate company diverges at Chesterford to Newmarket. But the Newmarket line, although completed, is at present closed: the receipts not having been found sufficient to meet the working expenses, and the affairs of the company being in confusion. From Cambridge there are branch lines eastward to Newmarket, and north-west to St. Ives and Huntingdon: from St. Ives the line is continued northward to March, re-entering Cambridgeshire near Chatteris. From Ely a line which is wholly in this county is open to March; from March it is continued westward to Peterborough, and northward to Wisbech. A branch of the Great Northern railway leaves the main line at Hitchin in Hertfordshire, and proceeding north-east passes Royston and joins the Eastern Counties line at Cambridge.

Geological Character.—The south and south-eastern parts of the county are occupied by part of the great chalk formation which extends, within the limits of Cambridgeshire, from Newmarket heath to Royston: it forms the mass of the Gogmagog hills, south-east of Cambridge, and of the Royston downs, which are connected with the Luton and Dunstable downs (Bedfordshire), and by them with the Chiltern hills (Bucks). There are also in Cambridgeshire two masses of this chalk detached from the principal mass—the Coach and Horses hill, near Orwel, south-west of Cambridge, and Madingley hill, west of Cambridge. The chalk of Cambridgeshire consists of

two varieties, the upper containing an abundance of the common black flint, and the lower or gray chalk, which contains little or none. The upper is found in the south-east part of the county: the lower chalk forms the principal hills, and occupies the north-west part of the chalk range. The chalk is furrowed transversely by the depression through which the London and Cambridge Junction Canal passes, and which separates the Gogmagog hills from the Royston downs. The district north-east and east of Cambridge is the most level chalk district in England; its flatness alone gives importance to the otherwise inconsiderable eminences of the Gogmagog hills. The chalk district of Cambridgeshire dips gently to the south-east. The chalk rests upon a blue clay, called in the county 'galt,' which is considered as a variety of the chalk-marl formation that crops out from beneath the north-western boundary of the chalk. This formation occupies a considerable extent of surface, extending to the boundary of Huntingdonshire and Bedfordshire; its thickness is variable, averaging perhaps 200 or 220 feet. It is nearly impervious to water. In a few places the iron-sand, which underlies the galt, rises to the surface. It forms excellent garden ground. Throughout the whole of this formation many fragments of mineralised wood are found; when dry they crumble into a fine powder, but when moist and fresh from the earth are definite in form, and have the bark in the utmost state of preservation. The whole of the northern part of the county is over-spread with the fens (BEDFORD LEVEL); the greater part of which in this county is comprehended in the Isle of Ely. The marshes south of the Old Ouse, about Soham, Wicken, and Reche, are not included in the Isle of Ely.

Surface, Soil, Climate, &c.—The soil of this county is extremely various, consisting of clay, loam, and chalk, both in the uplands and the fens. Although there are some poor commons and heaths, the greater part of the land is fertile. In some spots called white land, which have chalky subsoils, great crops of wheat and beans are raised. The Burwell wheat is in great request for seed in many parts of England, and the chaces of Cottenham indicate considerable richness in the pastures. The climate in the uplands is mild and healthy, but in the fens agues and fevers prevail when the water has evaporated and left the land in a half-dry state. In proportion as the fens are drained and the land is cultivated, the air becomes more healthy. The upland district is sufficiently varied to afford good situations for residences; but until the beginning of this century a very small proportion of the land was inclosed. During the last thirty years many common-fields, heaths, and fens have been inclosed. Many of these inclosures have taken place under special Acts of Parliament. The villages were mostly situated in hollows, between gentle elevations, where the soil was naturally most fertile; and being scattered through an open country, with their small inclosures and orchards, presented insulated green spots, which formed a strong contrast with the surrounding open fields entirely destitute of trees. The fen district is a dead flat intersected with ditches, canals, and sluggish streams. The soil consists of mud mixed with decayed and half-decayed vegetable matter. When the superfluous water has been removed, a soft spongy surface is left, which is much improved by burning. The ashes thus produced by being mixed with the soil greatly enrich it, and the most luxuriant crops are obtained without any other preparation. When a judicious rotation is adopted, and the ground is not too much exhausted to be restored by proper manures, this land, which is reclaimed from a state of comparative unproductiveness, becomes very valuable. The fens, where they have not been brought into cultivation, produce turf for fuel, and reeds and sedges for thatching and lighting fires. Osier-beds are likewise formed in some places, and give a good return. By the introduction of sainfoin on some of the thin chalky lands, a soil naturally unproductive now supports a great quantity of cattle and sheep, and also bears good crops of corn after having been some years in grass. By judicious surface-draining many soils in the county now too wet to bear turnips or to allow heavy cattle to be depastured upon them in spring or autumn, would become dry and sound; and the water being carried off by the drains, would not stagnate below the surface and keep the ground in a soft state, equally prejudicial to the growth of all plants not usually found in marshes, and to the cattle and sheep depastured on them. A convertible husbandry might then be introduced, the expenses of cultivation much diminished, and the produce greatly increased.

Divisions, Towns, &c.—The divisions of Cambridgeshire have undergone little change since the Domesday Survey. We subjoin a list of the present hundreds, giving also their situation in the county, and their ancient names:—Wisbeach, Witchford, Ely, occupy the northern half of the county, and correspond to the two ancient hundreds of Ely, Staploe (E.)—Staplehou. Chevelay (E.)—Chavelai. Radfield (S.E.)—Iladefelle. Chilford (S.E.)—Cildeford. Whittlesford (S.)—Witelesfeld. Triplow (S.)—Trepelau. Armingford (S.W.)—Erningford. Stow, or Long Stow (S.W.)—Stou. Papworth (W.)—Papeword. North Stow (central)—Noreston. Chesterton (central)—Cestretone. Wetherly (central)—Wederlai. Flendish (central)—Flainindic, or Flamindic. Staine (central)—Stanea. The county itself is called in Domesday Survey Orentebregiscire. In that survey the town of Cambridge is taxed as a hundred.

Besides the county town, CAMBRIDGE, this county has one city, ELY; and seven market-towns WISBEACH, MARCHE, THORNEY, LINTON,

and SOHAM; NEWMARKET, partly in Suffolk; and ROYSTON, partly in Hertfordshire. Several other places formerly had markets; that at WHITLITNEY has been disused for about fifty years; it seems to have been held by prescription. For notices of these towns we refer to their respective articles. We subjoin a brief notice of the decayed market-towns and some of the more considerable villages, with the population of their several parishes in 1851.

Abington Pigotts, or Abington-in-the-Clay, 12 miles S.W. from Cambridge, population 238, had formerly a market on Fridays. It is now a place of no importance. There are two other Abingtons in the county. *Abington, Great*, on the river Granta, 8 miles S.E. from Cambridge, population 331, has an ancient church and a Free school for girls supported by T. Mortlock, Esq. *Abington, Little*, the adjoining parish, population 307, has an ancient church, with some interesting features, of early English date. The King's Arms, Bourne Bridge, in this parish, was a celebrated posting house on the Newmarket road previous to the opening of the railways. *Balsham*, 10 miles E.S.E. from Cambridge, population 1352, belongs to the governors of the Charterhouse, London. The church is modern; there is a Dissenting chapel; also an Infant school. *Barrington*, on the left bank of the Rhee, 7 miles S.S.W. from Cambridge, population 596, had anciently a market on Mondays. The church is partly of early English date. The Independents have a chapel here. There is a National school. *Bassingbourne*, 13 miles S.W. from Cambridge, population 2148, had formerly a market on Mondays, which was originally granted by Henry III.; also a fair at the festival of St. Peter and St. Paul which lasted for eight days; but these have been long discontinued. The church, which is ancient, contains several good monuments. *Royston Union workhouse* is in this parish. *Bourne*, about 12 miles W. from Cambridge, population 945, has a large church partly of early English date. The mansion of Earl Delawarr, a handsome modern structure in the Elizabethan style, is in this parish. *Burwell*, 11 miles N.E. from Cambridge, population 2187, is a very extensive parish. The village of Burwell with the connected haulets of Hightown, Newnham, and North Street, extends for about two miles. The church is a very handsome building of the perpendicular date and style, with windows of large size, and containing very elegant tracery. In the church are some good monuments. There are some remains of an ancient castle. CAXTON and CHESTERTON being seats of Poor-Law Unions will be noticed in separate articles. *Chatteris*, 24 miles N.N.W. from Cambridge, population 6138, is a very large and populous village, but has no feature of general interest. Besides the church there are Dissenting chapels; also a National and a British school. *Cottenham*, 7 miles N. from Cambridge, population 2314, has a fine church of ancient date, with a lofty tower surmounted with pinnacles. The Wesleyan Methodists, Independents, and Baptists have places of worship. There is an Endowed Free Grammar school. There are several parochial charities. *Doddington*, 30 miles N. by W. from Cambridge, may be noticed as the largest parish in the county, and the richest benefice in the kingdom. The parish contains 36,985 acres of rich and fertile land; the living, a rectory in the gift of the Peyton family, is returned at 7306*l.* a year: the population of the entire parish, which includes the chaperies of Benwick and March and the hamlet of Wimblington, was 9703 in 1851; that of Doddington itself was 1454. Here was formerly one of the palaces of the bishops of Ely. An Endowed Free school for 28 boys, founded in 1696, had an income from endowment in 1837 of 175*l.*; but no return has been obtained in reference to the present state of the school. *Downham, or Little Downham*, Isle of Ely, 17 miles N. from Cambridge and 3 miles from Ely, population 2299, has an ancient church; Wesleyan Methodist and Baptist chapels; and a Free school. The inhabitants are chiefly agricultural. In Downham Park are some remains of the palace of Bishop Cox; they are now used as barns. *Duxford*, 9 miles S. by E. from Cambridge, on the west side of the Eastern Counties railway, population 844, contains two churches, and has several parochial charities. In Duxford are the remains of a monastery, part of which is now used as an inn, part as a barn. *Fen Ditton*, on the Cam, 24 miles N.E. from Cambridge, population 555, has an endowed Free school and a National school. The chancel of the church is an interesting example of the decorated style. *Fordham*, 16 miles N.E. from Cambridge, population 1584, is a large but quiet and uninteresting village. *Paxton*, 7 miles S. by W. from Cambridge, population 459, had formerly a market and two fairs; one fair is now held at Easter. The church is of perpendicular date and style. *Pulbourne*, 5 miles E.S.E. from Cambridge, population 1452, includes the two parishes of All Saints and St. Vigors. The churches of both parishes stood in the same churchyard till 1776, when that of St. Vigors having become much dilapidated, it was taken down under the authority of a special Act of Parliament. St. Vigors' church is of the early English and perpendicular styles. It contains some interesting ancient monuments and brasses, and a wooden pulpit, believed to be of the 14th century, and one of the oldest in the kingdom. There is a Free school in the village. *Gamlingay*, on the border of Bedfordshire, about 14 miles W.S.W. from Cambridge, population 1886, was formerly a market-town, but is now an unimportant village. The parish is very large. The church is a handsome structure. *Grantchester*, 2 miles S.S.W. from Cambridge, population 635, is by some antiquaries supposed to be the Cambroritum of Antoninus; others suppose that the Roman town stretched

from the present town of Cambridge to Grantchester. The village contains a National school. *Haddenham*, in the Isle of Ely, 13 miles N. by W. from Cambridge: population 2118. The church, a handsome building of the perpendicular style with a very lofty spire, stands on an eminence and is visible for a considerable distance. The Wesleyan Methodists and Baptists have places of worship. The Free school, founded in 1642, had an income from endowment of 76*l.* a year, and had 57 scholars in 1851. *Histon*, 4 miles N.N.W. from Cambridge: population 1011. The church, which is small, is of the early English style, with later insertions. There is a Wesleyan Methodist chapel. There is an endowed Free school, for which a new school-house has been erected within the last few years. *Isleham*, on the border of Suffolk, 20 miles N.E. from Cambridge, population 2286, has a neat gothic church, a Wesleyan Methodist, an Independent, and two Baptist chapels; also two Free schools. *Kingston*, 8 miles S.S.W. from Cambridge, population 315, had formerly a market and two annual fairs; it is now a poor village. *Leverington*, 44 miles N. from Cambridge, population 2143, is an agricultural village of no particular interest. In the church is an excellent latten lectern. *Littleport*, in the Isle of Ely, 14 miles N.N.E. from Cambridge: population, with the hamlets of Old Bank and Apshall, 3832. Littleport has a very handsome church with a lofty tower; a Wesleyan and a Primitive Methodist and two Baptist chapels; also a National school. The inhabitants are chiefly dependent on agriculture. *Long Stanton*, 7 miles N.W. from Cambridge, population 634, contains two churches: St. Michael's, a rude structure of early English date with a thatched roof, and All Saints, a rather handsome gothic building with a lofty tower and spire. In the village is a National school. Long Stanton was the seat of the Hatton family from a very early period until recently. The noble Elizabethan manor-house has been most part pulled down to make way for a new and smaller mansion. The Bishop of Ely had a palace here in which Queen Elizabeth was entertained. *Melbourne*, 10 miles N. by W. from Cambridge: population 1931. The church is a handsome edifice of the decorated style, and contains some good monuments. The Independents and Baptists have places of worship; there is a National school. *Oakington*, 5 miles N.W. from Cambridge, population 694, has a very excellent gothic church; a Baptist chapel; and a National school. *Sawston*, 6 miles S. by W. from Cambridge and 1 mile from the Whittlesford station of the Eastern Counties railway, population 1124, was formerly a market-town, and the vestiges of the market-cross are still standing in the centre of the village. The church, which is very spacious, is partly of the Norman date, with windows of the decorated period, which with various details, and the monuments in the interior, are of much interest to the archaeologist. There are places of worship for Roman Catholics and Independents; also almshouses and other parochial charities. *Sawston manor-house*, a picturesque old mansion, was erected in 1557 by Sir John Huddleston, with the materials of Cambridge castle, given to him by Queen Mary. *Shelford, Great*, 4½ miles S. from Cambridge: population 1038, including numerous labourers employed on railway works in progress. The church is of the perpendicular period, and contains some good brasses. There are a place of worship for Baptists, and National and British schools. Extensive flour-mills are in the parish. At Great Shelford is a station of the Eastern Counties railway which is largely used for the conveyance of agricultural produce. *Shelford, Little*, adjoining Great Shelford: population 580. The inhabitants of both parishes are dependent on agriculture. *Stretham*, Isle of Ely, 11 miles N. from Cambridge: population, with Thetford hamlet, 1597. The church is ancient; near it stands a stone pillar. The houses in Stretham are mostly new, a fire having destroyed the greater part of the village in May 1844. *Sutton*, Isle of Ely, 18 miles N. from Cambridge: population 1814. The village consists of one long street; the inhabitants are wholly agricultural. The church, a spacious edifice partly Norman, has two towers with pinnacles, and a spire. The Wesleyan Methodists, Baptists, and Quakers have places of worship. The village stands on an eminence, and commands extensive views. *Swavesey*, 9 miles N.W. from Cambridge, population 1385, formerly possessed a market and a fair. The church originally belonged to a monastery founded here before the conquest; it is chiefly of the decorated style, of which it is a good example. There are chapels for Baptists and Unitarians; National and British schools; and some parochial charities. *Triplow*, or *Thriplow*, 10 miles S. from Cambridge, population 521, has an ancient church; a Dissenting meeting-house; and a British school. *Triplow* heath was for a while the head-quarters of the parliamentary army commanded by Fairfax and Cromwell. *Trumpington*, 2 miles S. from Cambridge, population 771, is a sort of suburb to Cambridge. The church is an excellent specimen of the decorated style. Many portions of it are very beautiful; and there are several monuments of much interest—among others a brass of Sir Roger Trumpington, a crusader, who died in 1288, the oldest incised slab known with the exception of one at Stoke D'Abernon in Surrey. In the village is a large mansion belonging to the Pemberton family. *Waterbeach*, an extensive village and parish, 5 miles N. by E. from Cambridge: population 1440. The church is partly of early English date. There are chapels belonging to the Wesleyan Methodists and Baptists; an Endowed Free school; almshouses, and other parochial charities. Since the opening of the Eastern Counties railway, which has a

station here, Waterbeach has considerably increased. *Willingham*, a large agricultural village and parish, about 10 miles N.W. from Cambridge: population 1604. The church is a very fine and spacious edifice partly of early English date, with a lofty tower, and a remarkably good wooden roof. A mortuary chapel has a stone roof of high pitch and of rather uncommon design. There are chapels for Wesleyan Methodists and Baptists; an Endowed Free school for 30 boys; almshouses and other parochial charities. *Wimpole*, 9 miles S.W. from Cambridge, population 452, is chiefly noteworthy as containing the seat of the Earl of Hardwicke. The mansion is a spacious brick building, the centre of which was erected in 1632 by Sir Thomas Chicheley; the wings were added by Lord Oxford; the chief apartments were fitted up by Lord Chancellor Hardwicke. In the picture gallery and principal rooms is contained a very valuable collection of paintings. The library is large and valuable; and there is an extensive and important collection of state papers, now well known by the publication of a portion of them a few years back. Wimpole church was built by Lord Chancellor Hardwicke in 1749; it contains several costly monuments to the Hardwicke family.

Divisions for Ecclesiastical and Legal Purposes.—The county is, for the most part, in the diocese of Ely. The parishes are mostly in the archdeaconry of Ely; a few are in the archdeaconry of Sudbury. There are 165 parishes. By the Poor-Law Commissioners the county is divided into 9 Unions:—Cambridge, Caxton and Arrington, Chesterton, Ely, Linton, Newmarket, North Witchford, Whittlesey, and Wisbeach. These Unions include 173 parishes and townships, with an area of 538,303 acres, and a population in 1851 of 191,514; but the boundaries of the Unions are not strictly co-equal with those of the county. Cambridgeshire is in the Norfolk circuit. The assizes and quarter-sessions are held at Cambridge. County courts are held at Bourne, Cambridge, Ely, March, Newmarket, Royston, Soham, and Wisbeach. The county returns three members to the Imperial Parliament; the borough of Cambridge two; and the University of Cambridge two. Cambridge is the chief place of county election. According to the 'Census of Religious Worship' taken in 1851 it appears that there were then 404 places of worship in the county, of which 176 belonged to the Church of England, 72 to Baptists, 57 to Wesleyan Methodists, 39 to Primitive Methodists, 5 to Wesleyan Reformers, 38 to Independents, and 17 to various smaller bodies. The total number of sittings provided was 104,546.

History and Antiquities.—In the most remote period of British history Cambridgeshire appears to have been inhabited by the Icen, a powerful nation. In the Roman division of the island this county was included in Flavia Caesariensis. Several British and Roman roads crossed the county: the Ikeneld and Ermine Streets are supposed to be British. Ikeneld or Icknield Street crosses the county from the neighbourhood of Newmarket to the neighbourhood of Royston. For a considerable part of this distance it runs parallel to the road from Newmarket to London and a little to the left of it. Near the border of Essex it bends to the right and runs westward, just within the boundary of the county, to Royston; whence it gradually turns to the south-west, and runs towards Baldock, Hertfordshire. This ancient road has been in some parts so far obliterated by the plough as not to be easily traceable, in other parts the marks of its course are evident. Ermine Street entered the county at Royston, and ran to the left of the present turnpike-road to Caxton and Godmanchester near Huntingdon. A Roman road in the same direction kept nearly in the line of the present turnpike-road. The great Roman road (Via Devana) which connected the colonies of Camulodunum (Colchester or Maldon) and Deva (Chester) passed through Cambridgeshire, entering the county from Withersfield, near Haverhill in Suffolk, and proceeding with little deviation from a straight line to Cambridge, where it is supposed the Romans had a bridge, and from thence nearly in the line of the present turnpike-road to Godmanchester near Huntingdon. Other roads are still traceable or have been mentioned by antiquarian writers. Roman antiquities of various kinds have been dug up at Cambridge, Soham, Elme, near Wisbeach, and other places. The circular camp of Vaudlebury on the Gogmagog hills; Arbury in the parish of Chesterton near Cambridge; Willingham on the edge of the fen; and the earth-works round the sites of Bourne and Camps Castles, are probably of British origin. Vandlebury, from Roman remains found there, appears to have been afterwards occupied by the Romans; and Willingham was occupied and strengthened with new works by William the Conqueror when he besieged the Isle of Ely. At Great Shelford near Cambridge are the remains of a Roman camp; and a Roman embankment, connected with the works for draining the fens, extends some miles from Elme to Tyd St. Giles near Wisbeach. There are some remarkable ancient ditches in this county, as the Devil's Ditch near Newmarket, running north-west and south-east for about 4 or 5 miles, and crossing the London road; Fleamdyke, running parallel to it, at a distance of 6 miles; a third near Bourne Bridge, not far from Linton; and a fourth, a slighter work, near Foulmire, nearly in the same direction as the first two. The Devil's Ditch, the largest probably, and the most perfect, consists of a deep ditch and an elevated vallum, having a slope of 52 feet on the south-west side, where the ditch is, and 26 feet on the north-east side; the whole of the works are about 100 feet in breadth.

In the wars between the Saxons and Danes this county suffered

severely. About the year 870 Cambridge was burnt by the Danish invaders; the monasteries of Ely, Soham, and Thorney were destroyed, and their inmates slaughtered. The first attack of the barbarians on the Isle of Ely was repulsed, but the second was successful; many of the Saxon nobles who had taken refuge there with their effects became the prey of the invaders. In 875, in the reign of Alfred, the larger portion of the Danish army was posted at Cambridge, which had been rebuilt. In 921 an army formed of the Danes settled in East Anglia by Alfred, surrendered at Cambridge to Edward the Elder. In 1010 Cambridge was again burnt by the Danes, who were ravaging the country under their king Svein. When William the Conqueror invaded England, the most obstinate resistance which he experienced was in the Isle of Ely. Hereward le Wake, son of Leofric, lord of Brunne (Bourne) in Lincolnshire, had been banished in early life for his violent temper, and having signalled his valour in foreign parts, was in Flanders when the battle of Hastings was fought in 1066. Hearing that his paternal inheritance had been given to a Norman, and his mother ill-used, he returned to England and commenced hostilities against the usurpers of his patrimony. The Isle of Ely was his central station, and he built on it a wooden castle which long retained his name. William surrounded the island with his fleet and army, attempting to make a passage through the fens by solid roads in some parts and bridges in others; and either awed by the superstition of the times, or wishing to make it subservient to his interests, he got a witch to march at the head of his army and try the effect of her incantations against Hereward. The Anglo-Saxon, no way daunted, set fire to the reeds and other vegetation of the fens, and the witch and the troops who followed her perished in the flames. The actions of Hereward became the theme of popular songs, and the Conqueror's own secretary, Ingulphus, has penned his eulogium. During his warfare against the Normans his camp was the refuge of the friends of Saxon independence: Morcar earl of Northumbria, Stigand archbishop of Canterbury, Ellgwin bishop of Durham, and others repaired to him. The defence of the Isle lasted till 1074, and the Conqueror penetrated at last only by virtue of a compact with the monks of Ely, whose lands beyond the island he had seized. Hereward, unsubdued, contrived to make his peace with the king, obtained the restoration of his inheritance, and died quietly in his bed.

In the civil wars of Stephen and the Empress Maud, the bishop of Ely, who supported the empress, built a wooden castle at Ely, and fortified the castle of Aldreth (in Haddenham parish), which appears to have commanded one of the approaches to the Isle. The Isle then and afterwards suffered much from the ravages of war, and from famine and pestilence. In the civil war between John and his barons the Isle was twice ravaged by the king's troops, first under Walter de Bunek, and afterwards about 1216 under Fulke de Brent and his confederates. The barons took Cambridge castle, and the king marching into Cambridgeshire did, as Holinshed expresses it, 'hurt enough'; but on the king's retreat the barons recovered the Isle of Ely except one castle, probably that at Ely. In the troubles which marked the close of the reign of Henry III. the Isle was again the scene of contest. It was taken and fortified by the barons, who ravaged the county and took and plundered Cambridge. The Isle was retaken by the king's son, afterwards Edward I., in 1266 and following years. In the civil war of Charles I., the county of Cambridge supported the cause of the Parliament. The University adhered to the royal cause, and the heads of the University voted their plate to be melted down for the king's use. In 1643 Cromwell took possession of Cambridge, and the Earl of Manchester being sent down, expelled the most eminent loyalists from the University; in 1645 Cromwell was again sent to secure the Isle of Ely. When the king was seized by Cornet Joyce in 1647 the parliamentary army was at Kennet, in this county, near Newmarket; but the king was conveyed by Cromwell's order to Childerley, near Cambridge, where Cromwell and Fairfax visited him. On the 9th of June in the same year the king was removed to Newmarket.

Of baronial castles this county has scarcely any remains: there are some remains of a castle in Cheveley Park and at Burwell, both near Newmarket; and earthworks, marking the site of castles, at Ely, Bourne (between Cambridge and Potton, in Bedfordshire), and Castle Camps, near Linton. Some old entrenchments at Swavesey near St. Ives, called the Castle, are probably the remains of a mansion-house. Of Wisbeach Castle and Bassingbourne Castle, near Royston, there are no remains. At Downham in the Isle of Ely are some remains of an ancient palace of the bishops of Ely, and there are some old manor-houses, or remains of manor-houses, in different places. The principal monastic establishments in the county besides those at and near Cambridge, Ely, and Thorney, were Anglesey Priory of Austin canons at Bottisham, between Cambridge and Newmarket; Denny Abbey on the edge of the fens for Nuns Minorites; and Shengay, a house of the Knights Hospitallers at Wendy, near Royston. Of these there are no remains that call for notice. Of ancient ecclesiastical edifices the most striking are at Cambridge and Ely, and Thorney and Whittlesey; but there are various others, parts of which will well repay the attention of the student of gothic architecture.

Cambridgeshire is almost entirely an agricultural county, ranking

the sixth in that respect in England. In 1851 there were three savings banks in Cambridgeshire: at Cambridge, Ely, and Wisbeach. The total amount owing to depositors on the 20th of November, 1851, was 180,986*l.* 18*s.*

CAMBUSNETHAN. [LANARKSHIRE.]

CAMDEN. [CAROLINA, SOUTH.]

CAMDEN. [WALIA, NEW SOUTH.]

CAMELFORD, Cornwall, a market-town and the seat of a Poor-Law Union, in the parish of Lanteglos and hundred of Lesnewth, is situated in 50° 37' N. lat., 4° 40' W. long.; distant 12 miles N. by E. from Bodmin, and 223 miles W.S.W. from London. The population of the parish of Lanteglos in 1851 was 1740, of which about one-half belonged to the town of Camelford. The town is governed by a mayor and corporation. The living of Lanteglos is a rectory in the archdeaconry of Cornwall and diocese of Exeter. Camelford Poor-Law Union contains 12 parishes and townships, with an area of 38,012 acres, and a population in 1851 of 7309.

Camelford derives its name from the river Camel or Alan which rises about four miles to the north-north-east, and flows through the town. Camelford was made a free borough by Richard, earl of Cornwall, brother of Henry III., and afterwards king of the Romans. From the time of Edward VI. the borough sent two members to Parliament till it was disfranchised by the Reform Act. In Camelford are the ruins of an ancient chapel; the parish church is at Lanteglos, about a mile and a half from the town; the Wesleyan and Association Methodists and Independents have places of worship in the town. There is an Endowed Free school for 12 boys. The streets are broad and well paved. The town-hall was built about the commencement of the present century by the Duke of Bedford. A manufactory for serge employs some of the inhabitants. The market is on Friday for corn and provisions. A county court is held in Camelford. The neighbourhood of Camelford is supposed by some to have been the scene of the battle in which King Arthur fell, and of another battle fought in 823 between the Britons and the West Saxons, under Egbert. A considerable amount of rain falls at Camelford, from its proximity to high hills.

CAMEROON, or CAMAROEENS, a river of Africa, which discharges itself into the Bight of Biafra and into the same estuary as the Malimba, about 45 miles E. from Fernando Po. It has a bar across its mouth, with an average depth of from 15 to 18 feet water over it. Of this river little is known beyond a few miles from the entrance. Like other rivers on this coast, it has been long known to be a great mart for slaves. Palm oil and ivory are obtained here; the latter is considered very fine. The system of traffic is by barter. This river is separated from those to the westward by high land called the Camaroon Mountains, the highest peak of which rises to 13,000 feet above the sea, and is generally capped with snow. The name is derived from the Portuguese word for shrimp, of which there is a great abundance. Each side of the river is governed by a separate chief, whose friendship must be purchased by presents before any traffic is commenced.

CAMPAGNA DI ROMA, the popular and historical name of the most southern part of the Papal States, corresponding in a great measure to the ancient Latium, is bounded N.W. by the Tiber, which divides it from the Patrimonio di San Pietro; N. by the Anio or Teverone; E. by an offset of the Apennines, which divides it from the valley of the Liris or Garigliano in the kingdom of Naples, and which terminates at the sea near Terracina; S. and W. by the Mediterranean. The length of the district thus designated from Ostia to Terracina is about 62 miles, and its greatest breadth from the Apennines to the sea is about 45 miles. It is divided into two regions, the lowlands and the highlands, including the valley of the upper Sacco and part of that of the Teverone. The highlands consist of ramifications of the Apennines; of the offset which divides the valley of the Teverone from that of the Sacco, the ancient Tronca, and on which are the towns of Anagni, Palestrina, &c.; of the Monti Lepini (Volscorum Montes), which divide the valley of Sacco from the Pomptine marshes; and lastly, of the Alban and Tusculan hills which rise in the middle of the plain, and separate the lowlands of the Tiber from the Pomptine marshes. Towards the north the highlands of Alba and Tusculum are connected by some high ground towards Zagarolo with the mountains of Palestrina, thus separating the waters which run eastward into the Sacco and the Liris from those that run westward into the Tiber. The Apennines and the Monti Lepini are mostly rugged and bare; the valley of the Teverone is healthy, and the population robust, though poor; the valley of the Sacco is wide, fertile, and well cultivated. The Alban and Tusculan mounts are covered with trees, vineyards, and gardens; the air is salubrious, and the soil in many places very fertile. Those who talk of the desolation of the Campagna seem to have visited only the lowlands to the right and left of the high road between Rome and Naples, and that only in the summer months; for "in the winter and early part of the spring you see fields and pastures decked in all the luxury of a spontaneous vegetation, numerous herds of cattle and flocks of sheep grazing on the rich grass; but as soon as the hot season comes, a sudden change takes place in the appearance of the country—vegetation ceases—first a yellow, then a gray tinge covers the ground—the dusty soil looks as

if it were calcined by fire—the cattle migrate to the mountains—and the inhabitants disperse." (Tournon, 'Études Statistiques sur Rome.') The lowlands of the Tiber, which form the Agro Romano, or territory of the city of Rome, which extends on both banks of the Tiber, and which is often confounded with the Campagna, contain about 550,000 acres, of which about one-half is arable land, the rest pasture and forest, and only about 6000 acres are marsh. This territory is divided into farms of from 1200 to 3000 acres, some however are much larger, as the celebrated farm of Campomorto which probably contains not less than 20,000 acres. All the arable land of this large tract is rented by a small number of wealthy farmers who reside in palaces in Rome and manage the estates by means of fattori, or agents and clerks. It is evident that it is not the marshy grounds that cause the unwholesomeness of this part of the country. The surface of the soil is in fact undulating and dry, and slopes gently towards the coast; the malaria must be attributed to other natural causes. In Sir Wm. Gell's 'Topography of Rome and its Environs,' which is accompanied with an excellent map, embracing almost the whole province of the Campagna, with the exception of the Pomptine marshes, we find the following statement:—"There are 242,000 rubbi of arable land, 82,000 of which are considered to be in healthy districts, and the rest, being unwholesome, are sown with grain only once in four or five years. Wheat returns about nine to one. The vineyards are 14,600 rubbi; pastures, 162,000 rubbi; orchards, 1400; woods and forests, 170,000; in all 590,000 rubbi, or 2,360,000 acres, besides rocks, sands, marshes, rivers, &c., which occupy about 145,000 rubbi more. There are 700,000 sheep, 100,000 horned cattle, 4000 buffaloes, and 35,000 horses, besides pigs and goats." This statement however comprises also part of the adjoining province of the Patrimonio di San Pietro, on the right bank of the Tiber. The great plain between the south slope of the Lepini Mountains and the sea, which is known by the name of the Pomptine marshes, extends from Torre Tré Ponti to Terracina, a length of about 22 miles by 10 of breadth; of this extent only the lower tract, about 65,000 rubbi, is really marshy. Pius VI. drained 9000 rubbi which were being constantly under water. Of the whole extent of the marshy ground, one-third is susceptible of cultivation; another third is in pasture, and the rest forest or marsh. The extent of the Campagna is about 2400 square miles, of which about one-half is unwholesome, and only inhabited by a permanent population of about 15,000. The total population of the Campagna is 276,325, exclusive of the city of Rome, which in 1852 had a population of 175,838.

The Campagna is divided into two administrative districts—the Comarca di Roma which is under the jurisdiction of the governor of the city of Rome; and the delegation of Frosinone. Such towns in the Campagna as are not noticed in separate articles in this work are given under the heads ROMA, COMARCA DI; and FROSINONE; and the ancient geography of the district is given under LATIUM.

The name of Campagna di Roma was adopted in the middle ages, to distinguish the country from the neighbouring Campania, or Campagna Felice, in the kingdom of Naples. The depopulation of the Campagna of Rome is often, though most erroneously, attributed to Papal misgovernment; it is an historical fact that it was nearly as desolate in the time of Cicero as it is now. The depopulation of the country dates from the early conquest by Rome of the various people who inhabited Latium: the long obstinate resistance of the latter, and especially of the Volsci, in consequence of which most of their towns were destroyed; the subsequent devastations by Sulla; and the custom of the Roman patricians to abandon their vast estates to the cultivation of slaves and the care of overseers. The lowlands near Rome are mentioned as unwholesome by Livy, Cicero, Strabo, Horace, &c. After the fall of the Western empire, the devastation of Latium became complete, and Rome, reduced to a population of less than 20,000 inhabitants, stood literally in the midst of a desert. After the return of the Pope from Avignon in 1377, the population both of Rome and its territory began gradually to increase again. Since the pontificate of Sixtus V., 'the restorer of public peace and security' (1585-90), it has been steadily though slowly increasing. It is probably owing to the Papal government that Rome and the Campagna are not reduced to the condition of Babylon or Palmyra. No administration could render the lowlands of the Campagna healthy, or fix a population in them. Those provinces of the Papal States which enjoy a more salubrious atmosphere, such as Umbria, Perugia, the valley of Rieti in Sabina, the Marches, are among the finest, most populous, and best cultivated in all Italy.

The cultivation of the plains of the Campagna is peculiar. The farms, as above stated, are very large. The farmer seldom or never resides upon the estate, the farmhouse being occupied by the fattore, or steward, and by herdsmen. In winter the farm is covered with cattle; the sheep then collected in the Campagna amount to about 600,000, and the large gray oxen fed for the Roman market amount to about half that number. The herdsmen ride over the plain dressed in sheep-skin cloaks and armed with long pikes; their horses, almost as wild-looking as themselves, are in the summer turned loose among the woods and morasses along the coast, where with herds of buffaloes and swine they feed till caught again for winter and spring service. When the summer comes, and with it the insalubrity of the soil returns, the sheep and oxen are driven to the Apennines. Some hun-

dreds of labourers are engaged every year from the highlands for the service of one farm, between the months of October and June, and double the number at harvest-time, after which they return to their hills, or come to the hospitals of Rome with the malaria fever. At harvest-time the heat in the Campagna is most intense and the malaria most fatal. The hardy peasants from the Volscian hills for the sake of earning a few crowns reap all day under a scorching sun, and sleep at night on the ground shrouded by the heavy pestilent vapour, which begins to rise after sunset, and which in a week after overcomes the healthiest and hardiest. During the summer months only a small number of permanent servants remains on the farms. This system of farming on a large scale is rendered necessary by the malaria, and the consequent depopulation of the plains. In the highlands and valleys of the Apennines property is much more subdivided, the farms are of moderate size, and most of the villagers have gardens and orchards or vineyards. The highest summits in the Campagna are—Monte Caciune, in the Lepini ridge, 3500 feet; Monte Cavo, in the Alban ridge, 3000 feet; Maschio d'Ariano (Mons Algids), an eastern projection of the Alban, 2950 feet; Monte Tuscolo, 2000 feet. (Tournon; Gell; Chateaurieux, *Lettres écrites d'Italie*; *Foreign Quarterly Review*; Murray, *Handbook for Central Italy*; Blewitt, *Handbook for South Italy*.)

CAMPAN. [PYRÉNÉES, HAUTES.]

CAMPANIA, the ancient name of that part of the present kingdom of Naples which is now called Terra di Lavoro. It was celebrated from the remotest times for its extraordinary fertility, and its soft and genial climate. The Osci, or Opici, and Ausones (probably all one people), are the first inhabitants of Campania recorded in history. Etruscan colonies afterwards spread to this country, and founded twelve cities, including Capua, which became the principal city of Campania. The Etruscans of Campania appear to have degenerated from their ancestors, and to have become licentious, indolent, and idle. The Etruscans were driven out or conquered by the Samnites, who finally yielded to the Romans. The cruel invention of the fights of gladiators, afterwards adopted by the Romans, and carried to a frightful extent, is attributed to the Campanians of Capua.

After being allies of Rome the Campanians of Capua took the part of Hannibal, and were severely treated by the Romans in consequence. [CAPUA.] Livy (xxiii.-xxv.) speaks at length of the Campanians, their manners, and the part they took in the second Punic war. The island of Caprea (Capri) was reckoned a part of Campania. The Volturnus was the principal river of Campania. (Strabo, p. 242, &c.) For a description of the country see TERRA DI LAVORO.

CAMPBELTOWN, Argyleshire, a royal burgh and sea-port in the parish of Campbeltown, near the southern extremity of the peninsula of Cantire, stands on a loch or indentation of the coast, which forms an excellent harbour, about two miles long and one mile broad, with from 6 to 13 fathoms' depth of water. It is situated in 55° 24' N. lat., 5° 42' W. long., 65 miles W. by S. from Glasgow. The population of the burgh was 6880 in 1851. The burgh is governed by a provost and 17 councillors, and in conjunction with the burghs of Ayr, Irvine, Inverary, and Oban, returns one member to the Imperial Parliament.

Campbeltown was till 1700 a fishing village; but in that year it was created a royal burgh by William III. It then stood entirely on the property of the Duke of Argyle, and principally on the south-western side of the harbour; but it has since extended round the head of the loch towards the north-eastern side. There are good quays on both sides of the harbour. The intercourse with the mainland has been much increased by steam navigation. The vessels registered as belonging to the port on December 31st 1852 were—21 sailing vessels of 1252 tons, and 2 steam vessels of 259 tons. The vessels entered at the port during 1852 were—Coasting trade, inwards, 751 of 21,356 tons; outwards, 341 of 8645 tons; steam vessels, inwards, 342, tonnage 44,619; outwards, 339, tonnage 43,954. Foreign trade, one British vessel, inwards, tonnage 156.

There are many distilleries in Campbeltown and in the neighbourhood. The principal imports are barley from Ireland, and coals from Glasgow and Ayrshire. The principal exports are highland cattle and sheep, berrings, and whiskey. Fishing is a considerable branch of industry in Campbeltown and its neighbourhood. There is a weekly corn-market. In the parish, and about three miles from the town, coal of inferior quality has been found. There is a canal to facilitate its transport to Campbeltown. Besides the two parish churches, which are collegiate churches, and in one of which the service is in Gaelic, Campbeltown contains chapels for the Free Church and other Presbyterian Dissenters, an Episcopal chapel, and a chapel for Roman Catholics. The town-house is a spacious building with a spire. A weekly market is held on Thursday for the sale of grain and other agricultural produce. In the centre of the chief street of the burgh is an ancient granite cross, elaborately sculptured. It is said to have been brought from Iona. The parish contains the ruins of two chapels, around which are small burying grounds. On the coast are the remains of what have been considered Danish forts.

CAMPBELTOWN. [VAN DIEMEN'S LAND.]

CAMPDEN, CHIPPING. [GLOUCESTERSHIRE.]

CAMPEACHY, a town in Yucatan which forms part of the Mexican Republic, is situated in 20° 0' N. lat., 90° 30' W. long., on the west coast of the peninsula of Yucatan, on that portion of the Gulf of

Mexico which is sometimes called the Bay of Campeachy, but more appropriately the Bay of Vera Cruz. The smaller and open bay, about the centre of which the town is built, is properly the Bay of Campeachy. The town contains about 15,000 inhabitants, though some estimates make it 30,000, probably including the suburbs. The houses are constructed of stone, generally of one story only, and being whitewashed, though the windows are without glass, extending along the low flat shore, have a pleasing effect. The streets are rectangular throughout the city, and there are several good public buildings, including six churches, six convents, a handsome theatre used also occasionally for a ball-room, and a college. There is a museum containing a fine collection of shells, other objects of natural history, and numerous Yucatan antiquities, which was founded by two monks, the brothers Comacho. There is also an Alameda, or public walk, planted with double rows of orange-trees and furnished with seats. The town is fortified, but the fortifications were much damaged in 1841-2, when it was besieged unsuccessfully by the Mexicans on the revolt of Yucatan; they have however been completely repaired, and the bastions are mounted with heavy ordnance and mortars. There are some singular old caverns under the town. The harbour is formed by a jetty or mole. The exportations consist of logwood, or Campeachy-wood, cotton, and wax. The wood is cut in several places, especially on the banks of the Rio Champoton, south of the town; and the wax is got from the wild bees without stings, which are common in the country to the east. The country around is very picturesque, well wooded, and the climate is healthy and agreeable. There are many quintas or villas in the neighbourhood of the town, but the hovels of the poor native Indians are anything but agreeable objects.

CAMPLI. [ABRUZZO.]

CAMPO BASSO. [SANNIO.]

CAMPO FORMIO, a village 4 miles S.W. from Udine, in the Venetian province of Friuli, on the high road to Treviso and Venice. It is celebrated for the treaty of peace concluded here, 17th October 1797 between General Bonaparte, in the name of the French republic, and Count Cobentzel and General Meerfeld, the Austrian plenipotentiaries. By that treaty the emperor of Austria resigned Lombardy and Flanders, and received the Venetian States as a compensation. During the negotiations Bonaparte's headquarters were at Passeriano, a few miles from Campo Formio, near the banks of the Tagliamento.

CAMPSIE. [STIRLINGSHIRE.]

CAMPSIE HILLS, in Scotland, extend between the lower courses of the rivers Forth and Clyde, in a general direction from E.N.E. to S.S.W. They occupy the middle portion of the county of Stirling and the south-east part of that of Dumbarton. More than one-third of Stirlingshire is covered with the Campsie Hills and the valleys belonging to them, but only a small part of Dumbartonshire. The Campsie Hills are not connected with any mountain range of Scotland. To the south of them extends the plain, through the north portion of which the Forth and Clyde Canal runs; and at their western extremity they are separated from the hills of Renfrewshire, which terminate east of Port Glasgow, by the wide and deep bed of the Clyde. They are separated from the mountains skirting the banks of Loch Lomond on the west by the valley of the Leven. The mountains south-east of Ben Lomond are also detached from them. From Buchanan, near Loch Lomond, a plain with an average width of four or five miles extends to the banks of the Forth at Kippen. This plain in its highest parts is hardly more than 200 feet above the sea. Farther east the valley of the Forth divides the Campsie Hills from the high summits in Perthshire and the southern extremity of the Ochill Hills. The rock on which the castle of Dumbarton stands, close to the Clyde, is the south-western extremity of the range; the rock of Stirling Castle is its north-eastern extremity. At nearly an equal distance from both these rocks are the Campsie Fells, the highest portion of the system, which rise to more than 1500 feet above the sea. In these hills the sources of the Carron, the Endrick, and the Glazert are interlocked. From this point the Campsie Fells branch off west and east, and continue about 12 miles in each direction, ending on the west near Killearn. On the east the range divides into two ridges, which inclose the valley of the Carron, till both terminate somewhat more than a mile above Denny. The southern ridge is the higher, and rises in some points to 1350 feet; the northern, which is much lower, separates the valley of the Carron from the hills about the sources of the Bannockburn. From the point where the sources of the Endrick and Carron are interlocked, a ridge branches off in a north-easterly direction, and continues to the banks of the Forth, at Tonch, a distance of about 10 miles. At the source of the Glazert another ridge of high land called the Kirkpatrick Hills branches off in a north-easterly direction, and continues for four or five miles runs south-west, but then declines to the west, in which direction it continues for about 10 miles, till it terminates about a mile from the banks of the Leven, opposite Bonhill. These heights occupy a considerable space, sending off to the south and north offsets which advance southward to the road leading from Dumbarton to Glasgow, where Chapel Hill and Dulnotter Hill are situated. The descent of the Campsie Hills to the north is everywhere gentle, and often terminates in moors; on the south their declivity towards the plain is steep, and the streams are full of rapids and falls. Coal is found in some places.

CAMPUS MARTIUS. [ROME.]

CANAAN. [PALESTINE.]

CANADA, divided into Canada East, or Lower Canada, and Canada West, or Upper Canada, is the most important British settlement on the continent of America. Its southern extremity is Point Pelée, or South Foreland, which extends to the south of 42° N. lat. (near 82° 45' W. long.). No boundary having yet been fixed between Canada and the British possessions to the south and west of Hudson's Bay, it is impossible to assign its extent towards the north. It is however usual to consider all the countries north of the great lakes, which are drained by the rivers that fall into the St. Lawrence, as belonging to Canada; while those drained by the rivers falling into the Atlantic, or Hudson's Bay, are considered as portions of other divisions of the British possessions. Conformably to this notion, the most northern point of Canada lies between 52° and 53° N. lat., at some distance north of the Lake of Manicouagan, near 65° W. long. The most easterly point is Cape Gaspe south-west of the Island of Anticosti, 64° 15' W. long.; and the most western extremity may be considered to be Goose Lake, in 48° 5' N. lat., 90° 14' W. long.

Canada borders on the west, north, and for the most part also on the east, on other British territories, and in these directions its boundary-line is generally undetermined. The meridian of 67° 50' W. long. and the river Ristigouche divide it from the British colony of New Brunswick. On the south and partly on the east Canada is bounded by the United States of North America. The line of demarcation in this direction was ill-defined by the treaty of 1783, so that the frontiers respectively claimed by the British and the United States governments embraced between them a disputed territory of about 8000 square miles. By the treaty signed at Washington, August 9, 1842, the boundary between British North America and the United States was permanently defined on the east, and on the west as far as the Rocky Mountains. The eastern boundary commences at a point called the Monument, at the source of the river St. Croix, thence north following a line marked in 1816 and 1817 to its intersection with the river of St. John and to the middle of the channel of the river; thence to the mouth of the river St. Francis, along its channel and the lakes through which it flows, to the outlet of Lake Pohenagamook; thence south-westerly in a straight line to a point on the north-west branch of the river St. John—which point is to be 10 miles distant from the main branch of the St. John, but if the said point is found to be less than 7 miles from the nearest crest of the highlands which divide the rivers flowing into the St. Lawrence and the St. John, then the said point is to recede down the said north-west branch of the St. John to a point 7 miles from the crest—thence in a straight line to where the parallel of 46° 25' N. lat. intersects the south-west branch of the St. John; thence southerly to its source at Metgarrette Portage and along the highlands which divide the rivers falling into the St. Lawrence from those falling into the Atlantic to Hall's stream, and down the middle of it, until the line intersects the old line of boundary surveyed previously to the year 1774 at the 45th degree of N. lat., and thence west along that parallel to the St. Lawrence, or as it is here called the Catarqui. From this point the line is drawn along the course of the river, and through the lakes Ontario, Erie, Huron, and Superior, and the passages which unite these lakes to one another. By the treaty of 1842 the western boundary is altered at the entrance to Lake Superior so as to transfer to the United States the Island of St. George, or Sugar Island. The line is then carried through Lake Superior north of Isle Royale, along Pigeon River and Lakes Saisaginega, Cypress, Bois Blanc, La Croix, Little Vermillion, Namecan, and La Pluie to Chaudière Falls, thence to the north-western point of the Lake of the Woods (49° 22' 55" N. lat., and 95° 14' 38" W. long.), thence due south to its intersection with the 49th parallel of latitude and along the parallel to the Rocky Mountains. Previously to the treaty of 1783 the extent of Canada to the west was much more considerable than at present—extending as far south as the source of the Mississippi (47° 10' N. lat.), and from the source of this river west to the Rocky Mountains.

The average breadth of Canada from south to north is about 300 miles, and the length from Lake Superior to the Island of Anticosti about 1000 miles. This gives an area of about 300,000 square miles. Another statement gives Upper Canada about 90,000 square miles; Lower Canada, 205,863; and the St. Lawrence River with its estuary, 52,500—making the total surface 348,363 square miles. Nearly the whole of Canada is situated within the basin of the St. Lawrence River, both having one common boundary on the north; but on the south the basin of the St. Lawrence extends to a considerable distance into the United States of America, running from the western extremity of Lake Superior to the most southern point of Lake Michigan, by a line describing a curve towards the point where both lakes approach nearest each other. From the most southern point of Lake Michigan it runs east-south-east to the sources of the river Maumee, which empties itself into the western corner of Lake Erie: it then turns east-north-east towards Lake Erie, and runs parallel to it at an average distance of 15 to 25 miles. So far the elevated land forming the margin of the basin of the river seems to be from 1000 feet to 1200 feet above the level of the sea. At the eastern extremity of Lake Erie the range forming the boundary-line turns due east, and runs parallel to Lake Ontario: but here the distance from the lake

varies from 60 to 70 miles, and the average elevation of the country is estimated at rather more than 1400 feet above the sea. This range, which up to 75° W. long. continues in that direction, east of that meridian turns to the south and joins the Catskill Mountains on the banks of the Hudson (near 42° N. lat.). Between the north-eastern extremity of this ridge of high land and another ridge which begins near 74° W. long. and 43° N. lat. on the southern shores of Lake St. George, the edge of the basin of the St. Lawrence is not formed by a ridge, but by nearly a flat country, which is not more than 500 feet above the level of the sea. Through this break the Great Erie Canal in the state of New York has been cut. From the south corner of Lako St. George the edge of the St. Lawrence basin runs first north by east, but having approached to the distance of 70 miles from the banks of the river, it turns north-east, and runs parallel to its course up to 70° 20' W. long., where it follows the mountain ridge which extends from the origin of St. John's River northward till it approaches within 20 miles of the St. Lawrence. This distance it maintains on an average up to Cape Roziere, at the mouth of the wide ætuary of the river. The high land forming the edge of its basin east of Lake George is probably never less than 1500 feet above the level of tide-water.

The whole basin of the St. Lawrence is calculated by Darby to contain 537,000 square miles, of which }

The upper basin, or that of Lake Superior, contains	Sq. miles.
The middle basin, terminating at the great falls of the Niagara	90,000
The lower basin, to the mouth of the St. Lawrence	160,000
	287,000
	537,000

Of this area Lake Superior covers 43,000 square miles; Lake Huron 16,500, Lake Michigan 13,500, Lake Erie 10,900, Lake Ontario 12,600, and the river St. Lawrence with its wide ætuary 52,500 square miles, making in all 149,000 square miles.

According to this calculation the country drained by the efflux of the basin comprises 388,000 square miles, of which about 290,000 belong to Canada and 98,000 to the United States of America. The five great lakes extend from west to east over nearly 15½ degrees of longitude, with a difference of latitude of about 8½ degrees. Their contents amount to more than half of all the fresh water on the face of the globe.

Lake Superior, the true source of the St. Lawrence, is the greatest of all known fresh-water lakes. It is crescent-shaped, convex to the north, and terminating to the south-east and south-west in narrow points. It measures on a curved line drawn through the centre more than 400 miles in length; its extreme breadth is 175 miles, and its circumference, following the sinuosities of the coast, about 1740 miles. Its surface is 627 feet above the tide water in the Atlantic, and appears from various indications on the shores to have been 40 or 50 feet higher at some remote period. Its depth varies much, but is generally very great, and at its maximum is probably 1200 feet. When its surface is agitated by storms it resembles the ocean. It is subject to a considerable rise at the time of the spring-freshes, especially after a rigorous winter. The Thunder Mountain, one of that class of mountains which in some places approach near and form the margin of the lake, is a bleak rock about 1200 feet above the level of the lake, with a perpendicular face of its full height towards the west. It is, says Simpson, "one of the most appalling objects of the kind I have ever seen." The rivers which fall into Lake Superior are not long, but they amount to upwards of 50 of some size, and several are broad at their mouths. In general they are not navigable, or only for a short distance, as they descend in their short course from heights which are from 500 to 614 feet above the lake. The St. Louis, the most considerable of these tributaries, which enters at the extreme south-west angle, is the channel of communication with the Upper Mississippi; it rises 551 feet above the lake. Along the north shores of the lake the rocks are from 300 to 1500 feet high, and would render the navigation dangerous during a gale but for the numerous small islands near the entrance of inlets and bays, in which vessels find shelter. The country is dreary and almost without trees or vegetation; the climate is cold, and game and esculent plants exceedingly scarce. Along the south shore extends a low sandy beach, intersected with rocks of limestone rising 100 feet above the surface of the water. The navigation is dangerous in this part, owing to there being no bay on the whole extent of the coast. Islands only occur along the north shore and towards each extremity of the lake. The largest, called Isle Royale, is said to be 100 miles in length by 40 miles in breadth, but on most maps it has not half these dimensions. The waters accumulated in Lake Superior are carried off by a river issuing at its most eastern angle, called St. Mary's River or Strait. About 12 or 15 miles from the lake it forms the rapids of St. Mary, which are produced by a great mass of water forcing its way through a confined channel. The rapids are nearly 2 miles long, and have altogether a fall of 22½ feet perpendicular height. Canoes sometimes venture to descend the rapids, but generally avoid them by means of a portage about 2 miles long, which connects the navigable parts of the river. As far as the falls the river runs east, but below them it turns to the south-east, and dividing into several channels incloses

numerous islands, of which the most considerable are St. George or Sugar Island, St. Joseph, and Drummond; the island of St. Joseph belongs to Canada; the other two to the United States. This part of the river is navigable for boats and sailing vessels of 6 feet draught. Above the island of Drummond the river widens and soon enters Lake Huron after a course of above 40 miles, in which it falls 32 feet, the rapids included.

Lake Huron is only second to Lake Superior in extent, its greatest length in a curved line between St. Mary's Strait and its outlet being above 240 miles. From south to north it is 186 miles. Its extreme breadth, which lies nearly west-north-west and east-south-east, is about 220 miles; its circuit exceeds 1000 miles. The surface is 595 feet above high water in the Atlantic; the average depth is 1000 feet, but leads have been sunk 1800 feet off the inlet called Saginaw Bay without finding bottom. It is divided into two unequal portions by a series of islands called Manitoulin Islands, and by a peninsula called Cabot's Head. The Manitoulin Islands begin on the east of Drummond's Island in the very mouth of St. Mary's River, and extend east with an inclination to the south for 120 miles. They belong to Canada. One of them, Great Manitoulin, is upwards of 72 miles long, and varies in breadth from 3 to 23 miles, being singularly indented by inlets and coves, which give it a very irregular and broken outline. Its name is derived from the language of the Indians, who regard it as the dwelling of the Great Spirit, or 'Manitou.' It is settled exclusively by Indians. These islands are divided from Cape Hurd, the northern extremity of the peninsula of Cabot's Head, by a strait about 10 miles wide, which contains a few small rocky islands. Cabot's Head projects from the south shores of the lake, about 50 miles into the lake, with an average width of 12 miles. That portion of the lake which is thus separated from its main body is called Georgian Bay, and measures in length from the southern extremity of Nataswasaga Bay to St. Mary's Strait about 225 miles. Its south portion east of Cabot's Head has an average width of 50 miles, and lies south-south-east and north-north-west; but between the Manitoulin Islands and the north shores of the lake it does not exceed 7 or 8 miles, and sometimes contracts to 3 miles. At Nataswasaga Bay the shores are high, but the lake is free from rocks. Farther north the shores are much indented and fringed by a multitude of small islands and rocks. There is a small naval station at Penetanguishene, an excellent harbour near the head of the bay about 3 miles in length, narrow and landlocked by hills on both sides. The main body of Lake Huron contains very few islands, and is generally of great depth. The shores of Lake Huron opposite the Manitoulin Islands are elevated and broken, especially between 81° and 82° W. long., where there is a bold ridge of hills called Cloche Mountains extending about 40 miles along the coast, and exhibiting distinctly three or four elevated summits. From Cabot's Head to the outlet of the lake the shores are in general low, or of very moderate height. This is a dangerous part of the coast, having no shelter for large vessels from the violent westerly winds except the artificial harbour of Goderich. The western shores of the lake do not rise to a great height, and form nearly in the middle a deep and wide inlet—Saginaw Bay, which is 60 miles long by 20 miles wide. Among the rivers falling into Lake Huron three are remarkable—the Français, or French River, the outlet of Lake Nipissing; the Muskoka, the outlet of the lake of that name; and the Severn, which issues from Lake Simcoe. The Severn is not navigable. At its north-western extremity Lake Huron is united to Lake Michigan by the Strait of Machillimakinac, which is only 6 miles long and 8 miles wide. Lake Michigan is nearly 300 miles long, with an average width of 75 miles, and very deep. Its form is elliptical and regular, except a break in the west coast, which forms the Green Bay, and is said to extend 100 miles parallel to the lake, and another bay on the opposite side called Grand Traverse Bay. Its shores are everywhere of a moderate height. This lake is surrounded by the territories of the United States. Its level is lower than that of Lake Huron, and a current constantly sets into it from the latter.

The river St. Clair issues from the south point of Lake Huron, and runs 30 miles between moderately high banks till it expands into Lake St. Clair, which is about 30 miles in diameter and shallow, but has sufficient depth in its channel to admit steamboats and schooners; and the same is the case with the river St. Clair. The shores of the lake are low and level; and it receives from the east two considerable rivers, the Great Bear River or Creck and the Thames. Issuing from the south-west angle of Lake St. Clair the river is called Detroit. It first runs west, and then bends in a regular curve about due south to its influx into Lake Erie. Its length is 29 miles, and it is navigable for such vessels as are employed upon the lakes, being from 7 to 8 feet deep. At Amherstburg near its mouth is an excellent harbour. The banks of the river are moderately elevated. The fall between Lake Huron and Lake Erie is 30 feet.

Lake Erie is 265 miles long and 63½ miles broad at its centre: its circumference is computed at 653 miles; and its surface is 565 feet above the sea. It is the shallowest of all the great lakes, its average depth being 85 feet only, with a rocky bottom. The navigation on this lake has rapidly increased since the Great Erie Canal in the state of New York and the Welland Canal in Canada have been formed; but several circumstances combine to render it tedious and dangerous.

The chief of these is the very heavy ground swell which prevails in stormy weather in consequence of the shallowness of the waters. Several elongated points stretch from the north shore into the lake. The most conspicuous are Point Pelée or South Foreland, Point aux Pins or Landguard, Long Point or North Foreland, and Point Abino. The southern shores belonging to the United States are in general low, except between Cleveland and the mouth of the river Huron, where the cliffs rise almost perpendicularly nearly 60 feet above the water-level. This shore has some harbours for small vessels. There are several small islands scattered over the west end of the lake, only one of which, Point Pelée Island, is inhabited. These islands have also in some places good anchorage and shelter for small vessels; and on Cunningham's Island, which belongs to the United States, there is a fine harbour called Put-In Bay, which has 12 feet of water, and is well sheltered. The basin of this lake does not receive any great river except at its west and east extremities. At its west end it receives the Detroit and the Miami, which flow in the territories of the United States; and at its east end the Ouse or Grand River, whose mouth makes the best harbour on the north shore.

The waters of Lake Erie descend to Ontario by the Niagara River, which commences at the extreme north-east point of Lake Erie, and runs 33½ miles, measured along its course, in a general direction from south to north. Its breadth varies from half a mile to one mile and more. It divides several times into two branches, including some islands; of which the largest, Grand Island, belonging to New York, contains 11,200 acres. A little to the north-west of Grand Island is Navy Island, noted for having been taken possession of by the Canadian rebels under Dr. Mackenzie in 1837. Below Grand Island the river is above one mile wide, and turns to the west, in which direction it flows to the Great Falls, 3½ miles distant, and 20 miles from the beginning of the river. In this distance its waters fall 66 feet, of which they descend 51 feet in the space of the half mile immediately above the falls, so that the river is navigable to the village of Chippewa. The Great Falls are formed where the river suddenly turns to the north-north-east. Above them the banks of the river are very little elevated above the water's edge; but below the falls the current flows rapidly in a bed several hundred feet deep, and walled in on both sides by perpendicular rocks. The cataract consists of two falls, divided from each other by a small island called Goat Island. The fall on the American side is 162 feet high and 375 yards wide; that on the Canadian side, called from its shape the Horseshoe Fall, is 700 yards wide and 149 feet high. The face of Goat Island measures 330 yards. The whole breadth of the river at this point is 1405 yards, and the mass of water projected each minute over the precipice is estimated at 710,000 tons. Four miles lower down is a very strong eddy, called the Whirlpool; and 4 miles below it the river emerges from the rock-bound chasm, and flows in a deep and gentle current between banks of moderate elevation. As more than one-third of the Niagara is not navigable, the navigation of Erie and Ontario has been united by the Welland Canal.

Lake Ontario extends nearly west and east in an elliptical shape, measuring in length 172 miles, and in extreme width nearly 60 miles; its circuit is stated to be 467 miles; the depth varies from 18 feet to 300 feet, except in the centre, where it averages 3000 feet, but is said to be in some places beyond the reach of soundings. Its surface is 234 feet above the tide-water in the Atlantic. Its shores round the west end are of moderate height, they rise higher east of Toronto where they assume a lofty character, but subside gradually as they approach the peninsula of Prince Edward. The remainder of the Canada side up to the beginning of the river Cataragui is low, and in many places marshy. The southern shores are in general low or very little elevated; at the east end of the lake is a good harbour at Sackets. The Canadian shores have two excellent harbours for vessels of a middling size at Toronto and Kingston: the bays of Quinté and Burlington are also remarkable for extent and security. Two large rivers fall into the lake from the south, the Genesee and the Oswego or Onondaga; on the northern side the Trent falls into the Bay of Quinté. There are some small islands at the east extremity: the largest is Wolfe Island, opposite Kingston, at the efflux of the Cataragui or St. Lawrence, by which two channels are formed leading to the river; the northern channel is called the Kingston Channel, and the south the Carleton Channel.

The St. Lawrence issues from Lake Ontario by the two channels which surround Wolfe Island, but in this part and generally above Montreal it is called Cataragui. The part of the river immediately below Wolfe Island presents the appearance of a lake, and is studded with a multitude of small islands varying greatly in extent, shape, and appearance, whence it is called the Lake of the Thousand Islands. The number of these islands is 1602. About 40 miles from Lake Ontario the channel gradually becomes narrower and the current imperceptibly increases, but continues gentle 10 miles farther down to Prescott. Six miles below this place a series of rapids commences, which is almost uninterrupted to the head of Lake St. Francis, immediately below 45° N. lat. The greatest impediments to navigation occur between Johnston and Cornwall, where the river in 39 miles falls 75 feet, and very violent rapids are formed by the heavy volume

The lakes of St. Francis and St. Louis, which follow, are only

expansions of the river. St. Francis is 25 miles long by 5½ miles where widest; St. Louis, which is formed by the junction of the Ottawas or Ottawa River with the Cataragui, is 12 miles long and 6 miles broad at its greatest width. Between the two lakes lie the rapids of the Coteau, the Cedars, and the Cascades, at the last of which a sudden declivity in the bed of the river, obstructed by rocks in some places, and scooped into cavities in others, produces a most singular commotion. The waters precipitated with great velocity down the declivity are thrown up in spherical figures, and driven with the utmost violence back again upon the current. At the junction of the Ottawa and Lake St. Louis there are four considerable islands formed by the different channels of the river—Montreal, Isle Jesus, Bizarre, and Perrot. Montreal, the largest of them, is a beautiful island of a triangular shape, and contains the city of the same name. The surface of the island is nearly level, with the exception of a mountain (Coteau St. Pierre) and one or two hills of slight elevation, from which flow numerous streams and rivulets. Isle Jesus, separated from the north-west of Montreal by the Rivière des Prairies, is 21 miles long by 6 miles broad, and is level and admirably cultivated. Off its south-west end is Isle Bizarre, about 4 miles in length and nearly oval, well cleared and tenanted. Isle Perrot, 7 miles long by 3 miles broad, lies off the south-west end of Montreal; it is level, sandy, and not well cleared. The small islets De la Paix are annexed to the signiory of Isle Perrot, and serve for pasturages. The principal channel runs between the Island of Montreal and the south bank, first due east and afterwards nearly due north. Where it turns to the north there is a picturesque rapid called Sault St. Louis, which is very dangerous and almost impassable for boats and vessels, on account of the great rapidity of the current. A canal called Lachine has been cut through the south-east part of the Island of Montreal, which is rather more than 8 miles long, extending from the village of Upper Lachine to Montreal. The Sault St. Louis is the last considerable impediment in the navigation of the St. Lawrence. Some magnificent works have been constructed within the last 12 years for the purpose of improving the navigation between Lake Ontario and Montreal. The series of shorter rapids occurring in the first 33 miles below Prescott has been overcome by means of six locks and four short lateral cuts, measuring collectively 9¼ miles. The Cornwall Canal, terminating at the town of Cornwall, is 11¼ miles long, with a fall of 48 feet distributed through seven locks, and avoids the most violent rapids on the St. Lawrence. The Beauharnois Canal is situated on the south side of the river; it is 11¼ miles in length, has nine locks, and unites lakes St. Francis and St. Louis. These canals give 10 feet depth of water with a width of 80 feet at the bottom; the locks are 45 feet wide, 200 feet long, and give 9 feet depth of water. The Lachine Canal has been enlarged to the same dimensions. Through the new channels thus provided first class vessels run up from Montreal to Toronto and Hamilton, and through the Welland Canal to lakes Erie, St. Clair, and Huron.

Though Montreal is 580 miles from the Gulf of St. Lawrence, vessels of 600 tons get up to it with very little difficulty. Below Montreal the width of the river varies from 3 to 4 miles, till after receiving the river Richelieu at Sorel or William Henry it expands into Lake St. Peter, which is 25 miles long and above 9 miles wide. Groups of islands cover about 9 miles of its surface at its upper end; and farther down shoals stretch from both banks, which are low, for into the lake, so that only a narrow passage from 12 to 18 feet deep is left in the middle. About 10 miles from the lower end of this lake, the St. Lawrence is joined by the river St. Maurice, near the town of Three Rivers, where the tides are sometimes perceptible, though they are generally not much felt for several miles farther down. Three Rivers is 432 miles from the head of the island of Anticosti.

Richelieu Rapid, the last in the St. Lawrence, occurs 52 miles below Three Rivers. The bed of the river is here so much contracted and obstructed by rocks that it leaves only a very narrow channel, in which at ebb tide a rapid is formed that cannot be passed without great care. But when the ocean swell is at its height the rapid disappears, as the tides rise here from 15 to 20 feet. At Quebec, 180 miles below Montreal, the river is only 1314 yards wide, but the navigation is completely unobstructed; and just below the narrow channel lies a deep basin 4 miles wide, formed by the head of the island of Orleans, and serving as a harbour for the city. Below that island the St. Lawrence expands continually till it enters the Gulf. At the mouth of the river Saguenay it is 18 miles, and at Cape des Monts or Mont Pelée 25 miles across; but here the left bank trends suddenly almost north, so that at the Seven Islands the banks are 73 miles apart. The distance between Cape Rozier and Mingan settlement on the Labrador shore is very near 105 miles. This may be considered as the embouchure of the St. Lawrence. Its waters begin to be brackish 21 miles below Quebec and they are perfectly salt at Kamouraska, 75 miles lower down. Several islands occur in the lower and wider course of the river, of which the largest is the Island of Orleans, about 10 miles below Quebec, which is about 18 miles long, 5 miles wide, and well cultivated. At the mouth of the river is the large island of Anticosti.

If we consider Lake Superior as the true source of the St. Lawrence, the course of the river is between 600 and 700 miles shorter than that of the Mississippi.

That part of Canada to the north of the great lakes and the river St. Lawrence may be divided into three sections. The most western comprehends the country of Lake Superior and the north shores of Lake Huron, and is divided from that farther east by the range of mountains called La Cloche, which commence opposite the eastern extremity of Grand Manitoulin Island, and extend farther north than they have been explored. This part of Canada is very little known, and contains no European settlement except a few establishments for the fur-trade. It seems to be a table-land of considerable elevation, the surface of which is often slightly broken and covered with small hills, but in other parts spreads out in extensive levels. It is full of small lakes, and is traversed by a great number of small rivers; in some places it is covered with extensive swamps. It is generally well wooded. The middle section extends from the La Cloche Mountains east to the Ottawa, and comprehends all the countries west of that river, and also the peninsula which lies between the lakes Huron, Ontario, and Erie, and terminates at the rivers St. Clair and Detroit. It embraces consequently the whole settled part of Upper Canada and a very small portion of Lower Canada. The surface of this section comprises a table-land of a somewhat uneven surface, two extensive terraces, and a level plain. The table-land comprehends the northern half of this section; its southern edge is marked on the west by the rise in the country between lakes Simcoe and Muskoka. This acclivity continues eastward at a distance of about 20 miles S. of 45° N. lat., and may be considered as terminating a little east of the meridian of 77°. From the shores of the Georgian Bay the country rises rapidly to a considerable height; that portion of the table-land east of Lake Huron is 750 feet above the lake, and 1344 feet above the sea. This height may be considered about the average elevation of the table-land. Its surface is probably not very irregular, except towards the banks of the Ottawa, where it is broken by extensive valleys running parallel to the river, and considerably depressed below the surface of the table-land. About the middle of this elevated country is a depression which contains numerous lakes, united by two rivers, of which one called Nesswabic runs north and afterwards east, and joins the Ottawa; and the other, called Muskoka, runs first south and then west, and after having traversed the Trading Lake and Lake Muskoka, and formed several rapids, empties itself into the Georgian Bay. Towards the north-western boundary is Lake Nipissing, which is above 50 miles in diameter, and is 750 feet above the sea. From its southern extremity issues a river called the Français, or French River, which forms several rapids before it enters Lake Huron. As far as this table-land has been explored it appears to be generally covered with forests of hard wood, and to have a fertile soil. It is still entirely in possession of the native tribes, among which the Mississauga are the most numerous.

The Ottawa, which bounds this country on the east, issues from Lake Temiscaming, but its remotest branches rise nearly 100 miles beyond that lake. Its upper course is only visited by traders in fur and timber. The first European settlement is at Lake Allumettes, not far from the place where the Nesswabic enters the lake. In this part the Ottawa divides into two channels, inclosing between them Black River Island, which is about 15 miles long, with an average breadth of 4 miles. The upper course of this river consists only of a series of lakes, connected by short channels, which always exhibit rapids or falls. Farther down is the Grand Calumet Island, which is about 20 miles long and 7 miles in its greatest width. Both the channels which inclose it are full of rapids. At the Lake Des Chats the Ottawa is joined by the Madawaska, which descends from the table-land by a course of about 100 miles. Lake Chaudière is 18 miles long, with an extreme breadth of 5 miles; at the lower end of this lake commence the falls called Chaudières, or Kettles, from their form, the principal of which is 60 feet high. Below these falls near Hull is the mouth of the Gatineau River, which flows from the north-north-west through an immense valley of rich soil, and is navigable by canoes for more than 300 miles. From this point the Ottawa is navigable for steam-boats to Grenville, a distance of 60 miles: and in this part of its course the banks of the river, which so far are generally high, subside so much that the adjacent country is inundated in spring and autumn for more than a mile. At Grenville is the rapid called Long Sault. At Point Fortne the Ottawa gradually begins to expand into the Lake Two Mountains, which discharges itself by the rapid of St. Anne's into the St. Lawrence where it forms the Lake St. Louis above Montreal. To avoid the rapids the Grenville Canal has been constructed on the north bank between the town of Grenville and the Lake of the Two Mountains. Thus the Ottawa is navigable up to Bytown and the Chaudière Falls, a distance of above 100 miles. The course of the Ottawa from Lake Temiscaming to Lake Two Mountains is about 350 miles. The country bounded by the lower course of the Ottawa and the Catarqui rises with gentle acclivities in the form of terraces from the banks of both rivers. In the eastern districts the highest land extends at no great distance from the Catarqui; but north of the Lake of the Thousand Islands it turns to the west, and continues in that direction till it joins the table-land near 77° W. long. This ridge is probably not more than 700 feet above the sea: it is lowest at its western extremity, where it occupies a greater space and incloses a number of lakes, the greatest of which are the Rideau and Mississippi lakes. Some portions of his

country are marshy, but in general the soil is fertile, and agriculture is rapidly advancing. The comparatively small elevation of the western districts has suggested the formation of a canal between Lake Ontario and the Ottawa. This grand work is called the Rideau Canal from the lake of that name, which it enters at the south and quits at the northern extremity. The canal is 135 miles long, beginning at Kingston on the shores of Lake Ontario, and terminating at the foot of the Chaudière Falls. Lake Rideau, which is about 24 miles long and 6 miles wide on an average, is the summit-level of the canal, from which it descends 283 feet to the Ottawa River, and 154 feet to Lake Ontario. On the north side of Rideau Lake are 30 locks, and on the south side 17 locks. The locks are 142 feet in length, 33 feet in width, the depth of water being 5 feet, so that vessels under 125 tons can navigate the canal.

The country between the table-land and Lake Ontario forms two distinct terraces, which extend from east to west. They are divided from each other by a ridge of hills, which begin between 77° and 78° W. long., near the west end of the Bay of Quinté, about 8 or 9 miles from the shores of Lake Ontario, and run west nearly in a straight line, under the parallel of 44° N. As they proceed farther west they are farther from the lake, so that opposite the town of Toronto the plain along the shores of the lake is 24 miles wide, and where the ridge terminates, near 80° W. long., it is still wider. Between this ridge and the south edge of the table-land is the upper terrace, which is much larger. At the eastern extremity it extends to the shores of the Bay of Quinté, and farther west the southern range remains always about 50 miles distant from the south edge of the table-land; its length is about 150 miles. Both terraces are divided from the low plain, which extends farther west between the lakes of Huron and Erie by a ridge of hills which begins on the north on the shores of Natasawaga Bay, and runs south to the west end of Lake Ontario, where it forms the Burlington Heights, and continues along the shores of Burlington Bay and the south side of Lake Ontario, at a distance not exceeding from 4 to 8 miles. Near Queenstown it reaches the Niagara River, where it forms the Great Falls. It continues in an easterly direction through the state of New York to Lockport, where it is about 12 miles from Lake Erie. It afterwards crosses the Great Erie Canal, runs parallel to it, and subsides at Rochester, on the Genesee River.

The northern and larger of the terraces seems to rise gradually from east to west. In its western district is Lake Simcoe, whose surface covers 300 square miles, and is at least 100 feet above Lake Huron and 468 feet above Lake Ontario. From its north shore issues a considerable river called the Severn, which empties itself into an inlet of Lake Huron, called Gloucester Bay. Barrie, the thriving chief town of the Simcoe district, stands at the head of Kempenfeldt Bay, a large inlet of Lake Simcoe, on its north-west side. Balsam Lake, farther to the east, may be considered as the source of the river Trent, which running east unites the lakes Sturgeon, Pigeon, Shemong, Slubauticon, and Trout, all of which lie on the northern border of the terrace, and extend several miles from south to north. Issuing from Trout Lake the river runs with many windings south, and reaches Rice Lake by a bold bend to the east. This lake, which is 25 miles long, and from 4 to 5 miles wide, lies south-west and north-east, and only 15 miles from Lake Ontario. The Trent leaves the lake at its north-eastern extremity and continues in that direction for about 30 miles, when it turns east, soon afterwards south-west, then east, and afterwards south, till it falls into the Bay of Quinté. The Bay of Quinté is only a long, irregular, and winding lake, divided from Ontario by the peninsula of Prince Edward. Its length measured along its windings is near 50 miles, and its breadth varies from 6 to 12 miles. The isthmus which connects the peninsula of Prince Edward with the continent is, at its western extremity, only three furlongs wide. The peninsula is indented on every side by small bays and coves, offering anchorage and shelter for such vessels as navigate the lakes.

Of the upper terrace the soil, so far as it is known, is fertile, and it contains few sterile tracts except swamps. It is covered with valuable timber. Iron ore is abundant. European settlements are fast increasing. The southern terrace, which terminates in rather a high shore on Lake Ontario, and extends between the peninsula of Prince Edward and Darlington, is generally level and very fertile, with the exception of a sandy plain between Ontario and Rice Lake; west of Darlington the soil along the lake is of an inferior quality.

The plain of Upper Canada comprehends the peninsula which extends between the lakes Erie and Huron, nearly in the form of an equilateral triangle, whose base is formed by a line drawn from Fort Erie, on the inlet of the river Niagara, to Cape Hurd, the north extremity of Cabot's Head, a distance of 216 miles. Another line, cutting it at a right angle and striking Detroit River at Amherstburg, is about 195 miles long. All this tract, which contains about 20,000 square miles, is level, or slightly undulating, except on its east side, where it borders on the hills which separate it from the terraces. About the sources of the Thames indeed it appears to contain some rising ground, the upper plain of which is a kind of swamp or moor. The whole tract is an alluvial soil of great fertility, containing neither stones nor gravel. Most of it is covered with large forests of maple, beech, oak, basswood, ash, elm, hickory, walnut, butternut, chestnut, cherry, birch, cedar, and pine. In the midst of these woods, and some-

times on the banks of the rivers, there are prairies or natural meadows of no great extent, generally covering only a few thousand acres, and containing on them small clumps of lofty pines, white oak and poplar, scattered here and there. The largest of these prairies are in the neighbourhood of Long Point and the rivers Thames and Ouse. The largest river of this plain is the *Thames*, whose sources are in the great swamp which occupies the centre of the country. Its upper course is north and south as far as London, whence its general direction is south-west. It discharges itself into Lake St. Clair, after a winding course of nearly 150 miles. It is navigable for vessels as far as Chatham, 15 miles from its mouth, and for boats nearly to its source; but it has a bar at its entrance. The *Ouse*, or *Grand River*, rises in the hills south of Natarawaug Bay, about 30 miles from it, and runs with a very winding course, first about 75 or 80 miles south, and then nearly the same distance south-east, till it falls into Lake Erie at Sherbrooke. It has more water than the Thames, and is 900 yards wide at its mouth, but the bar across its entrance has only eight feet of water on it. Nevertheless it forms one of the best harbours on the north shore of Lake Erie. The river is navigable about 25 miles from its mouth for schooners, and considerably farther up for large boats. The *Welland*, or *Chippeway*, which rises between the west end of Lake Ontario and the banks of the Ouse, runs east and falls into the river Niagara nearly three miles above the Great Falls. For more than 25 miles from its mouth its depth varies between 9 and 15 feet. It has given its name to the canal which unites the lakes Erie and Ontario. The Welland Canal was formerly navigable only by vessels not exceeding 125 tons. It has of late years been reconstructed so as to give passage to vessels 140 feet long by 26 feet 4 inches beam, and of about 450 tons burden. The aqueduct which carries the canal over the river Welland is an extensive stone structure.

We have now to describe the third great section of Canada north of the St. Lawrence, or that which extends from the Ottawa to the Atlantic, and comprehends the greater part of Lower Canada. About 30 miles below Quebec is Cape Torment, in the neighbourhood of which a mountain rises to the height of 1890 feet above the sea. A line drawn from this point at right angles to the river divides the northern countries into two portions, which are different in features and character. Between the mouth of the Ottawa and Cape Torment the banks of the St. Lawrence are low, or of very moderate elevation, as far as Richelieu Rapid, 52 miles below Three Rivers; but from this point they begin to rise and assume a bold character, which continues increasing to Cape Diamond, on which Quebec stands, and still more towards Cape Torment. Where the banks are low the adjacent country from 5 to 15 miles inland is level, or rises gradually to slightly elevated terraces. Beyond this level the country rises in moderate hills with gentle slopes. The range of hills in the background begins on the banks of the Ottawa near Grenville, and runs nearly parallel to the St. Lawrence in a north-east direction. In the parallel of Quebec it turns east, and covers the country about that town with numerous hills which are divided from one another by fine valleys. The country has thus a different aspect in those districts where the banks of the river begin to be high and bold. The soil of this tract along the river is generally good. The country behind the range of mountains has only been explored along the course of a few rivers. It appears to contain very few tracts fit for agriculture in the narrow river valleys. The intervening spaces are occupied by ranges of high and bare rocks which contain numerous small lakes and swamps. The larger rivers have their origin to the west of the mountain range, break through it, and fall into the St. Lawrence. Those which join it to the south of the Richelieu Rapid are navigable for 20 miles and upwards from their mouth, but are obstructed by rapids and cataracts higher up. The rivers which discharge themselves into the St. Lawrence north of Richelieu Rapid are for the most part too rapid to be navigated; they are used in the spring to float down the timber to the mills situated near their mouth. The largest of these rivers is the St. Maurice, whose upper branches rise far in the interior behind the mountain ranges. They are three in number, and each of them passes through a considerable number of large lakes. They unite near 48° N. lat., from which point the river runs in a south-east direction with numerous bends to its mouth near Three Rivers, a course of above 150 miles. It is navigable for boats to La Thèze, about 100 miles from its mouth, but there are some rapids which must be avoided by short portages. The country extending north-east from Cape Torment is almost entirely unknown, except the valley of the river Saguenay. The coast has a forbidding appearance. From Cape Torment the ridge continues unbroken, except by the beds of rivers and rivulets, until it lowers 15 or 18 miles below the mouth of the Saguenay. It rises from the water-edge with a steep ascent to an average height of 300 or 400 feet, but in some places of 2000 feet. Farther down it subsides in approaching the Bergeronnes, and sinks to a moderate elevation at Pontneuf, about 40 miles below the mouth of the Saguenay. But towards Pointe des Monts the banks rise again, and continue at a great elevation to the boundary of Labrador. The interior is described by the natives as consisting of rocky cliffs and rugged hills of inconsiderable elevation dispersed over barren plains, and with thick forests studded with crooked and stunted pines, birch, fir, and cedar. Small lakes and swamps abound over the whole tract. The

Saguenay issues from Lake St. John, which covers about 540 square miles and receives several large rivers, of which the Wintehuan and the Assnapmoussin are the most considerable; but their course is very imperfectly known. Around Lake St. John are some tracts of cultivable land. Two rivers issue from the east part of the lake, called the Grande and Petite Discharge, and unite after a course of about 40 or 50 miles, forming an island 33 miles long with an average breadth of 17 miles. After their junction the river is called Saguenay, and runs nearly 100 miles to its mouth near Tadoussac. For about half the distance the banks are rich and fertile, but in the lower half they are formed of rocks rising from 200 to 1000 feet in height. The current of the Saguenay is very quick, though its depth is great; it is navigable for vessels of any size for about 70 miles to Ha-Ha Bay, which is a good harbour. The tide ascends to the union of the two Discharges, and rises about 15 feet. A mass of turbid water brought down by this river darkens the stream of the St. Lawrence for many miles.

In the south section of Lower Canada there is a mountain range at the sources of the Connecticut River, on the boundary-line between Canada and the United States, which runs east-north-east to the origin of the St. John River, and thence nearly due north till it approaches within about 20 miles of the St. Lawrence River. It then turns north-east, and continues in that direction parallel to the river, its rocky heights often advancing to the very edge of the water. By this mountain range, which terminates in capes Roziere and Gaspé, the country is divided into three regions, one lying to the west of the mountain range which runs north, the second forming the narrow tract along the St. Lawrence, and the third comprehending a small part of the basin of the St. John River. The western districts of the first region form an almost level plain, on which, at considerable distances, a few isolated mountains rise abruptly above the surface. The summit of Rouville Hill is 1100 feet above the level of the St. Lawrence. This flat country extends almost to the river St. Francis; but towards the south the surface becomes progressively hilly, till it assumes a mountainous character towards the lakes of Memphramagog and St. Francis. The banks of the St. Lawrence are low, and partly marshy, especially on the shores of Lake St. Peter; but lower down they gradually begin to rise, and at the mouth of the Chaudière they are high and bold, and continue so to Point Levy, opposite Quebec. The western level districts have the best soil in Lower Canada, from which wheat is exported to Great Britain. This is probably the most populous and best cultivated part of Canada. Between the St. Francis and the Chaudière the soil varies very much in fertility, and large portions of it are still covered with forests.

The *Chambly*, also called *Richelieu*, *St. John*, *St. Louis*, and *Sorel*, the largest of the rivers of Lower Canada which fall into the St. Lawrence from the south, rises in Lake George, in New York state, which lake is united by a short passage to Lake Champlain. Issuing from Lake Champlain, the Chambly is a wide river, but it grows gradually narrower as it proceeds north, so that at its mouth it is only 250 yards broad, while near Lake Champlain its width exceeds 1000 yards. The upper course is rather violent, and at some places broken by rapids; lower down its current is regular and gentle. It is navigable for decked vessels 12 or 14 miles from its mouth, and to Lake Champlain for boats and canoes. From St. John there is a ship navigation to the towns on Lake Champlain. By this river the produce of part of the state of New York contiguous to Lake Champlain is brought to Montreal. At the mouth is the town of William Henry, or Sorel. The course of the Chambly in Canada is above 70 miles. The *St. Francis* rises in the lake of St. Francis, which is about 18 or 20 miles long, and very irregular in breadth. The river issues from its west side, and runs about 30 miles south-west, where it turns to the north-west, and soon afterwards uniting with the river Magog, flowing from Lake Memphramagog, it continues its course north-west to its junction with the St. Lawrence, a distance of about 70 miles. The numerous rapids and falls render the navigation of this river difficult and laborious; yet the trade upon it is considerable. The *Chaudière* rises in the lake of Megantic, north-east of the sources of the Connecticut, and flows about half of its course north and the other half north-north-west. It is not navigable, owing to the rapids and falls following one another in quick succession. About four miles from its mouth are the Chaudière Falls, which are 130 feet high, the breadth of the river not being more than a few yards. Few falls can be compared with these for picturesque beauty. The course of the river is more than 100 miles. The country along the St. Lawrence, below the mouth of the Chaudière, rises from the banks of the river in irregular ridges, with generally a steep ascent, and attains a considerable elevation at the distance of 10, 15, and 20 miles from the river. It then forms a sort of table-land, which descends gently towards the river St. John. East of Point Levy the banks soon begin to lower, and for some extent are of moderate elevation. At St. Anne they rise into isolated cliffs of considerable height, and continue so to Kamouraska and St. Andrew's. Farther down there is, close to the river, a steep ascent, varying between 150 and 200 feet; and this elevation is still considerably increased opposite Bio Island. From this part to Cape Roziere it maintains nearly the same height and character, except at a few places where the rivers descend from the mountains. A very small part of this country is fit for cultivation, and the population is

inconsiderable. The peninsula of Gaspé, extending between the mouth of the St. Lawrence and the Bay of Chaleurs, contains an elevated valley, skirted by two ranges of high hills, which extend at a short distance from the St. Lawrence and the Ristigouche rivers and the Bay of Chaleurs. In the valley is a series of lakes, which send out rivers that cut the ranges and fall into the St. Lawrence or the Bay of Chaleurs. The settlements are few, and situated along the Bay of Chaleurs, the banks of the St. Lawrence being nearly uninhabited.

That portion of Lower Canada which is drained by the St. John and its tributaries, is in its lowest parts probably several hundred feet above the level of the sea. The *St. John* River has three upper branches, which lie between 46° and 47° N. lat., and west of 70° W. long., and all unite near that meridian. The *St. John*, or, as it is here called, the *Walloostock*, runs for a great distance north-east through the state of Maine, parallel to the St. Lawrence, and between 30 and 40 miles from it. By degrees it declines to the east, and is here joined by three large rivers, the Allagash running from the south, and the St. Francis and the Madawaska both descending from the north. After its confluence with the Madawaska it turns to the south-east, and forms part of the boundary of the province until it enters the British colony of New Brunswick, through which it runs in a southern direction for more than 80 miles. Having passed to the south of 46°, it again turns to the east, and flows 80 miles in that direction, when it again turns south, and after a course of about 60 miles falls into Fundy Bay with a wide estuary. Its course within New Brunswick is above 230 miles; from the frontier of that province to its junction with the St. Francis is about 70 miles, and thence to its source about 100 miles. Though descending from an elevated country, this river is more navigable than the others which drain Canada, the lower course of the St. Lawrence excepted. The upper part of its course, though not very deep, and in many parts rapid, is not broken by falls or rapids. Near the mouth of the Madawaska are the Little Falls, and at its entrance into New Brunswick the Great Falls, which are 75 feet in perpendicular height. Between these the navigation is practicable for steam-boats. Below the Great Falls some rapids occur, but they do not appear to be so strong as to interrupt navigation. Vessels of from 50 to 100 tons ascend to Fredericton, about 100 miles from the mouth.

Geology.—The geological character of Canada, so far as it has been ascertained, is in general granitic, with sandstone and calcareous rocks, the latter of a soft texture, disposed in horizontal strata. The banks of the St. Lawrence are in many places formed of a schistous substance in a decaying state; but still granite is everywhere found and always in strata more or less inclined. Cape Torment, 30 miles below Quebec, is a round, massive, granite mountain, about 1000 feet high, and the north shore of the river eastward of that point is generally of the primitive formations. Except in the marshes and swamps, rocks obtrude over all parts of the surface. In many places there occur deep fissures from six inches to two feet wide; the Indians describe some of these rents as several miles long, and 40 or 50 feet deep; when covered with the thick underwood they are at times very dangerous to the traveller. Intense frost may have occasioned these chasms; but the more received opinion attributes them to some great subterranean action, such as the tremendous earthquake recorded in a manuscript in the Jesuits' College at Quebec. The first shock occurred on the 5th of February 1663, and raged with great violence for fifteen minutes, extending simultaneously over 180,000 square miles of country. It continued afterwards to be felt for nearly six months almost without intermission. In the neighbourhood of Quebec a reddish or dark gray slate generally appears, and it forms the bed of the St. Lawrence and of Lake Ontario as far as Niagara. Boulders of granite, limestone, sandstone, syenite trap, and marble occur throughout the same extensive region. The strata laid bare in the chasm at the falls of Niagara are limestone, next slate, and lowest sandstone. The upper and lowermost of these strata compose the secondary formations of a large portion of Canada, and of nearly all the vast territory in the United States which is drained by the Mississippi. Slate is often interposed between them as at Niagara. It is there nearly 40 feet thick, fragile like shale, and crumbling away from beneath the limestone, so as to afford strong ground for the opinion that there has been for many ages a continual retrocession of the Great Falls. The islands and the level shores of Lake Huron are a calcareous region abounding in organic remains. Part of the northern and eastern shores of Lake Superior present old formations—syenite, stratified greenstone, alternating five times with vast beds of granite. Great quantities of the older shell-limestone are strewn in rolled masses on the beach. Amygdaloid occupies also a very large tract to the north, mingled with porphyries, conglomerates, and other substances. From Thunder Mountain westward trappose-greenstone is the prevailing rock; it forms some strange pilastered precipices near Fort William.

Minerals.—The mineral resources of Canada are immense, but till very recently they have been almost wholly neglected. Marbles and serpentine are quite common. Plumbago, ores of antimony, lead, iron, and copper are frequently met with. The mountains north of the Saguenay abound in iron to such an extent as to influence the mariner's compass. The iron mines of St. Maurice have long been

celebrated for the excellence of their yield, and metal not at all inferior is cheaply produced at Charlotteville near Lake Erie, and at the Marmora works about 32 miles north of the Bay of Quinté. The dreary wastes northward of Lake Superior contain stores of copper, perhaps unsurpassed anywhere in the world. At the Coppermine River 300 miles from the Sault de St. Marie the metal occurs in great masses in a pure state. Gold, silver, and tin have also been discovered in the same region. The northern and western shores of Ontario abound in salt springs, some of which (Stony Creek and St. Catherine's) are very productive. The north shore of Lake Erie exhibits immense beds of gypsum which are quarried for agricultural purposes.

Soil, Agriculture, &c.—The soil of Canada is generally good, as that made by the decay of forests for thousands of years upon substrata chiefly formed of the deposit from waters, must necessarily be. It is extremely fertile; in some districts wheat has been raised for 20 years successively on the same ground without manure. The grains cultivated in Canada are wheat, barley, rye, oats, buckwheat, and maize. Wheat is the staple of western Canada, and it bears a higher price than any other in the markets of Montreal and Quebec. The potato crops are superior, and all the vegetables of the temperate regions of the Old World grow with great luxuriance. All the European fruits, and some even of the tropical, are produced abundantly in this province, owing to the richness of its soil and the great heat of the summer. Tobacco grows well in the western regions. Hemp and flax are both indigenous. The variety of trees found in the vast Canadian forests is astonishing, and it is supposed that many kinds still remain unknown. Of all these none is more beautiful and useful than the maple, the adopted emblem of Canadian nationality. Its timber is valuable for many purposes, and large quantities of excellent sugar are made from its sap. The other forest trees most prevalent are beech, birch, elm, bass, ash, oak, pine, hickory, butternut, balsam, hazel, hemlock, cherry, cedar, cypress, fir, poplar, sycamore, white-wood, willow, and spruce. Timber and ashes, the raw produce of the forests, constitute the chief exports of the province. An immense quantity of oak and pine is annually sent down to Montreal and Quebec. The American ashes contain a larger proportion of pure potash than those of Dantzic or Russia.

Zoology.—The wild animals of Canada are deer, moose-deer, bears, wolves, wolverines, four species of the cat kind—namely, the cougar, the loup-cervier, the catamount, and the manguay or lynx—foxes, hares, squirrels, &c. The larger beasts of the forest are fast disappearing before the progress of civilisation; of the smaller ones many kinds still remain in diminished numbers. The beaver is now seldom found within reach of the white settlements.

The birds of Canada differ little from those of the same name in Europe. The only noxious reptiles are the puffadder, and two species of rattlesnakes; and these are rarely seen in the older settlements. The Canadian waters abound in fish of almost every variety known in England, and others peculiar to the country. Sturgeon of 100 lbs. weight are frequently taken, and a giant species of pike, called the maskenongi, of more than 60 lbs. The trout of the upper lakes attain the weight of 80 lbs. or 90 lbs. A fresh-water herring is found in great shoals in the lower lakes, but is inferior in delicacy to the corresponding species of the salt seas. Salmon are numerous in Ontario, but are never seen above the Falls of Niagara.

Climate.—The extreme range of temperature throughout all Canada is from 36° below to 120° above zero of Fahrenheit's scale; that is to say, from a point two degrees above that at which mercury freezes to a tropical summer heat. The more inhabited parts of the province lie between 42° and 48° N. lat., and their lowest temperature is scarcely under 25°. But healthful and even agreeable as it is on the whole, the Canadian climate everywhere exhibits extremes of heat and cold far exceeding those incident to European countries under the same parallels. Its hygrometric condition is much more constant. Fogs are almost unknown except in the peninsula of Gaspé, and such is the dryness of the air that metals exposed to it are seldom rusted. This remarkable peculiarity of a region so abounding in water, greatly mitigates the effects of both extremes of temperature on the human frame; and the cold of winter is moreover tempered in its action thereon by the usual absence of wind during the greatest intensity of the frost. The prevailing winds are from south-west, north-east, and north-west. The south-west is the most frequent; it is generally moderate and accompanied by clear skies. Thunder storms are frequent, and often cause great damage. The aurora borealis is often seen and has a much greater brilliancy than in Europe. Water-spouts are sometimes formed on the great lakes.

Circumstances of position and local configuration occasion corresponding varieties of climate in Canada. In the eastern division of the province the fall of snow begins in November and is completed by the end of December, when there ensues perfectly calm frosty weather, with a beautiful clear blue sky. By the first or second week of May the snow has all disappeared, summer is fully established, and the vegetation which had been in active progress for a month or more under the snow breaks forth in profuse luxuriance. The climate of Canada West is milder and more equable than that of the eastern division, which along with the humidity of the atmosphere arising from the extensive surface of water presented by the great lakes, makes the climate particularly favourable for the cultivation of

wheat and other cereals. In Canada West out-door work may be prosecuted at all seasons, but in Canada East this is occasionally rendered impracticable by the severity of the cold. The duration of winter is less by six or eight weeks in some parts westward than in Montreal. The earth in Canada West is seldom frozen more than 12 or 18 inches deep, and the covering of snow is generally not more than a foot and a half or two feet thick. The maximum heat of summer seldom exceeds 85°, and it is generally tempered by pleasant breezes from the lakes. From observations made in her Majesty's observatory at Toronto, it appeared that the highest mean maximum was in the month of July, when it reached 88°11', and the lowest mean minimum was in the month of December, when it stood at 35°2'. The annual mean was 44°39'. The observations extended over eleven years, 1840-50.

The great lakes are never icebound in their centres. The St. Lawrence is frozen over every winter from Montreal to the Richelieu Rapids, but from thence to Quebec only once in about five years. The steamboats on the St. Lawrence and Lake Ontario seldom cease running till near Christmas, and from Toronto to Niagara they generally continue to run through the whole winter. The navigation is entirely re-opened by the first or second week in May.

Canada West is settled for the most part by emigrants and the descendants of emigrants from Great Britain and Ireland, the Irish having rather a majority. In some localities there are large settlements of Pennsylvanian Germans. Canada East is inhabited principally by the descendants of the old French settlers, with the exception of Quebec and Montreal, where there are large trading populations of British origin, and the eastern townships which the British American Land Company have for some time been engaged in settling with British emigrants. The Indians in Canada belong to two nations, the Chippeways or Ojibbeways, and the Mohawks or Iroquois. The former are dispersed over the countries bordering on lakes Superior and Huron, the latter along those bordering the St. Lawrence and between lakes Ontario, Erie, and Huron. A few of them have settled in villages and embraced Christianity; the rest are hunters without fixed abode. Their numbers hardly amount at the largest estimate to 16,000, and are continually decreasing especially in the neighbourhood of the white settlements. The Canadians of French origin have preserved their native language, but they generally speak it incorrectly, and with some intermixture of English words. They are Roman Catholics; they have their own peculiar code of laws—that, namely, which was in use in the times of the ancient French monarchy, and is called 'Coutumes de Paris;' and lastly, they hold their lands by an antiquated feudal tenure that acts as an effectual bar to all improvement. The nature of this tenure will be explained hereafter. The Ottawa River to about 20 miles from its confluence with the St. Lawrence, forms the boundary between the two main divisions of the province.

LOWER CANADA, or CANADA EAST, is divided into 36 counties, the names of which we give here with the population of each in 1851:—Beauharnois, 40,213; Bellechasse, 17,982; Berthier, 34,608; Bonaventure, 10,844; Chambly, 20,576; Champlain, 13,896; Dorchester, 43,105; Drummond, 16,562; Gaspé, 10,904; Huntingdon, 40,645; Kamouraska, 20,396; Leinster, 29,690; L'Islet, 19,641; Lotbinière, 16,567; Mégantic, 13,835; Missisquoi, 13,484; Montmorency, 9598; Montreal, 77,381; Nicolet, 19,657; Ottawa, 22,993; Portneuf, 19,366; Quebec, 61,526; Richelieu, 25,636; Rouville, 27,081; Rimouski, 26,882; Saguenay, 20,783; St. Maurice, 27,562; St. Hyacinthe, 30,623; Sherbrooke, 20,914; Shefford, 16,482; Stanstead, 13,898; Terrebonne, 26,791; Two Mountains, 30,470; Veauceuil, 21,429; Verchères, 14,393; Yamaska, 14,748;—total population of Canada East, 890,261.

In Canada East are Montreal, which was selected at first as the capital of the united province, and Quebec. [MONTREAL; QUEBEC.] The other towns are Three Rivers, St. Hyacinthe, Sherbrooke, and Sorel. *Three Rivers* is prettily situated at the confluence of the St. Maurice with the St. Lawrence, and has a population of 4936. There are iron mines near the town. There is a considerable trade in pot- and pearl-ashes. *Three Rivers* is one of the depôts of the north-west traders, and is on the whole a place of some importance in a commercial point of view. *St. Hyacinthe*, population 3313, in St. Hyacinthe county, is situated on the left bank of the Yamaska River, about 80 miles E. by N. from Montreal. It is the seat of a college. *Sherbrooke*, population 2998, the district town of the eastern townships, is situated at the junction of the Magog with the St. Francis River. Its extensive command of water-power gives it great facilities for manufactures. The chief public building here is the court-house and jail. *Sorel*, or *William Henry*, population 3424, at the confluence of the Richelieu and the St. Lawrence, is likely from its advantageous situation to be of much greater importance than it has yet attained. By the Chambly Canal there is communication between Lake Champlain and the St. Lawrence at Sorel. There is also a railway on the same line of route.

The following villages in Canada East may be named with the population of each in 1851:—Aylmer, in Ottawa county, near the borders of Canada East, population 1169; Batiscan, in Champlain county, population about 750; Beauharnois, in Beauharnois county, population 874; Berthier-en-haut, population about 1600; Chambly,

population, 884; Cote St. Louis, in Montreal county, 995; Fraserville, in Rimouski county, 995; Huntingdon, in Beauharnois county, 679; Lachine, in Montreal county, 1075; Laprairie, in Huntingdon county, 1757; L'Assomption, 1084; Longueuil, 1496; Montmagny, in L'Islet county, 1221; St. Eustache, 784; St. John's, Chambly county, 3215; St. On's, Richelieu county, 542; St. Thérèse, Terrebonne county, 1129.

UPPER CANADA, or CANADA WEST, is divided into 42 counties, as follows:—Addington, population 15,165; Brant, 25,426; Bruce, 2837; Carleton, 31,397; Dundas, 13,811; Durham, 30,732; Elgin, 25,413; Essex, 16,817; Frontenac, 30,735; Grey, 13,217; Glengary, 17,596; Grenville, 20,707; Haldimand, 18,788; Halton, 18,322; Hastings, 31,977; Huron, 19,198; Kent, 17,469; Lambton, 10,815; Lanark, 27,317; Leeds, 30,280; Lenox, 7955; Lincoln, 23,868; Middlesex, 39,899; Northumberland, 31,229; Norfolk, 21,281; Ontario, 30,576; Oxford, 32,638; Peel, 24,816; Perth, 15,545; Peterboro', 15,237; Prescott, 10,487; Prince Edward, 18,837; Renfrew, 9415; Russell, 2870; Simcoe, 27,105; Stormont, 14,643; Victoria, 11,657; Waterloo, 26,537; Wellington, 26,796; Welland, 20,141; Wentworth, 42,619; York, 79,719;—population of Canada West, 952,004. Total population of Canada, 1,842,265.

Canada West contains the cities of Toronto, Hamilton, and Kingston. *Hamilton* is beautifully situated at the western extremity of Burlington Bay, near the shore of Lake Ontario. It was founded in 1813, and became an incorporated town in 1833: the population in 1851 was 14,112. The construction of the Burlington Canal, a short cutting which opens a clear navigation into Lake Ontario, and the improvements of the Desjardins Canal, 5 miles long, which connects Hamilton with the manufacturing town of Dundas, have much promoted the prosperity of the place. It is the district town of Gore district, and as such contains the court-house for the district and other public buildings. The streets are well laid out, and many of the houses are built of stone. There are two market-houses, one of them including an upper story used as the town-hall, a custom-house, a post-office, and a theatre. There are places of worship for Episcopalians, Presbyterians, Wesleyan Methodists, Independents, Baptists, Roman Catholics, and others; news-rooms; and a mechanics institute. Good roads extend in all directions from the city, and numerous stage-coaches keep up communication with the surrounding districts. Steam-vessels ply regularly during the season to Toronto and to Queenstown and Niagara. Hamilton has much increased in commercial importance of late years. The Great Western railway, uniting Hamilton with Windsor on the Canadian side of the Detroit River, will when completed open up a direct communication with the eastern states of the American Union. The line, which is in all about 223 miles in length, has been finished to London, or about half the entire distance. *Kingston*, population 11,585, situated on Lake Ontario, distant 199 miles S.W. from Montreal, and 177 miles E.N.E. from Toronto, was incorporated in 1838. It is advantageously situated at the beginning of the Rideau Canal and the Catarqui River, and is important in a military as well as a commercial point of view, being the key of the central St. Lawrence, as Quebec is of the river's seaward extremity. In its neighbourhood is Navy Bay, a narrow and deep inlet of Lake Ontario, which is the chief naval station on the lakes. The market-house, which contains also the post-office, the town-hall, and several public offices, is a handsome stone building of considerable dimensions. There are places of worship for Episcopalians, Presbyterians, Wesleyan Methodists, Baptists, Roman Catholics, and others. There are here a Presbyterian college, an hospital, a mechanics institute, and news-rooms. Ship-building is carried on. A bridge nearly 600 yards long crosses the river Catarqui at Kingstou. There are several mineral springs in the vicinity.

Of the towns of Canada West the following may be noticed:—*Amherstburg*, a garrison town on the Detroit River, population 1880, is finely situated, the banks of the river in the vicinity of the town being very beautiful. The town received in 1845 a charter to hold a fair twice a year. There are Episcopal, Presbyterian, Methodist, Baptist, and Roman Catholic places of worship, a court-house, news and reading-rooms, and a market-place. British and American steamers frequently call. Several handsome dwelling-houses are in the neighbourhood of the town. *Barrie*, population 1007, commenced in 1832, is now the district town of Simcoe district. One of the railway projects of Canada is a line from Toronto to Barrie. There are in the town a court-house, several places of worship, a mechanics institute, and a jail. Steam-vessels ply on Lake Simcoe, which by the river Severn communicates with Georgian Bay and Lake Huron. *Belville*, population 4569, situated about 50 miles W. from Kingston on the Bay of Quinté, is a place of considerable trade. There are here a court-house for the district of Victoria, several places of worship, and some other public buildings. Steam-vessels call regularly at Belville. *Brantford*, population 3877, on the left bank of the Grand River, about 74 miles W. by S. from Hamilton, was commenced in 1830. A canal about 2½ miles long with three locks enables vessels of moderate draught to reach the town, thus avoiding the falls of the Grand River. There are chapels for Episcopalians, Presbyterians, Independents, Baptists, and Roman Catholics. Grist-mills, fulling-mills, soap-factories, and other establishments give considerable employment. *Brockville*, population 3246, situated on the river

St. Lawrence, about 56 miles N.E. from Kingston, was founded in 1802; it is now an incorporated town. Most of the houses are built of stone, and the town has a handsome appearance. The court-house and jail, and the churches, of which there are several, are stone-buildings. Tanneries, saw-mills, a brewery, and other works employ some of the inhabitants. Steam-vessels call at Brockville on their passage. *Chatham*, population 2070, on the left bank of the river Thames, 66 miles S.W. from London, and 50 miles E. from Detroit, is a thriving town, with an increasing trade. A steam-vessel belonging to the place maintains a regular communication with Detroit and Amherstburg. There are here saw-mills, tanneries, pottery works, &c. Several places of worship are in the town. *Cobourg*, population 3871, is situated on gently rising ground, on the bank of Lake Ontario, 103 miles W. by S. from Kingston, 72 miles E. by N. from Toronto. The town is well built, and has a good appearance. The harbour and lighthouse are of recent construction. There are churches for the leading denominations of Christians, a court-house, a mechanics institute, &c. Victoria College, founded by the Wesleyan Methodists, but not exclusive in its management, is supported partly by a legislative grant. It has the power to grant degrees. There are here a large cloth-factory, mills, and other works. *Cornwall*, population 1646, situated at the termination of the Cornwall Canal in the St. Lawrence, was incorporated in 1834. There are many good stone dwelling-houses, several churches, and a court-house and jail. Some tanneries, a foundry, and other establishments give employment. *Dundas*, population 3517, a manufacturing town, about 5 miles N.W. from Hamilton, possesses extensive water-power, which has contributed much to its prosperity. The town is surrounded on three sides by high table-land, usually termed 'the mountain;' from this high land freestone and limestone are procured and exported. There are several chapels in the town. There is a mechanics institute. *Goderich*, population 1329, on Lake Huron, at the entrance of the Maitland River, was laid out in 1827 by Mr. Galt, who was at that time Secretary of the Canada Company. The town is finely situated on rising ground, more than 100 feet above the level of the lake. It is about 60 miles N. by W. from London. An expensive harbour was constructed, and a lighthouse was placed at the port, but the town has not been very successful. There are several churches, a court-house, breweries, tan-yards, &c. *Guelph*, population 1860, the district-town of *Wellington* district, about 42 miles N.W. from Hamilton, was laid out by Mr. Galt in 1828. It is pleasantly situated on elevated ground. The Episcopalians, Presbyterians, Wesleyan Methodists, Independents, and Roman Catholics have places of worship. *London*, population 7035, is finely situated at the junction of two branches of the river Thames, 85 miles W. by S. from Hamilton. It was laid out in 1826 by the crown, and was incorporated in 1840. London suffered severely from fire in 1844 and 1845, but the appearance of the town was much improved by the handsome streets of fine buildings which were subsequently erected. St. Paul's Episcopal church, erected by subscription to replace the edifice burnt down in 1844, is a beautiful gothic structure with a square tower surmounted with pinnacles. The court-house and jail, built of brick in the form of a castle; commodious barracks; two market-buildings; a theatre, and a handsome station of the Great Western railway are among the public buildings of the town. There are good roads in the vicinity. Machiue-making, tanning, brewing, &c. are carried on. The central section (Hamilton to London) of the Great Western railway was opened on December 15th, 1853. *Niagara*, population 3340, the district-town of *Niagara* district, 48 miles E. from Hamilton, was for a few years, under the name of Newark, the capital of the country. It was incorporated in 1845. There are here several churches, a town-hall, and a court-house. The Niagara Harbour and Dock Company, incorporated in 1830, have constructed in their ship-yards numerous barges, schooners, and steam-vessels. Considerable quantities of apples, peaches, and cider are shipped annually from the port of Niagara. *Perth*, population 1916, the chief town of *Bathurst* district, distant about 40 miles N.W. from Brockville, was laid out by the government in 1816. It stands on the river Tay, which is made navigable to the Rideau Canal by a branch canal about 11 miles in length. The town contains seven places of worship, a court-house and jail, and many good dwelling-houses built of stone. White marble is found a few miles from the town. *Peterborough*, population 2191, occupies a beautiful situation on the Otonabee or Trent River, about 34 miles N.N.W. from Cobourg. It was commenced in 1826, is well laid out, and has a handsome appearance. Part of the town on the east or left bank of the river is called Peterborough East. Most of the places of worship are built of stone. On an elevated site behind the town is the court-house and jail, a handsome stone edifice. There are here woollen manufactories, filling-mills, saw-mills, chair-factories, breweries, &c. *Pictou*, population 1569, chief town of *Prince Edward* district, is finely situated on the Bay of Quinté. It is an old town, and contains many good stone houses. Steamers call here on their passages between Kingston and Trent. There are several places of worship, a court-house and jail, and a library. A good deal of trade is carried on. Wheat, flour, butter, leather, &c. are exported. *Port Hope*, population 2476, on Lake Ontario, about 8 miles W. from Cobourg, between Toronto and Kingston, is built on the side of a hill commanding interesting views of lake and inland scenery. It

contains some handsome buildings, including four places of worship. Wheat, flour, and timber are the chief exports. *Prescott*, population 2156, on the St. Lawrence, about 12 miles N.E. from Brockville, possessed considerable trade previous to the opening of the Rideau Canal, but since then it has not made rapid progress. Among the buildings are four places of worship, and a custom-house. At this place the river is about a mile and a quarter broad. A good deal of pot- and pearl-ashes is exported. *Sandwich*, population not given separately, on the Detroit River, is finely situated and well laid out. It is one of the oldest towns in Canada, and has assumed very much the appearance of an English country town. Many flower-gardens and orchards are kept by the inhabitants. The Episcopalians and Methodists, have places of worship in the town. *Simcoe*, population 1452, the chief town of *Talbot* district, is situated near the shore of Lake Erie, about 24 miles S. by W. from Brantford. Grist- and saw-mills, a carding-machine and fulling-mill, with other establishments, furnish employment. *St. Catherine's*, population 4363, on the Welland Canal, about 12 miles W. from Niagara, occupies a beautiful situation, and possesses a good trade. Ship-building is carried on. Great quantities of flour are annually exported. There are six places of worship. *Woodstock*, population 2112, chief town of *Oxford* county in the *Brook* district, about 32 miles E.N.E. from London, is pleasantly situated. It is composed of East and West Woodstock, forming one street of about a mile long. There are six places of worship, a court-house, and a mechanics institute. Considerable trade is carried on.

A few of the villages may be named:—*Bath*, in Addington county, population about 700. *Chippawa*, population 1193, laid out in 1816, on the Welland River, has a good ship-building trade. The Niagara Harbour and Dock Company have a ship-yard at this place. There are several chapels. Tanning, iron- and brass-founding, wagon-making, &c. are carried on. *Galt*, population 2248, on the Grand River, is situated in a low valley about 25 miles W.N.W. from Hamilton. It possesses good water-privileges, which have favoured the growth of manufactures. The streets are well laid out, and the houses are generally of stone. A considerable quantity of flour is exported. *Ingersoll*, population 1190, on the east branch of the river Thames, about 22 miles E. from London, was commenced in 1831. It possesses three places of worship, several mills and foundries, and a good trade. It has increased considerably of late years. *Oshawa*, population 1142, about 33 miles N.E. from Toronto, in the midst of a farming district, possesses a considerable trade. Several branches of manufacture are carried on. The principal articles of export are wheat, flour, and lumber. There are three places of worship in the village. *Paris*, population 1890, on the Grand River, about 22 miles W. from Dundas, was named Paris from the large quantities of gypsum, or plaster-of-Paris found in the vicinity. The village is finely situated, and is increasing in importance. There are five places of worship. Large quantities of wheat, lumber, and plaster are exported. *Preston*, population 1180, about 3 miles N.W. from Galt, chiefly inhabited by Germans. The village was commenced in 1834. There are churches for Lutherans and Roman Catholics. *Richmond*, population 434, on the Goodwood River, about 20 miles S. by W. from Bytown, was laid out in 1818 by the Duke of Richmond. There are three churches. A small trade is carried on. *St. Thomas*, population 1274, about 17 miles S. from London, is agreeably situated, and possesses a good trade. There are six places of worship. *Thorold*, population 1091, situated on a hill about 4 miles S. from St. Catherine's, is on the line of the Welland Canal. It contains three places of worship, several mills, a brewery, and other establishments.

History, Government, &c.—Canada was first discovered by John and Sebastian Cabot in 1497. In 1525 it was visited by Verazani, a Florentine, who took possession of the country for the king of France. In 1535 Jacques Cartier, bearing a commission from the French king, explored the river St. Lawrence, which he so called from his having first entered it on St. Lawrence's day; but it was not until 1608 that the first permanent settlement, of which there is any record as having been made by Europeans on the continent of North America, was formed by the French under Champlain, on the spot now occupied by the city of Quebec. Settlements had been made about 1604, or the year following, under grants of Henry IV. of France, near the river St. Croix, and at Port Royal; but these settlements were broken up in 1614, owing to a successful attack upon them by Sir Samuel Argal. Quebec surrendered to the English under Kirk, in 1629, but was immediately restored to France, peace having been established with that country in April of that year. In 1663 the colony was constituted a royal government, and the governors were thenceforth appointed by the king. Canada continued a possession of France until 1759, in which year Quebec was taken by General Wolfe, and the province was ceded in full sovereignty to Great Britain by the treaty of Paris in 1763. The affairs of Canada were regulated by the ordinances of the governor alone till 1774, when under an Act of Parliament called the Quebec Act, a legislative council of 23 members was appointed by the king. The form of government was subsequently altered by an Act styled the Constitution of 1791, under the provisions of which Canada was divided into an upper and a lower province. To each province was assigned a constitution consisting of a governor, an executive council appointed by the crown (similar

to the privy council in England), a legislative council, the members of which were appointed for life by the king, and formed the second estate, and a representative assembly, or third estate, elected for four years. A long course of violent discussions between the provincial Houses of Assembly and the respective executive governments reached their climax in 1837, when ill-concerted and futile attempts at insurrection were made in both provinces. In the following year the Earl of Durham, who had been appointed governor of Canada and high commissioner for the adjustment of Canadian affairs, made a report, in accordance with which the Act 3 and 4 Vt. c. 35, for the re-union of the provinces was passed on the 23rd of July, 1840. This Act authorises the appointment of a legislative council by the crown of not fewer than 20 members; and enacts, that the two provinces shall return an equal number of representatives to the House of Assembly (at present 42 each); that the city of Toronto shall return two members, and the towns of Kingston, Brockville, Hamilton, Cornwall, Niagara, London, and Bytown, in West Canada, one each; that the cities of Quebec and Montreal shall return each two members, and the towns of Three Rivers and Sherbrooke one each; that the members of the House of Assembly shall be elected for four years; that all writs, proclamations, journals, &c. of the council and assembly shall be in the English language only; that the entire duties and revenues of the province shall form one consolidated fund, and the sum of 75,000*l.* is specifically appropriated for the civil government of the province. The Act was brought into operation during the administration of Mr. Poulett Thomson, who was created Lord Sydenham. The House of Assembly also passed, with his assent, the 'responsible government' resolutions, for the permanent establishment of this system, whereby the government of the province for the time being is identified in policy with the majority of the representative body.

The tenure of land in the Seigniorial districts of Lower Canada, that is, with two exceptions, of lands granted by the crown of France, is as follows:—A tract of land, varying in extent—but sometimes large, as in the case of the seignory of Beauharnois, which is six square leagues—was granted to a seignor, or lord of a manor, to re-grant to others at a certain fixed rent (*cens*). The seignor held of the crown upon the accustomed rents and dues, according to the custom of Paris: he had a local legal jurisdiction, which is now abolished; he performed homage on a mutation of possession; he was to reside by the express condition of some grants (*tenir feu et lieu*); certain timber was to be reserved for public purposes; he was to make roads; he had the privilege of trading with the Indians; with certain other privileges and obligations. Any settler, not already possessed of land, was entitled to demand of right, from the seignor, a grant of waste land, usually of about 90 acres, at the accustomed rent, commonly a 'sol' or penny an acre—a rent of the nature of our chief rent in free and common socage manors; the grantee was personally to occupy his land under the penalty of its re-union to the domain; he was to clear the land; to make and repair roads; with some other provisions of a similar kind. The system had many advantages. The settler had no more land than his means enabled him to cultivate; what he received he was to cultivate; he was to reside; he was not required to apply any part of his previously-accumulated gains in the purchase of his land, and the whole of his capital was free to be employed in agriculture. As his family increased, his children were enabled to apply for new grants, and to extend the settlement of the country.

Upon the establishment of the English authority in Canada, the enforcement of the law against the tenants continued, but was neglected by the crown against the seignors. The mill-service has been abused by conditions of grants that no mill of any kind shall be erected by the tenant. The accustomed rent has been increased, as though it was a farm rent, and this has also been done to evade the penalty of forfeiture imposed on the seignor in case he sold the land for a fixed sum. The abuses of the system occasioned many complaints in the province, connected also with a strong feeling in favour of the commutation of the fines payable on alienation. But instead of submitting the subject to the Provincial Legislature, which was perfectly competent to deal with it, the government passed the Imperial Act of the 6 Geo. IV. c. 59, called 'the Canada Tenures Act,' which placed matters in a worse state than before. Instead of enforcing on the seignors the duty to make grants, which many refused to do; placing the rent in a uniform state, and checking the abuses of the seignors; this Act enabled the seignors by paying the fifth (*quint*) to the crown on the alienation of land, to have the tenure of the land commuted into free and common socage; the waste lands, which they only held on trust for public purposes, became private property; and the tenants, whose grievances were alleged to justify this measure, were left more completely at the mercy of the seignors than before.

There are 223 seignories in Lower Canada. They are almost inclosed by the townships, or lands held in free and common socage. In Upper Canada the land is held upon the tenure of free and common socage. The system of land-holding is defective in not being connected with a general land-tax on all waste lands not in the possession of the crown.

By the establishment of the Canada Company, which was incorporated by Act of Parliament and by Royal Charter in 1826, a considerable impulse was given to emigration from the mother country to

Canada, and to the settlement of many parts of the province. Many public works, and improvements, such as roads, bridges, &c., have been executed by this company, and by the British American Land Company, which was incorporated by Royal Charter and Act of Parliament in 1831. The following table shows the amount of emigration from the United Kingdom to all parts of the world, and the proportion of emigrants who went to British America in the four years 1849-52.

	1849.	1850.	1851.	1852.
Total Emigration from the United Kingdom	299,493	289,840	333,966	367,675
To British North America from the United Kingdom	41,367	32,961	42,605	32,870
Of which, from Ireland	26,368	19,764	23,930	17,693
from England	9,352	10,152	11,675	9,538
from Scotland	5,447	3,023	7,000	5,643

Of the population of Canada East, 890,261, as many as 669,528 are natives of Canada of French origin, and 125,580 are Canadians of other than French origin; 51,499 are of Irish origin; 14,565 of Scotch; 12,482 are from the United States of North America; and 11,230 from England and Wales. The remainder is composed of natives of the European continent, and of our own colonies. In Canada West, the population of which is 952,004, the Canadians of French origin number 26,417, and the Canadians not French, 526,093: the Irish, 176,267; English and Welsh, 82,699; the Scotch, 75,811; natives of the United States, 43,732; natives of Germany and Holland, 9957. With respect to the whole of Canada, of which the total population is 1,842,265, the seven principal items stand as follows:—Canadians of French origin, 695,945; Canadians, not French, 651,673; Irish, 227,766; English and Welsh, 93,929; Scotch, 90,376; natives of the United States, 56,214; of Germany and Holland, 10,116. At the time of the surrender of Canada to Great Britain, the population was chiefly French, and located in the lower province. Although this class has not been much increased by immigration, its numbers have in the course of 90 years increased about 1000 per cent. The progress of Canada West has been still more remarkable. In 1791, the date of the Constitutional Act, the population was 50,000; in 1811 it was 77,000; in 1824 it was 151,097; in 1832 it was 261,060; in 1842 it was 486,055; in 1851 it amounted to 952,004.

The agricultural census in 1852 shows the following results:—

Canada East.—Occupiers of land, 94,449; of whom 13,261 held 10 arpents and under; and 4585 held above 200 arpents. The number of arpents held amounted to 3,113,915; of which 3,605,517 arpents were under cultivation; 2,072,953 under crops; 1,502,355 under pasture; and 30,109 in gardens. There were 4,508,593 arpents in wood or wild land. The arpent, which contains about six-sevenths of an acre, is the common measure of land in Lower Canada. Of the land under crops 427,111 arpents produced 3,075,868 bushels of wheat; 42,927 produced 603,616 bushels of barley; 46,007 produced 341,443 bushels of rye; 165,192 arpents produced 1,132,190 bushels of peas; 590,422 yielded 8,967,594 bushels of oats; 51,781 produced 530,417 bushels of buckwheat; and 22,669 arpents produced 400,287 bushels of Indian corn. Of potatoes 4,456,111 bushels were yielded by 73,244 arpents; of turnips 369,909 bushels by 3897 arpents; of clover and other grass-seeds there were raised 18,921 bushels; of carrots 82,344 bushels; of mangel-wurzel, 103,999 bushels; of beans 28,602 bushels; of hops, 111,158 lbs.; of hay, 965,653 tons; of flax end hemp, 1,367,016 lbs. The amount of tobacco obtained was 483,652 lbs.; of wool, 1,430,976 lbs.; of maple sugar, 6,190,694 lbs.; of cider, 53,327 gallons; of filled cloth, 780,891 yards; of linen 839,523 yards; of flannel, 860,850 yards. The live stock included 111,819 oxen, 294,514 milch cows, 180,317 calves or heifers, 236,077 horses of all ages, 629,827 sheep, and 256,219 pigs. The dairy produce amounted to 9,637,152 lbs. butter, and 511,014 lbs. cheese. Of provisions there were prepared 63,747 barrels of beef, and 223,370 barrels of pork. The fish cured amounted to 43,363 barrels.

Canada West.—Occupiers of land, 99,860; of whom 9976 had 10 acres and under, and 3080 had above 200 acres each. The total number of acres held was 9,823,233; of which 3,697,724 acres were under cultivation, 2,274,586 were under crops, 1,367,644 were under pasture, and 55,489 were in gardens. Of wood or wild land there was an extent of 6,125,509 acres in 1852. Of the land under crops, the proportions devoted to the different productions stood thus:—Wheat, 782,115 acres, produce 12,692,852 bushels; barley, 29,916 acres, produce 625,875 bushels; rye, 38,968 acres, produce 479,651 bushels; peas, 192,109 acres, produce 2,873,394 bushels; oats, 421,634 acres, produce 11,193,344 bushels; huckwheat, 44,265 acres, produce 639,384 bushels; Indian corn, 70,571 acres, produce 1,696,513 bushels; potatoes, 77,672 acres, produce 4,987,475 bushels; turnips, 17,135 acres, produce 3,644,942 bushels; clover and other grass-seeds, 42,460 bushels; carrots, 174,895 bushels; mangel-wurzel, 54,226 bushels; beans, 18,109 bushels; hops, 113,064 lbs.; hay, 631,782 tons; flax and hemp, 50,650 lbs. Of tobacco, the production amounted to 764,476 lbs.; of wool, 2,699,764 lbs.; of maple sugar, 3,581,505 lbs.; of cider, 701,612 gallons; of filled cloth, 527,466 yards; linen, 14,855 yards; and flannel, 1,160,301 yards. The live stock included

193,982 oxen; 296,924 milch cows; 254,988 calves and heifers; 203,300 horses of all ages; 968,022 sheep; 569,257 pigs. The dairy produce consisted of 15,976,315 lbs. of butter, and 2,226,776 lbs. of cheese. Of provisions there were provided 817,746 barrels of beef, and 528,129 barrels of pork. The fish cured amounted to 47,589 barrels. Canada receives from the United Kingdom coals, metal, cordage, East India produce, and the various kinds of British manufactures; from the British West Indies, sugar, molasses, coffee, rum, and hard woods; from the United States, beef and pork, biscuit, rice, and tobacco. The exports of Canada are:—To the United Kingdom, pot- and pearl-ashes, wheat and flour, and timber; to the West Indies, beef and pork, beer, grain, and flour; to the United States, forest produce, wheat, flour, butter, wool, live stock, &c. The imports and exports for four years (1848-51) were as follows:—

	Imports.		Exports.	
	£	s. d.	£	s. d.
1848 . . .	2,629,584	17 11	2,302,830	17 6
1849 . . .	2,468,130	6 9	2,193,078	0 3
1850 . . .	3,489,466	3 5	2,457,886	1 2
1851 . . .	4,404,409	0 2	2,663,983	14 4

The exports in 1851 consisted principally of the following divisions:—Products of the forest, value stated, 1,245,927*l.* 18*s.* 5*d.*; animals and their products, 182,366*l.* 16*s.* 5*d.*; vegetable food, 773,916*l.* 2*s.* 2*d.*; other agricultural products, 7814*l.* 1*s.* 7*d.*; products of the seas, 51,225*l.* 5*s.* 6*d.*; products of the mines, 17,826*l.* 7*s.* 5*d.*; manufactures, 11,327*l.* 10*s.* 3*d.*

The progress of wealth in Canada West may be seen by comparing the amount of assessable property, returned at various periods, as follows:—In 1825 the amount of assessable property in Upper Canada was returned at 1,854,965*l.*; in 1830 it was 2,407,618*l.*; in 1840 it was 4,608,843*l.*; in 1845 it was 6,393,630*l.*; in 1852 the total value of assessable property in Upper Canada, as valued under an Act passed in 1850, which included some kinds of personal property previously exempt, amounted to 37,695,931*l.*; and even this appears to be considered short of the real amount by at least 20 per cent.

Since 1849 the policy of the government has been to alienate roads, bridges, harbours, and some other public works, and to dispose of them to private companies, with certain stipulations as to the continued efficiency of the respective works. Besides these however there are several works of provincial importance which are in the hands of government, such as the St. Lawrence and Welland canals, the Erie Canal, &c. The total cost of these works to 1st January, 1852, was 2,834,234*l.* The net revenue in 1851 was 48,278*l.*, or less than 2 per cent. on the outlay. The revenue is increasing. With respect to railways, the Provincial Act, 12 Vict., cap. 29, passed in 1849, provided that in no case should government advance more than half the amount expended on the works, and that the whole resources and property of the companies should be pledged for the redemption of the advances with interest. On this principle public aid has been extended to the following railways, undertaken since the passing of the Act of 1849:—St. Lawrence and Atlantic railway, from the St. Lawrence opposite Montreal, to the frontier line, length 126 miles; the Ontario, Simcoe, and Huron railway, from Toronto to Lake Huron, 90 miles; Great Western, from Hamilton to Windsor, 228 miles; Quebec and Richmond, 100 miles; Main Trunk, Toronto to Montreal, 380 miles; and the Quebec and Trois Pistoles line, on the route to the lower provinces, 160 miles. Acts have been recently passed by the local legislature to encourage steam communication between Liverpool and Quebec, and to connect Quebec and Montreal by railway with sea-ports open during the winter. A contract has been completed (subject to approval by Parliament) with an eminent firm in Liverpool, by which a line of powerful screw steamers, of not less than 1500 tons burden, are to run between Liverpool and Quebec and Montreal every fortnight during the season of navigation, and to Portland, in the state of Maine, during the winter months. The contract is to extend for 7 years, at a cost to the province of 19,000*l.* sterling per annum; or 11,000*l.* should it be determined to run the steamers monthly during the summer instead of fortnightly.

In April 1851 the management of the post-office was transferred to the control of the provincial authorities. A uniform rate of 3*d.* currency (about 2*d.*) per half ounce was adopted at the same time, and the result has been satisfactory. The number of miles travelled by the mail during the year ending April 5th, 1852, was 2,931,375; an increase of 444,360 miles over the previous year; 243 new post-offices were opened; the gross revenue during the first year of the reduced system was 59,004*l.*, being only about 18,000*l.* less than the revenue of the last year of the former system.

Special grants of public money are annually made for the support of the common schools. The sum of 41,095*l.* 17*s.* 10*d.* is divided between Upper and Lower Canada for this purpose, in proportion to their respective population. Each school municipality, before receiving any share of this public grant, must raise at least an equal sum by local taxation. In Upper Canada the local contributions greatly exceed the required proportion. In 1851 Upper Canada possessed 3001 common schools, attended by 168,159 scholars; the total sum available for teachers' salaries, and for the erection and repair of school-houses, being 93,226*l.* 15*s.* 7*d.*, of which 20,547*l.* 18*s.* 11*d.* was received out of the parliamentary grant. In Lower Canada, the

principle of local assessment was not so favourably received at first, but the school system is now making more satisfactory progress. In both sections of the province there are also several endowments and special grants for collegiate institutions, normal schools, and other objects of a similar character. In Lower Canada the revenues of the estates of the Jesuits are devoted to education. They amounted in 1841 to 4566*l.*; and a sum of 29,592*l.* on the same account was, in 1844, in the provincial chest without interest. In Upper Canada the University of Toronto was founded by royal charter in 1827, and endowed with property now realising about 11,000*l.* per annum. It was formerly connected with the Church of England; but by an act of the Colonial Legislature which came into force on the 1st of January 1850, it was made a purely secular institution, and its government was placed exclusively in the hands of laymen.

The Roman Catholic creed is professed by seven-eighths of the inhabitants of Lower Canada. Their clergy have for their support 1-26th of all the grain raised on the lands of Catholics, and an annual stipend of 1000*l.* is paid by the government to the Roman Catholic bishop of Quebec and his coadjutor. The numbers of the population attached to the leading religious denominations in Canada in 1851 were as follows:—Church of Rome, 914,561; Church of England, 268,592; Presbyterians, 237,683; Methodists, 228,839; Baptists, 49,846; Lutherans, 12,107; and Congregationalists, 11,674.

Of one-seventh of all the lands in Upper Canada, and of those in the townships of Lower Canada, set apart under the name of clergy reserves, and sold, the proceeds were applied to the maintenance of a 'Protestant Clergy.' By the Act 16 Vict., cap. 21, passed May 9, 1853, the provincial government and legislature have the power of dealing with the question of the clergy reserves without referring to the home government, the present recipients retaining their interest during their lifetime. The Church of England in Canada is presided over by the bishops of Quebec, Montreal, and Toronto, who have each an annual allowance of 1000*l.* The Church of England, which has 242 clergy, obtained 10,394*l.* 5*s.* 11*d.* of the public money in 1851 for Upper Canada, and 1786*l.* 15*s.* for Lower Canada; the Church of Rome, which has 7 dioceses and 543 clergy, had in 1851 for the upper province 1369*l.* 17*s.* 3*d.*; the Church of Scotland had 5347*l.* 16*s.* 7*d.* for the upper, and 893*l.* 7*s.* 5*d.* for the lower province; the Wesleyan Methodist body had 639*l.* 5*s.*; and the United Synod of the Presbyterian Church 464*l.* 18*s.* 4*d.* The number of places of worship in Canada included in the Census returns of 1851 is 1559, including 471 Methodist, 257 Presbyterian (of which about 80 are in connection with the Established Church of Scotland, 100 with the Free Church, and 60 with the United Presbyterian Church), 226 Church of England, 135 Roman Catholic, 116 Baptist, 84 Congregational and Independent, 46 Bible Christian, 22 Lutheran, and 18 Quaker places of worship, besides others not classified.

In both sections of the Canadian territory small bodies of Indians remain, and of them some have been brought considerably under the influence of civilisation. They have made greatest progress in the upper province, where more care has been taken to respect their rights, and to provide for them some stated means of support. In Upper Canada the Indians inhabiting the settled districts are reckoned at about 7500; those in the unsettled districts may be about 3000. In Lower Canada these classes number respectively about 3500 and 2000. Efforts have been made to introduce industrial schools among the Indians in the settled districts, and hopes are entertained that the attempt will be to some extent successful. An interesting community of coloured people, fugitives from slavery in the United States, has been formed at Dawn, in the Western district of Canada, on the Bear Creek, a feeder of the river St. Clair.

Before the union the province of Lower Canada had only a small debt of about 30,000*l.* In Upper Canada in 1839 Sir G. Arthur stated the debt to be 1,162,187*l.*; the interest 65,000*l.*; the permanent expenses of the government 55,000*l.*; and the revenue 78,000*l.*—leaving a deficiency of 42,000*l.* The public debt of the province at the close of 1851 was 3,659,146*l.* 15*s.* 1*d.*, besides the liabilities connected with the various lines of railway recently undertaken. The expenditure for 1851 amounted to 521,643*l.* 11*s.* 2*d.*, inclusive of 133,749*l.* 7*s.* interest on the public debt; the revenue was 692,206*l.* 4*s.* 9*d.*—showing an excess of revenue over expenditure of 170,562*l.* 13*s.* 7*d.*

CANADIAN SEAS, a term that has sometimes not inaptly been used to designate the large fresh-water lakes Superior, Huron, &c., which lie within the basin of the St. Lawrence. The description of the Canadian Seas and the St. Lawrence basin is given under CANADA.

CANALE. [ALBA.]

CANARA, a province on the west coast of Hindustan, between 12° and 15° N. lat., and between 74° and 76° E. long. It is bounded N. by Bejapore and the Portuguese territory; E. by Mysore and the Balaghaut ceded districts; S. by Malabar; and W. by the Indian Ocean. The length of the province along the coast from north to south is 180 miles, and its mean breadth is about 40 miles; the total area has been computed at 7380 square miles; of this area 4622 square miles are contained below and 2758 square miles above the Ghauts.

The province is divided into two districts, North and South Canara; the line of division is about 13° 40' N. lat. The surface of Canara is rocky and uneven. On the high grounds red gravel prevails

near the coast the soil is sandy, but the valleys are well adapted for rice cultivation. There are several small mountain streams.

The entire population of Canara has been estimated at about 760,000, of which number it was computed that more than one-sixth were Brahmans. About 50,000 were said to be Roman Catholics. The inhabitants of the sea-coast are principally Mohammedans, and those of the interior Hindoos.

The chief production of the province is rice, for cultivating which the climate is peculiarly favourable, owing to the prevalence of rains. Cocoa-nuts, betel, and pepper are also cultivated.

The chief towns are in the north division Batticollah, and in the south division Mangalore and Barcelore. *Batticollah* stands on the sea-coast in 13° 55' N. lat., and 74° 37' E. long.; on the north bank of the Scandaholay, a small stream which waters a beautiful valley surrounded by hills. *Mangalore* is built on the margin of a salt lake, which is separated from the sea by a sandy beach in 12° 53' N. lat., and 74° 57' E. long. It is a place of considerable trade; the exports consist principally of rice, betel-nut, pepper, sandal-wood, and turmeric to Muscat, Goa, Bombay, and the coast of Malabar. The imports consist of raw sugar and silk from Bengal and China, and of oil and ghee from Surat. The Portuguese had a factory here, which was destroyed in 1596 by the Arabs from Muscat. In 1763 the town was taken by the English, but retaken by Hyder. In 1783 it again surrendered to the English, but was immediately besieged by Tipoo, and when at the conclusion of the war it was given up to him was little more than a heap of ruins. The fortifications have since been dismantled. The population is estimated at 30,000. *Barcelore*, supposed to be the Barace of the ancients, is situated on the sea-coast 55 miles N. from Mangalore, in 13° 37' N. lat., 74° 47' E. long.

The province of Canara, which till then had been subject to Hindoo sway, was subdued by Hyder Ali, raja of Mysore, in 1763. On the death of his son Tipoo, in 1799, the whole province was placed under British authority. Canara is now included in the territories of the Bombay presidency.

(Buchanan, *Journey through Mysore, Canara, and Malabar*; Mill, *History of British India*.)

CANARIES, a group of islands in the Atlantic, lying off the coast of Africa, between 27° 40' and 29° 30' N. lat., 13° 30' and 18° 20' W. long. They are supposed to be the Fortunate Islands of the ancients. Ptolemy in his account of them (vi. 32), which is taken from Juba, the learned Mauritanian prince, calls one island Nivaria, or Snow Island, which is probably Tenerife; another island he calls Canaria, from the number of dogs of a large size that were found there; Juba had two of these dogs. The first meridian of Ptolemaeus is drawn through the group.

The first account we have of these islands in modern times is about the year 1330, by a French ship which was driven among them by stress of weather. Upon this discovery a Spanish nobleman, Don Luis, count of Claromonte, obtained a grant of the islands from Pope Clement VI., with the title of king. Nothing was however done towards making a settlement till 1385, when a fleet under Ferdinando Perara sailed from Cadiz and touched at Lanzarote, but was driven away by the natives. The next expedition was from Seville in 1393, but no possession was taken of any of the islands. In 1400 another fleet sailed from Rochelle, under John de Bethencourt, and anchored at Lanzarote, where they built a fort at Point Rubicon. The adventurers then passed over to Fuerteventura; but being opposed by the natives they were obliged to re-embark. De Bethencourt returned to Spain, and having obtained from Enrique III. of Castile and Leon a grant of the islands, with the title of king, again sailed to Lanzarote, and in June 1405, took possession of Fuerteventura, Gomera, and Hierro; but failed in his attempts upon Gran-Canaria or Canaria and Palma.

De Bethencourt died in 1408 and was succeeded by a nephew, who in 1418 sold his right to the islands to Enrique de Guzman. This nobleman expended large sums in endeavouring to subdue the other islands, but without success. In 1461 the Spaniards went through the form of taking possession of Canaria and Tenerife for the crown.

Some difference having arisen between Spain and Portugal with regard to these islands, in consequence of a second sale of them by the nephew of De Bethencourt to the latter power, the Portuguese arrived in force at Lanzarote to take possession; but the dispute was settled by treaty, in which the islands were ceded to Spain. A treaty of commerce was entered into with the chiefs of Canaria in 1476; but in the same year the court of Castile purchased the right to the three unconquered islands of Canaria, Tenerife, and Palma, and in the following year sent out a fleet to undertake the conquest of Canaria, which however was not finally accomplished till April 1483. Palma and Tenerife were subjugated respectively in 1491 and 1493. Since this time the Canaries have always belonged to the Spanish crown. The original inhabitants were called Guanches, of whom little is now known except their bravery and their custom of embalming the dead. Owing to intermarriage with their conquerors, the Guanches have ceased to exist as a separate people, and the population may now be considered entirely Spanish.

The group consists of seven islands: Hierro or Ferro, Palma, Gomera, Tenerife, Gran-Canaria, Fuerteventura, and Lanzarote; and of several small rocky islets, the largest of which are Graciosa and Alegranza. The whole group stands on a bank; but the depth of

water between the islands is very great, and the passages are good. They are all of volcanic origin, and present a surface diversified by rocks, gorges, mountains, and valleys. The coasts are high and precipitous; there are no close harbours, the anchorage being generally open roadsteads. The mountains which are barren, rocky, and peaked, rise to the greatest height about the centres of the islands, and some of them have their summits covered with snow during the winter. The valleys, wherever there is water or any humidity in the soil, are exceedingly fertile, producing grain, vegetables, and fruits, both tropical and European. The vine is extensively cultivated, and much wine is made. The sugar-cane grows, but its cultivation is neglected. All kinds of domestic cattle abound in some of the islands. Camels are reared and used as beasts of burden. Fowls, ducks, geese, pigeons, and turkeys are very numerous. The number of wild birds, both native and migratory, is also very great; among the former are wild pigeons, quails, larks, and canaries.

Each of the islands has its governor, and the whole group is under a Captain-General. The whole area of the islands is 3340 square miles; and the population in 1849 was 257,719. The entire annual produce is estimated as follows:—wheat, maize, barley, millet, and rye, 170,000 quarters; wine, 54,000 pipes; barilla, 300,000 quintals; and potatoes, 500,000 barrels. The chief foreign trade is with England, the United States, and Hamburg; there is also an active trade between the islands. The principal ports are Santa-Cruz and Orotava in Tenerife, and Palmas in Gran-Canaria. The exports consist of wine, fruits, corn, barilla, honey, orchilla, moss, fish, cochineal, raw silk, &c.; the imports are woollen and cotton cloths, linen, silks, colonial produce, brandy, paper, oil, glass, hardware, &c. There are important fisheries along the coast of Africa.

The temperature is very equable and the climate excellent. There are two seasons, the rainy and the dry. The dry season lasts from April to October; during its continuance the weather is constantly fine, and the north-east trade-wind blows without intermission, being strongest from the middle of May to the middle of August. The mountains of the several islands, by obstructing the course of the north-east trade-wind, cause calms to prevail for several miles to leeward to the point where the divided currents again unite. These winds render communication between the islands tedious. A vessel can sail from Tenerife to Hierro in a day; but the return voyage takes 10 or 12 days, sometimes three or four weeks. Since 1849 however the communication between the islands has been much facilitated by the use of steam-packets. A mail steamer plies regularly every week between the islands and Cadiz. From October to April the south-west winds prevail, attended with rain; and at times with thunder-storms. The genial nature of the climate is disagreeably affected, at the beginning and end of the rainy season, by the south-east wind called El Levante, which blowing across the Sahara is dry, hot, and sultry, and produces great thirst. It sometimes carries clouds of locusts, which commit great ravages on the corn-fields and plantations. The islands are ill-supplied with spring-water. Rain-water is preserved in tanks.

Hierro or *Ferro*, the most south-western of the Canaries, contains about 80 square miles, and has a population of 5000. The promontory on the west coast, now called Debesa, was formerly famous as the point through which the universal first meridian was drawn; it is about 18° 10' W. of Greenwich. The island suffers more than any of the others from droughts, and but for the frequent fogs vegetables could not live. *Valverde*, a small place on the north-eastern coast, is the chief place in the island.

Palma lies N. by E. of Hierro; it is about 30 miles long from north to south, and its greatest breadth is about 20 miles. The area is 510 square miles, and the population about 34,000. The mountain ridge runs from north to south, and contains many extinct craters of great height. The central crater called Caldera is surrounded by many lofty peaks, of which the Pico-de-los-Muchachos and the Pico-de-la-Cruz rise to the respective heights of 7631 and 7469 feet above the sea. The coasts and valleys are extremely fertile, producing much wine, fruits, and silk. There are forests in the island in which good timber is grown; the palm, sweet-bay, and myrtle abound; and in many places the *Euphorbia balsamifera* or *Canariensis* grows. *Santa-Cruz-de-las-Palmas*, the capital, is on the east coast: it and Tazacorte on the west coast are the chief ports. Some taffetas, stuffs, and ribands are the only manufactures of any importance.

Gomera, which lies S.E. of Palma, is nearly circular, and contains 164 square miles. The mountains consist of granite and micaceous slate. The valleys are well watered, but badly cultivated. Corn, wine, oil, cotton, fruits, moss, and honey are produced. Cattle, sheep, mules, poultry, and game are abundant. *San-Sebastian* is the chief town and port. The island has a population of about 12,000.

Tenerife (sometimes incorrectly written *Teneriffe*) is the largest and most important of the islands. It is about 60 miles long from north-east to south-west; its greatest breadth is 30 miles, but it grows gradually narrower towards the north-east, and at that extremity the breadth is not more than 6 miles. The area is about 1225 square miles, and the population 86,000. About one-seventh of the surface is fit for cultivation; the remainder is covered with lava and other volcanic matter, and a great part of it is entirely destitute of vegetation. The coasts present some remarkable promontories—Del-

Hidalgo on the north-west, Anagada on the north-east, Rasca on the south, and Teno and Buenavista on the west. The highest point on the island is the Peak of Teyde, or Peak of Tenerife, a dormant volcano, rising to the height of 11,946 feet above the sea. The crater measures 300 feet by 200 feet; it is surrounded by a circular wall 40 feet high, which from a distance has the appearance of a cylinder placed on a truncated cone. The peak rises above the current of the trade-winds, and is always exposed to a violent continuous gale from the west. The view of this mountain from Orotava on the west coast is magnificent, from the contrast of the rich cultivated plain and the leafy forests on its lower slopes with the barren, wild, and stern aspect of the peak. Teyde is connected by a mountain ridge with another crater called Chahorra, which is 9388 feet high. Sulphurous vapours are constantly issuing from the crevices in these craters. To the west of Chahorra there are four volcanic cones, which were in a state of eruption in 1798. The Peak of Teyde is surrounded on the south and east by a continuous chain of mountains, inclosing a semicircular plain of about 3 miles' radius, which is called Llanos-de-las-Rectamas, from the broom (*retama*), almost the only vegetable that grows on it. The whole plain is nearly covered with pumice-stone. The country west and north of the peak descends with rapid broken slopes towards the sea. The outer edge of the semicircular mountains is surrounded by high table-lands, which together with the region of the peak cover nearly half the island, and contain some pine forests. Towards the north-east these table-lands, which have a very broken surface, extend for about 20 miles, and terminate in the plain of Laguna. This plain, which is nearly in the middle of the island, is of considerable extent; it is shut in by hills, and is nearly a dead level. After the rains it is partially covered with water, from which circumstance it takes its name. It produces abundance of grain, but no trees. The eastern part of the island consists of numerous fertile valleys separated by basaltic hills, the highest of which, the Bufadero, is 3069 feet above the sea. This part produces the finest fruits in the island. The valley of Taoro, in the northern part of the island, is of great extent and of extraordinary fertility.

In Tenerife all European domestic animals, and also white camels are reared. Cattle are kept for slaughter and the plough; cows are never milked. Goats, sheep, asses, and mules are numerous. The silkworm is extensively reared. Bees also are numerous, and a great deal of excellent honey is collected. Rabbits, wild fowl, turkeys, and all kinds of poultry are very plentiful. The agricultural produce is similar to that of the other islands. The quantity of wine annually made amounts to 3,000,000 gallons; the best sort, called Vidonia, which resembles Madeira, is exported to England. Coffee has been cultivated with success; iron ore is found, and sulphur abounds on the Peak of Teyde. Linen and woollen stuffs are manufactured by each family generally for its own use. Some silk stuffs, earthenware, soap, vermicelli, leather, brandy, ropes from the agave, hats, baskets, and mats of palm-leaves are the other chief articles of manufacture. The imports consist of iron utensils, hardware, bar-iron, flax, glass, pottery, leather, candles, cotton goods, salt provisions, cod, &c.; the exports are wine, brandy, barilla, almonds, dried fruits, raw silk, and orchilla.

The island is divided into three districts—Laguna, Orotava, and Garachico. *Santa-Cruz-de-Santiago*, the chief town and port of the island, stands on the north-east coast. It has a small harbour, well sheltered, except from the south-east winds. The town is the residence of the Captain-General of the Canaries, and has a population of 9000. *San-Christoval*, in the centre of the plain of Laguna, is a pleasant well-built town, with 10,000 inhabitants. *Orotava*, on the north-east coast, stands on the slope of a hill nearly 1200 feet above the sea; it is a well-built thriving place, with 8000 inhabitants, who carry on a considerable commerce by means of a harbour, two miles distant, at *Puerto-de-la-Orotava*, a town of 4600 inhabitants. *Guimar*, S.W. of Santa-Cruz, stands in a fertile well-watered valley, and has a population of 3500; near it are several mummy tombs of the Guanches. *Taraconte* and *Icod-de-los-Vinos* are on the north coast, and have each about 5000 inhabitants. *Garachico* is a port to the west of the peak, on the low coast north of Buenavista.

Gran-Canaria, or *Canaria*, which gives name to the group, lies E. of Tenerife. It is nearly circular, and about 75 miles round: the population is about 69,000. The highest point, El Cumbre or Pico-del-Pozo-de-las-Nieves, is 6648 feet above the sea. The mountain Sancillo, near the centre of the island, is 6070 feet high, and is surmounted with a large wooden cross. *Port-la-Luz*, which affords good anchorage and is well sheltered from the north-east winds, is formed by Isleta, a rocky promontory joined to the island by a low isthmus. *Las-Palmas*, the capital of the island, is on a bay on the east coast; it is the largest and best built town in the Canaries; it is the seat of a bishop and of the Audiencia Real, or supreme court of justice for all the islands. The city is well supplied with water by numerous fountains, and has 17,382 inhabitants. It contains a cathedral, hospital, college, several monasteries, and has a well-supplied market. The harbour is formed by a mole. The following are the other chief places:—*Aguimes*, situated on the eastern coast, has 2300 inhabitants. *Atalaya*, population 2000, is composed of dwellings consisting of apartments cut in the sides of the Mount St.-Antoine. *Teror*, population 4800, situated in the interior in the northern part of the island, is frequented by pilgrims as a sacred spot. The bishop has a residence

here. *Tiraxana* is a village composed of a collection of grottoes inhabited by a colony of free blacks, who do not cultivate intercourse with Europeans.

Fuerteventura, which is N.E. of Gran-Canaria, is about 60 miles long; its breadth is very irregular, varying from 20 miles to 5 miles. The area is about 720 square miles, and the population 18,000. It is less mountainous than the other islands. Though generally barren, it contains many spots of great fertility. The interior formation of the island is singular. A group of extinct volcanoes, 2160 feet high, to the south of Puerto-Cabras, branch off eastward and westward to within a short distance of the sea, follow the direction of the coast for about 30 miles, and then again unite, inclosing an extensive arid plain, on which several villages are built. From the southern junction of the mountains an isthmus, 5 miles long and 2½ miles wide, unites the mountainous peninsula of Jandia to the main part of the island. This mountain mass is about 28 miles long; it presents a precipitous face towards the north-west, rising directly to the height of 2820 feet above the sea, but sends out spurs in other directions, which inclose slopes of easy ascent. It is uninhabited, though it is said to contain some good springs. The pasturage on it is so fine that the flocks and herds are driven here from other parts of the island to graze. Orchilla also is produced in large quantities in the peninsula. The capital of the island is *Santa-Maria-de-Betancuria*, also called La Villa. The only road in the island leads from La Villa to Cabras on the east coast, which is the chief port. The anchorage at Cabras is indifferent, and the landing-place a beach of shingles. *Oliva*, in the fertile valley of Oliva, in the north of the island, is the largest town in the island, and has only 2000 inhabitants.

Lanzarote, the most eastward of the Canaries, lies N.E. of Fuerteventura, from which it is separated by a strait called La Bocayna. The island is 31 miles long, and its breadth varies from 5 to 10 miles. The area is about 240 square miles, and the population is about 18,000. From the northern extremity of the island precipitous cliffs 1500 feet high run south-west for 7 miles, and terminate in a sandy plain, where in 1825 an eruption took place, and two considerable hills were thrown up, which are still burning. Beyond this plain the shore is again precipitous as far as the promontory of Pechiguera, with the exception of the little bay of Janubio, in which there was formerly a harbour for small vessels. This harbour was converted into a salt lake by the eruption of 1765. The eastern shores are neither so steep nor so high, and there are many fertile tracts of ground. The highest land, called Montaña Blanca, is nearly in the centre of the island; it is 2000 feet high, and cultivated to its summit. This island is subject to long droughts, and to gales of excessive violence. The wine and grapes are of superior quality. *Teguise*, a small place in the interior, is the chief town. *Naos*, on the eastern shore, has a small secure harbour formed by rocky islets, and with two entrances, of which the northern one has a depth of 12 feet, the eastern of 17½ feet at low water, and 9 feet rise of tide. *Arecife*, a more frequented port, situated south of Naos, has 2500 inhabitants, most of whom are engaged in the fishery on the African coast.

In accordance with a decree of the Queen of Spain the seven principal ports of the islands—namely, Santa-Cruz-de-Santiago, Orotava, Las-Palmas, Santa-Cruz-de-las-Palmas, Arecife, Cabras, and San-Sebastian—have been constituted free ports since October 10, 1852.

The Little Canaries lie N. of Lanzarote, and are connected with it by a bank on which there are 40 fathoms' water. *Graciosa* is separated from Lanzarote by the Strait del Rio, which is about a mile wide, and is the safest and most commodious port for large ships in the Canaries. The great difficulty of communicating with Lanzarote, on account of the high precipitous coasts of that island, presents an insuperable obstacle to this strait being resorted to as a harbour for trade. *Graciosa* and *Alegranza*, a little farther north, are both the product of extinct volcanoes; they contain craters, and are covered with naked basaltic rocks, lava-streams, and other volcanic matter. They are inhabited by 40 or 50 persons each, who cultivate barilla in the bottom of the craters. *Santa-Clara*, *Roquete*, *Lobos*, and the others, are mere rocky islets, and uninhabited.

(Glas, *History and Conquest of the Canary Islands*; Humboldt, *Voyage aux Régions Équinoxiales du Nouveau Continent*; Von Buch, *Physikalische Beschreibung der Canarischen Inseln*; *Journal of the Royal Geographical Society*.)

CANCALE. [ILLE-ET-VILAINE.]

CANDAHAR. [AFGHANISTAN; KANDAHAR.]

CANDEISH, or KHANDEISH, a province of Hindustan, extending along the southern bank of the Nerbudda, between 20° and 22° N. lat., 73° and 77° E. long. It is bounded N. by Malwa, E. by Berar and Gundwana, S. by Aurungabad and Berar, and W. by Gujerat. Its length from east to west is about 210 miles, and its average breadth about 80 miles. The area is estimated at about 12,500 square miles, and the population at nearly half a million.

Candeish is generally a level country, but is nearly surrounded by mountains. The plain of Candeish is very fertile, although its whole surface is studded with isolated hills with perpendicular sides of rock and flat summits. Each of these hills forms a natural fortress. In addition to the Tuptee and the Nerhudda the province is watered by several copious streams which flow from the table-land and fall into the Tuptee.

This country was rendered a scene of desolation before it fell into the hands of the British. The ravages committed by Jeswunt Rao Holkar in 1802 caused a famine in the following year, which carried off a large proportion of the inhabitants. After this the Bheel tribes, whose chiefs command most of the passes in the mountain range to the north, and the Pindarries, were accustomed to make periodical incursions into the plains for plunder. In 1818 Candeish, then among the possessions of Holkar, was ceded to the British; but the Arabs, who had previously obtained a footing in the country, opposed the British authority. In 1819 the British obtained possession of the province. At that time nearly one-half of the villages had been abandoned to the tigers, which swarmed throughout the land. The mischief was repaired under the administration of General Briggs, who succeeded in restoring the province to prosperity.

The principal towns in the province are—Boorhanpore, Aseerghur, Hindia, Nundoorbar, and Gaulna. [BOORHANPORE; ASEERGHUR.] Hindia is situated on the south bank of the Nerburda, where its channel is 3000 feet wide, in 22° 26' N. lat., 77° 5' E. long. This place is chiefly important from its position, as commanding some of the best fords across the Nerburda. Nundoorbar contains about 500 houses, and was formerly a place of much greater extent. The wall by which it was surrounded is now for the most part in ruins. This town is in 21° 25' N. lat., 74° 15' E. long. Gaulna was once a large town, but has fallen greatly to decay. The fort stands on a high rocky mountain, and is surrounded by a wall of stone and brick 20 feet high and a mile in circumference. The town, which is at the foot of the mountain, on its north side, is surrounded by a mud wall and towers.

(Mill, *History of British India; Institutes of Akbar; Reports of Committees of House of Commons on the Affairs of India.*)

CANDIA, the ancient *Kreté* or *Creta*, and the modern Greek *Kriti*, one of the largest islands in the Mediterranean Sea, is situated to the south of the Archipelago, between the Morea, Africa, and Asia Minor. It extends from 34° 54' to 35° 42' N. lat., and from 23° 28' to 26° 19' E. long. Its length from east to west is about 160 miles from Cape Salmone to Cape Crio; its breadth is very unequal. In some places towards the middle of its length it is about 35 miles broad, in others about 20 miles; between Retimo and Sphakia 10 miles, and in one place in the east part of the island, between the Gulf of Mirabel and the coast of Hierapetra, only 6 miles. It has three principal capes—Samonim, now Salmone, at the east extremity towards Rhodes; Corycum, now Cape Buso, looking towards the Morea; and Crio, looking towards the Cyrenaica. Its coast, especially towards the north, is indented by deep gulfs, of which those of Kisamos, Khania, Snda, Armyro, and Mirabel, or Spinalonga, are the deepest, and the three principal towns of the island, Canea or Khania, Retimo, and Candia, are on that side. The south coast is rugged and iron-bound. A continuous mass of high land runs through the whole length of the island, about the middle of which Mount Ida, now called Psilorati, rises far above the rest to the height of 7674 feet. The mountains in the west part of the island are called by Strabo Lenka Oré, or White Mountains; he says they are about as high as Taygetus (probably about 5000 feet). In the south-west part of the island the mountains run close to the coast. This is the district of the Sphakiotes, a race of mountaineers, occasionally robbers and pirates, who have never been totally conquered by the Turks. The ridge eastward from Mount Ida is the ancient Dicte, now called Mount Siti. The main chain sends out offshoots to the north and south. Those on the north side slope down gradually towards the sea, inclosing plains and valleys of great fertility, and forming by their projections the numerous bays and gulfs with which the northern coast is indented. The southern offshoots descend abruptly, present a steep, rocky, and arid surface, and terminate in a precipitous coast provided with no good harbour. Mount Ida itself sinks down rapidly on its south-eastern side into an extensive plain watered by the Hieropotamo, the ancient Lethæus, which rising in the mountainous district of Arkadiot flows westward into the sea a few miles south of Mount Ida. The southern boundary of this plain is a secondary range, which springing from the main chain near the source of the Hieropotamo runs south-west and terminates in Cape Matala. The rivers of Candia are only a kind of torrents very shallow in the dry season.

To the north of the principal range of mountains the island contains extensive forests, pastures, and meadows; and produces corn, wine, oil, opium, liquorice, flax, cotton, silk, carobs, oranges, lemons, dates, and other southern produce. Besides the common domestic animals, game, wild sheep, chamois goats, bees, and fish are very numerous. About 600,000 sheep and goats are fed on the mountains; their wool is coarse; their milk is made into cheese. There are in the island about 50,000 horned cattle, which are used chiefly for draught and for ploughing; the milk of cows is not used, there being a prejudice against it.

The valleys that have rivulets running through them are from June to the end of September very unhealthy, so that although they are very productive, and offer facilities for the conveyance of produce to market, the peasantry generally reside on the hills, where the land is less fertile, but where they are sure of enjoying uninterrupted health. The habitations of the peasantry are rude in the extreme, and their clothing consists of coarse cottons, linens, or woollens, manufactured

by each household. The chief manufacture is soap, which is highly esteemed all through the Levant. The principal exports are oil and soap; the imports are some British and Austrian manufactured goods and metals, colonial produce, and corn. Ploughing the land between the olive-trees is all the culture they receive. The fruit is generally allowed to drop from the trees, and it is gathered by women and children into heaps; these are then taken to the mill and the fruit is bruised, after which process it is put into a wooden press worked by two or four men. In the district of Apokorona the fruit is beaten from the trees, which are thereby injured. Although many of the olive-trees were cut down during the numerous insurrections of the peasantry, the population is still insufficient to attend to them all, and in good years a fourth of the fruit is lost for want of hands to gather it. Every article produced on the island pays one-seventh to the government, and besides this extraordinary taxes are often arbitrarily imposed. In lieu of a tax on silk the mulberry-trees are rated. There are several small islands round the coast, of which the principal are Standia, on the north, and Gozzi, on the south. The climate is warm, and in the low valleys unhealthy in the autumn. The sirocco, the common scourge of the Mediterranean, is often severely felt.

Candia is divided into eight Greek bishoprics, including the see of the metropolitan archbishop of Gortyna; into three sanjaks—Candia, which is governed by a pasha of three tails, Canea, and Retimo, each governed by a pasha of two tails; and into twenty mukattas, or districts, each governed by an 'aga,' who receives the taxes and the tithes of the mosques. In ancient times the island seems to have been very thickly peopled. Under the Venetians the population is said to have been about 1,000,000; in 1821 it amounted to 260,000, and in 1840 but little over 150,000, four-fifths of whom were Greeks.

The principal towns and ports are on the northern coast of the island. *Canea*, or *Khania*, on the Gulf of Khania, is the capital of the western sanjak; it has a population of 8000, and a good harbour formed by a mole 1237 feet long, with a lighthouse at its extremity; vessels of 300 tons can enter the harbour, which is defended by a fort. The fortifications were constructed by the Venetians. The town is surrounded by old walls and deep ditches, and contains several mosques and Greek churches. It is the seat of a Greek bishop, and has an arsenal, docks, lazaretto, and some soap factories. Several European consuls reside at Khania.

Suda, distant from Canea about 3 miles by land, on the Bay of Suda, has a harbour perfectly safe in all weathers.

Retimo, the capital of the central sanjak and the seat of a Greek bishop, has 4000 inhabitants, and a small harbour formed by a mole.

Candia, or *Khandia*, about 40 miles E. from Retimo, is the capital of the island. The name is the Venetian form of *Khandax* (Great Fortress), the designation given to the city by its Saracen founders. From the city the name has been commonly applied in Europe to the island itself, which however is never called Candia by the natives. Candia is much decayed since the time of the Venetians. The fortifications are still in tolerable repair, but the houses of the town are falling to ruin, and the harbour, which is formed by two moles, is blocked up with sand to such a degree that only vessels drawing less than 8 feet of water can enter. Ships loading from Candia anchor in one of the three ports of Standia, an island about 7 miles north-north-east of the town. Candia has 12,000 inhabitants; it is the residence of the Greek archbishop of Gortyna, and of the chief pasha of the island. The streets are wide and rudely paved, and many of the houses are fronted by gardens adorned with fountains. The pasha's palace, the bazaar, mosques, public baths, large cathedral built by the Venetians, and the fortifications, are the principal structures. Soap is the chief industrial product of the town. There are a few Jews in Candia, but in Canea, which is the principal port of the island, they amount to about 200, and have a synagogue. Not far from it are the ruins of the ancient Cnosus, famous in fable for its labyrinth.

Spinalonga, on the Gulf of Mirabel, has a good harbour, but the entrance is subject to sudden squalls. A few miles south of this is the harbour of Ayio-Nicola, the best harbour in the island next to Snda, but it is not frequented. The most noted town on the south coast is Sphakia, the chief town of the Sphakiotes. At Hagio-deka, a village near the Hieropotamo, are the ruins of Gortyna, and a cavern of great extent in a part of Mount Ida. This cavern has been sometimes taken for the labyrinth of Cnosus, of which no trace remains.

The ancient history of Crete begins with the heroic or fabulous times. The early inhabitants are supposed to have been descended from Phœnician, Pelagian, and Dorian colonists. The Dorian immigration must have taken place long before the time of Homer, who speaks of the different races in the island ('*Odyss.*' xix. 174, &c.). Historians and poets tell us of a king called Minos who lived before the Trojan war and resided at Cnosus, the site of which is not far from the present town of Candia, and ruled over the greater part of the island. He was the legislator of the country and his laws became celebrated among the Greeks, who borrowed from them (Strabo, x. 323). He employed, say the legends, Dædalus, an Athenian artist, on his return from Egypt to build a labyrinth in imitation of that of Mæris in Egypt, and he afterwards confined in it Dædalus himself. Minos according to tradition was also the first who had a navy; he cleared the Grecian seas of pirates, expelled the Carians from the Cyclades, and settled his sons in them (Thucyd. i. 4). Then comes the well-known story

of the Minotaurus, Theseus and Ariadne. Idomeneus, a grandson of Minos, one of the Cretan chiefs who went to the siege of Troy, on his return was driven away by his subjects and went to found the colony of Salentum on the coast of Iapygia. After the expulsion of the dynasty of Minos, Gortys, a town built in the centre of the island near the foot of Mount Ida, became a powerful rival to Cnossus. Crete had once many flourishing cities, some say a hundred; and the principal, besides Cnossus and Gortys or Gortyna, were Cisamus, Cydonia now Canea, Amphimalla, Rithymna, now Retimo, Heracleum the port of Cnossus, and Miletus, all on the north coast, Phalasarna on the west coast, Lyctus, Phœnixportus, and Hierapetra on the south coast, and Ampelos on the east coast. Strabo, whose maternal ancestors were from Cnossus, although he himself was born in Pontus, gives a pretty full account of the Cretans, their laws, their towns, and the wars between them; and Aristotle in his 'Politic' (book ii.) has described the peculiar institutions of the ancient Cretans. The east part of the island had been colonised by the Dorians, the west part was inhabited by the Cydonians, and the south by the Eteoeretes. It was two days' sail from the south coast of Crete to Cyrenaica and four to Egypt.

The Cretans were often at war among themselves or with their neighbours the Cilicians, and with the kings of Syria and of Egypt. They materially assisted Demetrius II. Nicator to recover the throne of Syria, over the usurper Alexander Balas, B.C. 143 (Justin xxxv. 2). The Cretans were celebrated for their archery, and in the later period of their political history were often employed as mercenary troops by other nations.

Crete was conquered by the Romans, B.C. 67, under the proconsul Quintus Metellus, after an obstinate defence. It became a Roman province and a colony was sent to Cnossus. The Cretans seem to have been notorious for dishonesty and lying. 'Cretizare cum Cretensibus' was a common proverb, meaning 'to deceive the deceiver.' St. Paul in his epistle to Titus, whom he had appointed to preach the gospel to the Cretans, alludes to the bad reputation of the people.

Crete remained subject to the Roman emperors and afterwards to the Byzantines till A.D. 823, when it was conquered by the Saracens, who built the town of Candia, which has ever since been considered the capital of the island. Nicophorus Phocas retook it in 961. After the taking of Constantinople by the Franks Baldwin I. gave the island of Candia to Boniface, marquis of Montferrat, who sold it to the Venetians in 1204. The Venetians kept possession of Candia more than four centuries; it was one of their chief possessions in the east, and the first of the three subject kingdoms (the other two were Cyprus and the Morea) whose flags waved over the square of St. Mark. The island was governed by a provveditor-general from Venice, who had under him the four provveditors of Canea, Candia, Retimo, and Sittia. For judicial matters there were rettori, or judges, sent also from Venice, each of whom was assisted by two councillors who were natives of the island. The municipal administration was in the hands of the Candioti. The taxes were very moderate. The native nobility enjoyed feudal privileges, and they were bound to have a certain number of militia from among their vassals and tenants ready when called. The whole of this militia was reckoned at 60,000 men. Although most of the natives were of the Greek Church and had their own clergy, there was an archbishop of the Latin or Western Church who was sent from Venice. In 1645 the Turks landed 50,000 men, besieged and took Canea; in the following year they took Retimo, and in 1643 laid siege to Candia the capital of the island. This siege, the longest in modern history, lasted 20 years. The Venetians strained every nerve for the defence of the place. The order of Malta, the Pope, the Duke of Savoy, Louis XIV., all sent auxiliaries to the relief of Candia. The vizier Achmet Coprougli was at last sent in 1667 by the sultan with great reinforcements to carry the place; Francesco Morosini conducted the defence. In September 1669 the Venetians, having exhausted every means, surrendered Candia to the vizier by a convention in which they retained the forts of Suda, Spinalonga, and Carahusa, on the coast of the island. The wars of Candia cost the senate 25 millions of ducats. In the last three years of the siege 29,000 Christians and 70,000 Turks were killed. The Turks made 69 assaults and the Venetians made 80 sorties; the number of mines exploded on both sides was 1364. Since the capture of Candia, Crete has remained in the hands of the Turks, under whom it has been perhaps the worst governed country in the world, all its former prosperity has vanished, and its population dwindled to a fourth of what it was under the Venetians. In 1821 and for several subsequent years the native Greek population maintained a sanguinary warfare with their Turkish masters in the hope of shaking off their oppressive yoke. In this struggle they failed. According to a decision of the allied powers the island was made over to Mehemet Ali of Egypt in 1830, to indemnify him for his losses in the revolutionary war in the Morea. He made some improvement in the trading regulations of the island, but the oppressed raya obtained little relief by a change of masters. Mehemet Ali held it till 1840, when by a convention of the great European powers (except France) it was restored to Turkey, from which another insurrection in 1841 and 1842 failed to set it free. In ancient times the forests upon Mount Ida supplied wood for smelting and forging iron, though no

trace of ancient mining operations has been discovered on the island. Among the forest-trees in ancient times flourished the fruit-bearing poplar, the evergreen plane, the cypress, and the cedar. The vines of Crete, and especially its raisin wine, were celebrated in ancient times. Among its simples grew the dictamnus or dittany, famous among physicians and poets. The island was free from all wild beasts and noxious animals; its dogs were a match for those of Sparta, and its wild goat is the supposed origin of all our domestic varieties.

(Daru, *Histoire de Venise*; Botta, *Storia d'Italia*; Macgregor, *Commercial Statistics*; Dr. Bowring, *Reports*; *Dictionary of Greek and Roman Geography*.)

CANDY. [KANDY.]

CANEA. [CANDIA.]

CANFRANC. [ARAGON.]

CANNES. [VAR.]

CANNSTADT, properly KANNSTADT, a town in the Neckar-Kreis in the kingdom of Württemberg, is famous for its mineral springs, its healthy climate, and its beautiful situation on the right bank of the Neckar, nearly in the centre of the kingdom, and in the heart of a fertile country. It is a station on the railroad from Stuttgart to Esslingen and within 4 or 5 miles of the former city, and contains about 5350 inhabitants. Independently of its trade, for it is the staple town for the traffic in the Neckar, and has manufactures of woollens, cottons, tobacco, &c., there are 37 mineral springs in the neighbourhood and a regular establishment of baths, with grounds laid out for visitors. The Kursaal is decorated with fresco paintings and is otherwise an elegant building. It is erected a quarter of a mile from the town, at the foot of a hill from which the springs arise. Kannstadt is frequented in the season by large numbers of people from Stuttgart. There are horse-races in summer. The Seelberg, an adjoining hill, 640 feet in height, contains many curious fossil remains. Vases, coins, and other Roman antiquities have of late years been found near Kannstadt. The two royal seats, Bellevue and Rosenstein, are in its vicinity.

CANO/PUS or CANO/BUS (*Kano*), a city of Egypt, on the coast near the outlet of the western or Canopic branch of the Nile. It was 120 stadia from Alexandria by land, with which it was connected by a canal. In the time of Strabo (p. 801) it contained a great temple of Serapis.

CANOSA. [BARI, TERRA DI.]

CANTABRI, a people of ancient Spain, who lived east of the Asturians in the region now called Las Montañas de Santander. To the east they bordered on the Autrigones and the Varduli, or Biscayans. To the south the Cantabri seem to have extended beyond the mountains into the north part of the present province of Palencia, where they bordered on the Vacæi (Mannert, 'Geographie der Griechen und Römer'). They were a brave, secluded, half wild race, who long resisted the Romans, and were only finally subdued together with the Asturians by Augustus, B.C. 25. They revolted again after some years but were defeated and nearly exterminated by Agrippa, B.C. 19. In the division of Spain made by that emperor the Cantabri were included in the Tarraconensis province. They gave their name to the Sinus Cantabricus, now Gulf of Biscay.

CANTAL, a department in France, lies between 44° 37' and 45° 25' N. lat., 2° 2' and 3° 20' E. long., and is bounded N. by the departments of Corrèze and Puy-de-Dôme, E. by those of Haute-Loire and Lozère, S. by Aveyron, and W. by Lot and Corrèze. It is formed out of Upper Auvergne, and is named from the highest of its mountains, the Plomb-du-Cantal, which stands nearly in the centre of the department. The department measures 68 miles from north-east to south-west, and 57 miles from south-east to north-west. The area is about 2000 square miles; and the population in 1851 was 253,329, which gives 126.66 to the square mile, being 43.05 below the average per square mile for the whole of France.

The department is almost entirely covered with the mountains of AUVERGNE, the principal chain of which crosses it from north-north-east to south-west. In this chain, and within a range of 7 miles diameter, are the volcanic summits of Plomb-du-Cantal, Col-de-Cahre, Puy-Mary, and Puy-Violet, which rise to the respective heights of 6095, 5541, 5443, and 5229 feet above the sea. These peaks are of conical shape, bare, rugged, and from their steepness almost inaccessible. The whole range is of volcanic origin and contains many craters distinguished by the local name Puy. In the neighbourhood of this central region are many ancient valleys filled up with lava, which has flowed at several unknown and long distant epochs. The mountains are covered with snow during several months of the year. In the spring the lower heights abound with verdant pastures, intermixed with numerous wild flowers, especially violets, hyacinths, lily-of-the-valley, pinks, daisies, &c.; they also produce medicinal plants and orchid abundantly. The only human habitations met with in this wild region are the hurons, or little huts, which serve as temporary dwellings for the cow-herds, who drive their cattle hither in the fine season, and manufacture large quantities of butter and cheese.

At the lower extremities of the high plains and in the valleys which separate them are found the towns, villages, and cultivated lands of the department. Here also the flocks and herds come to pass the winter in vast huddings, the upper story of which is used as

a store for corn and other farm produce. The valleys, which radiate in all directions from the mountain-knot of the Plomb-du-Cantal, are picturesque and beautiful in the extreme, abounding in woods, meadows, waters, and bold cascades, and strewed with neat villages, which are clustered round the parish church, or sheltered by a lofty precipice or some ancient castle. The mountains of Cantal form part of the watershed between the Allier and the Loire on the north-east, and of the Dordogne on the west, and the Lot on the south. The Rue, which receives the Sautoire, rises on the northern side of Plomb-du-Cantal, and flows north-west into the Dordogne. The Cère rises in its south-western slopes, and receiving the Jordanne a little below Aurillac flows west on its way to join the Dordogne, which forms for several miles the boundary of the department on the north-west. The streams springing from the south and south-east of the central group flow into the Truyère, which rising in the mountains of Lozère, and flowing first eastward, then towards the north, enters the department of Cantal, crosses it to westward, then turns south-west, and falls into the Lot near Entraignes in the department of Aveyron. The Alagnon rises on the eastern side, receives several small streams, and flowing north-north-east falls into the Allier. In the south-west of the department rises the Celle, a feeder of the Lot, which river flows for a short distance along the extreme south of the department. Several of these rivers flow through very deep ravines, the precipitous sides of which show the different layers of lava and other strata through which the waters have worn their way. All of them abound in cascades, have great rapidity of descent, and are consequently not navigable.

To the south and west of the great mountain range the department has a tolerably mild climate; to the north and east the climate is less genial; all the central and higher portion of the department has a rude climate and a long dreary winter. The department is subject to terrible hurricanes; those that occur in the winter, called 'ecirs,' are especially fearful, as they sweep the snow before them, fill up the narrow valleys, and bury the houses beneath the drift.

The department contains 1,279,481 acres. Of this surface 547,789 acres are mountain pasture, 157,765 forest and woodland, and 255,334 acres heaths and moors. The arable portion, which hardly exceeds 400,000 acres, consists generally of a very light and stony soil, and does not produce bread-stuffs sufficient for the consumption. Very little wheat is grown or used; the chief crops are rye, buckwheat, barley, hemp, flax, and oleaginous plants. Chestnuts are abundant, and in some districts form the principal part of the food of the people; in other districts peas and lentils are used as food. The excellent mountain pastures form the main source of the wealth of the department. The number of horned cattle reared for exportation and for the purpose of making butter and cheese is very great. As much as 50,000 quintals of cheese are annually made. Horses are numerous; they are small in size, but hardy: mules are much used as beasts of burden. Sheep are very numerous, and in high repute for the goodness of their wool. In mineral wealth the department is rich; copper, iron, lead, sulphur, alum, antimony, coal, limestone, slate, granite, &c., are found, but the only mine worked is one of coal. The number of mineral and hot springs is very great. The manufacturing industry of the department is of little importance; it is confined to the making of lace, copper vessels, coarse stuffs, glue, and leather. At the end of autumn many of the population emigrate to Paris and other parts of France, where they find employment as porters, water-carriers, tinkers, and handicraftsmen, returning home in the spring of the following year, or in some instances after an interval of several years, for the inhabitants are strongly attached to their poor, wild, but highly picturesque country. The mountainous nature of its surface, and the want of roads, canals, and navigable rivers present great obstacles to the development of the trade of the department, which consists in the exportation of its cattle and agricultural products, and in the importation of corn, wine, oil, salt, metals, and cloth.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Aurillac	8	93	96,433
2. Mauriac	6	57	63,346
3. Murat	3	34	35,309
4. St.-Flour	6	74	58,241
Total	23	258	253,329

Of the first arrondissement, and of the whole department, the chief town is AURILLAC. *St.-Cernin*, a few miles N. from Aurillac, has a population of 3046. *St.-Mamet*, 11 miles from Aurillac, has a fine old castle, an ancient church, and a population of 2000. *Maura*, 25 miles S.S.W. from Aurillac, stands in the beautiful valley of Arcanthe, which is watered by the Rance, a feeder of the Celle: population 3000. *Vic-sur-Cère* stands near the head of the fine valley of the Cère, which extends far up the south flank of the Plomb-du-Cantal: the population is 2000, but this number is doubled from June to October by the numbers who resort to the mineral waters.

In the second arrondissement the chief town is *Mauriac*, which has

a college, a tribunal of first instance, and a population of 3400. The most remarkable building is the ancient church of *Notre-Dame-des-Miracles*, which is adorned with some very curious bas-reliefs. The town is the chief entrepôt for the colonial produce, provisions, and merchandise required for the mountain districts, and has a considerable trade. *Pléaur* stands in a fertile plain, 10 miles from Mauriac, and has 3012 inhabitants. *Riom-et-Montagnes*, in which several Roman remains have been found, is 19 miles from Mauriac, and has 2400 inhabitants.

In the third arrondissement the chief town is *Murat*, which is an ill-built place on the right bank of the Alagnon, with 2700 inhabitants. It has a college and tribunal of first instance. The neighbourhood of this town is most interesting to the geologist for the many evidences it presents of violent volcanic action. *Allanche*, a small well-built town, 9 miles N.E. from Murat, has a handsome church, an old castle, and 2605 inhabitants. *Marcent*, 10 miles N. from Murat, has a ferruginous spring and a population of 2664, including the whole commune.

Of the fourth arrondissement the chief town is *St.-Flour*, formerly the capital of Haute-Auvergne, which stands on a high plateau formed by a mass of basaltic rock, presenting on three sides steep precipices, and joined to the neighbouring high land of Plauvèze by a narrow isthmus which is handsomely laid out as a promenade. A part of the town stands at the foot of this rock, and communicates with the upper town by a winding road cut in the rock. Through this part of the town the road from Paris to Perpignan runs. The streets of *St.-Flour* are narrow; the houses are built of basalt and lava and covered with tiles. The chief building is the cathedral. The town is the seat of a bishop, has an ecclesiastical seminary, a college, tribunals of first instance and of commerce, and a population of 5254. The assize court of the department is held here. *Chaudes-Aigues*, 15 miles S. by W. from *St.-Flour*, is famous for its hot mineral springs, from which it derives its name. It is situated in a gorge of the mountains, and has a population of 2476. The waters vary in heat at the different springs from 135° to 177° Fahrenheit; in the winter they are conveyed by pipes through the houses of the town for the purpose of heating. The road from *St.-Flour* to *Chaudes-Aigues* traverses the plateau of Plauvèze, and affords a fine view of the volcanic group of Cantal: on approaching *Chaudes-Aigues* it is terraced through the granitic rock along frightful ravines, at the bottom of which the Truyère flows. *Massiac*, 15 miles N. by E. from *St.-Flour*, on the high road to Clermont, is situated in a narrow valley, and not far from the right bank of the Alagnon: population 2200.

The department forms the diocese of the bishop of *St.-Flour*. It is comprehended in the jurisdiction of the High Court of Riom, and belongs to the 20th Military Division, of which Clermont-Ferrand is head-quarters.

(*Dictionnaire de la France; Annuaire pour 1853.*)

CANTERBURY, Kent, a municipal and parliamentary borough, a cathedral city, the seat of the metropolitan see of all England, and forming of itself a county and a Poor-Law Union. The city of Canterbury is situated on the river Stour, on the high road from London to Dover, in 51° 17' N. lat., 1° 4' E. long., and is distant 55 miles E.S.E. from London by road, and 81 miles by the Ramsgate branch of the South-Eastern railway. The population of the city of Canterbury, which includes 14 parishes, 2 precincts, and 4 extra-parochial districts, was 18,398 in 1851. The borough is governed by 6 aldermen, one of whom is mayor, and 18 councillors; and returns two members to the Imperial Parliament. The livings are in the archdeaconry and diocese of Canterbury. Canterbury Poor-Law Union contains an area of 3830 acres, with a population in 1851 of 14,097.

All traces of the origin of Canterbury are lost in the obscurity of early history. At the time of the Roman occupation it was of considerable importance, as is evident from its position at the point of junction of the Roman military roads to Dover and Lympne, their two principal havens. The ancient British name seems to have been *Durwhern*, which in Latin was changed into *Durovernum*. By the Saxons it was called *Caer-Cant*, or the City of Kent; whence we have *Cantuaria* and *Canterbury*. At the beginning of the Saxon Heptarchy it was considered the chief city of the kingdom of Kent, and was the king's residence. Canterbury is pleasantly situated between hills of a moderate height, the air is salubrious, and the neighbouring country fertile. The city extends about half a mile from east to west, and somewhat more from north to south: there are four suburbs at the four cardinal points. Many Roman coins and Roman and British remains have been discovered in the city and neighbourhood.

Canterbury in early times suffered repeated ravages, particularly from the Danes. In 1011 a great part of the city was reduced to ashes. It has frequently suffered by fire, the most calamitous instances of which were in the reigns of Henry II. and Henry VIII.; but it always recovered from these disasters, owing to its rank as the metropolitan city; and the constant resort of pilgrims tended in no small degree to enrich it. At Canterbury was founded the first regular Christian establishment of Augustine, who in the year 597 baptised Ethelbert, king of Kent, and 10,000 Saxons in the river Swale. Augustine was the first archbishop, and died here in the year 604. His body was first buried in the monastery of *St. Augustine*, and afterwards, in 1091, was removed into the cathedral. Among the

most celebrated of the archbishops are Thomas à Becket, who was murdered before the altar by four of the attendants of King Henry II. in 1171; and Thomas Cranmer, who was burnt at Oxford in the reign of Queen Mary. The cathedral, one of the most noble buildings in England, is of very ancient date. Augustine is said (Bede, 'Hist. Ecc.' lib. i. c. 33) to have commenced his cathedral on the site of a church which was built during the Roman dominion in Britain for the use of the Christian soldiers. The present cathedral dates from 1130, when the building which had been founded by Archbishop Lanfranc, and enlarged by Anselm, was solemnly consecrated by Archbishop Corbel, in presence of Henry I. of England, David, king of Scotland, and all the English bishops. Forty-five years later however, in consequence of having been nearly destroyed by fire, the cathedral was almost entirely rebuilt, and at subsequent periods it was frequently added to, or repaired, or in parts rebuilt. Hence it exhibits the utmost diversity of architectural style, ranging from early Norman to the latest perpendicular; but notwithstanding this all the parts are so disposed as to produce a pleasing effect. The cathedral is a double cross, with a noble tower 235 feet high rising from the intersection of the nave and western transepts, and two towers 130 feet high at the western end. The eastern end, called Becket's Crown, from having been finished during his tenure of the archbishopric, is circular. The south porch is a handsome embattled structure, with a roof of stone. The great tower, called Bell Harry Tower, is one of the most beautiful specimens of the pointed style of architecture in England. There are many windows of painted glass, of which the great western is the most remarkable. A new stone chair or throne for the archbishop has recently replaced the former throne, which was made of wood. The choir is one of the most spacious in the kingdom, being nearly 200 feet in length and 38 feet in breadth. The extreme length of the whole building from east to west is 514 feet, and the extreme breadth 71 feet. The cathedral has lately undergone extensive repairs and judicious restoration at the expense of the dean and chapter. The crypts underneath the cathedral are the finest in the kingdom. They have numerous chapels, in one of which are some perfect remains of ancient paintings on the walls. The crypt was long occupied by a Walloon congregation as a place of worship, Queen Elizabeth having granted it for that purpose in 1568. The cathedral contains numerous splendid monuments: among others are those of Henry IV., Edward the Black Prince, Archbishop Langton, and many other personages famous in English history. Of the magnificent shrine of Thomas à Becket not a vestige remains.

Of the numerous old churches in Canterbury by far the most interesting is that of St. Martin. A church occupied the site of the present edifice at least as early as the time of St. Augustine; who, according to Bede, on his arrival in Britain, found a church existing there. It does not appear very certain when the oldest part of the present church was erected; the body of it was rebuilt in the 12th or 13th century, apparently out of the materials of the older church, as Roman bricks and some Norman sculpture are worked up in the walls. It is a small plain building, consisting only of a nave and chancel without pillars. A few years back the whole was carefully and thoroughly restored. The church of St. Mary Magdalene is in part of Norman date. The church of St. John the Baptist has also some Norman features. St. Dunstan's church and the church of the Holy Cross are both very ancient. The chancel of St. Mildred's church may be noticed as an example of the late perpendicular style. In several of the churches are monuments of interest. In St. Dunstan's is the vault of the Roper family, in which is still contained the head of Sir Thomas More, which was buried there 'with great devotion' by his favourite daughter Mary Roper. When the chancel was repaired in 1835 the Roper vault was opened, and in a niche in the wall was found a leaden box, open in front, and with an iron grating before it, in which was contained a head that was afterwards proved to be that of Sir Thomas More. ('Gentleman's Mag,' May, 1837.)

The Grammar school, which is within the precincts of the cathedral, and is supported by the chapter, is called the King's school, having been remodelled by Henry VIII. This school was originally founded by Theodore, archbishop of Canterbury, who died about 690. The King's scholars, of whom there are 50, have their classical education free of charge, and receive 1*l.* 16*s.* 8*d.* a year in money. There are 30 exhibitions and scholarships attached to this school. Besides the King's scholars there were 45 commoners at the school in 1851.

St. Augustine's Monastery stood in the eastern suburbs: this abbey and its precincts occupied 16 acres of ground, which were inclosed by a wall. The fine gateway of St. Augustine, which formed the chief entrance, was in a dilapidated state, but was repaired a few years back by public subscription. The revenues and privileges of this monastery increased rapidly. Ample contributions from kings, nobles, and others supplied funds for adding to the extent and magnificence of the buildings. In 1168 the greater part of the church of the monastery was burnt, and numerous ancient charters and codicils were consumed. At the dissolution, Henry VIII. appropriated the monastery as a royal palace. Queen Elizabeth kept a court here in 1573, when she was on a royal progress. From Lady Wotton, who dwelt here during the rebellion, the buildings were called Lady Wotton's Palace, and the green in front of the great gate is still called Lady Wotton's Green. The property continued in the possession of Lady

Wotton's descendants till 1844, when the remains of the abbey were sold by public auction. The purchaser was Mr. A. J. Beresford Hope, M.P., the cost being 2100*l.* The building had been employed for some years for purposes very different from its original object. "The chapel was in ruins; the Guests' Hall was used as a brewery and public-house of low character; the space under the gateway was a dray-house, and the room over it (the state bed-chamber of the abbey and palace) contained the large vat for cooling the liquor, and had before this been used as a cock-pit." Mr. Hope presented the site and the remains of the buildings to the Archbishop of Canterbury in trust for the erection of a missionary college in connection with the Established Church. In the erection of the required buildings as much as possible of the ancient structure has been preserved. The entire expense of the chapel, which has been built on the foundation of the former chapel, including the altar plate, amounting in all to about 4500*l.*, was defrayed by Mr. Hope, who also contributed largely to the institution in other ways. The windows of the chapel are filled with stained glass. The chapel and cloister are paved with encaustic tiles. On the south of the chapel are the warden's lodge and rooms for the fellows of the college. On the north side of the quadrangle are the rooms and dormitories, which are calculated to accommodate about 45 students. The library, a spacious room, 80 feet by 40 feet, is built on the foundations of the ancient refectory of the abbey. The library contains about 8000 volumes. Beneath the library is a fine crypt, used as a workshop in which the students are taught carpentering, carving, and other branches of manual industry. The college was incorporated by royal charter, June 28, 1848. The course of study extends over three years. The annual collegiate charge for the education and maintenance of each student is 35*l.* Twenty exhibitions have been founded by private individuals and by committees of public societies in order to promote the objects of the college. The Archbishop of Canterbury is visitor, and one of the patrons. The Archbishop of York and the Bishop of London are also patrons. The number of students in 1852 was 20.

Among the ruins of ancient buildings in Canterbury may be noticed the walls of a castle, said to have been built by William the Conqueror, which is on the south-west side of the city, near the entrance from Ashford. These remains appear to have been the keep, or donjon, of a fortress, within which it stood, and of which the bounds may still be traced. The ruins of the palace, which was originally built by Archbishop Lanfranc, are adjoining the borough of Staplegate, a suburb of the city. The Pilgrims' Passage, by Mercery Lane, on the north side of the High Street, is towards the cathedral. Canterbury contains 14 parish churches and places of worship for Independents, Baptists, Wesleyan Methodists, Quakers, Roman Catholics, Unitarians, Jews, and others. The charitable institutions for education, for the maintenance and relief of the aged and infirm, and other purposes, are numerous; those which have endowments attached are administered by trustees appointed by the Lord Chancellor. There are several National, British, and Infant schools, a Blue-Coat school, and a Gray-Coat school. The city and county hospital, a valuable and well-conducted establishment, was completed in the year 1798; it is supported by voluntary contributions.

The city of Canterbury was in ancient times part of the royal demesnes, and was under the government of an officer appointed by the crown, styled the prefect, portreeve, or provost, who had all the civil authority, and accounted yearly to the king for the several profits arising from the city. In the 18th of Henry III., the citizens were empowered to choose bailiffs for themselves. In the 26th of Henry VI., a charter of further liberties and privileges was granted, and that form of municipal government established which existed until the operation of the Municipal Reform Act. Edward IV. granted a charter which settled the boundaries of the jurisdiction, and formed the city into a county by the name of the county of the city of Canterbury. There were subsequent charters by Henry VII., Henry VIII., James I., Charles II., and George III. A county court is held at Canterbury. Quarter sessions are held by the recorder; capital offences are removed to the assizes at Maidstone. The city has sent two members to Parliament since the 23rd of Edward I.

Canterbury is neither a manufacturing nor a commercial city. Silk weaving, which was introduced by French refugees, was at one time prosecuted to a considerable extent in the city, but has been long extinct. The trade in wool is large, but the chief trade is in corn and hops, for the cultivation of which the soil of the neighbouring country is particularly favourable. There are numerous mills on the banks of the river Stour. Canterbury has long been noted for its hrawn, which is sent to all parts of the kingdom. A railway from Canterbury to Whitstable, the port of Canterbury, has been of considerable benefit to the trade of the town. Of the public buildings the guildhall, the fruit and vegetable market, the new corn and hop exchange, the butter and fish markets, the philosophical museum, the barracks, the military infirmary, the jail, the houses of correction, and the assembly rooms, are the chief. There is a savings bank in Canterbury. The city is lighted with gas. At the south-east corner of a field, close to the city wall, is a large artificial mound, or circular hill, which in 1790 was converted by Alderman James Simmonds, to whom the city is much indebted for many improvements, into a city mall; the sides of the hill were also cut into serpentine walks, so as to admit an easy

ascend to its summit, and were connected with a terrace formed upon the rampart within the wall, extending in length upwards of 600 yards; additional walks were also made in the field in which it is situated, called the Dane John or Donjon field, and a double row of limes was planted on the sides of the principal walk. The public-spirited conduct of the alderman is commemorated by a pillar placed on the summit of the mound. Some springs of mineral waters discovered in 1693 on premises now used as a nursery-ground, have been highly esteemed for their medicinal properties. One is purely chalybeate, and the other contains a portion of sulphur in combination with the iron. During the severest seasons these waters never freeze. In the vicinity of Canterbury are many gentlemen's seats.

The markets are held daily for provisions of all kinds; but the principal market, which is for cattle, corn, hops, and seeds, is on Saturday, and is toll free for corn. A market for fat stock is held every alternate Tuesday with Ashford. The annual fair, which commences on the 11th of October, and lasts from eight to ten days, is very numerous attended; it is chiefly for pedlery and toys.

The Archbishop of Canterbury is primate of all England and metropolitan. His ecclesiastical province includes the following dioceses: St. Asaph's, Bangor, Bath and Wells, Canterbury, Chichester, St. David's, Ely, Exeter, Gloucester and Bristol, Hereford, Lichfield, Lincoln, Llandaff, London, Norwich, Oxford, Peterborough, Rochester, Salisbury, Winchester, and Worcester. The diocese of Canterbury comprises 352 benefices, including the county of Kent, except the city and deanery of Rochester, and some parishes in the London diocese. The chapter consists of a dean, 12 canons, 2 archdeacons, 6 preachers, and 5 minor canons. By a late statute the canonries are reduced to six; accordingly six are now suspended. The income of the Archbishop of Canterbury is 15,000*l.* a year.

(Somner; Batteley; Lambard; Hasted; Gostling; Camden; *Canterbury Guides*; *Communication from Canterbury*.)

CANTERBURY. [ZEALAND, NEW.]

CANTIRE. [ARGYLSHIRE.]

CANTON, a city of China, the capital of the province called Kiang-tong, a corruption of which has been applied by Europeans to the town itself; the real name is Kuang-chow-foo. It lies in 23° 7' 10" N. lat., and 113° 14' 30" E. long., distant about 1200 miles S. by W. from Peking, and 60 miles N.N.W. from the Chinese Sea. The city is built on the north bank of the Choo-keang, or Pearl River, and on the eastern bank of its affluent, the Pi-keang, a river which flows from the mountains north and west of the city. From the entrance of the river Bocca Tigris (so called after the Portuguese) to Canton the distance is 32 miles; a ship sails a few points west of north until she arrives near the 'first bar,' and thence her course is nearly due west to the anchorage at Whampoa, which is 10 miles below the foreign factories, the intercourse with which is entirely conducted in boats. On reaching the city the country to the north and east appears hilly and mountainous. The rivers and creeks, which are very numerous, abound with fish, and are covered with a great variety of boats, which are continually passing between the neighbouring towns and villages. The tide flows about 40 miles above Canton. The country lying southward of the city consists of an alluvial flat, being the delta formed by the depositions from the waters of the main river, with here and there a solitary hill of granite or red-sandstone rising up like an island. Rice-fields and gardens, in a high state of cultivation, occupy the lowlands, and trees, principally firs, cover the elevated points. That part of the city situated within the wall is built in the form of an irregular square, and divided by another wall, which runs from east to west into two parts. The north and largest portion is called the old or inner city; it is inhabited chiefly by Mantehoo or Tartar families; the south part is called the new or outer city; it is the abode of Chinese. Across the old city, about the centre of it, a wide street runs east and west, called by the Chinese the Straight Street of Benevolence and Love. Outside the city walls, close to the foreign factories, is the Street of Perpetual Joy. To the south the wall runs parallel to the river at the distance of about 100 yards; on the north, where the city is built partly up the acclivity of the hills in the rear, the wall takes an irregular course, and in some places is about 300 feet above the surface of the river. The whole circuit of the walls may be about 7 miles. The walls are of brick, on a foundation of red-sandstone: they are about 20 feet thick, and vary in height from 25 to 40 feet. The gates of the city are 16 in all, but 4 of them lead through the wall which separates the old from the new city; so that there are only 12 outer gates, each distinguished by a name descriptive of its position. Most of the streets are short, and irregularly laid out, varying in width from 6 to 16 feet; but in general they are about 8 feet wide, just allowing the passage of two sedan chairs, for no wheel carriages are used at Canton. They are everywhere flagged, more or less regularly, with large flat stones. The crowd that throngs them is exceedingly great. Bricks are generally used for the walls of houses, though a few of the poorer sort are constructed of mud. Stone and wood are sparingly used in building; stone is employed about gateways, and wood for columns, beams, and rafters. The roofing consists invariably of thin tiles, which are laid on the rafters in rows alternately concave and convex, the latter overlapping the joined edges of the former and cemented over them with mortar. Windows are small and rarely supplied with

glass. Paper, mica, and other transparent substances are used in its place. The materials for building are procurable at moderate prices and in abundance. The wood, a variety of fir, is floated down the river in huge rafts, and bricks are made in the neighbourhood of Canton. There are 120 temples in and near Canton. The principal Buddhist temple stands on the island of Homan, which is situated in the river, opposite Canton. This temple covers, with its buildings, courts, and gardens, an area of about 7 acres, and is surrounded by a lofty wall. In the old city is a Mohammedan mosque, with dome and minaret 160 feet high. At the north side of the city is a pagoda five stories in height.

The habitations in which about one-half of the population of Canton have their abodes, stand close on the street, and have usually only a single entrance, which is closed by a bamboo screen suspended from the top of the door; within these houses there are no superfluous apartments; a single room allotted to each branch of the family serves as a dormitory, while a third, which completes the number into which the whole inclosure is divided, is used by all the household as a common eating-room. Chinese houses of consequence open towards the south, but in the poorer sort this point of course is often disregarded. The dwellings inhabited by the more wealthy part of the community are surrounded by a wall 12 or 14 feet high, that fronts the street, and completely screens the buildings within. The poorest persons live in the extreme parts of the suburbs, along the banks of the river and its creeks, and in the northern part of the old city; their houses are mere mud hovels, low, narrow, dark, and without any division of apartments. Several canals traverse the city and suburbs, and are used for conveying goods and passengers. Two of the largest of these canals run parallel to, and outside of the east and west walls, and communicate with each other by a third, which passes through the outer city. The foreign factories are railed in, and form a promenade, called Respondentia Walk.

The shops are commonly quite open towards the street, that is, those appropriated to Chinese customers: for the few streets devoted to European trade are rather on a different plan, the shops being of a closer structure and less exposed to external observation. The several streets are commonly devoted to distinct trades. There is 'Carpenter' Street, or rather Square, as it is carried round a parallelogram; 'Curiosity' Street (as the English call it) is devoted to the sale of antiques, real and fictitious; and 'Apothecary' Street is full of druggists' shops, the drawers in which are neatly arranged and lettered, and filled principally with simples. By the side of each shop is suspended from on high a huge ornamental tablet of wood, varnished and gilded, on which are inscribed the particular calling of the tenant and the goods in which he deals. Some of the shops, which are pretty richly supplied, appear to be much exposed towards the street; but the inhabitants of each division generally combine into a system of watch and ward for common protection, and during the night the streets are closed at each end by doors, which are guarded by the regular police. The greatest risk to which the houses and shops of Canton are exposed is that of fires, which are frequent, the notion of fatalism which prevails among the natives rendering them singularly careless. The Chinese have very generally adopted the use of our fire-engines, which they themselves manufacture sufficiently well to answer the purpose. The amount of the native population of Canton has been often estimated, but so little authentic information has ever been obtained on the subject, that it still remains undecided. The usual estimate of a million appears to be much too high. No inconsiderable part of the population live upon the river, in the junks, barges, and small boats, causing the space opposite Canton and its suburbs to assume the appearance of a floating city. By far the largest part of the small boats are called 'egg-house' boats, from their shape resembling the longitudinal section of an egg. They are generally not more than 10 or 12 feet long, about 6 feet broad, and so low that a person can scarcely stand up in them. Their covering consists of a bamboo or mat tilt, shaped like that of a waggon, which is very light, and serves tolerably as a defence against the weather. Whole families live in these boats, and are considered as a distinct part of the population, being under a separate regulation and not allowed to intermarry with those on shore. These boats are registered, and the whole number has been reported at 84,000. Some of these floating houses present a handsome appearance. Vagabonds and beggars are very numerous in Canton.

A founding hospital, instituted in 1693, affords accommodation for upwards of 200 children. There is also a general hospital, commenced in 1835 by an American missionary society. Canton possesses 14 high schools and 30 colleges, three of the colleges have about 200 students each. In the new city is the residence of the provincial governor or viceroy, and that of the Hoppo, or commissioners of the customs on foreign trade. The barracks are also in the new city.

The portion of Canton in which the European factories are situated, being a mere suburb, does not contain many of the larger or public buildings; but the arrangement and architecture of the streets and shops are precisely the same as within the walls of the city. The whole frontage of the buildings in which foreigners of all nations are shut up together for the prosecution of their trading business at Canton, does not exceed between 700 and 800 feet. Each front, of

which there are about thirteen, extends backwards 130 yards, into a long narrow lane, on each side of which, as well as over arches that cross it, are the confined abodes of the English, French, Dutch, Americans, Parsees, and others.

The European factories are called by the Chinese 'Hongs,' the word hong being always used by them to denote a commercial establishment or warehouse. To the east of all there is a narrow inlet from the river—a sort of ditch, which serves to surround a portion of the city wall, as well as to drain that portion of the town. This is crossed with a single arch by a narrow street at the back of the factories, that leads to the warehouses of the several Hong merchants, all of them communicating with the river by wooden stairs, from which the tea and other goods are shipped. The space occupied by the foreign factories is crossed by two well-known thoroughfares, one of them named China Street, and the other Hog Lane; to which a third, called New China Street, has been added. The first is rather broader than the generality of Chinese streets, and contains the shops of the small dealers in carved and lacquered ware, silks, and other articles in common demand by strangers. The shops, instead of being set out with the showy and sometimes expensive front of an English or French shop, are closed in by gloomy black shutters, and very ill-lit by a small sky-light, or rather a hole in the roof. The alley called Hog Lane is narrower and more filthy than anything of the kind in a European town. The hovels by which it is lined are occupied by abandoned Chinese, who supply the poor ignorant sailors with spirits, medicated to their taste with stimulating or stupefying drugs.

The climate at Canton is generally remarkably healthy, though extremely hot during the summer, and at all times subject to great and sudden vicissitudes. In July and August the thermometer sometimes reaches 100° Fahr. in the shade, and during winter it occasionally falls below the freezing point at night: the average of the year is about 72°.

Canton derives its chief interest and importance from having been formerly the sole, and still being the principal, emporium of the British trade with China. Canton city is nearly at the farthest possible distance from the capital. The policy of the Tartar dynasty in confining the European trade with such obstinacy to a point so unsuited to its extension may have been prompted by the desire to remove the danger of external involvements from the vicinity of the capital, and to derive the largest possible revenue from internal duties on transit, which in this instance are known to be large. The emperor derives a very large revenue, direct and indirect, from Canton, and the Chinese officials practise extortion to a very great degree for their own private advantage. The restriction on foreign trade which confined commercial transactions to the Hong merchants has been removed, and foreigners may now trade with any parties they choose to employ.

The annual amount of foreign business transacted at Canton was estimated a few years ago at 80 millions of dollars; the larger part of the trade being carried on by Englishmen and Americans. All the legitimate trade of China with European nations, with the exception of Russia, was formerly conducted at Canton. The Russian depôt is at Kiachta, on the border of the empire, in Mongolia. The British possessions in India have extensive commercial dealings with China, exceeding even the amount of the trade between England and China. From India the principal article received was formerly raw cotton; but opium, clandestinely introduced, was more recently the largest in amount. The Chinese authorities, having been roused to activity on the subject, in 1839 confiscated and destroyed a very large quantity of opium belonging to British subjects. Redress was demanded, and a war ensued, which ended in the adoption of a treaty in 1842, by which a complete change was effected in the commercial policy of China. The Chinese government agreed by the terms of this treaty to pay 21 millions of dollars as an indemnity; to open the ports of Amoy, Foo-cho-foo, Ningpo, and Shanghai, in addition to Canton, for the admission of the ships and goods of Britain; to cede to the British government the island of Hong Kong, situated in the estuary of the Canton River; and to establish a just tariff of duties on exports and imports. The average arrivals of ships under the British flag at Canton are about 230, of 120,000 tons burden; of which about one-half clear out for the United Kingdom, exclusive of those which clear for British ports after touching at Hong Kong. The average annual value of the imports, exclusive of opium, amounts to 16,000,000 dollars, the exports to from 18,000,000 to 20,000,000 dollars. The principal articles of export are tea, raw silk, and silk piece-goods. Of tea the quantity exported in 1844 was 72,566,311 lbs., of which 15,825,800 lbs. went to the United States and 52,179,533 lbs. to Great Britain. The total value of the tea exported in 1844 was 19,307,759 dollars. The quantity of tea brought into Great Britain during the year ending 5th January 1853 was 66,361,020 lbs., and that to America had increased in a somewhat larger proportion. On the 5th January 1853 the emperor of China legalised the importation of opium into his dominions.

Tea.—The bulk of the Company's exportations down to the end of 1833, when the trade was thrown open, comprised under the head of black tea—bohea, congou, with souchong and campoi, under which may be ranged souchi and pekoe. The green teas consisted of the

three principal distinctions of twankay, hyson skin, and hyson. The two great varieties of the tea plant are the *Thea viridis*, which is most extensively cultivated in the northern part of the empire, and the *Thea Bohea*, which is the Canton variety. From the *Thea viridis* are made all the fine green teas in the great Hwuy-chow country and the adjoining provinces. From the *Thea Bohea* are produced at the pleasure of the manufacturer, and according to the demand, the inferior green and black teas which are made about Canton.

Occupations of the Inhabitants.—It has been estimated that about 50,000 persons are engaged in Canton in the manufacture of various kinds of cloth; about 17,000 in the weaving of silk; and upwards of 4000 in shoemaking. A large number of persons find employment as workers in wood, brass, iron, stone, &c. The book trade affords considerable employment. Particular trades are associated in distinct communities, guided by laws of their own in reference to the management of their business. A large proportion of the articles required for use in Canton and for export is manufactured at Fuh-shan, a place of considerable size a few miles west from Canton.

Money and Weights.—A paper currency was adopted by the Mongol conquerors of the empire, but was subsequently abandoned in consequence of the depreciation and discredit which ensued from over issues and the bad faith of the government. At Canton silver and a base alloy of copper are the two metals in circulation. The native copper coin is from its low value used only in bazaar payments, the exchange varying between 700 and 800 for a Spanish dollar. The Chinese seem to find it impossible to have a silver coin, from the propensity of the people to play tricks with anything more valuable than their base copper coin, the cash. The Spanish dollars imported into Canton are very soon punched into such a state as to be exchangeable only by weight. None but freshly imported dollars are received without a very strict scrutiny called shroffing. The charge attendant on this operation causes a premium in favour of new dollars.

The broken Spanish dollars circulate by weight, and their proportion to the tale or tael varies in different transactions, being estimated in the accounts among foreigners and native merchants at the rate of 720 taels per 1000 dollars; but in the weighing of money, at 717 taels per 1000 dollars; and to 'outside dealers,' shopkeepers, and compradors, at 715 taels per 1000 dollars.

The Chinese money-weights are as follows:—

Tale.	Mace.	Candareen.	Cash.	Oz. Troy.	Grs. Troy.
1	10	100	1000	1.208	579.84
	1	10	100		57.98
		1	10		5.79

In the sycee, or fine silver prescribed for the payment of government dues, 98 parts in 100 must be pure. This is cast in oblong ingots, of 1 and 10 taels in weight, with a stamp impressed. Gold is not used either for exchange or as an article of remittance.

The commercial weights are calculated in peculs, catties, and taels, and their proportions are according to this table:—

Pecul.	Catties.	Tales.	lbs. avoirdupois.	Cwts.
1	100	1600	133½	1.19047
	1	16	1½	

(A Description of the City of Canton; The Chinese, a General Description of the Empire of China and its Inhabitants; Fortune, Two Journeys into the Tea Districts of China, 1853; Parliamentary Returns.)

CANVEY ISLAND. [ESSEX.]

CAPE, literally Head (*Cap*, French; *Capo*, Italian; *Cabo*, Spanish and Portuguese; all from the Latin *Caput*), is a term used to indicate the extremity of a portion of the coast which projects beyond the general line of the shore. On rocky and much-indentured coasts, as on that of northern Scotland, capes are of course very frequent, while low and sandy coasts sometimes offer no cape for 50 or even 100 miles. On shores of the latter description they are commonly formed by the change in the trending of the land, and form obtuse angles, while on rocky coasts they terminate in acute angles, on which account they sometimes are called Points.

CAPE BRETON, an island of British North America, situated to the E. of Nova Scotia, and forming the S.E. limit of the Gulf of St. Lawrence, lies between 45° 27' and 47° 4' N. lat., and between 59° 45' and 61° 38' W. long. Its greatest length from north to south is about 100 miles, and its greatest breadth 85 miles. Its area, exclusive of the great salt waters, is about 2,000,000 acres, more than one-half of which is supposed to be fit for cultivation. The extent of improved land in 1851 was 63,527 acres. The island is divided from the mainland of Nova Scotia by the Gut of Canso and St. George's Bay. The Gut of Canso is a channel 21 miles long, varying from one mile to one mile and a half in width. St. George's Bay is at the northern extremity of this channel. North Point is about 73 miles from Cape Anguille, the south-western extremity of Newfoundland. The population of the island in 1851 was 27,580.

The Island of Breton contains much high land, particularly in the north part, and on the east and north-west districts near the coast. Cape Enfumé, on the north-east coast, in lat. 46° 40', is 1800 feet above the level of the sea. The east and south coasts are well provided with harbours. St. Ann's Bay, on the east, leads through a narrow pass to a safe and capacious harbour of the same name, in which ships of considerable burden may anchor. Sydney Harbour,

to the south-east of St. Ann's Bay, is an inlet two miles wide and four miles long; which then separates into two narrow arms, one of which runs to the south-west, the other to the south: at the bottom of the south arm, seven miles from the sea, is the town of Sydney, the capital of the island. Sydney Harbour is safe and spacious. It has a bar at its mouth, but with sufficient depth of water for large ships to enter. South of Sydney Harbour are Lingen, Windham, Murgain, and Miré bays. Miré Bay is the outlet of Miré River, which flows into it from the west. On the south-east coast are Louisbourg Harbour, Gabarus Bay, Portland Cove, Forked Harbour, and St. Esprit Harbour. St. Peter's Bay is on the south coast, and in Lenox Channel leading to the Gut of Canso. In the southern entrance of the Gut is situated the island of Arichat, with the port of the same name. The only harbour on the west coast which will admit trading vessels is Port Hood, situated at the north-east point of St. George's Bay: this harbour is capacious, and completely sheltered. The most remarkable physical feature of the island is the Bras d'Or, an inland sea, which occupies a large portion of its surface, and nearly divides it into two islands. The entrance to this basin is by two channels formed by the island of Boulardrie, which lies between St. Ann's and Sydney harbours on the east coast. The north channel is called the Great Entrance, and the channel on the south side of the island the Little Entrance: the last has a sunken bar at the mouth, and is seldom used even by boats. Boulardrie Island is 20 miles long, and its greatest breadth is two miles. Within this island is the Little Bras d'Or, a passage to the west of which leads to Bedeque Bay and Whyccomagh Basin, which are together 15 miles long. Another narrow passage at the south extreme of the Little Bras d'Or conducts to the large basin, which contains numerous small islands, and branches out into several arms or inlets. The most southern of these arms terminates at the Isthmus of St. Peter, a neck of land only 900 yards across, which separates the water of Bras d'Or from the Atlantic, at the Bay of St. Peter in Lenox Channel.

The Bras d'Or receives the waters of several rivers, the principal of which are the Bedeque and the Wagematcook on the north, and the Dennys on the west. From the mouth of the Great Entrance to the south-west extremity of St. Peter's Isthmus this inland basin is 55 miles long; its width from east to west at the broadest part is 20 miles. The depth of water varies from 70 to 360 feet, and in every part it is safely navigable, offering great commercial advantages to the island by affording water-communication to the farmers of every district.

The island contains several fresh-water lakes. In the north-west division is Lake Marguerite, 40 miles in circumference, the outlet of which is by a river of the same name 15 miles long, which falls into the sea opposite East Cape, on Prince Edward's Island. Grand Lake and Miré River or Lake are in the south division; the latter receives the waters of Salmon River, which flows from the west. There are likewise on different parts of the coast many small streams which are not navigable.

The climate of Cape Breton is not so regular, but neither is it so rigorous as that of the neighbouring continent. The frost does not usually set in long before Christmas; and there are frequent intervals of warm weather, sometimes for a fortnight together, in the course of the winter season. Very intense cold is occasionally experienced. The summer months are dry and warm on the eastern coast, but on the western coast there is more moisture. The mean summer heat is 80° Fahrenheit in the shade. The spring is short, and vegetation is exceedingly rapid. Planting and sowing are done in May, fruits ripen in July, and in August and September the harvest is got in.

Mica-slate, clay-slate, syenite, and primitive trap are found in all parts of the island. Transition limestone, grauwacke, gypsum, and coal are very generally distributed. The coal-fields are of great extent in the south-east division. Coal exists in the west part of the island; and it has been calculated that the available seams of coal in different parts occupy an area of 120 square miles. Extensive works are carried on at Sydney and at Lingen, where the seams vary in thickness from 3 to 11 feet. The quantity of coal raised in the island in 1851 was 53,000 chaldrons. Granite prevails among the primitive rocks south-east of the Bras d'Or. Gypsum is found in great abundance in many parts, and particularly on the shores of the Bras d'Or. There are salt springs at Bedeque, at Whyccomagh, at Wagematcook, and in some other parts on the Bras d'Or: the brine produces from 10 to 12 per cent. of salt. Iron-ore is found abundantly associated with the coal about Sydney, Lingen, and in other places. Some of the ore will, it is said, yield 60 per cent. of the metal.

The principal vegetable productions of Cape Breton are timber, and the common cereal grains, including maize and potatoes. Of the timber, which includes the pine, birch, oak, spruce, hemlock, beech, ash, maple, and elm, considerable shipments are made yearly to the United Kingdom. The produce in 1851 included:—Wheat, 16,600 bushels; barley, 24,776 bushels; oats 183,188 bushels; maize, 124 bushels; buckwheat, 75 bushels; rye, 33 bushels; potatoes, 114,654 bushels; turnips, 21,718 bushels; hay, 16,251 tons; butter, 329,086 lbs.; cheese, 16,300 lbs.

The coast and harbours swarm with fish. Those most commonly

taken are salmon, cod, herrings, mackerel, shad, halibut, sturgeon, alewives, soles, plaice, haddocks, and smelts. In the lakes and rivers perch, trout, bream, and eels are abundant. The statistics of the fishery for 1851 show the following results:—Vessels employed 21, of 463 tons, with 83 men: boats employed 654, with 1293 men. Quantities cured: dry fish, 21,458; salmon, 344 barrels; shad, 23 barrels; mackerel, 9423 barrels; herring, 6113 barrels; alewives, 53 barrels. A considerable quantity of fish-oil was also obtained, amounting to nearly a fourth of the quantity furnished by all the other parts of Nova Scotia.

The first settlement was made on this island in 1712 by the French, who gave it the name of *Isle Royale*. In 1720 they constructed the fortifications of Louisbourg, on the south-eastern coast. In 1745 the island was taken by the British. The town of Sydney, now the capital of the island, was founded in 1823. It is laid out with regularity, and the houses are neatly built, each having a garden attached to it. The courts of law are held in Sydney, where also the different government officers have their residences. The other settlements are situated either on the sea-coast or on the margin of the Bras d'Or. Most of the smaller settlements on the coast have been made by fishermen, many of whom are the descendants of the Acadians, or original French settlers from Nova Scotia. The European inhabitants who occupy themselves in agriculture and in the timber trade, are principally emigrants from Scotland and Ireland; some few inhabitants are the descendants of American loyalists. According to the Census returns of 1851 there were then on the island 18 clergymen, 7 lawyers, 7 doctors, 119 merchants and traders, 94 employed in manufactures, 502 mechanics, 3276 farmers, 1124 persons engaged in the fisheries, 35 registered seamen, 273 persons employed at sea, and 66 employed in the lumber trade.

The island is included within the government of NOVA SCOTIA, and is politically divided into two districts or counties, those of Cape Breton and Victoria. The island sends two representatives to the Nova Scotia House of Assembly. The greater number of the inhabitants, including most of the Scotch who came from the Highlands, are of the Roman Catholic religion. There are a few Presbyterians, and some members of the Church of England, who are under the spiritual care of the bishop of Nova Scotia. The respective numbers of the various religious bodies in 1851 were as follows:—Church of England, 2156; Roman Catholics, 11,493; Kirk of Scotland, 3452; Presbyterian Church of Nova Scotia, 103; Free Church, 8963; Baptists, 531; Methodists, 685; Independents, 73; other denominations, 318. The number of churches in all was 47; of schools, 70; of scholars, 2179. A few Indians still remain in the island. Their principal employments are hunting and fishing, but tracts of land have been reserved for them, upon which they grow maize and potatoes. They are quiet and inoffensive, generally remain stationary at their settlements during the winter, but wander along the shores at the return of warmer weather.

The following figures relative to the trade and manufactures of Cape Breton are obtained from the Census returns of 1851:—Saw-mills 14; grist-mills, 34; steam-mills, 2; tanneries, 7; value of leather manufactured, 2854*l.*; value of boots and shoes manufactured, 6978*l.*; one foundry, employing 5 hands, and producing castings of the value of 1200*l.*; 3 weaving and carding establishments; 1194 hand-loom; fulled-cloth manufactured, 24,850 yards; cloth (not fulled) manufactured, 43,504 yards; flannel manufactured, 16,084 yards; soap manufactured, value, 1074*l.*; candles, 512*l.*; quantity of maple sugar, 2132 lbs. The number of vessels built during the year was 24 of 2593 tons: the number of boats built was 469. The imports and exports stood as follows:—*Sydney*, estimated value of imports, 12,954*l.*, of which 6413*l.* was from Great Britain; 1332*l.* from British North America; and 4849*l.* from the United States. Exports, 30,234*l.*, of which 18,906*l.* went to British North America, and 8505*l.* to the United States. Shipping, inwards—293, of 28,633 tons, with 1620 men; of these ships 193 were from the British colonies: outwards, 300 ships (of which 192 sailed to British colonies), tonnage 30,127, with 1721 men. *Arichat*, value of imports, 16,298*l.*; exports, 21,850*l.*, of which about one half went to foreign states. Shipping, inwards, 183 of 15,215 tons, with 801 men: outwards, 77 of 5443 tons, with 357 men.

(Macgregor, *British America*; Bouchette, *British Dominions in North America*; *Parliamentary Papers*.)

CAPE COAST CASTLE. [GOLD COAST.]

CAPE COD. [MASSACHUSETTS.]

CAPE FEAR. [CAROLINA, NORTH.]

CAPE OF GOOD HOPE, one of the most southern points of Africa, was discovered by Bartholomew Diaz, the Portuguese navigator, in 1493. Diaz, after exploring the Atlantic coast of Africa as far as Cape das Voltas, 29° S. lat., was driven out to sea by a storm, and the next land he saw was Algoa Bay. He had thus doubled the southern extremity of Africa without knowing it. On his way back he saw the cape to which he gave the name of Cabo Tormentoso, or Cape of Storms. On his return home the King of Portugal gave it the name of Cape of Good Hope, as an omen that the Portuguese had now a fair prospect of reaching India, the great object of their maritime expeditions. Vasco de Gama doubled it in November 1497, on his way to the Indian seas, and from that time the Portuguese consi-

dered it as the southern extremity of Africa. But Africa does not terminate in a point: it presents to the Southern Ocean a broad line of coast running east and west, from 18° 23' E., the longitude of Algoa Bay. This coast is indented by several bays and forms several promontories, of which the Cape of Good Hope is the most westward, but Cape Agulhas, 20° 10' E. long. advances farthest to the south, being in 34° 45' S. lat. The Cape of Good Hope is in 34° 22' S. lat. It forms the southern extremity of a narrow peninsula about 30 miles long, formed by False Bay on the east, Table Bay on the north, and the Atlantic on the west. Cape Town is on Table Bay on the north coast of this peninsula, and Simon's Town is on False Bay. This peninsula was the original boundary of the settlement which the Dutch made here about the middle of the 17th century, but they soon extended themselves beyond the isthmus which joins it to the African continent. The Hottentots, the natives of this part of Africa, a mild and inoffensive race, were easily though gradually subdued by the Dutch, who encroached step by step upon their country, reducing them to the condition of serfs, or driving away before them the more stubborn tribes. This process continued for more than a century, until at last the Dutch occupied the whole country as far as the great ridge called Nieuwveld Bergen and Sneeuw Bergen, about 32° S. lat., which runs east and west nearly parallel to the south coast, and divides the waters that run to the south, from those which flow north into the Orange River. Down to the close of the last century this ridge formed the natural boundary of the Cape colony, although the political boundary stretched considerably farther, the back settlers having extended beyond it on several points through the districts called by the Dutch Onder Roggeveld, Agter Roggeveld, and Middle Roggeveld. The colonial territory has since been considerably augmented.

The present boundaries of Cape Colony proper, as fixed by proclamation of July 5th, 1848, are—on the W. and S. the Atlantic Ocean; on the N. the Orange River, or Gariep, to where the Welge Spruit falls into it in 30° 25' S. lat., 27° 20' E. long.; on the E. the Welge Spruit to where the Wittebergen approach it; the ridges of the latter and the Stormbergen to the sources of the White Kei River; along its eastern branch to where it joins the Zwart (Black) Kei; up the latter to the junction of the Klaas Smits River, ascending it to its sources near Gaika's Kop; thence across the mountains to the sources of the Chumie, and down the latter and the Keiskamma to the sea. The length of the territory thus comprised, from west to east, is nearly 600 miles; its greatest breadth from north to south is about 450 miles; and its probable area is 203,000 square miles. It consists of several well-marked mountain chains and terraces rising one above another from the coast.

At the south-western extremity of the colony is a completely insulated mountain mass, forming the peninsula above mentioned, and of which the celebrated Table Mountain at the back of Cape Town is the highest summit (elevation 3582 feet). A broad expanse of level sands (the Cape Flats) divides it from the Hottentot Holland Mountains, which terminate in Cape Hangklip on the east of False Bay, opposite to the Cape of Good Hope. From the neighbourhood of Worcester, between 60 and 70 miles north-east of Cape Town, several chains of mountains strike off in different directions: the western or Tubagh chain, which runs northward to near the mouth of Olifant's River; the Drakenstein or Hottentot Holland chain before mentioned, which runs southward, in which and its offshoots are several important mountain passes; a range which bears in its course from west to east, successively, the names of the Zwelldam, Outeniqua, and Zitzikamma mountains, and which divides the southern sea-coast of the colony from the elevated longitudinal valleys called Kannaland and the Long Kloof; and the great Zwartberg chain, which bears generally from west to east, and nearly parallel in the greater part of its extent to the last-mentioned chain, being separated from it by the Long Kloof and the valley of the Kromme River.

North of the Zwartberg lies the vast elevated plain called the Great Karroo, which extends for nearly 300 miles east and west, and about 80 miles north and south. It is a bleak wide desert, utterly bare and barren, except after heavy rains. On the west it communicates with the Roggeveld Karroo, and on the north it is bounded by a great chain of mountains, which in its western part bears the name of the Nieuwveld Bergen, and farther eastward that of the Sneeuw Bergen. These last are the highest mountains in the colony; yet, notwithstanding their name, they are not covered with perpetual snow, and therefore do not give rise to unending streams. Their highest summit, the Spitzkop or Kompas Berg, north of the village of Great Reynet, has been variously estimated at 7000 and 10,000 feet of elevation above the level of the sea.

The land between these several mountain chains rises in successive stages like terraces from south to north; so that the Long Kloof is higher by some hundreds of feet than the country along the southern coast; the Great Karroo is much higher than the Long Kloof (having, it is said, a medium elevation of 3000 feet above the sea); and the country to the north of the Sneeuw Bergen is more elevated still.

The easternmost district of the colony, that of Albany, is for the most part a region of undulating hills, without any very conspicuous eminences; but to the north and north-east of it is another system

of high mountains, in which the Kunap, the Kat River, and most of the other tributaries of the Great Fish River, as well as the Keiskamma and its feeders, take their rise. These are the mountains of Somerset, the Tarka, and the Ceded Territory. The Winterberg, their highest point, is supposed to have an elevation of 7000 feet. This chain extends in somewhat of an irregular crescent shape from between the Great and Little Fish rivers above the village of Somerset, to the upper valley of the Keiskamma, and links itself to the Amatola Mountains in Kaffraria.

The rivers of the Cape Colony are numerous, but have little permanent depth of water. A very few can be entered by small craft; the remainder, including the Orange River, are not navigable. The principal streams which discharge themselves into the sea on the southern coast are (in succession from west to east) the Breede, the Gauritz, the Gamtoos, the Sunday, the Bushman's River, the Great Fish River, and the Keiskamma. Those of secondary importance likewise flowing directly into the sea are the Duyvenboks, the Kuysna, the Kourboome, the Kromme, the Zwartkops, and the Kowie. Of those which flow to the western coast the chief are the Berg River, Olifant's River, and the Gariep or Great Orange River. Nearly all but the latter are torrents shrunken almost to dryness except after heavy rains, when they rise suddenly and become extremely impetuous and formidable. Many of them flow in deep channels cut down fifty feet or more below the general surface of the country, between steep banks choked with thick vegetation. These ravines are great hindrances to travellers, and render it very difficult to use the waters of the streams for irrigation.

The general character of the country is sterile and uninviting. The environs of Cape Town indeed are picturesque, and so also is the country eastward of the Fish River; some of the south-western districts have a considerable degree of fertility, and produce corn and wine in abundance, whilst all the rest of the colony may be considered as present as nearly a grazing country. The quantity of corn raised is more than sufficient for the wants of the colony. Considerable attention is paid to the cultivation of the vine. White wine is produced in the interior. The small vineyard of Constantia, situated about eight miles west from Cape Town, has acquired celebrity from the luscious and high-flavoured wine which it produces, and which is known as Constantia wine. The produce of the Constantia vineyard, including both red and white wines, varies from 8000 to 12,000 gallons annually, according to the season. The chief occupation of the rural districts is the rearing of cattle. Merino sheep have been introduced into the colony, and have been successfully reared. In various parts of the country there are extensive varieties of beautiful flowers, including several hundred species. The aloes yields produce amounting in some years to about 3000*l.* in value, which is chiefly exported. From the covering of the wax-berry, candles are manufactured. The southern faces of the Outeniqua and Zitzikamma mountains are clothed with forests of large trees, as are also the Zuurburg and some other tracts near the eastern frontier; but the general characteristics of the scenery are rocky and arid mountains, naked uncultivated plains, stony valleys without a tree, a prevailing monotony, and absence of shade, of verdure, and of water. A few of the larger species of wild animals still exist in the remote parts of the colony, but their number diminishes as the civilised man encroaches on the territory hitherto occupied by the wild beast and the undisciplined savage. The climate is on the whole dry, but mild and favourable to health. Rain falls plentifully on the coast, but in the interior of the country it occurs rarely. The mean temperature for the year at Cape Town is 67° 3', the range being from 58° 3' to 76° 6'. The coldest months are June and July; the warmest are December and January.

The territory of Cape Colony is divided into 10 western and 10 eastern districts, very unequal in size. The western districts are Cape, Stellenbosch, Zwelldam, Caledon, Worcester, Clanwilliam, Paarl, Malmesbury, George, and Beaufort. The eastern districts are—Uitenhage, Port Elizabeth, Graaf Reynet, Cradock, Colesberg, Somerset, Albany, Fort Beaufort, Victoria, and Albert. The principal towns are—Cape Town, the capital [CAPE TOWN], Grahamstown, Port Elizabeth, Graaf Reynet, Simon's Town, Uitenhage, Zwelldam, Stellenbosch, Beaufort, &c.

Grahamstown, the principal town of the eastern districts and capital of the Albany district, is situated near the source of the Kowie River, on a plateau about 700 feet above the level of the sea. It contains 800 houses and about 6000 inhabitants; returns two members to the House of Assembly; is governed by a municipality and has lately been very much improved. Port Elizabeth, on the north-west corner of Algoa Bay in the district of Uitenhage, is a mean-looking but thriving town of 5000 inhabitants, and is the principal port of the eastern province. In the year ending 5th January 1849 there entered the port 138 vessels of 24,900 tons aggregate burden. The customs dues were 25,266*l.*; the total value of imports was 326,293*l.*; of exports 132,461*l.* The anchorage of Algoa Bay though open to the south-east winds is not unsafe for well provided vessels if proper care be taken. Landing however is often impracticable on account of the heavy surf. A lighthouse has been recently placed upon Cape Recife, the south-western extremity of the bay. Graaf Reynet, the chief town of the district of that name, distant 500 miles E. from Cape Town and 142 miles N.W. from Grahamstown, stands on the Sunday River, near

the foot of the Great Sneeuw Bergen. It is a pretty Dutch looking town and inhabited almost exclusively by Dutch; population about 3000. *Uitenage* has more the appearance of a rural village than a town. It is one of the most agreeable places in the colony, and stands on the beautiful little Zwartkops River, in a fertile valley surrounded by wooded hills. It was proposed by the late Sir Benjamin d'Urban to remove the seat of government to this place, a measure which promised many advantages, but which was defeated by the opposition it excited at Cape Town. *Simon's Town*, 24 miles from Cape Town, is a small place consisting of little more than a single row of houses, stretching along the shore of the bay and backed by steep barren stony hills. *Simon's Bay*, the station for ships of war, is a cove on the west side of False Bay: it is not capable of containing any great number of vessels; but being sheltered from the westerly winds and in part from the swell caused by the south-easterly winds, it is a safer anchorage than False Bay. *Zwellendam*, *Stellenbosch*, and *Beaufort*, the chief places of the districts so called, are large villages.

The population of the Cape Colony according to the Census of 1848 was 200,546. Of this total 78,827 were whites, namely, 39,896 males and 38,931 females; 101,176 belonged to the coloured races, namely, 52,197 males, 48,979 females; the remaining 22,543 belonged to Cape Town, namely, 11,074 males, 11,469 females. The genuine Hottentots now in the colony are few in comparison with the mixed breeds, or *Bastaards* as they are called, in whom the blood of the aboriginal race is crossed with that of the Dutch, the Negro, or the Malay. The *Baroa* or *Boesjesmen* too have declined in numbers, but some of this singular race still roam the deserts lying along the northern boundary of *Clanwilliam* and *Beaufort* districts.

The constitution of the colony as finally adopted in 1853 after much agitation, consists of a Governor, a Legislative Council, and a House of Assembly. The Governor is appointed by the crown. The Legislative Council is formed of fifteen elective members and the chief justice of the colony, who holds his seat in right of his office and is president whenever present: five members form a quorum; all questions are decided by a majority not including the president, but when the votes are equal the president has the casting vote; the members are elected for ten years, but eight and seven retire alternately every five years. The House of Assembly consists of forty-six members elected for five years, and twelve form a quorum. The electors are every male person not subject to legal incapacity who has occupied for twelve months previous to the day of election premises or land of the annual value of 25*l.*, or has been in the receipt of a salary of not less than 50*l.* per annum, or of 25*l.* together with board and lodging. Registration claims, objections, publication of lists of voters, revision, &c., are after the model of the mother country. Each of the ten western and ten eastern divisions returns two members each; *Grahamstown* returns two members and *Cape Town* (including the municipality of *Green Point*) returns four members. A property qualification is required for members of both houses of 2000*l.* in real property, or 4000*l.* in personal property clear of all mortgages or debts. The colonial secretary, the treasurer, the attorney-general, and the auditor are empowered, ex officio, to act and speak in both houses but not to vote. A session to be held once at least in every year. The governor has power to give or refuse his assent to bills passed, or to reserve them for the royal pleasure, but the Queen in council may disallow of acts assented to by the governor. The civil list, as it may be called, amounts to 106,090*l.*, of which the governor and his secretary receive 5300*l.*; the colonial secretary and his department 5500*l.*; the treasurer-general and his department 1890*l.*; the registrar of deeds 1000*l.*; the post-office 2330*l.*; the supreme court of law 7935*l.*; the divisional courts 16,335*l.*; education establishments 4100*l.*; police, prisons, and jails 1540*l.*; public worship 16,060*l.*; pensions 15,000*l.*; border department (aborigines) 14,000*l.*; the rest to various offices.

The Established Church has a bishop of Cape Town with a dean, four canons, and two archdeacons. The bishop of Cape Town is metropolitan, and has under him the bishop of *Grahamstown* created in 1853, and the bishop of *Natal* created in the same year, and the diocese includes the island of *St. Helena*. A considerable part of the community belong to the Dutch Reformed Church, and there are also numbers of Dissenters, all of whom have their various places of worship, schools, &c. The public provision for education in the colony is made on a comprehensive and liberal scale. Besides the *South African College* in *Cape Town* and the *Diocesan Collegiate School* in the *Cape* division, there are 179 public and private schools, some wholly some partially supported and directed by the government. In each district town there is a government free school, which is kept independent of all sectarian influence.

The gross revenue of the Cape of Good Hope in the year 1849 was 223,554*l.*, the cost of collection being 19,036*l.* The principal items were: Customs, 83,788*l.*; land revenue, 14,500*l.*; land sales, 8687*l.*; transfer duties, 20,387*l.*; auction duties, 17,257*l.*; stamps and licences, 20,607*l.*, and postage, 9574*l.* The total expense of the civil establishment in the same year was 259,201*l.*, including 10,813*l.* for immigration. The total military expenditure for the year ending March 31, 1850, was 158,201*l.*; the number of men, including the artillery, was 4790. In 1849 the total amount of exports was 547,047*l.*; the imports amounted to 829,852*l.*

The Cape Colony is pre-eminent among new countries for the number and excellence of its roads. They are managed by a board sitting at *Cape Town*, and the expense is defrayed by a local rate. [NATAL; KAFFRARIA; TRANSVAARIEPINE SOVEREIGNTY.]

(*Parliamentary Papers*; *Cape of Good Hope Almanack*; *Communication from the Cape of Good Hope*.)

CAPE HORN, which is considered the southern extremity of America, is not a part of that continent, but is the most southern point of a small island which belongs to the extensive group of *Tierra del Fuego*. It is situated in about 56° S. lat., 67° 10' W. long., and consists of a high precipitous black rock, which is conspicuous above all the neighbouring land, utterly destitute of vegetation, and running far out into the sea. The strong westerly gales which blow in the neighbourhood of this cape render it difficult to be doubled from the east. These gales however blow during the summer (October to April) only near the cape; in 60° S. lat. they are more variable, and vessels now double the cape, as it is called, without danger, simply by sailing on a higher latitude. During the winter east winds are more frequent; but at that season the navigation is rendered dangerous by the floating islands which approach the cape, and are found even farther to the north. There is a current towards the east near the cape which is attributed to the effect of the west gales. (Capt. Basil Hall.)

CAPE TOWN, the capital of the British possessions in South Africa, is in 33° 55' S. lat., and 18° 21' E. long., at the foot of *Table Mountain*, on the shore of *Table Bay*, from which the ground rises with a gentle slope towards the mountain. *Cape Town* was founded by the Dutch in 1650, and, together with the colony, continued in their possession until 1795, when it was taken by the English. At the peace of *Amiens* it was restored to the Dutch, but was again taken by the English in 1806, and has since remained in their possession. The town is well and regularly built. The houses, which are flat roofed and for the most part of a good size, are nearly all of red brick or stone, and furnished with a verandah in front. The principal streets are wide and clean, and regularly laid out, intersecting each other at right angles, and shaded with oaks and elms; but they are unpaved, and therefore excessively dusty in dry weather. The town is exposed to great heat in consequence of its situation, facing the woodland sun and immediately backed by naked mountains. The castle is on the right side of the town looking towards *Table Bay*, the anchorage in which it commands. This fortress is of considerable strength. Its form is pentagonal, and it has a broad fosse and regular out-works. Many of the public offices of the colony are within its walls, which likewise contain barracks capable of holding 1000 men. Connected with the castle on the east by a rampart called the *Sea-lines* is *Fort Knokke*, and still farther east is *Craig's Tower* and battery. On the west, surrounding the hill called the *Lieu's Rump*, are *Clavonne*, *Amsterdam*, and *Rogge* batteries; and the entrance to the bay is commanded by a battery called the *Meuillé*.

Table Bay is sufficiently capacious to contain a great number of ships, but it is exposed to a heavy swell during the prevalence of the westerly winds in June, July, and August. At other times the anchorage is tolerably safe. When discharging or taking in goods ships are moored very near the landing-place, which is built of wood, and is at the east side of the town. The south-east wind, as it blows from off the shore, is not dangerous to ships in the bay; but it often cuts off the communication between them and the land for several days together. It is usually accompanied by that peculiar cloud called the *Table Cloth*, which lies along the top of *Table Mountain* like a wreath of snow, while the rest of the sky is perfectly clear.

There are eleven churches and chapels in the town. Three of these are of the Established Church, four English Dissenting, one Scotch, one Dutch, one Lutheran, and one Roman Catholic. The ministers of all these places of public worship are supported by the colonial government. The supreme court of justice for *Cape Colony* is held within the town under the presidency of a chief justice and two puisne judges; there are besides a magistrates' court and a police office, having a judge and superintendent and a deputy. An observatory has been established about 2 miles north from *Cape Town* under the control of the Lords of the Admiralty. An iron building has lately been erected to serve as a depot for coals, to supply the steam-vessels which touch at the cape on their route to *Australia*.

The plain which surrounds *Table Mountain* is composed of blue schist, interrupted by masses of blue flinty rock, and resting upon a tenacious clay impregnated with iron. After ascending 900 feet the mountain appears to be nearly a solid mass of granite, characterised by large crystals of felspar, and containing, besides quartz and mica, occasional masses of hornblende. After ascending 900 feet higher the granite is surmounted by thin horizontal strata of red sandstone for near 200 feet; then succeeds a more indurated sandstone, quite white, and containing imbedded in it pieces of quartz from the size of a pea to that of an apple; this formation continues to the summit of the mountain, which is 3567 feet above the sea.

CAPE VERD ISLANDS (*Ilhas Verdes*), were so called by the Portuguese because the sea to the west of them is covered with Gulf-weed, so as to present some resemblance to extensive meadows. This group of islands is about 300 miles from the western shore of Africa, between 14° 17' and 17° 19' N. lat., and between 22° 10' and 25° 10'

W. long. Their shores are commonly low, or of moderate elevation, but in the interior the islands often rise to a considerable height. They are doubtless of volcanic origin, and a volcano still exists in the island of Fogo, the summit of which is above 9000 feet high. The soil is very dry, but by no means sterile. The rainy season lasts from July to November, and is attended with thunder-storms and thick fogs. Sometimes no rain falls for three or four years together, and the consequence is a famine. During the rainy season the climate is unhealthy. Maize and rice are the principal objects of agriculture; but all the fruits of the south of Europe and of Western Africa grow abundantly, especially oranges, melons, pomegranates, bananas, lemons, figs, guavas, grapes, cocoa-nuts, and pine-apples. Coffee grows well, as also indigo and tobacco. Sugar and cotton are grown, but very little is exported; and though the vine flourishes, the wine made is of inferior quality. The palm, tamarind, and adansonia are the principal trees. The number of trees on the island however is but small. Among the domestic animals the most numerous are cattle, goats, asses, and fowls; goat-skins are the principal article of export, upwards of 6000 being annually shipped. Asses are exported to the West Indies. The most remarkable of the wild animals are monkeys and bisam-cats; turtles abound in the neighbouring seas. Salt is made by evaporation from sea-water in most of these islands on the low shores, and forms an important article of export to America and the coast of Africa. A good deal of orchilla is gathered. The inhabitants, who are all Catholics and speak Portuguese, are mostly negroes, mixed with some mulattoes, the descendants of the Portuguese who have settled here. There are very few whites. Vessels bound for the East Indies sometimes stop here for fresh provisions.

The group consists of 8 larger islands and several barren islets. The following table shows their area and comparative populations:—

	Area in sq. miles.	Free inhab.	Slaves.
Santiago	360	10,932	1714
Fogo	144	4,700	909
Brava	36	3,820	170
Mauo	50	1,542	363
Boavista	140	2,818	513
San Nicolae	115	5,293	125
San Antonio	240	13,407	180
San Vicente	70	336	5
Total	1155	51,354	3979

It must be mentioned however that the total population of the islands in 1850 amounted to 86,738. The population in the table is taken from the Census of 1834. The total area of all the islands and islets belonging to the group is 1642 square miles.

Branca, Chaon, Carnera, and Ghuay are bare rocks, and Ilha do Sal has a sterile soil, but is important for the great quantity of salt collected in the numerous lagoons with which its beach is covered, and which is formed by solar evaporation.

The capital of the islands is *Ribeira Grande*, which is situated on the island of Santiago. It is the seat of a bishop, the residence of the Portuguese governor of the Cape Verde, and contains 500 houses: it is situated at the mouth of a river which forms a small harbour, but it is not much visited. *Porto Praya* is a good harbour, and is visited by vessels bound for India: it contains 1200 inhabitants.

These islands were discovered in 1449 by the Portuguese, and some years afterwards they were settled. They are still in the possession of the Portuguese, and under a separate governor. Besides the few articles (goat-skins, salt, turtles, fruits, saltpetre, cattle, and asses) which are exported, the inhabitants have some commerce with the continent of Africa, where they sell cotton cloths. Whales abound round the islands, and amber is found on all the coasts. Linen, earthenware, pottery, and soap are made on some of the islands.

In the sea which divides this group from Africa, the atmosphere for the greater part of the year is hazy and foggy, especially near the continent, so that the vessels sailing south prefer to keep to the west of the islands. The same phenomenon of a foggy atmosphere is observed farther north, between the Canaries and the coast north of Cape Bojador.

(Macgregor, *Commercial Statistics*.)

CAPE WALKER. [NORTH POLAR COUNTRIES.]

CAPELLE, LA. [AISNE.]

CAPERNAUM, an ancient city of Galilee in Palestine, about 70 miles N. by E. from Jerusalem, was situated on the north-western shore of the Sea of Tiberias, and about 2 miles W. from the mouth of the Jordan. It was a place of considerable importance in the time of Christ. It was there that our Saviour commenced his public ministry; and in its neighbourhood he delivered the Sermon on the Mount. Its continued impenitency and unbelief, notwithstanding the peculiar opportunities with which it was favoured, led to the denunciations pronounced against it. The name (Kaphr-uahum) meant 'village of consolation.' The ruins are now called Tell-Hûm, 'the ruined heap of a herd of camels.' The remains of Roman baths, porticoes, and buildings attest its ancient importance.

CAPITANATA, a province of the kingdom of Naples corresponding to the ancient Daunia, extends along the Adriatic from the mouth

of the Saccione to the mouth of the Ofanto. The Ofanto divides the province on the south-east from Basilicata and Bari; on the south and south-west lies the province of Principato Ultra, separated from Capitanata by the main ridge of the Apennines. The north-western boundary towards Sannio or Molise is formed by the upper course of the Fortore to the point where this river crosses the high road from Lucera to Ururi: it then runs along this road for five miles in a north-west direction, and thence down to the Saccione, along the left bank of which it runs to its mouth. The length of the province along the coast in a straight line is 70 miles; but reckoning the winding of the sea round the great projection of Monte Gargano, the coast-line measures at least 100 miles. The average width of the province is about 45 miles; but between the crest of the Apennines and the extremity of Monte Gargano it is not less than 75 miles. The area is about 2359 square miles, and the population in 1851 was 318,415. The governor of this territory and the adjoining parts of Italy subject to the Eastern emperors, was styled *Katapan*; and Capitanata is supposed to be a corruption of *Katapanata* or *Catapanata*, the name by which his province would most probably be designated. The province is also vulgarly called *Puglia Piana* (or level Puglia) to distinguish it from *Puglia Pietrosa* (the rocky), now Terra di Bari and Otranto.

The greater part of Capitanata consists of a wide plain sloping gently from the foot of the Apennines to the Adriatic. In the northern part of the province the mountainous region of Monte Gargano projects eastward into the sea, forming a promontory which from its shape and position has been called the 'Spur of Italy.' To the north-west the districts of Torre Maggiore, Lucera, and Vulturara lie among offsets of the Apennine ridge. To the west the towns of Troja and Bovino, and to the south that of Ascoli rise at the foot of the ridge itself. All the rest is a vast monotonous plain, without trees, with hardly any villages or houses, and with only the city of Foggia in the middle of it, and the town of Cerignola near the Ofanto. This plain is known by the name of Tavoliere di Puglia. The Fortore flows north-north-east into the sea to the north of Lake Lesina, opposite the Tremiti Isles. The Candelaro rises to the north of Torre Maggiore, not far from the right bank of the Fortore, from which it is divided by a low offshoot of the Apennines; it thence flows south-east along the western base of the Monte Gargano, receiving on the right bank from the Apennines the Triolo, the Volgano, and the Celone (which cross the northern part of the Tavoliere), and on the left bank a few small streams from Monte Gargano, and falls into the shore-lake of Pantano Salso, a few miles south of Manfredonia. The Cervaro and Carapella flow in a north-east direction from the Apennines, and at a distance of only a few miles apart cross the Tavoliere, the former enters the Pantano Salso; the latter discharges part of its waters into the shore-lake of Salpi, and the rest, by a canal cut in 1830, into the Adriatic. The Candelaro, Celone, and some of the other rivers are embanked to prevent inundations. The Ofanto (ancient Aufidus) is noticed under BASILICATA.

About one-sixth of the surface among the hilly regions of Gargano and the Apennines is covered with forests and plantations of trees. *Monte Gargano*, the ancient *Garganus*, is the only great promontory on the Italian shore of the Adriatic between Ancona and Otranto. The region is a compact mass of limestone mountains geologically connected with the Apennines, but separated from them by a portion of the great plain of Apulia. It extends not less than 35 miles from east to west, above 20 miles from north to south, and attains in its highest point an elevation of 5120 feet above the sea. In ancient times Garganus was celebrated for its dense forests of oak, but these have now almost entirely disappeared. The southern slopes of Monte Gargano are covered with aromatic herbs, from which the bees of the region make most excellent honey—the offshoot between Monte San Angelo and the sea was celebrated for its honey by Horace, whose name for the range (*Matinus*) is perpetuated in that of Mattinata, a village with a tower and small port. The ridges of Monte Gargano that extend down to the sea screen several coves well adapted for sheltering small craft. The Monte Gargano, with its well-wooded ravines interspersed with villages, presents much beautiful and interesting scenery. The region contains extensive quarries of alabaster.

The great plain of the *Tavoliere* is about 60 miles long and 30 miles broad in its widest part; it occupies 1,120,000 moggia, or nearly one-half of the surface of the province. It belongs to the crown, with the exception of a few small portions. Two-thirds of the plain are left for pasture, and have no resident population; and the other third is cultivated, excepting 58,000 moggia of it, which are covered with marshes. The history of the Tavoliere is interesting. Daunia, previous to the Roman invasion, was well inhabited, and had many towns. In the second Punic war the devastation of the country was commenced. The wars of Sulla and the servile war of Spartacus completed the desolation. The towns and villages of the plain being destroyed, the inhabitants became wanderers and shepherds. The course of the rivers and drains being neglected, pestilential marshes were formed near the sea-coast; while the inland plain, deprived of irrigation, was burnt up by the summer heats. In winter however it afforded a natural and abundant pasture. The mountaineers of Samnium and Abruzzo began to lead their flocks in winter into the plains of Apulia, which were abandoned, and returned to the mountains for the summer. This was the origin of the system of migratory

pasturing, which has continued ever since. The Romans imposed a tribute upon the right to pasture in the plain, and intrusted its management to Publicani, called 'Albarehi,' who numbered the heads of cattle or sheep, and collected the tax. (Ducange, 'Glossarium,' art. 'Albarehi.') Under the emperors the complaints of the extortions of the Publicani became so loud that Nero proposed to the senate the abolition of the tax, which however was not effected. Under the Normans the Tavoliere was made a royal property, and parts of it were let to 'locati,' or tenants. Charles of Durazzo drove away the tenants. By letters-patent of Alfonso of Aragon, dated from Tibur 1st of August 1447, the proprietors of flocks in the mountains of Samnium and Abruzzo were obliged to take them into the plain of Puglia for the winter, and to pay a tax at so much per head. In mitigation of this compulsory system the proprietors obtained several privileges and immunities, which gave it a marked resemblance to the Spanish Mesta, on which no doubt it was modelled.

In 1661 this obligatory migration was commuted into a voluntary one, by which every proprietor of flocks obtained the quantity of ground that he wanted for pasture by paying to the treasury 132 ducats a year for every 1000 sheep. Other parts of the plain were let for cultivation. Under Joseph Bonaparte, in 1806, all the temporary tenants of the Tavoliere were obliged to become perpetual tenants, and to purchase their lease, under which regulation 1,800,000 ducats were paid at once into the treasury. In 1817, after the restoration, a second fee to the same amount was exacted, and the annual charge was also raised; at the same time the peace lowered the price of agricultural produce, and much distress among the tenants was the consequence. An insurrection followed in 1820. Austria intervened and abolished the compulsory system which was the cause of the outbreak. The farmers and breeders of the neighbouring provinces however still voluntarily bring their flocks; and the administration of the pasturage instead of being as formerly in the hands of a jobbing board at Foggia is entirely confided to the Intendente of the province. The tolls and rents now paid to the crown from this system are said to amount to 400,000 ducats a year. Each flock is under the care of a chief shepherd, an under shepherd, and head dairyman; it is subdivided into 'morre' of 350 sheep each, under the care of a shepherd, dairyman, and cheese-maker. To each morra two dogs of the large white Abruzzo breed are attached, and a mule for carrying the haggage and utensils for making cheese. All the attendants on the flocks are dressed in sheep-skin coats, coarse cloth breeches, and sandals; and whilst in the pastures they sleep on the ground under tents of skins.

The breed of sheep has been improved by the cross of merinoes, and the wool is doubled in value. The breed of horses has also been improved; and winnowing and threshing machines have been introduced. Notwithstanding the dryness of the soil and the little manure used by the cultivators, wheat thrives very well on it, and large quantities are exported. From the Gargano, which is the best cultivated district in the province, oil, lemons, oranges, carobs, capers, and terebinth gum are exported. Large cels from the lakes of Varano and Lesina, in the same district, are exported, chiefly to Naples. Cheese, cattle, and ponies form the other articles of exportation. The manufactures are very few, consisting of some linens made at Cerignola, coarse hats, leather, common soap, &c. Manfredonia, on the Gulf of Manfredonia, which is sheltered on the north-west by Monte Gargano, is the only harbour in the province, but it has not depth of water for large vessels. Near Manfredonia are salt-works of marine salt. The marsh called *Lago Salso*, between the Candelaro and the Cervaro, is about 4 miles in length and 2 miles in breadth. Further east along the coast, and between the mouth of the Carapelle and that of the Ofanto, is the great marsh called *Lago Salpi*, 20 square miles in extent and only 2 feet in its greatest depth; it is nearly dry in summer, and poisons the air all around. Two small towns, Salpi (on the ruins of the ancient Salapia, celebrated for its siege by Hannibal) and Casal-Trinità (population 3800) are near its borders. The royal salt-works near Casal-Trinità are the most important salt-works in the kingdom.

Towns.—*Foggia*, the capital of Capitanata, is a well-built modern town of 21,000 inhabitants, the seat of the provincial courts of justice, of a commercial court, and the centre of all the trade of the province. Around it are plantations of olives, vines, and other fruit-trees, which form an oasis in the midst of a desert. Many of the provincial nobility and gentry reside at Foggia. The great road from Naples to Barletta, Bari, &c., passes through Foggia, whence other roads branch off to Manfredonia and Monte Gargano, to San Severo, and to Lucera. Foggia is 78 miles E.N.E. from Naples, and 20 miles S.W. from Manfredonia. The city is supposed to have been built from the ruins of Arpi, 4 miles distant, which was taken by Hannibal after the battle of Cannæ. The principal streets are wide, and contain good houses and handsome shops. The cathedral, originally a gothic structure, was destroyed by an earthquake in 1731; the upper part has been since rebuilt in a different style. The town has a good theatre; and a new campo-santo, or cemetery, and promenade have been recently formed. Foggia was one of the favorite places of residence of the emperor Frederick II., whose third wife, Isabella of England, and daughter of King John, died here. The gateway of the emperor's palace and a well sunk by him still remain. Manfred, Frederick's natural son, defeated the legate of Pope Alexander IV. under the walls of Foggia, and was crowned in the cathedral. Charles I. of Anjou

and his son Philippe died in the fortified palace of Foggia. After the occupation of Otranto by the Turks Ferdinand I. of Aragon assembled here a parliament of barons and prelates to arrange a crusade against the Infidels. In 1779 Francis I., then duke of Calabria, was married to the Grand Duchess Maria Clementina of Austria, in the cathedral; and at this time Ferdinand I. and his court resided at Foggia, which ranked as the second city in the kingdom.

Cerignola, 24 miles S.E. from Foggia, and about 6 miles N.W. from the bridge of Canosa over the Ofanto, is a well-built episcopal town with about 10,000 inhabitants. It consists of an old and a new town; the former still retains portions of its ancient walls. The town is built on a hill, which commands an extensive view over a monotonous plain of corn-land without a single tree. The decisive battle of Cerignola, in which the Spaniards under Gonsalvo di Cordoba (April 23, 1503) defeated the French under the Duke de Neauparis, reduced the kingdom of Naples to a Spanish province. An ancient military stoue still standing in one of the streets records that Trajan had made the road from Beneventum to Brundisium at his own cost.

Bovino, 18 miles S.W. from Foggia, is an episcopal town situated on a hill at the foot of the Apennines, and has a population of 5700. It occupies the site of the ancient Vibinum. The Val di Boviuo, or Pass of Bovino, is a narrow defile traversed by the Cervaro, inaccessible except at its two extremities; it is diversified by corn-fields, hop-grounds, and forests abounding with white acacia and arbor-vitæ. This defile was formerly the haunt of the brigands of Capitanata; indeed Bovino still enjoys the reputation of being the nursery of the most famous brigands in all Italy. The road from Ariano to Foggia runs through the Val di Boviuo, along the left bank of the Cervaro; at Ponte di Bovino, the eastern end of the defile, a branch crosses the Cervaro, and traverses the Tavoliere to Cerignola.

Ascoli, a poor place of 5000 inhabitants, on the road from Bovino to Melfi, occupies the site of the ancient Asculum Apulum, the scene of the drawn battle between Pyrrhus and the Romans under the consul Curium. [ASCOLI DI SATRIANO.]

Manfredonia, a city founded by Manfred in 1256, and named from him, is 23 miles E.N.E. from Foggia, at the head of the Gulf of Manfredonia, and has 5000 inhabitants. It was built from the ruins of Sipontum, an ancient Greek city, which was desolated in the invasion of the Goths. The town is well built, with wide streets of symmetrical houses. Manfredonia gives title to an archbishop, and for cleanliness and regularity of plan is surpassed by few cities in Europe. It is surrounded by walls and defended by a strong castle, which also commands the port. The population, formerly much greater, has dwindled to its present amount in consequence of malaria from the Sipontine marshes; these however have been recently drained, and the town is said now to be more healthy. The church of Madonna di Xiponto, among the ruins of Sipontum, is still the archiepiscopal cathedral, and is built in the Saracenic style. The city contains many beautiful buildings, and its harbour is the chief port of the province.

Monte Sant' Angelo, about 6 miles N. from Manfredonia, situated on one of the mountains of Garganus, is a well-built town with about 12,000 inhabitants. The town, which has a fine castle, took its name and its origin from the archangel St. Michael, the patron saint of the Norman conquerors of south Italy and Sicily, who is said to have appeared here in a cave in the year 491 to San Lorenzo, archbishop of Sipontum. On the 8th of May, the festival of the saint, the town and mountain are crowded with pilgrims to the holy cave, not only from the region of Monte Gargano but even from remote provinces of the kingdom; they come in an endless variety of costume, many of them armed cap-a-pie and all ascend the mountain on foot, bareheaded, and singing the hymn to the archangel. The cave is lighted with lamps and terminates in three chapels, one dedicated to St. Michael and another to the Madonna; in the third is a small cistern of cool and limpid water, which is distributed to visitors, and is said to have wonderful healing powers. Through a narrow fissure in the roof of the cave a most imposing view of the monastery of Sant' Angelo is obtained rearing its pinnacles from the impending rock at an immense height above. The road from Manfredonia to Monte Sant' Angelo passes through a succession of gardens filled with orange trees for three or four miles. The mountain is then ascended by steep and tiresome zigzag paths practicable only for pedestrians. The town of Monte Sant' Angelo, like most places of pilgrimage, is beset with beggars.

Lucera, about 10 miles N.W. from Foggia, is situated on a steep and commanding eminence above the Tavoliere, and has a population of about 10,000. It occupies the site of the ancient *Luceria*, the capital of Daunia. The ancient city was destroyed in the wars of the 7th century, and lay in ruins till 1230, when the emperor Frederick II. restored it as a residence for his Sicilian Saracens, to whom he guaranteed the free exercise of their religion. Christians were excluded from the city and compelled to reside beyond the walls, where their church, called Madonna della Spica, is still standing. The town is girt with old walls pierced by five gateways. The castle is about a quarter of a mile from the town and separated from it by a ditch crossed by a drawbridge. The old streets are narrow, but the modern parts of the town are well built and handsome. The bishop's palace is the finest building in the province. The cathedral, which the Saracens converted into a mosque, has a gothic interior, but still

bears external traces of Moorish architecture; it contains 13 pillars of verde antique, supposed to have belonged to an ancient temple, and the pulpit is adorned with Greek mosaics. The castle occupies the site of the ancient Roman citadel, under the walls of which the Romans wiped out the disgrace of their ignominious defeat at Furcula Caudina. A large square tower in the centre of the castle is supposed to be of Roman erection; the rest of the building is attributed to Frederick II. Though now in ruins this castle is one of the most imposing buildings of the kind in Italy. Its walls inclose space enough to contain a small city; two round towers are still standing, one of which is now a telegraph station. The emperor erected apartments for himself in the area, which were connected with the town by a subterranean passage. Frederick's son, Manfred, took refuge with the Saracen garrison of Lucera in 1254, and his widow and children after the fatal battle of Benevento resided in the castle for a short time. Charles of Anjou expelled the Saracens in 1269. Near Lucera are the ruins of Castel Fiorentino, in which the emperor Frederick II. died Dec. 13, 1250. Lucera is the seat of judicial courts for the province of Capitanata and has a small college. The territory of Lucera is now as in ancient times famous for the fine quality of the wool which is furnished by its flocks.

San Severo, one of the most flourishing towns in the province, is situated near the northern edge of the Tavoliere, 20 miles N. by W. from Foggia, and has a population of 19,000. In 1799 it was almost destroyed by the French in revenge for the gallant resistance made by its inhabitants, 3000 of whom were slain; the rest were saved by the intrepid conduct of the women, who rushed between the combatants. The town was afterwards walled, but a new quarter and large suburbs have recently sprung up beyond the walls, which contain many handsome residences of the rich proprietors of the province.

Serra Capriola, in the north of the province between the Fortore and the Saccione, is a small town of 5600 inhabitants. At the village of Chienti, a little north of it, are ancient ruins supposed to be those of the Apulian Teate.

Troja, a small episcopal city of 5300 inhabitants, built on a conical hill, 15 miles S.W. from Foggia, was founded by one of the Greek Katapans in the 11th century. This city has given name to three remarkable battles: one fought in 1254, in which Manfred defeated the army of Pope Innocent IV.; a second in 1441 in the plain between Troja and Bovino, in which Alfonso I. of Aragon in person defeated the army of René of Anjou; and the third in 1462, when the Angevines were again totally defeated by the Spaniards commanded by Ferdinand I. of Aragon.

Viesti, a small sea-port town of about 5000 inhabitants, is situated on the Adriatic shore at the north-eastern base of Monte Gargano.

Off the northern coast of Capitanata are the Tremiti Islands, about 10 miles distant from the Punta di Mileto between the shore lakes of Varano and Lesina. These islands are the ancient *Diomedea Insulae*. There are four of them: San Domenico the most southern and the largest; San Nicola or Tremiti; Caprara; and about 10 miles north-eastward Pianosa. There is a monastery and castle on Tremiti; in this island a volcano burst forth May 15, 1816, and threw up stones and lava for several hours. On San Domenico also there is a large monastery. This island was the place of exile of Augustus's infamous granddaughter Julia, who died here.

CAPO D'ISTRIA. [ISTRIA.]

CAPPADOCIA, a country of Asia Minor, usually spoken of in two divisions—1, Cappadocia the Great, or Cappadocia bordering on the Taurus (Strabo), also called Cappadocia simply; and 2, Cappadocia bordering on the Pontus, often called Pontus only. Cappadocia on the Pontus includes the country north of the range of mountains anciently called the Paryadres. Taken in its comprehensive sense the term Cappadocia included nearly the whole of the Turkish province of Roum, and a great part of Karamania. It was bounded N. by the Pontus Euxinus (Black Sea), S. by Taurus, which divided it from Cilicia, W. by Paphlagonia, Phrygia, and Galatia, and E. by the Euphrates. Both the Cappadocians on the Pontus and those bordering on the Taurus were called Syrians by the Greeks, and White Syrians (*Λευκοί Σύροι*), to distinguish them from the Black Syrians beyond the Taurus. (Herod. i. 72, v. 49; Strabo, xvi. p. 737, a, Casaub.) Cappadocians was the name given them by the Persians. (Herod. vii. 72.) There is a river Cappadox, mentioned by Pliny, rising in some of the mountain-ridges, and flowing along the boundary of Galatia and Cappadocia into the Halys; the name is not mentioned by Strabo; and it is probably of comparatively late origin. Some writers however have derived the name of the country from the river. Ainsworth in the 'London Geographical Journal,' vol. x. p. 290, supposes the Cappadox to be the Kalichi, which joins the Halys on the right bank a little north of 39° N. lat.

Cappadocia is one of the richest parts of Asia Minor; it is characterised by extensive plains of great fertility. It was generally deficient in wood, but well adapted for grain, particularly wheat. Some parts of it produced excellent wine. Of the mountains the principal is the Taurus, which forms in fact the southern boundary. Two other important chains, the Anti-Taurus and the Paryadres (Keldir), run nearly parallel from Armenia into the centre of Cappadocia. From the summit of Mount Argæus Strabo says (xii. p. 538), that the few who had ever gone so high had been able to see the Black Sea and the

Gulf of Scanderoon, an assertion which is confuted by the bare inspection of a map. [ANATOLIA.] Cappadocia the Great generally has little wood; almost the only timber district is in the neighbourhood of Mount Argæus, which supplies the rest of the country with fuel. Beyond this woody region which surrounds the mountain is a sandy plain with a substratum of rock, quite barren and uncultivated. The part between Mount Argæus and Mazaca (Kesarieh), and indeed most of this district, appears to have been the seat of volcanic action (Strab. xii. p. 538); it abounds in water, chiefly marshes caused by the overflow of the river Melas. On the banks of the Melas were some large stone quarries, which supplied the people of Mazaca with building materials. Mazaca was the favourite abode of the kings of Cappadocia, who appear to have selected it for its central position, and because it abounded in timber and in stone as well as in fodder, which was a great object where so much attention was paid to cattle. (Xen. 'Cyrop.' ii. 1, 5.) The tribute which they paid to the Persian monarch consisted chiefly in horses, mules, and sheep. The high table-lands of this country are admirable pasture-land; and it is probable that in very early, as well as in later times, the Cappadocians carried on an extensive trade in supplying the neighbouring nations with horses and mules. (Ezekiel, xxvii. 4.)

The principal towns of Pontic Cappadocia were on the coast. A little east of the mouth of the Halys was Amisus (Samsuu): farther east on the river Thermodon stood Themiscyra, whose plains were the fabled abode of the Amazons; proceeding along the coast we come to Cerasus, which some suppose to be represented by the modern Keresun, where cherry-trees grow wild in great abundance on the hills; it was from this place that Lucullus (B.C. 74) first brought cherries into Italy, on his return from the Mithridatic war. The word 'cherry' (*cerasus*) took its name from the place. Just upon the eastern boundary of Cappadocia on the Pontus stands Trapezus, the modern Trebizond, originally a colony from Sinope (Xen. 'Anab.' iv. 8. 22), where the Greeks met with a hospitable reception on their retreat after the battle of Cunaxa. Trapezus and Cerasus paid tribute to Sinope. (Xen. 'Anab.' v. 5, 10.)

The chief towns inland were Amasia, Mazaca, Comana (in Pontus), the great emporium for the Armenian merchants (Strab. xii. p. 559), and Comana in Cappadocia the Great, the modern Bostan, which contained a great temple of Bellona. To the west of Comana, near the boundary of Lycaonia, was Tyana, or as Xenophon ('Anab.' i. 2, 20.) calls it, Dana, the limit of Cyrus's march in Cappadocia. The principal rivers of Cappadocia are the Halys (Kizil) and the Iris (Yeshil), both of which flow into the Euxine; and the Melas, which flows into the Euphrates. The Kizil flows through a country abounding in salt-hills, and hence Strabo supposes the ancient name to have been derived (xii. p. 546, d). Indeed in many parts of Cappadocia salt tracts are found of great extent. [ANATOLIA.] The Iris flows through Amasia.

Cappadocia abounded also in mines of iron and silver: Horace alludes to this fact. ('Epist.' i. 6, 39.) The iron mines in the north-east of Pontus were worked by the Chalybes (Strab. xii. 549, d; Xen. 'Anab.' v. 5, 1), the greater part of whom appear to have gained a livelihood by working in iron. On the same coast east of Samsun (Amisus) at a place called Unieh, rock alum still forms a considerable article of trade. There is said to be a silver mine at a place near Amasia, called now Hadji Kioi. Crystal, jasper, and onyx are said also to enrich this country. (Strab. p. 540, a.) Strabo speaks of a beautiful stone which was produced in Cappadocia, white like ivory; the handles of swords were made of it.

The Cappadocians were very generally known during the Roman occupation of their country for their unprincipled and vicious character; so much so that the word 'Cappadocian' was only another name for a villain.

The condition of Cappadocia before the period of the Persian rule is uncertain; possibly it belonged to the extensive kingdom of Lydia. At any rate both Cappadocia on the Pontus and Cappadocia on the Taurus appear to have formed one state. Darius Hystaspis is said to have first divided it into two satrapies. (Strab. xii. 534, c.) The satraps appear to have been kings of the countries tributary to the Persian monarch, and hence an hereditary succession is observed. The circumstance that Darius and his successors in this, as in most other cases, left the government of the district with the native princes, is probably to be attributed more to their inability to prevent it than to any other reason.

The first king of Cappadocia, according to Strabo (xii. p. 534, a), was Ariarathes. But Arihæus, mentioned by Xenophon ('Cyrop.' ii. 1, 5), would appear to have preceded him. The following list has been drawn up in the 'Universal History' (vol. x. p. 8):—Pharnaces, Smerdis, Atmanas, Anaphas I., Anaphas II., Datames, Ariarannes I., Ariarathes I., Olophernes, Ariarathes II., Ariarathes III., Ariarannes II., Ariarathes IV., Ariarathes V., Ariarathes VI., Ariarathes VII., Ariarathes VIII., Ariarathes IX. (the family of Pharnaces now extinct), Ariobarzanes I., Ariobarzanes II., Ariobarzanes III., Archelaus. On the death of Archelaus Cappadocia was reduced to a Roman province (Strabo, xii. p. 534), which it continued to be till it was invaded by the Turks.

On the division of Cappadocia by the Persians Pontus was given over to one of the ancestors of Mithridates, according to Justin and

other writers. The following is a list of the kings as they have been mentioned in history:—Artabazes (an interval of perhaps 80 years then occurs), Rhodabates, Mithridates I., Ariobarzanes I., Mithridates II., Mithridates III., Ariobarzanes II., Mithridates IV., Mithridates V., Pharnaces I., Mithridates VI., Mithridates VII., surnamed the Great, with whom the Romans long waged war (he died B.C. 64); Pharnaces II., Darius, Polemon I., Polemon II. Pontus was then reduced entirely to a Roman province. (Tacit. 'Hist.' iii. 47.)



Coin of Artabazes.

British Museum. Actual size. Silver. 61 grains.

CAPPOQUIN. [WATERFORD.]

CAPRI, the Roman *Caprea*, a rocky but beautiful island in the Mediterranean, stands at the southern entrance of the Bay of Naples. It is 3 miles from Cape Campanella, which terminates the promontory of Sorrento; about 10 miles from Capo Miseno, on the other side of the bay, and 22 miles from the mole of Naples. It is composed of limestone rocks, which are disposed in two masses with a considerable hollow between them. The highest of these two masses, which is to the west, rises 1900 feet above the sea. It is called *Monte Solaro*, and a pretty little town named *Anacapri* (Upper Capri), is situated upon the table-land of the mountain. The inhabitants of Anacapri communicate with the other town called Capri, and all the east of the island by means of a steep flight of 535 steps, which is carried down the face of a precipice in a very curious manner. The eastern division of the island is only 860 feet above the sea in its highest part. The circumference of the island is about 11 miles. There are only two safe landing places on it.

Capri stands on a shelving rock towards the eastern extremity of the island: it contains from 200 to 300 small but neat houses, five or six churches and chapels, and a confined piazza or square in the middle. The population of the island is about 6000, of whom about 4000 are settled in the district of Capri, and 2000 in the western district. The inhabitants are almost all small farmers and fishermen. By great industry the islanders have retained and secured patches of good soil on steep hill sides and in the midst of rocks and cliffs: the cultivable parts produce most kinds of vegetables and fruits, a small quantity of excellent oil, and a considerable quantity of excellent wine. This wine, which is much used at Naples, is of two sorts, red and white. The red wine is called 'vino Tiberiano' from the emperor Tiberius. Another important item of exports consists of quails, which are annually captured at their seasons of passage in vast numbers.

The narrow area of this island is wonderfully crowded with a variety of scenic beauty, remains of antiquity, and historical recollections. Extensive ruins of the villas of Tiberius, who resided a long time at Caprea, still exist. He erected not less than twelve villas on different parts of the island. The ruins of the most considerable of them are seen on a bold perpendicular cliff at the eastern end of the island, opposite the Surrentine Promontory. Near it also are the remains of a pharos, or lighthouse, which served to guide ships through the strait between the island and the Surrentine Promontory. One of the greatest attractions of Capri is the Grotto Azzurra, or Blue Grotto, on the north-eastern coast.

CAPUA, a city in the kingdom of Naples, is finely situated in one of the richest parts of the Terra di Lavoro, in a plain on the left bank of the Volturno, 15 miles N.W. from Naples, on the high road to Rome, and has a population of 8700. The Volturno enters the sea about 12 miles below Capua; at the town itself it is a deep and rapid river, and makes such a bend as to sweep round at least two-thirds of the inclosure of the city. Capua occupies the site of the ancient *Casilinum*, celebrated for its noble stand against Hannibal. It was built in the 9th century, and first fortified in 1231. In the 18th century the fortifications were enlarged and reconstructed on the principles of Vauban; but in the French invasion of Italy it was unable to make a long resistance to its assailants. The most noteworthy objects in the town are the gothic cathedral, in which are some granite columns from ancient Casilinum; and the church of the Annunziata, which is built on the site of an ancient temple, and has some bas-reliefs in its walls. Under the arch of the Piazza dei Giudici numerous ancient inscriptions are preserved. Capua gives title to an archbishop. It is a pretty well-built town. There is a railroad from Capua to Naples, which was completed about nine years since.

The site of ancient *Capua* is occupied by the large village or 'casale' of *Santa Maria di Capua*, which, although it does not rank as a town, contains nearly 10,000 inhabitants. *Santa Maria* is about 2 miles from the Volturno, and about the same distance east of the modern Capua. The railroad above mentioned passes through it. It is a very interesting place on account of the ancient remains strowed about it. Considerable portions of the ancient walls and encircling ditch are visible, so that the circuit of the city may be traced with

tolerable certainty. The ruins of the amphitheatre are extensive, and show that when perfect it must have been one of the most magnificent structures of the kind in Italy. There are remains of a triumphal arch near the amphitheatre; and some traces are found of the theatre, the existence of which is recorded by an inscription.

Capua was one of the Etruscan cities founded in Campania. The date of this Etruscan foundation is much disputed, some referring it with Cato to B.C. 471, and others assigning it to B.C. 800. There seems little doubt that before the Etruscan occupation there was an Oscan town named Capua on the site. The Etruscan name, according to Livy (iv. 37), was *Volturnum*. When it fell into the hands of the Samnites, B.C. 423, the original Oscan name seems to have been restored. The name Capua is supposed to mean 'a plain,' and the adjective *Campanus* (Ager) is evidently formed from Capua. Capua after this event became an essentially Oscan city, and soon rose to great prosperity. Livy writing of it about B.C. 343, styles it the greatest and most opulent city in Italy (vii. 31). Its wealth rendered its inhabitants proverbial for luxury and effeminacy.

Hannibal spent a winter in this town during his campaign in Italy. In the course of this war the Romans formed the siege of Capua, which adhered to the side of Hannibal (Livy, xxv. 20); when the place was taken by the consuls Fulvius and Appius Claudius, the senators were put to death, about 300 nobles were shut up in prison, and the bulk of the citizens sold for slaves. Capua at this time was probably a larger and wealthier city than Rome. The Romans spared the city, which they peopled with strangers, in order that the most fertile lands in Italy might not be left without cultivators; but its political importance was annihilated. It soon however became again a flourishing town, and distinguished for its attachment to Rome. Though deprived of all political privileges and of its fertile territory, which the Romans retained as the property of the state, the city is characterised by Cicero as distinguished for its extent and embellishments. In B.C. 59 Capua became a Roman colony, and 20,000 Roman citizens were settled in its territory under the Agrarian law passed by Cæsar in his consulship. From this time the city enjoyed a dignity corresponding to its importance, and under the empire, although little is said of it, it continued to be a flourishing, large, and populous city. On the fall of the empire its prosperity attracted the barbarians who desolated Italy. The Vandals under Genseric took it, A.D. 456, and utterly destroyed it. In the wars of Belisarius it figures again, but in a very reduced condition. In the 8th century it seems to have recovered considerable prosperity, for it is termed by P. Diaconus one of the three most populous cities in Campania. At last the Saracens A.D. 840 took it and reduced it to ashes. Its surviving inhabitants abandoned its defenceless position and took refuge in the mountains, but were soon after (A.D. 856) prevailed upon by their bishop Landulfus to return and establish themselves on the site of Casilinum, which they fortified and named from their ancient city.

In the outskirts of Santa Maria, and on the roads that branch off from that town to Capua, Caserta, Naples, and Nola, there are many ancient tombs, and the whole district, taking a diameter of 10 miles, abounds more than any part of Italy with those ancient vases so vaguely called 'Etruscan,' but which ought to be called *Capuan*, or *Campanian*. The coins of Capua are almost all of copper, and bear the name of the city with Oscan legends.



Coin of Capua.

British Museum. Actual size. Bronze. 225 grains.

CARACAS, the capital of the republic of Venezuela, and of the department of Caracas, in South America, is situated in 10° 30' 15" N. lat., 67° 4' 45" W. long., and about 20 miles by the road from its port, La Guayra, and has a population of about 50,000. It is situated at the west end of the plain of Chacao, which extends about 8 miles towards the east, and is about 5 or 6 miles wide. The ground on which the town is situated is very uneven, and has a steep slope from north-north-west to south-south-east. The Plaza Mayor is 2880 feet above the level of the sea. On the south side of the town is the small river Guayra; and from the heights on which the town stands the Anauco, the Carota, and the Cachucho flow into the Guayra near the town. There are several bridges over the three last-mentioned rivers. The Cachucho supplies many public and private fountains with water. The streets, which are straight and generally paved, intersect each other at right angles. The private houses are good and well-built; some are of brick, but the greater part of masonry, in framework. They are arranged in the manner of the houses in Spain, presenting towards the street bare walls with one or two windows, but containing in the middle large court-yards, into which the apartments open.

The largest of the eight squares is the *Plaza Mayor*, which is the market for vegetables, fruit, meat, salted provisions, fish, poultry, game, bread, parrots, monkeys, birds, &c. Within the square is the cathedral, an extensive and solid edifice. The east and south sides of the square are occupied by well-built barracks, erected by the Spaniards. The city is the seat of a university; it contains several convents, three hospitals, and a theatre. The mean temperature of the year is about 72° Fahr.; that of the hot season is about 75° and that of the cold season 66°; but the thermometer sometimes reaches 84° or 85°, and at others descends to 51° or 52°. Rain is extremely abundant during April, May, and June, but not so incessant as in other tropical countries: the other parts of the year are rather dry.

By the earthquake of 1812 about 12,000 persons are said to have perished. The war with the Spaniards reduced the population still further. The earthquake of 1826 also contributed to its diminution: at this last period the population did not exceed 30,000. As Caracas is united by roads with the well-cultivated valley of Aragua, and with the Llanos, which extend south to the banks of the Orinoco, it is the place from which all these countries receive European manufactures, and to which they send their produce. The exports from La Guayra consist principally of cacao, cotton, indigo, coffee, tobacco, hides, and live cattle.

CARAMANIA, or KARAMANIA, a large and important part of Turkey, comprising nearly the whole of the south coast of Asia Minor, which is described under the general head of ANATOLIA. This extensive sea-board, which, measuring from the Gulf of Iskenderoon, or Scanderoon, to the Gulf of Makri is upwards of 400 miles long, is divided into pashalics or governments bearing different names; and it seems that the appellation 'Caramania' is neither used by the present inhabitants nor recognised at the seat of government. The name is not classical, for in ancient times the provinces called Lycia, Pamphylia, the two Cilicias, with parts of Caria and Phrygia, occupied the country which we call Caramania. In the middle ages however, a kingdom or state called Karamanly, from the name of Karaman, the founder of it, did exist here, and comprised all the ancient provinces which we have mentioned; but after a struggle of two centuries it was conquered by the Osmanli Turks under Bajazet II., about 1485.

The fertile and beautiful district of Adana (the Cilicia Campestris of the ancients) is the best cultivated part of Caramania. Solitude, desertion, and wretchedness reign over nearly all the rest of the long line of coast, where the frequent and splendid ruins of Grecian and Roman cities indicate a prosperity and wealth that have long been past.

CARCASSONE, or CARCASONE. [AUDE.]

CARDIFF, the county town of Glamorganshire, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 51° 28' N. lat., 3° 10' W. long.; 166 miles W. from London by road, and 170 miles by the South Wales railway. The population of the borough in 1851 was 18,351. The borough is governed by 6 aldermen, one of whom is mayor, and 18 councillors; but by an Act passed in 1837 the management of local affairs is vested in a body of commissioners consisting of the resident justices of the peace, the constable of the castle, the mayor, aldermen, and town clerk, together with 50 other persons. There is also a Local Board of Health. Cardiff, with Cowbridge and Llantrissant, returns one member to the Imperial Parliament. The livings of the two parishes are vicarages in the archdeaconry and diocese of Llandaff. Cardiff Poor-Law Union contains 44 parishes and townships, with an area of 127,941 acres, and a population in 1851 of 46,443.

The town is built on the left bank of the river Taff, Taf, or Taf, about a mile above the fall of the river into Penarth Harbour. Cardiff seems to be a corruption of *Caer Taf*, the 'fortress on the Taf'; but some Welsh antiquaries derive the Welsh name of the town (*Caerdydd*) from *Caer Didi*, the 'fortress of Didius,' from a post which it is assumed the Roman general Aulus Didius erected here. Cardiff is a corporate town of ancient date, its earliest charter being dated 12 Edward III. (A.D. 1338). The town with its contributory boroughs sent one member to Parliament by the statute 27 Henry VIII. The town consists of the principal street on the road from London to Penhroke, running east and west, a second main street at right angles to this, three other large streets, and several smaller ones. Cardiff has risen to the rank of an important commercial town and port from the circumstance of its being the natural outlet of the large mineral district of the Taff valley, and of the productions of the works at Merthyr Tydvil and other places. During the last few years a marked increase has taken place in the town in consequence of the opening of several collieries in the Aberdare valley. A kind of coal peculiarly adapted for the production of steam is raised in the Aberdare collieries and brought to Cardiff for shipment to all parts of the world. The town is built upon a low flat site, very little above the ordinary high-water level. The town-hall, which is the highest point, is only 10 feet above that level. The town is almost surrounded by water: the estuaries of the Taff and the Ely form Cardiff harbour, a shallow tract, a large portion of which is left uncovered as the tide recedes. The Cardiff Flats are a level mud waste. The town is lighted with gas by a company formed in 1837.

Among the buildings of Cardiff is the castle, now in possession of

the Marquis of Bute, and converted into a modern mansion. This castle was erected by Robert Fitzhamon, the Anglo-Norman conqueror of Glamorganshire, in the room of a smaller one which stood on the same site, built by the Welsh princes of Morganwg. Robert, duke of Normandy, brother of William Rufus and Henry I., died in the castle, having been a prisoner for 23 years. The west front of the castle is modern, and being flanked by a massive octagonal tower, appears to great advantage on entering the town from the west. The ruins of the ancient keep, still standing on a circular mound within the castle inclosure, command an extensive prospect over the level amid which Cardiff is situated. In the interior of the castle are some family portraits and other paintings by Vandyke, Kneller, Romney, and other artists.

The town is comprised within the parishes of St. John the Baptist and St. Mary. St. John's includes the older part of the town; St. Mary's the modern part, in the neighbourhood of the Bute Docks. St. John's church is spacious and handsome, in the early English style, with a lofty square embattled tower in the perpendicular style. St. Mary's was built in 1845. There are chapels for Baptists, Independents, Methodists, and Roman Catholics; five public schools, at which about a thousand children are educated; an infirmary, built at the charge of Daniel Jones, Esq., of Beaupré; and the Union workhouse, which stands on the western outskirts of the town. The county jail comprehends the house of correction for the eastern parts of the county. The guildhall stands in the midst of one of the principal streets. The market-house was built by the corporation in 1835.

The population has risen from 2000 to upwards of 18,000 between 1801 and 1851. The Glamorganshire Canal was finished in 1798; the Taff railway was opened in 1840. The river, the canal, and the railway run nearly side by side, and terminate at Cardiff. The late Marquis of Bute, the owner of a large amount of property in this neighbourhood, projected the formation of a large harbour or dock between the town and the Bristol Channel on a piece of waste ground belonging to himself. The dock, called the Bute Dock, and a ship canal leading thence to the sea, were opened about the same time as the railway. On these works about 300,000*l.* has been expended. The entrance into the floating harbour from the sea is through sea-gates 45 feet in width; the harbour or basin has an area of an acre and a half, and is fitted for the reception of large vessels. The main entrance lock is 152 feet long by 36 feet wide. The ship canal extends to Cardiff, 1400 yards in length and 200 feet in width, comprising a mile of fine wharfage, and varying in depth from 13 to 19 feet. These improvements by affording facilities to the shipping trade have tended to promote the growing prosperity of the port. The number and tonnage of vessels registered as belonging to the port of Cardiff on the 31st of December 1852 were:—Under 50 tons 22 vessels, 581 tons; above 50 tons, 40 vessels, 6233 tons: steam-vessels, under 50 tons, 7, tonnage 179; above 50 tons, 2, tonnage 187. The number and tonnage of vessels that entered and cleared at the port of Cardiff during 1852 were as follows:—Coastwise, inwards 1394 sailing vessels, 66,209 tons; outwards 5791, tonnage 392,734: steam-vessels, inwards 422, tonnage 39,048; outwards 421, tonnage 38,962. Colonial: inwards 97 vessels, tonnage 15,455; outwards 247, tonnage 57,379. Foreign, inwards 378 vessels, 65,820 tons; outwards 1464 vessels, tonnage 286,846; and one steam-vessel of 86 tons.

(Cliffe, *Book of South Wales; Communication from Cardiff.*)

CARDIGAN, the chief town of Cardiganshire, a sea-port, municipal, and parliamentary borough, and the seat of a Poor-Law Union, mostly in the parish of St. Mary and partly in Penhrokeshire, is chiefly situated on the right bank of the river Teify, about three miles from its mouth, in 52° 5' N. lat., 4° 40' W. long.; distant 239 miles W. by N. from London. The population of the borough in 1851 was 3876. The borough is governed by 4 aldermen, one of whom is mayor, and 12 councillors; and in conjunction with Aberystwith, Lampeter, and Adpar returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Cardigan and diocese of St. David's. Cardigan Poor-Law Union contains 26 parishes and townships, with a population in 1851 of 20,144.

Cardigan is called in Welsh *Aber-teify*, from its position on the river Teify. The corporation claim to be a corporation by prescription. Cardigan first rose into a town about the time of the Norman conquest. The foundation of its castle is ascribed to Gilbert de Clare, about 1160. In the struggles between the Welsh and their Norman invaders for the possession of this post, which the mouth of the river rendered important, the castle was frequently damaged or destroyed. The two towers and the wall now standing are probably the remains of the fortifications erected by Gilbert Marshall, about the year 1240. Edward I. resided here for a month while settling the affairs of South Wales. The castle stands in a commanding position above the river, which is here crossed by an ancient bridge. Giraldus Cambrensis states the Teify to have been the last British river in which heavers were to be found. There was a priory here, which Leland says contained 11 black monks, and was a cell to Chertsey. A small hut strong camp called *Hên Castell*, is situated on the banks of the Teify, a little below the town. All the streets are narrow except the principal one, at the end of which stands the

county jail, erected by Mr. Naah in 1793. A handsome county hall was built here in 1764. A county court is held at Cardigan. A literary and scientific institute is supported in the town.

The church, dedicated to St. Mary, is an ancient and substantial structure, having at the west end a noble tower; the interior has a spacious nave, and a chancel of more ancient date than the body of the church. A neat gallery at the west end was erected at the cost of the late Pryse Pryse, Esq., M.P. The National school-room has been licensed for divine service. The Calvinistic and Wesleyan Methodists, Independents, and Baptists have places of worship. The National school, erected in 1848, at a cost of about 1500*l*. In addition to the site, is in the early English style. A Free Grammar school endowed in 1653 is free to six poor boys of the borough. A Girls' Charity school, supported by voluntary contributions, is well attended. There are also Commercial schools.

The port of Cardigan extends from four to five miles beyond Fishguard on the south, and about 24 miles to the north, so as to include Aberayron. The harbour is greatly obstructed by a bar, and is dangerous in winter. Ships of 400 tons can come up to the bridge in spring tides; but the general trade is confined to vessels of from 20 to 100 tons. The number and tonnage of vessels registered as belonging to the port of Cardigan on 31st December 1852 were as follows:—Under 50 tons, 132 vessels, 3941 tons; above 50 tons, 94 vessels, 8871 tons. The number and tonnage of vessels entered and cleared at the port during 1852 stood thus:—Coastwise, inwards 537 vessels, 13,783 tons; outwards 50 vessels, 1519 tons. Colonial and foreign, inwards 6 vessels, 997 tons; outwards 1 vessel, 109 tons.

The imports are chiefly coal, culm, limestone, and deals; the exports oats, butter, and slates. Salmon-fishing is productive, and the herring-fishery is of some importance.

(Cliffe, *Book of South Wales*; *Communication from Cardigan*.)

CARDIGANSHIRE, a maritime county of South Wales, lying between 52° 2' and 52° 33' N. lat., 3° 38' and 4° 42' W. long., is bounded N. by the counties of Merioneth and Montgomery, E. by Radnorshire and Brecknockshire, which are for the most part separated from it by the rivers Claerwen and Towy, S. by Pembrokeshire and Caermarthenshire, from which in three-fourths of its length it is divided by the river Teify, and in part by a stream called the Dotlie. The Irish sea forms its boundary on the W. The area is 443,357 acres. In 1851 its population was 70,796.

Surface, Hydrography, Communications.—The south-west district of the county and several tracts near the coast are level; in general however the surface is mountainous, especially in the northern and eastern parts. The highest lands are rugged, bleak, and barren; covered with ling, rushes, and heather; those that are somewhat lower afford pasture for the little hardy sheep of the country, the property of the small farmers, whose dwellings are for the sake of shelter placed in the narrow valleys beneath. A part of Plinlimmon is situated in the north-east part of the county; this mountain and Tregaron Down, Talsarn, and Capel Cynon are the most elevated summits in Cardiganshire. Their heights are—Plinlimmon, 2463 feet; Tregaron Down, 1747 feet; Talsarn, 1143 feet; Capel Cynon, 1046 feet.

The sea-coast, in its north and south extremities, is flat and sandy; towards the centre of its line the hills terminate abruptly, and the beach, from which on account of its shelving rapidly, the sea retreats but little at low tide, is chiefly formed of shingle. The principal rivers are—the Teify, which rises in Llyn Teify, a small lake on the eastern border, and abounds with salmon, of which a large quantity is carried to distant markets; the Towy, the Claerwen, the Ystwith, and the Rhydol, which rises in Plinlimmon. The Ystwith and the Rhydol fall into the sea at Aberystwith. The Arth, the Ayron, the Wirral, and the Lery are also considerable streams. There are upwards of 20 lakes, or llyns, in the county. Most of them are small, but they are abundantly stored with fish. The chief are Llyn Teify, Llyn Gyuon, Llyn Egnant, and Llyn-ruddon-vawr; these have much wild beauty, which is however far exceeded by the celebrated water-falls of the Mynach at the Devil's Bridge, the falls of the Rhydol at Hafod, and the rapids higher up that stream, in the neighbourhood of Pont Erwydd.

The roads (which carry the whole traffic of the county, for there is neither canal nor railroad in this district) have of late years been much improved. An entirely new line of communication with Radnorshire, which in part of its length is used by travellers to Llanidloes and Newtown, has been of great benefit to Aberystwith. The other principal roads lead from Aberystwith to Machyulleth, from the same place to Cardigan and Lampeter, and from Tregaron through Lampeter and Newcastle-Emlyn to Cardigan.

Geology and Mineralogy.—The county of Cardigan chiefly consists of hard slaty strata, belonging to the transition series of the Lower Silurian and Upper Cambrian systems; they are destitute of organic remains. Veins of copper-ore, lead, and sulphate of zinc occur. The mines were in the 16th and 17th centuries worked extensively and profitably. They afterwards were almost wholly neglected. But of late years the spirit of mining enterprise has led to the re-opening some of the old mines and to the commencing of new ones. The lead-mines are said to be most successful. The lead contains silver, varying from 14 to 80 ozs. to the ton; at Llanvair mine some specimens

have occurred which yielded 100 ozs. to the ton. Slate of inferior quality is quarried in the neighbourhood of Aberystwith.

Climate, Soil, Agriculture.—The climate of this county is in winter very rough, the winds are violent, and the snow frequently remains on the mountains till late in the spring; in summer however and in autumn there is a light dry wholesome air, which is extremely pleasant. The soil in the mountainous districts is thin and cold, and yields a small produce of oats, barley, and potatoes; rye is also sown in small quantities. Near the sea-coast, especially on the flat loamy tract between Aberayron and Llanysted, wheat is cultivated successfully; large crops of barley are raised on lands manured with sea-weed; and potatoes are grown in abundance.

The prevailing breed of cattle is small and hardy, in colour generally black or brindled; dairy-farming is not uncommon, and butter is made in considerable quantities. The horses are small but compact, and are capable of drawing considerable weights in one-horse carts, which throughout the county are in general use. The sheep are neither well-formed nor fine in the fleece; but their endurance and constitution adapt them admirably to the exposed hills on which they pasture, and from which they are seldom driven down, the ewes in the yearning season excepted. They are so small as frequently not to weigh more than 10 lbs. a quarter: the mutton is excellent both in grain and flavour. A considerable quantity of pigs and poultry is reared, and eggs in great numbers are collected from the cottages and farm-houses by persons who convey them weekly to distant markets. With nearly all farms is let a right of pasturage on the hills for a given number of sheep, which often forms the principal source of profit. The size of the farms varies from 40 to 150 acres; in the best districts some are larger. The fences are frequently made with alternate layers of turf and stones, built up as walls, without hedges growing upon them. The farms and cottages have a rude and almost primitive appearance. As there is no coal in the county, peat, being abundant, is the fuel chiefly consumed.

Divisions, Towns, &c.—Cardiganshire is divided into five hundreds—Guewr Glyn, Ilar, Moyddyn, Penarth, and Troedyraur. Cardigan Island, an extra-parochial tract of pasturage of about 40 acres extent situated at a short distance from the mainland, at the mouth of the Teify, forms a part of Troedyraur hundred. These hundreds are divided into 68 parishes, which contain five market-towns—ABERYSTWITH, ABERAYRON, LAMPETER, CARDIGAN, and TREGARON. Cardigan is on the river Teify, and Tregaron and Lampeter are within a short distance of its banks. Cardigan, Lampeter, Aberystwith, and Adpar are corporate towns. Adpar is united with Newcastle-Emlyn, in Caermarthenshire, by a bridge which crosses the Teify. They form together a contributory parliamentary borough, and being in fact one town will be most appropriately noticed together under NEWCASTLE-EMLYN.

We add a brief account of the villages which, from their size or importance, seem to call for notice, with the population of their several parishes in 1851:—

Aberporth, 3 miles N.E. from Cardigan, population 514, is pleasantly situated at the mouth of the Howny on the shore of Cardigan Bay. There is some trade in coals, culm, and limestone. Herring fishing is carried on. In summer the village is resorted to for sea-bathing. The church is of great antiquity. The Cribach Road affords good shelter for shipping. *Hafod*, 14 miles S.E. from Aberystwith, is much visited by tourists on account of the celebrated water-falls and rock scenery of the Devil's Bridge. Hafod House and grounds, which when the property of Colonel Jones were the subject of so much admiration from literary tourists, still form a principal attraction. The house has been rebuilt, and the grounds are much altered. *Llanarth*, 18 miles N.E. from Cardigan: population, 2337. The village is of some size: fairs are held in January, March, June, September, and October for cattle, horses, and pedlery. The church is spacious and of considerable antiquity. The Wesleyan and Calvinistic Methodists and Independents have places of worship. In the parish are a British encampment and some tumuli. *Llanbadarn-vawr*, about 24 miles N.N.E. from Cardigan, is a very extensive parish, containing besides several hamlets, the market-town of Aberystwith: population of the entire parish 12,776. Llanbadarn-vawr church is one of the oldest in Wales; and contains portions of the two still older edifices which successively occupied the site previous to its erection. Llanbadarn-vawr is said to have been the seat of a bishopric, over which St. Padarn, the British saint to whom the church is dedicated, presided. There are some British encampments in the parish. *New Quay*, 20 miles N.N.E. from Cardigan, is in the parish of Llanllwchaearn, the population of which in 1851 was 1733. New Quay is a thriving little port. It is situated a few miles S. from Aberayron, with which flourishing town it is pretty closely connected. There is an extensive fishery. Ship-building is carried on; and there are stone-quarries. In summer it is resorted to as a bathing place. The church is of the early English date and style. *Pontrhydfendigad*, a small village 4 miles N.E. from Tregaron, contains the remains of the Abbey of Strata Florida, so celebrated in the literary history of South Wales. Of the abbey buildings an arch of considerable beauty is still standing. At *Yspytty Ystradmeyrich*, a little village about 3 miles from Pontrhydfendigad, population 138, was a cell of the abbey of Strata Florida, of which some part yet remains. *Ystradmeyrich*

possesses a Free Grammar school, founded in 1757 by Edward Richards. There are some remains of a British or Roman encampment, and of a Norman castle which figures somewhat conspicuously in early Welsh history.

Divisions for Ecclesiastical and Legal Purposes.—Cardiganshire is wholly in the province of Cautebury, diocese of St. David's, and archdeaconry of Cardigan. The several parishes are divided among the deaneries of Emlyn, Kemmes, Sub Ayrton, and Upper Ayrton. According to the 'Census of Religious Worship' taken in 1851, it appears that in the Registration county (which includes, in addition to the county proper, parts of Caermarthenshire and Pembrokeshire, with an additional population of about 27,000), there were then 349 places of worship, described as follows:—Church of England, 110; Calvinistic Methodists, 82; Independents, 71; Baptists, 48; Wesleyan Methodists, 20; Unitarians, 14; Latter-Day Saints, 2; Primitive Methodists, 1; Wesleyan Association, 1. The number of sittings provided was 82,335.

The county is divided by the Poor-Law Commissioners into five Unions: Aberayron, Aberystwith, Cardigan, Lampeter, and Tregaron. These Unions include 106 parishes and townships, with a population in 1851 of 77,319; but the boundaries of the Unions are not strictly co-extensive with those of the county. Cardigan is in the South Wales and Chester circuit. The assizes are held at Cardigan. The Easter quarter sessions are held at Lampeter, at other times at Cardigan or Aberayron. County courts are held at Aberayron, Aberystwith, Cardigan, Lampeter, Llandeilo-vawr, and Newcastle in Emlyn. One member is returned to the Imperial Parliament for the county; another for the contributory boroughs.

Civil History and Antiquities.—The name Cardigan is derived from 'Caredigion,' which signifies the territory of Caredig, the first king of this district. One of his successors, Rodri Mawr, or Roderick the Great, in the year 843 became by inheritance and marriage the king of all Wales. Roderick divided his dominions into three parts, in each of which he had built a palace, and, bequeathing to each of his sons a share, appointed the third prince umpire over the quarrels of any other two. Cardiganshire became the property of Cadell, who shortly after his father's death seized upon his brother Merfyn's portion, which caused the eldest brother Anarawd to lay waste the county of Cardigan. Cadell died in 900. After this time Cardigan became a lordship under the princes of South Wales. In 952 Cardiganshire was again laid waste by two North Welsh princes, who claimed it as their possession. In 1033 Gruffydd, prince of North Wales, came into Cardiganshire, burnt Llanbadarn-vawr, and afterwards compelled all South Wales to swear allegiance to him. About 1092 the Normans landed here, and Roger Montgomery, earl of Arundel, did homage to William Rufus for the lordships of Cardigan and Powis; but when King William returned to Normandy the Welsh, commanded by the princes both of North and South Wales, entered Cardiganshire, and destroyed the Normans, their castles and fortifications. In 1097 Cadwgan, who had been deprived of his possessions in South Wales, regained Cardiganshire with part of Powis. Upon a dispute with Colwgan, Henry I. gave permission to Gilbert Strongbow, earl of Strygill, to seize his territories. Gilbert raised a strong force, soon reduced Cardiganshire, and built the castles of Aberystwith and Cilgerran. In 1135 Cadwalader and Owen Gwynedd, the sons of the prince of North Wales, with 6000 foot and 2000 horse, overran the country as far as Cardigan, and were victorious in an engagement with Stephen, the governor of the place. About the year 1137 Owen Gwynedd a second time invaded Cardiganshire, which it seems then belonged to his brother Cadwalader. He entered it a third time and burnt Aberystwith Castle in 1142. The disturbances among the Welsh continued with little intermission until 1171, when King Henry II. gave Cardiganshire with other territories to Prince Rhys, the last prince of this district. In 1176 Rhys gave a great entertainment at Christmas in his castle of Cardigan; several hundreds of English, Normans, and others were there. All the bards of Wales were present, answering each other in rhyme. Maelgwyn, one of the Welsh princes, having a contest with his nephews, whose authority he had usurped, swore allegiance to the English, and procuring a large army of English and Normans gave battle to his nephews, but was conquered and slain. King John having already subdued the rest of Wales, compelled Rhys and Owen, the nephews of Maelgwyn, to give up their lands and do homage to him. In 1238 Llewellyn summoned all the Welsh lords and barons to Ystradflur, where each swore fealty to him, and did homage to his son David, whom he named his successor. But Gilbert Marshal, earl of Pembroke, besieged, took, and garrisoned the castle of Cardigan. In 1270 Madoc did homage to Llewellyn ap Gruffydd as lord of Cardigan, agreeably to the charter granted by the king of England, which confirmed to Llewellyn the title of Prince of Wales. King Edward I. in 1277 obtained great advantages over Llewellyn, and dictated hard conditions of peace, to enforce which he built and garrisoned a castle at Aberystwith. Edward now divided Wales into counties, and annexed it to England in 1284; and the better to settle his affairs, soon afterwards made a progress through Cardiganshire. In 1404 Owen Glyndwr took Aberystwith Castle, which was recovered by Prince Henry in 1407.

Cardiganshire abounds with antiquities. The remains of British

and Roman encampments are exceedingly numerous and widely spread. There are also many Celtic remains of the kind commonly attributed to the Druids. Of two stone circles near Nant-y-nod, the larger, consisting of 76 upright stones, is 228 feet, the smaller 98 feet in circumference. The cairns are numerous. That popularly known as Bedd Taliesin, or the Grave of Taliesin (the famous Welsh bard), is 130 feet in circumference. Besides the Roman station at Llanio, a Roman road known as Sarn Helen traverses the county in a north and south direction from that place. Remains of castles are either standing or it is evident that such fortifications have existed at Cardigan, Aberystwith, Lampeter, Ystradmeiric, Cilcennin, Llanrysted, Dinerth, Moyddgn, Abereimon, Penwedic, Castell Gwalter, Castell Cadwgan, Hên'Castell, Castell Flemis, &c. There were also religious houses at Cardigan, Lampeter, Llanrysted, Llandewi-Brevi, and Strata Florida. The abbey of Strata Florida was the depository of part of the records of the principality, and the burial-place of many Welsh princes and celebrated bards. Rhys Gruffydd founded the first abbey in 1164; this building however was destroyed, and a new one erected two miles distant from the original site.

Cardigan is chiefly an agricultural county. The manufactures are confined to the weaving of a small quantity of flannel and coarse woollen stuffs. Gloves are made in the neighbourhood of Aberystwith and Tregaron. Oats, butter, and slates are exported. The vessels engaged during the summer in the coasting trade are used in autumn as fishing-boats. The principal imports are coal from Liverpool, culm from South Wales, Pembroke limestone, and Meinel and American deals. The harbours are extremely exposed, and the bars at Cardigan and Aberystwith are great impediments to navigation. In 1851 the only savings bank in Cardiganshire was at Aberystwith: the amount owing to depositors on the 20th of November 1851 was 32,017. 6s. 9d.

CARDINGTON. [BEDFORDSHIRE.]

CAREW. [Pembrokeshire.]

CARIA. [KARIA.]

CARIBBEE ISLANDS, Tho, have received their name from the Caribs. By this denomination are understood the whole series of islands which on the north begu with the Virgin Islands and on the south terminate with Trinidad. [ANTILLES.]

CARIBS, or CARIBBEES, is the name given by the first European navigators to one of the aboriginal tribes of South America, and which has been adopted by all European nations, though they call themselves Carina, Calina, and Callinago. At the time of the arrival of the Europeans in America the Caribs were in possession of the smaller islands of the West Indies which lie between Puerto Rico and the Gulf of Paria. The Caribs made stout resistance against the European intruders, but at last they were compelled to yield and to abandon the islands after the greater part of them had fallen in continually-repeated conflicts. A small number is said to exist still on the islands of Trinidad, St. Vincent, and Dominica.

Though the Caribs have been nearly extirpated from the islands, there still exists a considerable number on the continent of South America. They are principally found on the banks of the Lower Orinoco and of the Caroni, one of its principal tributaries, where they are partly settled in the missions along the Caroni and Orinoco, but a considerable number are still independent under their own caciques, to whom they pay great respect.

The Caribs are distinguished from the other native tribes of America by their athletic stature and their great courage and firmness of purpose. They speak of their savages with contempt and disdain, and think themselves a privileged race. The Caribs have been accused of cannibalism. [AMERICA, *Man of*, vol. i. 294.]

CARIESFORT. [WICKLOW.]

CARIGALLIN. [CORK.]

CARINTHIA (*Kärnten*), a Crownland of the Austrian empire, constituting the northern part of the former kingdom of Illyria, is bounded N. and E. by Styria, W. by Salzburg and the Tyrol, and S. by Carniola. It is situated between 46° and 47° N. lat., 13° and 15° E. long., and occupies an area of 3978 square miles, with a population of 319,220 in 1850. Its northern and southern districts, between which the Drave runs from west to east, are covered with the Noric and Carnic Alps respectively, and with their offshoots; the land inclosed between these enormous masses does not enjoy the heat which is indispensable to successful cultivation, and the produce of the soil is insufficient for the population. The valleys between the mountains contain however a deep soil of sand and clay intermixed, and are very productive. Of the two mountain chains which encompass Carniola, the formation is wholly dissimilar. The Noric Alps are composed of granite, gneiss, and other primitive rocks, which are not unfrequently traversed by beds and strata of quartz, sulphate of barytes, and various species of ores. This chain also contains the most elevated summits in Carinthia; the 'Glockner,' which is on the north-western border, has an elevation of 12,980 feet, and is the highest of the Carinthian Mountains. Many parts of the Noric Alps are densely covered with forests. The Carnic Alps are composed of limestone. The eastern districts are bounded by the Carniolan Alps, which are much inferior in height to the two other ranges. The most remarkable feature in these Carniolan Alps is that portion called the Dobratsch, or Villach Alps, the elevation of which averages about 7500

feet, and along the side of which runs a fine plateau. The highest points in this chain produce only stunted grass, Iceland moss, and other plants resembling the vegetation of the most northerly parts of Europe.

Carinthia is richly supplied with streams. The Drave, which receives most of the rivers, enters the crownland from the Tyrol, and flows for about 140 miles from west to east through Carinthia. [DRAVE.] The other large rivers which water it are the Guil, Möll, Lieser, Gurk, Glan, and Lavant. The crownland also abounds in mountain streams and small lakes. Only a small ratio of the surface is adapted for tillage, but there is a good breadth of meadow and pasture land. The stock of domestic animals includes horses, oxen, cows, and sheep. Horned cattle and sheep are the most numerous. The breed of horses is much finer in Upper than in Lower Carinthia, but in the latter the breed of horned cattle is superior. The wool is of an ordinary description. Swine and goats are reared in most parts. A very small portion of the soil is laid out in garden-ground and vineyards. The woods and forests cover about 570,000 acres.

The mines of Carinthia constitute its chief wealth. The mountain chains are rich in copper, iron, lead, and zinc. The mines of Fragant in Upper Carinthia contain inexhaustible supplies of copper. This metal is also raised at Kerschdorf in the circle of Villach, and on Mount Lumbrecht in that of Klagenfurt. Iron ore occurs through the whole length of the alpine chain, from the confines of the Tyrol in the west to those of Styria in the east. The principal mines at work are at Döllach, Gmünd, Freisach, Hüttenberg (where there are eighteen high-blast furnaces), Waldenstein, and St. Gertraud. In all the Austrian dominions there are no lead-works so extensive and productive as those of the Ore-Mountain (Erzberg), close to the Lead-Mountain (Bleyberg), at no great distance from Villach in Upper Carinthia. The largest zinc and calamine works are situated on the Raibl in the southern part of Upper Carinthia. On the Raibl, and in the iron strata at Hüttenberg, antimony is found. Immense beds of coal exist in Carinthia, and mines are worked at a few places. Large quantities of turf are dug at Feldkirchen and at Loreto on the Worthsee. Carinthia contains quartz, jasper, semi-opal, garnet, beryl, and other valuable stones, as well as various kinds of clay, talc, limestone, &c. There are marble quarries at Velden, Upper Villach, and Wasserleoburg in Upper, and at Sittersdorf, &c., in Lower Carinthia.

Both Carinthia and Carniola are named from the *Carni*, an ancient Celtic tribe which occupied the Carnic and Julian Alps, and is supposed to have been so called from the Celtic word (*Carn*) for 'mountain peak.' The territory of the *Carni* however was not co-extensive with that of the two Crownlands named, but seems to have included the highlands between the Drave and the head of the Adriatic, from the Piave to the source of the Save. Tergeste, now Trieste, was originally a Carnic village.

The industrial products are principally iron, iron-ware, and steel. The other manufactures consist of woollens, silk stuffs, cotton prints, ribands, and white-lead; the greater part at Klagenfurt, the capital of Carinthia. Independently of what has been enumerated, Carniola has few products to export beyond horned cattle. Its internal communications are much facilitated by good roads, among which there is a skillfully-constructed one across the steep and rocky Loibl into Carniola. A branch railroad is in course of construction southward from Klagenfurt to join the Vienna-Triest line at Laybach.

The western part of the crownland is commonly called Upper Carinthia, the eastern part Lower Carinthia. In the former, which is a truly alpine country, cattle-breeding, mining, and wood-cutting are the chief occupations; in Lower Carinthia, on the contrary, there are many fertile valleys well adapted for cultivation. The inhabitants are partly of German partly of Slavonic origin, the latter considerably preponderating. They are all Catholics, except a small number who are Lutherans and under the jurisdiction of the consistory of Vienna. Carinthia is in the jurisdiction of the supreme tribunal of Grätz. The governor of the crownland resides in Klagenfurt. The chief towns, KLAGENFURT and VILLACH, are noticed in separate articles. The Crownland of Carinthia is included in the so-called Germanic empire.

CARLINGFORD. [Louth.]

CARLISLE, Cumberland, the capital of the county, an episcopal city, a parliamentary and municipal borough and port, and the seat of a Poor-Law Union, stands on an eminence nearly encompassed by three streams, the largest of which, the Eden, passing the city on the north side receives the other two—the Caldew on the west and the Peteril on the east of the city. Carlisle is situated in 54° 53' N. lat., 2° 55' W. long., distant 301 miles N.W. by N. from London by road, and 300 miles by the North-Western and the Lancaster and Carlisle railways. The borough is governed by 10 aldermen, one of whom is mayor, and 30 councillors; and returns two members to the Imperial Parliament. The population of the city of Carlisle in 1851 was 26,310. The livings of the parishes of St. Mary and St. Cuthbert are perpetual curacies in the archdeaconry and diocese of Carlisle. Carlisle Poor-Law Union contains 19 parishes and townships, with an area of 62,981 acres, and a population in 1851 of 41,566.

Carlisle is supposed to be of British origin, and there is reason to conclude that it was a Roman station, the *Luguvallum* of the 'Itinerary' of Antoninus. It was probably first fortified about the time of Agricola. The Danes destroyed it about the end of the 9th century;

and it remained desolate for two centuries afterwards. Its restoration and the erection of the castle are attributed to William Rufus. The subsequent history of Carlisle, down to the union of the two kingdoms, is intimately connected with the wars between England and Scotland, and the history of the border feuds and forays. Carlisle was taken by David I., king of Scotland, and was besieged afterwards without success by William the Lion. It suffered by fire during subsequent sieges. It was occupied on different occasions by Edward I., who in 1306-7 held a Parliament here. Mary Queen of Scotland stopped in her flight after the battle of Laugside at Carlisle, where commenced her long imprisonment in England. The inhabitants declared for Charles I.; in the civil wars they suffered severe privations. In 1745 the garrison surrendered to the Pretender, Charles Stuart, the mayor and corporation presenting him with the keys of the city on their knees, and afterwards proclaiming him King of Great Britain. On the city being re-taken by the Duke of Cumberland some of the principal actors on this occasion suffered death; on others severities little short of death were inflicted.

To its position as a fortified border-town Carlisle owes much of its importance and the possession of many immunities and privileges which at various periods in its early history were conferred upon it.

Till about a century ago no trade or manufacture of any importance appears to have been carried on within the city. The comparative strength of its position in a district frequently exposed to border conflicts, attracted to it the surrounding inhabitants, so that at certain periods in its history it was a populous place; but after the union of the crowns of England and Scotland in the person of James I. of England, Carlisle sunk into decay; a condition from which during the last 60 or 70 years it has been gradually but steadily recovering. In 1763 the population was about 4000; in 1780 it was 6299; in 1801, 10,221; in 1831 the total population amounted to 19,069; in 1851 it was, as mentioned above, 26,310.

The principal trade of Carlisle arises from its manufactures of cotton goods and ginghams. There are also hat-factories, dye-works, and several extensive foundries. The distance of the city from Port Carlisle, at the mouth of the river Eden on the Solway Frith, is about nine miles; a ship canal, 11 miles in length, which was completed in 1823, connects Carlisle with Bowness on the Solway Frith. By this canal vessels of 100 tons can ascend to the town. A steamer plies twice a week between Liverpool and Port Carlisle. Besides being a principal station on one of the railway routes to Scotland, Carlisle possesses railway communication with Newcastle-on-Tyne and South Shields on the eastern coast and with Maryport on the western.

The following statement gives a view of the shipping business of Carlisle:—The number and tonnage of vessels registered as belonging to Carlisle on the 31st of December 1852, were—Sailing-vessels under 50 tons, 12, tonnage, 399; above 50 tons, 23, tonnage, 1624: steam-vessels, one of 10 tons, and one of 231 tons. The vessels which entered and cleared at the port during 1852 were as follows:—Coasting trade, inwards 139, tonnage, 5903; outwards 343, tonnage, 14,836: steam-vessels, inwards 104, tonnage, 26,646; outwards 99, tonnage, 26,319. In the colonial and foreign trade there entered 12 vessels of 2236 tons, and cleared 4 of 860 tons.

Before the Reformation there were several ecclesiastical establishments in the city. Dr. Paley was archdeacon of Carlisle, and published some of his most popular works while residing in the city. He is buried in the cathedral, where a monument has been erected to his memory. The cathedral is an ancient building of red freestone, displaying specimens of different styles of architecture from the Norman downwards. It is a comparatively small building, and inferior to most other English cathedrals. The chief architectural feature is the great east window, which is a splendid and elaborate example of the decorated style. The principal dimensions of the cathedral of Carlisle are as follows:—Extreme length, 242 feet; breadth, 130 feet; length of nave, 110 feet; breadth of nave, 34 feet; height, 73 feet; height of tower, 123 feet. In addition to the cathedral and St. Mary's there are three other churches—St. Cuthbert's, Trinity, and Christ church, and places of worship for Independents, Wesleyan and Primitive Methodists, Presbyterians, Baptists, Quakers, and Roman Catholics. Carlisle possesses an Endowed Grammar school, founded by Henry VIII. It is free to the choristers of the cathedral. The school possesses an income from endowment of 108*l.* a year. It is under the care of a head and second master, and three other masters: the number of scholars in 1852 was 75. There are National, British, and Infant schools, a School of Industry, and St. Patrick's school, instituted in 1825 for the education of 400 children. The Fawcett schools were recently erected as a testimonial of respect to the venerable incumbent of St. Cuthbert's church. There are in Carlisle two literary institutions, a mechanics institute, a public library, two public news-rooms, and a savings bank.

The castle of Carlisle, erected in 1092, lies between the city and the Eden, on a slight eminence overlooking the river. Some parts of the original castle remain in an unusually perfect state. This is especially the case with the barbican, which is a very interesting example of that portion of a Norman castle. Carlisle castle is still maintained as a garrison-fortress. Scarcely any portion of the old walls and bulwarks now remains. The county jail and house of correction, erected in 1827, are within the city. A county court is held in Carlisle.

Considerable improvement has taken place in Carlisle of late years. Many new buildings have been erected; handsome streets have been formed; the roads in the vicinity have been much improved. Among the more recent buildings may be mentioned the custom-house, a neat and convenient structure, situated at the canal basin; the news-room, in English Street, built of white freestone, in the decorated style, and erected in 1831; the fish-market, a plain Grecian building, erected by the corporation; and the large railway station of the Lancaster and Carlisle Railway Company. A handsome elliptical stone bridge of five arches was erected over the Eden in 1812, at a cost of 70,000*l*. There are also bridges over the Caldew and the Peteril. The city contains a number of benevolent institutions, among which are the infirmary, a fever hospital, a dispensary, and a humane society.

The market-days are Wednesday and Saturday. Fairs are held in August and September. A series of fairs or 'great marts' for horses and cattle, commences on the Saturday after the 10th of October, and continues every Saturday till Christmas.

An earldom of Carlisle was created shortly after the Norman conquest. It has become three times extinct, by surrender, attainder, and death without issue. The present earldom was revived in 1661, and is held by a branch of the Howard family. Carlisle was erected into a bishop's see by Henry I. in 1133; the bishop having jurisdiction over a large portion of Cumberland and Westmorland. The diocese at present extends over a considerable part of these two counties, and comprises 137 benefices: there is only one archdeaconry—that of Carlisle. The chapter consists of the dean, four canons, the archdeacon, chancellor, three minor canons, registrar, deputy-registrar, and secretaries. The income of the bishop is fixed at 3000*l*. a year.

(Nicholson and Burn, *History of Cumberland*; Lysons, *Magna Britannia*; *Communication from Carlisle*.)

CARLOVITZ, a well-built town in the Slavonian military frontier, is situated on the right bank of the Danube, about 8 miles S.E. from Peterwardein, and has about 5600 inhabitants. It is the seat of the archbishop or metropolitan of the Greek Church in the Austrian dominions. The finest buildings are the cathedral and the archiepiscopal palace. The only quarter of Carlovitz which has the appearance of a town is that part which adjoins the archiepiscopal palace; the larger portion of it stretches like a village along the Danube. It contains three other churches, a Greek theological seminary, a lyceum, a Roman Catholic academy, and an hospital. The church of Mariafried on an adjacent eminence is built upon the spot on which the treaty of 1699 between Leopold II. and his Polish and Venetian allies and Mustafa II. of Turkey was concluded. By this treaty Austria gained Hungary, Transylvania, and Slavonia. The traffic of Carlovitz is derived from its fisheries and transit-trade, as well as the export of the wines, which the environs produce in considerable quantity; this has in some years amounted to 1,800,000 gallons. Carlovitz is a station for the Danube steamers. Although situated within the military frontier, it is a free town, governed by civil magistrates, and its inhabitants are exempted from military duty in order that they may apply themselves to trade and manufactures.

CARLOW, an inland county of the province of Leinster in Ireland, is bounded E. and S.E. by the counties of Wicklow and Wexford, which separate it from the Irish Channel, S.W. and W. by the county of Kilkenny, and N.W. and N. by the Queen's county and the county of Kildare. It lies between 52° 28' and 52° 53' N. lat., 6° 32' and 7° 7' W. long. It has an area of 221,342 acres, of which 184,059 acres are arable, 31,249 uncultivated, 4927 in plantations, 602 comprised in towns, and 505 acres under water: the population in 1851 was 68,075.

The county, which is in form nearly triangular, comprises a plain of considerable extent and fertility, lying between the Wicklow and Wexford ranges on the east, and the high lands which bound the valley of the Barrow on the west. The Slaney River descending along the western declivities of the Wicklow range, and thence passing by the northern extremity of the Wexford group waters the central and north-eastern divisions of the county, passing in its course the towns of Rathvilly, Tullow, and Clonegall. The Barrow forms the boundary of the county on the west, except through a portion of its course where it cuts off the barony of Idrone West. The county town of Carlow, and the towns of Leighlin Bridge, Bagenalstown, and Borris are situated on the Barrow in this part of its course: the adjoining districts display excellent agriculture and great fertility. The southern extremity of the county, included between the Barrow and the mountain range of Blackstairs (2401 feet) and Mount Leinster (2604 feet), is hilly and ill cultivated. Through a distance of about 15 miles these mountains form a barrier between the south of Carlow and the adjoining county of Wexford, crossed only by one leading road through the pass of Scullough Gap.

The principal geological constituent is granite, which extends from the mountainous district of Wicklow through the entire central tract of the county. Through the central and more productive part of the field the granite is covered by tertiary beds of limestone gravel. In the southern division the granite rises into the elevations of Mount Leinster and Blackstairs. North of the ridge of Mount Leinster a tract of the silurian slate of Wexford, skirted by greenstone protrusions, crosses the valley of the Slaney from the neighborhood of Clonegall to Myshall. In the valley of the Barrow the upper limestone, calp, and lower limestone present their respective edges in

parallel fields corresponding pretty nearly to the course of the river which flows chiefly through the field of calp. A small projection of the old red-sandstone formation of the Slievenamon group occurs at Goresbridge. In the limestone district the soil is gravelly but warm; it is lighter and more peaty in the granite district. From the facility of splitting with the wedge the granite which is found here, lintels of granite are commonly employed in cases where bars of wood are used elsewhere, and a common fence in the county of Carlow is a granite paling, the square lintels resting on their angles in notches on the tops of granite uprights; the weight of the stone keeps it in its place without any further fastening. A branch of the Great Southern and Western railway has been open since August 1846, connecting Dublin with Carlow town; and an extension of the line from Carlow to Lavinstown, within two miles of Kilkenny, was opened in November 1850. The great southern road from Dublin to Kilkenny passes through the county in a direction nearly parallel to the Barrow, which it crosses at Leighlin Bridge. The roads are numerous and mostly in good repair. Carlow also derives considerable facilities of transport from the Barrow navigation, which affords a water-carriage south to Waterford, and north by the Grand Canal, a branch of which meets it at Athy, to Dublin and the Shannon.

With a good soil and a resident proprietary Carlow has long held no mean position as an agricultural and productive county. The crops generally raised are potatoes, wheat, barley, and oats. The number of acres under crop in 1851 was 87,615: namely, wheat, 10,191; oats, 28,415; barley, bere, and rye, 5709; beans and peas, 136; potatoes, 11,154; turnips, 6047; mangel-wurzel, carrots, parsnips, and cabbage, 1157; vetches and other green crops, 352; flax, 117; and meadow and clover, 24,319 acres. Of plantations, including oak, ash, elm, beech, and fir trees, mixed timber, and fruit, there were 8428 acres. In 1851 the number of holdings in the county was 5942, of which number 529 did not exceed one acre. In the same year on 6403 holdings (of which 5413 were under one acre) there were 7039 horses, 2309 mules and asses, 33,939 cattle, 32,268 sheep, 24,642 pigs, 2743 goats, and 105,635 poultry. On the whole the county is a rich one, and the farmers have hitherto, for their stations, been generally comfortable.

The manufacture of coarse woollens was at one time carried on to some extent in Carlow, but the trade is now altogether gone. The county is essentially agricultural, and its staple is the raising and preparation of provisions—especially corn, butter, flour, and oatmeal. On the Barrow navigation there is a fall of rather more than one foot per mile, which gives a great water-power available for mill sites at almost every weir; the number of corn-mills along the line is accordingly very great, and with one or two exceptions these establishments lie within the limits of this county. The provision trade consists chiefly in bacon for the home market. Large quantities of barley are malted by the resident maltsters and distillers.

The only towns of any importance in this county are CARLOW, TULLOW, and BAGENALSTOWN. Carlow will be found described under its title: Tullow and Bagenalstown, with one or two villages, we notice here. *Tullow* is situated on the Slaney, on the road from Dublin to Wexford, in a well-cultivated and agreeable country: the population in 1851 was 2963. The parish church is adorned with a tower, and the Roman Catholic chapel with a spire, which form striking features in the landscape. There are here a small monastery and convent, the members of which occupy themselves in education. Quarter sessions are held here in rotation. The town is improving.

Bagenalstown, on the Barrow, is a small but neat and thriving place: in 1851 it had a population of 2256, and 36 inmates of the fever hospital. The sessions house, occupying an elevated site, has a handsome Ionic portico. A considerable number of respectable families reside here and in the vicinity; and an extensive trade is carried on in milling, for which the Barrow affords abundant water-power. The quarrying and dressing of granite also affords a good deal of employment. Quarter sessions are held here.

Borris is a small town, population 720 in 1851, which has grown up as an appendage to the neighbouring manor-house of Borris, the residence of the Kavanagh family. The Roman Catholic chapel is in the village; the private chapel attached to Borris House serves as the ordinary place of worship for the Protestant inhabitants of Borris town. Borris House is an imposing building in the Elizabethan style, and stands in a park of great extent and beauty on the left bank of the Barrow. *Clonegall*, population 334, on the eastern border of the county, is picturesquely situated on the river Derry, about 7 miles S.S.E. from Tullow. The village contains some good buildings. Ten fairs are held in the course of the year; two in May and December for frieze; the rest for cattle. *Hacketstown*, population 790, on the Derreen rivulet, about 35 miles S. by W. from Dublin, is a place of some importance in the district in which it is situated. Fourteen fairs are held in the course of the year. The town possesses a respectable amount of trade. Besides the parochial chapel, there are two chapels for Roman Catholics, and National and Charity schools. *Leighlin Bridge*, population 1292 in 1851, so called from a bridge built here in 1320 by a canon of the cathedral of Kildare, to facilitate the access to the cathedral church of Old Leighlin which stands two miles west, is a small straggling town on both sides of the Barrow. The parish church and Roman Catholic chapel stand on the right bank; the ruins

of an early Anglo-Norman fortress called the Black Castle, built to defend the ford before the erection of the bridge, occupy a considerable area on the left. *Old Leighlin* is a poor village, and the cathedral, a building of the 12th century, restored in the 16th, has been used since the union of the sea with that of Ferns, in A.D. 1600, as the parish church. *Old Leighlin* was at an early period a parliamentary borough, and a place of some consequence, but suffered from fire, and the ravages of war. The borough returned two members to the Irish Parliament, but was disfranchised by the Act of Union. *Rathvilly*, population 466, situated on the left bank of the river Barrow, has increased in population from 221 in 1841 to 401 in 1851. It forms a suburb of the town of Graiuenamanagh on the opposite bank of the river, in Kilkenny county. Near the village are the ruins of Tinnahinch Castle, and of St. Michael's church, burying-ground, and wall. Fairs are held in May, September, and December.

In the year 630 a synod was held at *Old Leighlin* to adjust the dispute between the Irish ecclesiastics and the See of Rome regarding the fit time of celebrating Easter. When the English invaders came this part of the country was known as comprehending the territories of *Ily-drone* and *Hy-Cavanagh*, being the northern portion of the territory of *Ily-Kinmullagh*, the patrimony of *Dermot Mac Murrough*, king of *Leinster*, the inviter of *Strongbow*. *Isabel*, daughter of *Strongbow* by *Eva*, daughter of *Dermot*, married (1189) *William Earl Marshal*, one of the invading nobles, who in her right succeeded to the principality of *Leinster*. This *William*, who was Lord Justice of Ireland, granted the first charter to the inhabitants of *Catherlagh*, as the present county town was then called, about 1208; and *King John* coming to Ireland in 1216 made the county shire ground. *William Earl Marshal* and *Pembroke* dying in 1219 left five sons and five daughters, and on failure of the male line the *Carlow* division of his immense estates fell to his daughter *Maud*, who married *Roger Bigod*, earl of *Norfolk*. From *Roger*, earl of *Norfolk*, the lordship of *Carlow* passed to the crown, and from *Maud* his wife the barony of *Idrone* passed by grant in fee to the family of *Carew*. The lordship of the county was next granted by *Edward I.* to *Thomas de Brotherton*, and from him descended through the family of *Howard*, earls of *Norfolk* and lords of *Carlow*, till forfeited by the statute of absentees in the reign of *Henry VIII.* These lords palatine exercised a kind of sovereign away in their territories, but the circumstance of their residing at a distance gradually slackened the exercise of their privileges, and the descendants of the dispossessed Irish taking advantage of the lax administration of their deputies, and headed by one of the *Kavanaghs*, a descendant of *Dermot Mac Murrough*, began forcibly to repossess themselves of their ancient patrimony, in which attempt they were ultimately so successful that in the 37th *Edward III.* an order issued *pro barrio amorendo a Catherlagh usque ad Dublin*—for withdrawing the boundary of the pale from *Carlow* to *Dublin*—the country south of *Naas* having fallen completely into the hands of the Irish. *Richard II.*, A.D. 1394, and again in 1399, undertook expeditions for the recovery of the revolted counties, but although he forced some of the Irish chieftains to a temporary show of obedience, he was finally obliged to return to England without accomplishing his object. In 1404 the *Fitzgeralds* seized the castle, which they held till after the unsuccessful rebellion of *Lord Thomas Fitzgerald* in 1537. In this year the resumption of the lordship of *Carlow*, alluded to above, took place; by which means the crown was afterwards enabled to grant large estates to the family of *Butler* in this county. In 1567 *Sir Peter Carew*, descendant of the last proprietor of *Idrone*, into which the *Kavanaghs* had forcibly intruded in the reign of *Edward III.*, exhibited his claim to this barony, and having established it to the satisfaction of the council, entered on possession, and "dealt in such good order with the *Kavanaghs*, and so honourably used himself, that they all voluntarily yielded up their lands, and submitted themselves to his devotion." (*Hooker*.) *Sir Peter Carew* died in 1570, and his son *Sir Peter Carew* was killed at *Glendalough* in a battle with the *O'Byrnes* of *Wicklow* in 1580, after which the *Kavanaghs* once more made head in *Carlow*, and with the *O'Byrnes*, commenced a predatory warfare, which lasted from 1590 till 1601, when *Sir Oliver Lambert* at length reduced both to submission.

During the reign of *Elizabeth* large tracts of the county of *Carlow* had been granted to the *Butlers* and *Fitzgeralds*, and in the succeeding reign their estates were confirmed, as well as considerable possessions to the *Earl of Thomond*, to the submitted *Kavanaghs*; and among other grants was that of the entire barony of *Idrone*, to the family of *Bagnall*. In the rebellion of 1798 *Carlow* was the scene of several engagements. On the 25th of May the rebels attacked the town of *Carlow*, and were repulsed with the loss of 600 men; on the same day a battle was fought at *Hacketstown*, in which the insurgents, said to have been 13,000 strong, were defeated with considerable loss; and on the night preceding, *Borris House*, the residence of *Mr. Cavanagh*, was attacked by 5000 of the peasantry, who were repulsed both on this occasion and on the 24th of June when they assailed the town of *Borris*. *Leighlin Bridge* and *Bagenalstown* were also attacked with a like result.

The chief antiquities of the county are military; cromlechs, near

the towns of *Carlow* and *Hacketstown*, and the cathedral church at *Old Leighlin*, being the only pagan and ecclesiastical monuments of interest. Of the cromlechs, that near *Carlow* is the most remarkable; the covering-stone weighs nearly 90 tons. Of the castles those at *Carlow*, *Tullow*, and *Leighlin Bridge* are the most ancient: the building of all is attributed to *De Lacey*. At *Clonmullin*, in the barony of *Forth*, are some traces of the castle of *Donnell Spanagh Kavanagh*; *Cloghgrenan*, a castle of the *Butlers* on the right bank of the *Barrow*, is still standing; *Clonmore*, another stronghold of the same family, situated near *Hacketstown*, remains in a state of good preservation; it is a noble pile of 170 feet square, flanked with square towers at the angles.

Carlow county is divided into seven baronies: *Rathvilly* and *Carlow* on the north; *Forth*, *Idrone East*, and *Idrone West* in the centre; and *St. Mullin's* (*Upper* and *Lower*) on the south. The county court-house and prison, county infirmary, and district lunatic asylum are at *Carlow* town. Quarter sessions are held at *Carlow*, *Tullow*, and *Bagenalstown*. Fever hospitals are at *Bagenalstown*, *Borris*, *Carlow*, and *Tullow*. In December 1851 there were in the county 59 National schools, attended by 3133 male and 3515 female scholars. *Carlow* returns three members to the Imperial Parliament, two for the county and one for the borough of *Carlow*. The assizes are held at *Carlow*. The county is within the military district of *Kilkenny*; a barracks-station for cavalry and infantry is at *Carlow*. The county constabulary, of which the head-quarters are at *Carlow*, consist of 159 men, including officers; they are divided into four districts, of which the head-quarters are *Carlow*, *Bagenalstown*, *Tullow*, and *Borris*. There was no savings bank in the county in 1851.

(*Ordnance Survey Geological Map*; *Ryan, History and Antiquities of Carlow*; *Statistical Survey of Carlow*; *Fraser, Handbook for Ireland*; *Original Communications*.)

CARLOW, county of *Carlow*, Ireland, in the barony and county of the same name, with the suburb of *Graigie* in the barony of *Shieve-marique*, *Queen's County*, an assize, market, and post-town, a parliamentary borough, and the seat of a Poor-Law Union, is situated in 52° 47' N. lat., 6° 56' W. long.; distant from *Dublin* by the high road 49½ miles, by the *Carlow* branch of the *Great Southern and Western* railway 55½ miles. The population of the borough in 1851 was 9121, besides 2461 inmates of the Union workhouse and other public institutions. The borough returns one member to the Imperial Parliament. *Carlow* Poor-Law Union comprises 45 electoral divisions, and an area of 185,857 acres, with a population in 1851 of 63,598.

Carlow is situated on the left bank of the *Barrow* where the *Burrin*, a small river flowing westward from the barony of *Forth*, enters that river. The town consists chiefly of two main streets, one running nearly parallel with the *Barrow*, and crossing the *Burrin* by a neat metal bridge; the other leading to the suburb of *Graigie*, in *Queen's County*, by a handsome hausted stone bridge over the *Barrow*. On the north side of the latter street opposite the site of the ruined castle stands the parish church, a respectable edifice ornamented with a spire of very elegant proportions. The court-house is an octagonal building of cut stone, with a handsome portico of Ionic columns, approached by a fine flight of steps, and elevated on a massive balustraded basement. There are places of worship for *Presbyterians*, *Methodists*, and *Quakers*. The Roman Catholic church and college are both fine buildings; the church, which serves as a cathedral for the united dioceses of *Leighlin* and *Kildare*, is a spacious and handsome cruciform edifice, with an octagonal tower surmounted by a lantern 150 feet high. The college, a plain edifice, was originally founded in 1789 for the education of Roman Catholics. A new wing was added in 1828, and the house is now calculated for 200 students. There is a Roman Catholic convent here, founded in 1811, with a school attached. There is also a nunnery. *Carlow* has a diocesan school and several other schools connected with the *Established Church*. The county jail is a well-regulated establishment; employment is provided for prisoners of both sexes. The Union workhouse is constructed for the accommodation of 3278 inmates. Adjoining is a barrack for two companies of infantry and a troop of horse. Coal is brought from the neighbouring coal district in the *Queen's County*, and by the *Barrow* from *Ross* and *Waterford*; but the principal fuel used by the lower classes is turf. The chief manufacture carried on here is that of flour and oatmeal, large grinding-mills being driven both by the *Burrin* and the *Barrow*; there are a brewery and a distillery, several flour-mills and malt-houses. The butter trade is carried on extensively.

The town of *Carlow* grew up round the castle which was founded here by the early English conquerors about the end of the 12th century. It was erected into a borough by *William Earl Marshal*, about 1208, and was surrounded with walls in 1362 by *Lionel*, duke of *Clarence*, who removed the king's exchequer hither from *Dublin*. It is said that the castle was seized in 1297 by *Donnell Mac Art Kavanagh*; and it appears to have been occasionally in the hands of the Irish till about 1494, when it was seized by a brother of the *Earl of Kildare*, and after a siege of ten days was taken from him by the lord deputy, *Sir Edward Poynings*. The castle was occupied by the *Royalists* under *Captain Bellow*, and on the 24th of July, 1650, after a short siege was surrendered to *Sir Hardress Waller*, commanding a division of *Ireton's* parliamentary forces. In July, 1604, the innor of *Carlow* was

granted to Donogh O'Brien, earl of Thomond, and the office of constable of the castle was bestowed on him and his son Brien in consideration of his surrender of certain castles in Tipperary and Limerick. In 1613 James I. granted a charter to the inhabitants of Carlow, constituting the town a borough. This charter was superseded by the Reform Act. The dilapidation of the castle has been comparatively recent. The whole structure, a square of 105 feet, with massive round towers at the angles, was standing in 1814, when an injudicious attempt was made to modernise it by piercing new windows and diminishing the thickness of the walls, in consequence of which more than one-half of the building fell to the ground. Its ruins, consisting of one curtain wall with its flanking towers, about 65 feet in height, stand over the left bank of the Barrow, and still form a prominent and picturesque object.

The Lunatic Asylum for the counties of Carlow, Kildare, Wexford, Kilkenny, and Kilkenny city, is half a mile north of the town. A fever hospital and military barracks are at Carlow. Carlow is a neat and thriving town, situated in a rich country, and is the residence of many respectable families. Fairs are held in May, June, August, and November. Markets are held on Monday and Thursday. Grain and butter are exported to Dublin and Waterford to a considerable amount. Several flour-mills and malt-houses are in the vicinity.

(Ryan, *History of the County of Carlow*; Thom, *Irish Almanac*; *Parliamentary Reports and Papers*; *Original Communications*.)

CARLSBAD, a royal town, celebrated for its mineral waters, is situated on the Tepl, in the circle of Ellbogen in Bohemia, in 50° 18' N. lat., 12° 52' E. long., and has a permanent population of about 3000. The warm spring called the Sprudel, to which it is indebted for its celebrity, was first brought into notice in 1870, when Charles IV., as the tradition says, while following the chase in its vicinity was attracted to the spot by the cries of a hound that had fallen into the hot spring in pursuit of a stag. Charles's physician, Beier, was one of the party, and formed so high an opinion of the virtues of the water, that he recommended his royal master to use it for the cure of wounds he had received at the battle of Crecy. The result having established its efficacy, Charles founded a free town on the spot, settled the inhabitants of a neighbouring village upon it, ordered baths to be opened, and gave it his own name. In the market-place is a statue of Charles IV.

Carlsbad is built in a deep narrow valley, traversed by the Tepl, which falls into the Eger just below the town, and is bounded on every side by lofty heights of granite. The houses branch out into three distinct ravines or lesser valleys. A more delightful scene cannot be conceived than the prospects from the summit of the heights that screen these dells. They are traversed in all directions by shady walks provided with seats and summer-houses. The hot springs are close to the banks of the Tepl. They emit a delicate vapour, which constantly hangs over the town, and has a peculiar odour. The Sprudel has a temperature of 165° Fahr.; its water boils eggs hard, and is used by the townspeople to scald poultry and pigs. Its principal chemical ingredients, which exist also in the same proportions in the other springs, are sulphate of soda, carbonate of soda, common salt, bromine, and potash. About 2,000,000 gallons of water flow from the springs in a day, two-thirds of which are furnished by the Sprudel and Hygeia. The Muhlbrunnen has a temperature of 138°, the Neunbrunnen 147°, the Theresienbrunnen 132°. There are several other springs; most of them are shaded by a covered colonnade, under which the drinkers take the waters in the morning to the sound of soft music. The waters are used also for warm, mud, vapour, and douche baths. In 1838 a new fountain burst forth in the market-place with a temperature of 135½°. All the springs rise out of granitic breccia; and all of them have petrifying qualities. The Sprudel bursts out of the breccia through a crust of its own formation.

Carlsbad is the most aristocratic watering-place in Europe. The most fashionable season is from June 15th to August 15th, but some visitors remain to the end of September. The number of visitors varies between 5000 and 6000. There are reading-rooms, restaurants, several good shops, a theatre, and coffee-houses; gaming is strictly prohibited. Bohemian glass, china, earthen and pewter cups are sold in large quantities. Every visitor who remains 5 days pays a tax of 4 florins, which is laid out in keeping up and improving the walks, baths, temples, colonnade, and other buildings connected with the springs. The arrival of distinguished strangers is announced by trumpeters stationed on a tall tower near the market-place; the nature and extent of the flourish depend on the character of the equipage.

CARLSKRONA, a fortified sea-port town, the capital of the province (Län) of Carlskrona in Sweden, is situated in 56° 10' N. lat., 15° 35' E. long., and has a population of about 12,000. It was founded in 1680 by Charles XI., who made it the station of the royal fleet and the naval arsenal of Sweden. It is built chiefly on the island of Trotsö; the rest of the town stands on smaller adjoining islands, the whole being connected by bridges and by an embankment with the mainland. Its streets are wide and straight, but the ground on which the town stands is uneven. The houses are commonly good, though small; many of them are built of stone and the roof of wood.

The harbour, formed by a series of islands lying about three miles distant from the continent, is spacious, safe, and convenient, and has depth enough for the largest men-of-war. There are three entrances:

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the only one practicable for large vessels is on the south side of the town, between the islands Aspö and Tjurkö, and is defended by two strong forts. The entrance to the west of it is called Aepöund, which may be entered by frigates, and still smaller vessels find admission into the harbour by the east entrance, called Skällesund.

The dry docks of this harbour have always attracted the attention of foreigners. The old dock, built in the time of Charles XII., was blasted out of the granite rock, and is 200 feet long by 80 feet wide; it is deep enough for the largest vessels. The new dock, constructed under Gustav III., is much more extensive, and consists of several divisions for the building of different kinds of vessels; it is likewise cut in the granite. The other buildings are the arsenal, the artillery-yard, and the admiralty. The buildings and constructions connected with the naval arsenal and dockyard are separated from the town by a wall. The greatest inconvenience to which the inhabitants are exposed is the want of good water. The manufactures, which, excepting the naval equipments made in the royal arsenal, are unimportant, comprise linen, tobacco, and refined sugar; metals, potash, &c., are exported. Steamboats between Stockholm and *Carlskrona* (a small sea-port, 26 miles W. from Carlskrona, with a population of 4200) call at Carlskrona.

The province of Carlskrona has an area of 1130 square miles, and had in 1845 a population of 102,342.

CARLSRUHE (Karlsruhe), the capital of the grand duchy of Baden, stands in the circle of Mittel-Rhein, about 4 miles east of the Rhine, on the railway between Mannheim and Bäle, being 34 miles S. from the former and 123 miles N.N.E. from the latter town: population, 24,000. It stands at an elevation of 372 feet above the level of the sea and 50 feet above that of the Rhine, in 48° 56' N. lat., 8° 22' E. long. Its origin was a bunting-seat built on the spot by Charles William, margrave of Baden, in 1715. It is constructed in the form of an extended fan, the grand ducal palace constituting the central point, from which the streets and avenues diverge. The streets commence from a semicircular row of handsome houses which fronts the palace, and is called the Great Circle. The style of the houses is various; some are in the Dutch, some in the French, and many in a mixed Greek and Roman style. The palace is remarkable only for its tower called Pleythurm, which stands in its centre; the right wing of the edifice contains the public library of 90,000 volumes, a collection of antiquities, coins, &c.; and the left wing, the church of the court. The view from the Pleythurm is splendid, comprehending the whole city and the Hardt Forest, which nearly surrounds the town, and is pierced by roads corresponding with the several streets; beyond this to the west are seen the Vosges Mountains and the windings of the Rhine, the Black Forest Mountains on the south, and the Bergstrasse on the north. The Great Circle contains the government offices, and the palace of the Margrave Maximilian. Karlsruhe has nine public squares, the finest of which is the market-place. The stone-pyramid, with an inscription in memory of Charles William the founder of the place, whose remains are inclosed in it, stands in the centre of the square. The new Protestant, the new Catholic, and the garrison churches are handsome buildings. The building for the Legislative Assembly is three stories high, and contains two fine halls for the sittings of the two chambers, besides residences for the president, officers, &c., and depositories for the archives and papers. Among the important institutions of Karlsruhe, to all which are attached handsome buildings, are—the museum, the mint and office of works, the academy of the arts and sciences, with a picture gallery attached to it, the arsenal, polytechnic school, post-office, and barracks. The town also possesses a botanical garden, a veterinary school, four hospitals, a deaf and dumb asylum, and other useful and benevolent institutions. There is a theatre attached to the palace. The inhabitants derive their livelihood principally from trade, mechanical employments, and manufactures. The chief manufactures are silks, cottons, carpets, woollens, jewellery, tobacco, snuff, leather, carriages, and articles of luxury. The Palace Gardens and those called Amalienruhe are always open to the public, and afford pleasant promenades. There are also many attractive spots in the neighbourhood. The town is supplied with water by an aqueduct from the Durlach. [BADEN.]

CARLSTADT. [CROATIA.]

CARLTON, West Riding of Yorkshire, a township and the seat of a Gilbert Poor-Law Incorporation, in the parish of Guiseley and upper division of the wapentake of Skyrack. Carlton is situated in 53° 53' N. lat., 1° 40' W. long.; distant 2 miles S.E. from Otley, and 28 miles W. by S. from York. The population of the township in 1851 was 185, including 79 inmates of the workhouse. Carlton Gilbert Incorporation contains 40 parishes and townships, with an area of 86,034 acres, and a population in 1851 of 68,610.

CARLUKE. [LANARKSHIRE.]

CARMEL, a range of hills connected by a chain of lower hills with the central mountains of Palestine, runs in a north-west direction and terminates abruptly in the sea in a bold promontory, which is called *Mount Carmel*, and forms the southern extremity of the Bay of Acre. The range rises rapidly from the coast to the height of about 1500 feet, and its whole length is about 18 miles. It separates the great plain of Philistia from the plain of Esdraon and the coast of Phœnicia. It is composed of limestone, and was formerly noted for

its fertility. On the summits of the range, oaks, pines, and other trees grow; and the vines and olive-trees which are still seen among the brambles indicate that its surface was once under cultivation. The sides are still covered with rich pasture, where shepherds feed their flocks as they did when the Hebrew prophets described it as the 'habitation of shepherds.' The Kishon runs along the eastern base of Carmel into the Bay of Khaifa.

Mount Carmel is celebrated in the Old Testament for the sacrifice of Elijah (2 Kings, xxiii.), and the fame of this miracle made it be regarded even by pagans as a place of peculiar sanctity. The site of Elijah's altar is still pointed out. Carmel contains numerous caves, particularly on the western side. At the north-western extremity of Mount Carmel is a monastery belonging to the Carmelite monks, who took their denomination from this mountain: the monastery is believed to be built over the spot where Elijah and Elisha had their abode.

The little town of *Caifa*, or *Khaifa* (the ancient Porphyrium), at the northern base of Mount Carmel, is of some importance on account of its roadstead. Corn, cotton, sesamum, and Galilean and Samaritan oils are exported from Caifa.

CARNAK. [MORBIKAN.]

CARNAK. [THEBES.]

CARNATIC, a province in the south of Hindustan, extending between 8° and 16° N. lat., and between 77° and 81° E. long. This province comprehends the former dominions of the Nabobs of Arcot, stretching from Cape Comorin on the S. to the small river Gundigama, by which it is separated from the Circars on the N. On the E. it is bounded by the Bay of Bengal, having a line of coast 560 miles long; and on the W. are Coimbatore, the Barramahal districts, and the territory ceded by the Nizam. The breadth of the province, no where greater than 110 miles, averages about 75 miles, and is narrowest towards the north. The chain of hills known as the Eastern Ghauts commences in the south, about 11° 20' N. lat., and extends northward in a direct line to 16° N. lat., separating the Carnatic throughout its extent into two divisions, one called Carnatic Balaghauts, or above the Ghauts [BALAGHAUTS]; the other the Carnatic Paycenghaut, or below the Ghauts. The province is further divided in length into three parts, severally called the Southern, the Central, and the Northern Carnatic. The first of these divisions is south of the river Colerun, the northern branch of the Cavery, which runs from Trichinopoly to the Bay of Bengal. This part of the Carnatic did not form an integral part of the dominions of the Nabob of Arcot, but was tributary to that chief. The principal towns which it contains are Carrical, Cuddalore, Madura, Nagore, Negapatam, Tanjore, Tinnevely, Tranquebar, and Trichinopoly. The Central Carnatic has the Colerun for its southern and the Pannair for its northern boundary. Its chief towns are Madras, Arcot, Chandergeri, Chingleput, Conjeveram, Ginjee, Nellore, Pondicherry, Pulicat, Vellore, and Wallajabad. The Northern Carnatic comprehends the remainder of the province, and is included between the Pannair on the south and the Gundigama on the north; of its towns, which are few in number, we may name Saumgaum.

Carrical, at one of the outlets of the Cavery River, is a French settlement. The river is here navigable for small boats. The population is about 15,000. There is here a good harbour. The town possesses considerable trade. *Madura*, situated near the Vaygaru River, is a fortified city, about 270 miles S.W. from Madras. The population formerly amounted to 40,000, but is now probably not half that number. The walls of its ancient fortifications remain, and a large palace, a great temple with pyramidal towers, with numerous Hindoo edifices, attest the former extent and magnificence of the place. The streets are wide, and regularly built, but the dwellings of the inhabitants are of an inferior description. *Nagore*, on the Nagore River, a branch of the Cavery, at its embouchure in the Indian Ocean, is a populous city, with a considerable trade. The houses are well built. The city possesses several mosques, a square tower 150 feet high, and other public buildings. *Negapatam*, on the Coromandel coast, about 50 miles E. from Tanjore, was formerly a Portuguese and afterwards a Dutch settlement of importance, but has lost its trade since it was united to the British dominions in 1783. *Tanjore*, the capital of the Raja of Tanjore, is situated near the right bank of the Cavery, in 10° 47' N. lat., 79° 13' E. long., distant 40 miles E. from Trichinopoly: the population has been variously estimated at from 35,000 to 80,000. The circumference of the city and the suburbs is about six miles. It is a place of great strength, being defended by two forts, which are connected with each other; both are surrounded by walls built of large stones, and by broad and deep wet ditches. The city is regularly built, and is said to contain a larger proportion of good houses than any other town in Southern Hindustan. The palace of the raja is in the larger fort. An extensive Hindoo temple is situated in the smaller fort. There is here an English church. *Tinnevely*, 60 miles N. by E. from Cape Comorin, is situated in a very well cultivated country not far from the mountains. *Tranquebar*, formerly a Danish settlement, is a fortified sea-port town. It was purchased by England in 1846. The town possesses a good harbour, and some commerce. The population may be about 20,000. *Tranquebar* is a principal station of the Protestant missionaries in Hindustan. *Trichinopoly* is situated on a rocky eminence on the right bank of the river

Cavery; it is fortified, and is said to contain, including the suburbs, upwards of 80,000 inhabitants. The houses are generally inferior to those of Tanjore. There is a considerable trade in cotton-cloth, jewellery, and horse equipments. The head-quarters of the south division of the Madras army is at Trichinopoly. The chief public buildings are a palace, a mosque, and two Hindoo temples. *Chandergeri*, is a fortified town, situated in 18° 43' N. lat., 79° 17' E. long., about 85 miles N.W. from Madras. *Chingleput* is situated in 12° 46' N. lat., 80° 2' E. long., on a feeder of the Palair, distant about 38 miles S.S.W. from Madras. The town is irregularly built, and the houses are of mean appearance. The fort has been allowed to fall into decay. In 1751 it was taken by the French and retained by them till 1752 when Captain, afterwards Lord Clive retook the place. *Conjeveram*, called by the natives Kunji, is situated in a fertile valley watered by the small river Wegawutty, in 12° 49' N. lat., 79° 48' E. long. The town is built in a straggling manner, and resembles a series of villages interspersed with extensive gardens and plantations. The streets, which are wide and regularly laid out, are planted on each side with cocoa-nut trees and hastard cedars. The houses are only one story high; they have mud walls and are roofed with tiles. Each house is built in the form of a square, with a small court in the centre. A considerable part of the inhabitants are weavers, and employ themselves in making red handkerchiefs, turbans, and cloths adapted for the dresses of the natives. Conjeveram is also the residence of numerous Brahmins belonging to temples dedicated to Siva and Vishnu, which are much frequented. The pagoda of Siva is a large building said to contain 1000 pillars, many of them elaborately sculptured. The pagoda dedicated to Vishnu Conjee is not so large, but is more highly venerated. It was from this building that the town obtained its name of Conjeveram. There are numerous pagodas, near which are placed large tanks; in one of these, situated on the west side of the great pagoda, every Brahmmin who visits the place for the first time must perform his ablutions, and he must spend money in charity; the sums thus raised being in fact applied to the support of the Brahmmins belonging to the temple. *Ginjee* is situated in 12° 12' N. lat., 79° 28' E. long., distant 35 miles N.W. from Pondicherry. It was formerly considered by the natives as the strongest fort in the Carnatic. The works cover the summits and great part of the sides of three detached rocky mountains, upwards of 500 feet high, and difficult of access: the whole are connected by lines which inclose the plain between the mountains, and contain within them a fortified barrier, dividing the works into an outer and inner fort. This fortress was built about the middle of the 15th century, and was successfully strengthened by its Mohammedan and Mahratta possessors. It surrendered to the British in 1761, and has since been completely neglected. *Nellore*, situated on the right bank of the Pennair River, is a populous place, and has a considerable amount of trade. *PONDICHERRY*, formerly the principal seat of the French power in Hindustan, will be described in a separate article. *Pulicat* stands on the edge of a lake separated from the sea by a low sandy beach, in 13° 25' N. lat., 80° 24' E. long., 23 miles N. from Madras. The Dutch formed a settlement here as early as 1609, and after the loss of Negapatam made it their chief station on the Coromandel coast. *Vellore* is situated on the right bank of the river Palair; in 12° 55' N. lat., 79° 12' E. long., about 20 miles W. from Arcot. Vellore is a large fortress, containing saconic barracks and a curious pagoda, commanding the main road from the coast of the Carnatic to the province of Mysore. The fortress is surrounded by a strong stone wall, with bastions and round towers at short distances, and by a wide and deep ditch, over which is a causeway, forming the only entrance. The town, which is large and populous, is connected with the fortress by extensive outworks. It was besieged by Tipoo Saib in 1781, but unsuccessfully, and after the conquest of Seringapatam it became the residence of his family, but on their joining in a revolt in 1826 they were removed to Bengal. *Wallajabad* is 14 miles N.W. from the town of Chingleput, in 12° 48' N. lat., 79° 53' E. long., and contains extensive military cantonments. *Saumgaum* is situated in 14° 25' N. lat., 79° 47' E. long., 17 miles N.W. from Nellore.

The climate of the Carnatic Paycenghaut, which has the sea on one side and an abrupt mountain ridge on the other, is considered to be the hottest in India. Contiguous to the coast the heat is somewhat mitigated by the sea-breeze. The failure of this sea-breeze, which sometimes occurs for several successive days, occasions a degree of heat highly distressing to the inhabitants, the thermometer rising to 130° in the shade. From May to July occasional showers occur, and sometimes it rains heavily and continuously for three or four days, by which the air is cooled and vegetation assisted. The soil of the province near the coast is a mixture of sea-sand and loam, sparingly intermixed with the remains of marine animals. In many parts the earth is strongly impregnated with iron, and in others there is in dry weather a considerable efflorescence of common salt upon the surface.

The principal rivers of the province are the Pannair, the Palair, the Colerun, and the Vaygaru. The Pannair rises in Mysore, near the fortress of Nandydrug, and taking a south-easterly direction, falls into the sea at Cuddalore, after a course, including its windings, of about 250 miles. The source of the Palair is very near that of the Pannair: it has a winding course towards the north-east of about

220 miles, and falls into the sea near Sadras, in 12° 31' N. lat., and 80° 14' E. long. The Colerun as above mentioned is a branch of the Cavery. The Vaygaru rises in the highlands to the south of Mysore, flows with a tolerably direct course south-east past Madura, and falls into the sea about 20 miles south of Tondi, in 9° 25' N. lat., and 79° 5' E. long. During its course the waters of this river are much employed for irrigation, and near its mouth there is a large tank, by which it is in great part absorbed: its channel is partially dry during some months in the year.

The lowlands are chiefly devoted to the cultivation of rice, and their rent depends upon the facility with which they can be irrigated. There are four harvests in the year, two of which are raised upon the same ground. The increase in ordinary seasons is usually for the first crop fifty-fold, for the second and third each forty-fold, and for the last from twenty to thirty-fold of the seed, the proportion sown being about ten bushels to the English acre. The high grounds which cannot be watered are principally employed for raising different descriptions of millet and a few leguminous plants. Sugar and indigo are cultivated to a small extent, and cotton in some situations grows luxuriantly.

The great bulk of the inhabitants of the Carnatic are Hindoos. A great part of the land is rented by Brahmins, who employ labourers of the inferior castes. The most numerous class of cultivators is that of Sudras, many of whom perform all the operations of the farm with their own hands.

The first invasion of the Carnatic on the part of the Mohammedans was in the year 1310, when the Hindoo sovereign was made tributary to the Mogul emperor. In 1717 Nizam-ul-Mulk obtained independent possession of the south of India, and the dependence of the Carnatic upon the throne of Delhi ceased. On the death of the Nabob of the Carnatic in 1749 the succession was disputed by Chunda Saheb and Mohammed Ali, more commonly called Walla-jah. Walla-jah was supported by the English, and through their exertions was established as Nabob of the Carnatic. Walla-jah was retained by the English as a subsidiary ally until his death, which occurred in 1795, when he was succeeded by his son, Oomdut-ul-Omrah. In 1801 the civil and military government of the Carnatic was transferred to the East India Company by the Nabob Azim-ul-Omrah, upon the Company engaging to pay him annually one-fifth of the net revenue of the country, and providing for the principal officers of his government. [ARCOOT.] In every part of the province there were formerly numerous fortresses. Many of the forts have crumbled to pieces, and those still visible are fast falling to decay, while the towns and villages have multiplied in number and increased in extent.

(Rennell, *Memoir of a Map of Hindustan*; Heyne, *Historical and Statistical Tracts on India*; Mill, *History of British India*; Reports of Committees of House of Commons on the Affairs of India.)

CARNEW. [WICKLOW.]

CARNIC ALPS. [ALPS; AUSTRIA; CARINTHIA.]

CARNIOLA. [KRAIN.]

CARNLOUGH. [ANTRIM.]

CAROLINA, NORTH, one of the United States of North America, is bounded N. by the state of Virginia, W. by Tennessee, S. by Georgia and South Carolina, and E. by the Atlantic Ocean. It lies between 33° 50' and 36° 30' N. lat., 75° 25' and 84° 30' W. long. Its extreme length from near the source of the Tennessee River to Cape Hatteras is 420 miles; its extreme breadth in the eastern part is 180 miles, diminishing in the western part to only 20 miles. The area is 45,000 square miles. The total population in 1850 was 869,039, of whom 553,023 were whites, 316,011 coloured persons, and 831 Indians. The following table shows the increase of population and the proportion of slaves in this state since 1820. The total population in

1820	was 638,829, including 14,612 free col. persons and 295,017 slaves.
1830	„ 737,987, „ 19,543 „ 235,601 „
1840	„ 753,419, „ 22,732 „ 245,817 „
1850	„ 869,039, „ 27,463 „ 266,548 „

The federal representative population in 1850 was 753,619, in which number three-fifths of the slaves are included. This entitles the state to send eight representatives to Congress. To the Senate, like each of the other United States, North Carolina sends two members.

Coast-line, Surface.—The coast runs from the borders of South Carolina nearly east to Cape Fear, and thence in a generally east-north-east direction to Cape Hatteras, and thence nearly due north to the borders of Virginia. It exhibits a very peculiar character. Besides Cape Hatteras it has two other projecting points, Cape Lookout and Cape Fear, which latter is on an island about eight miles in length and from one to three miles in width, called Smith's Island. By these three capes two open bays are formed, Onslow Bay and Raleigh Bay. Near Cape Fear is a deep inlet formed by the mouth of the Cape Fear River; but along the whole shore of Onslow Bay, an extent of 120 miles, the flat coast is lined by low barren sandy islands, or more properly sand-banks, extending parallel to the shore at a distance of about a mile, the islands themselves being from half a mile to a mile wide. This series of islands is traversed by several inlets, which are not navigable, except New Inlet by Smith's Island and Bogue Inlet in Onslow Bay, and these are practicable only for small vessels. From the islands extensive shoals extend far into the sea and with the furious gales which prevail greatly increase the

dangerous character of the coast navigation. From Cape Hatteras the shoal extends farther than from any other point, and the vicinity of this cape is consequently especially dreaded by the mariner, being generally regarded as the most dangerous part of the coast of the United States. Near Cape Lookout, and between it and Cape Hatteras, the same character of coast continues, except that the islands are not so frequently broken by inlets, but continue in one place forty or fifty miles and upwards. The islands are also broader, measuring from one to two miles in width. But though along this coast the sandy islands extend in straight lines, the shores of the mainland behind them are broken by numerous arms of the sea which penetrate to a considerable distance inland, and which like the outer sea have numerous shoals. There are also two extensive sounds, Pamlico and Albemarle sounds. Pamlico Sound extends from south-west by west to north-east by east 70 miles, with a mean breadth of 15 miles, and terminates inland in the wide bays of the Neuse and Pamlico rivers. It is connected on the north-east with Albemarle Sound, and opens into Raleigh Bay by Ocracoke Inlet, which may be considered as the mouth of the sound, and has 14 feet of water at mean and only six feet at low tide. Albemarle Sound runs due west into the mainland about 60 miles by 10 miles in width; but it sends off lateral branches, especially to the north, which run from 12 to 15 miles inland. Albemarle Sound has no practicable connection with the ocean. Extending northward from the mouth of Albemarle Sound is Currituck Sound, which is 50 miles long and from 2 to 10 miles wide. The peculiar character of the coast of North Carolina deprives it of good harbours, though there are several large rivers. Cape Fear, with 18 feet of water, is the deepest inlet that the state possesses.

The surface of North Carolina presents three well-marked natural divisions. The western portion, which is somewhat more than one-fourth of its surface, lies in the Alleghany or Appalachian Mountains [ALLEGHANY MOUNTAINS], and is traversed by several of its ridges. To the east of them extends the higher terrace, or the hilly country, which occupies a little more than one-fourth of its surface. Between this region and the coast spreads the lower terrace, or the level country, which comprehends nearly one-half of the state. The boundary-line between the two terraces begins on the north at the Mundford Falls of the river Roanoke above Halifax, and extends south-south-west to Smithfield on the Neuse, and to Aycrystborough on Cape Fear River, and terminates on the river Pedee between Rockingham and Sneadsborough.

The low country, stretching from 100 to 140 miles inland from the coast, exhibits two different aspects. Along the shore it is partly covered with extensive swamps and marshes, and traversed by muddy sluggish rivers. These swamps are said to cover an area equal to that of one-tenth of the whole state. The largest of the swamps are near Albemarle and Pamlico sounds. Between these sounds is the Alligator or Little Dismal Swamp, which is of little less extent than the Great Dismal Swamp, which lies to the north of Albemarle Sound and stretches into Virginia, and is 30 miles long and from 10 to 12 miles wide. In the centre of it is Drummond Lake, 30 miles in circuit. The swamps south of the Neuse River are of less extent, though several of them are from 15 to 20 miles in diameter. The principal are Dover, Holly, Shelter, and Green swamps. These swamps are the result of the tides and partly also of land-floods; and may be compared to the Sunderbunds in the delta of the Ganges. They are mostly covered with high trees, especially cypresses, cedars, and pines; but are in parts covered with an almost impervious growth of tall rank grass and herbage. The soil of the swamps is generally a soft bog, and is covered knee-deep with water. The dry tracts of land which intersect the swamps and the parts which have been drained have in general a good soil, and much rice and cotton is raised on them. Between the swampy country and the hilly region extends, in breadth 40 miles and upwards, a tract of sandy land which is mostly level; but in some places there are hills 200 feet above the adjacent country. The soil is sterile and the surface overgrown with pine forests. The rivers have a much quicker course than through the marshy country, and along their banks the soil is better, and the pines are replaced by oak, hickory, maple, beech, &c. This part of the country is only cultivated on the river-bottoms.

The upper terrace, or hilly country, lying between the pine lands and the mountains, is at a mean several hundred feet above the sea, and presents an agreeable succession of moderate hills with gentle ascents, and of wide and extensive valleys. The soil of the valleys is good, consisting of a black and fertile mould, and yields rich crops of grain.

That portion of North Carolina which is within the Alleghany Mountains is an agreeable alternation of hills and valleys. The mountains form two ridges, of which the west is called the Iron Mountains (and part of it also the Stone and another part the Smoky Mountains) and the east the Blue Ridge. Both are united at several places by short intermediate ridges. The highest summit is Black Mountain, the loftiest summit of the Alleghanies, which attains an elevation of 6428 feet. Roan Mountain is 6038 feet, Grandfather Mountain 5556 feet, and Table Mountain 3420 feet above the level of the sea. The Ararat or Pilot Mountain, east of the Blue Ridge, and about 16 miles N. from Salem, is a solitary pyramidal hill rising from a comparative level 1550 feet high; from the summit rises an almost perpendicular

column to the height of about 200 feet. The rivers which rise between the two ridges run west to the Tennessee River. The elevation of the whole country comprehended between the two mountain ridges is 1000 feet above the sea. The soil is in general fertile in grain.

Hydrography, Communications.—All the rivers have rapids where they pass from the hilly country to the low region. Their course above the rapids is rather swift; but below them no other current is observed than that produced by the tide, which ascends to the rapids. They offer therefore an easy navigation up to the hilly country; but shifting sand-bars invariably occur at their mouth, and they are generally shallow; they are consequently only available for vessels of light draught.

The *Roanoke* is formed by two branches, the Dan and Staunton, which rise and unite in Virginia. After their union the river runs south-east by east, and six miles above Halifax forms the Munnford Falls. Lower down its course is excessively circuitous; it falls into Albemarle Sound. Its course from the junction of the two streams is 150 miles. It is navigable nearly 30 miles from its mouth for the vessels which navigate the sound, and boats of 45 tons can ascend to the falls, which are 75 miles from its mouth. A canal enables boats to pass round the falls, and the navigation is thus continued for boats of 5 tons up to the Dan and Staunton. The *Neuse* rises in the centre of the upper terrace, and runs about 200 miles, first south-east and then south-east by east. Below Newbern it gradually spreads into a semicircular bay, which opens into the wider expanse of Pamlico Sound: it is navigable for boats in the greater part of its course. Between the Roanoke and the Neuse is the *Tar*, which also enters Pamlico Sound, and is navigable for vessels drawing 8 feet of water up to Washington, 30 miles, and for boats to Tarborough, 90 miles. *Cape Fear River* is formed by the confluence of Deep River and Haw River, which rise in the northern part of the state, and unite at Haywood, in Chatham county. The Cape Fear River flows by a general course south-east for 250 miles, till it enters the Atlantic about 10 miles N. from Cape Fear. It is navigable for vessels drawing 12 feet of water to Wilmington, 34 miles from the sea; and sloops may ascend to Fayetteville, which is 96 miles higher up. There are several other streams, but none of any great importance, for purposes of communication; many of them are capable of being made largely available for mechanical power. The only canals are the Dismal Swamp Canal, which with its branches is chiefly used for lumbering purposes, and Harlow Canal, which unites the Neuse River to Beaufort. Some important works are however projected for the improvement of the navigation of the Deep and Cape Fear rivers.

The total length of railways completed in North Carolina on January 1st, 1853, was 492 miles. The only through line yet finished is the Weldon and Wilmington railway, which unites with the Petersburg railway running north, and the Seaboard and Roanoke line to Norfolk (Virginia); and at Wilmington with the Wilmington and Manchester railway, which connects it with the railways of South Carolina: its entire length is 162 miles. The North Carolina Central railway runs from the Weldon and Wilmington line, near Guildsborough, through Raleigh, Hillsborough, and Lexington to Charlotte, where it unites with the South Carolina railways: its entire length is 223 miles. The Gaston and Raleigh line runs from Gaston, on the Roanoke, to the capital, Raleigh (87 miles), where it joins the Central line. At Gaston it is connected with the Greenville and Roanoke line, which is 21 miles long, and joins the Petersburg line at Hicksford in Virginia.

Geology and Mineralogy.—The geological character of this state has been incidentally noticed under ALLEGHANY MOUNTAINS. The low country stretching inland from the coast is of the tertiary and cretaceous formations, consisting generally of deposits of clay, marl, and sand, in which have been found the remains of extinct gigantic quadrupeds, as the mastodon, and large quantities of shells. Veins of limestone, copperas, and bog-iron also occur. Sir Charles Lyell assimilates these strata to the English crag and the faluns of Ton-raine. West of this district are mica-schist and granite rocks, covered in parts with unconformable red-sandstone. According to Professor Olinstead, who has made an official survey of North Carolina, the great slate formation is about 20 miles wide, and runs from Granville county in a south-western direction across the state. Within this district occur numerous beds of porphyry, soapstone, serpentine, &c. Connected with these formations are the carboniferous strata, which occur chiefly in Chatham, Moore, and Orange counties, near the middle of the state, and afford valuable veins of bituminous coal. West of the slate and coal districts is another belt of primary, silurian, and quartziferous rocks, which reaches to the Blue Ridge, and in this belt occurs the celebrated North Carolina Gold Region—prior to the remarkable discoveries in California the richest gold district in the United States.

The mineral wealth of this state is very considerable. The gold district of this part of North America extends along the foot of the eastern declivity of the Alleghany Mountains between 32° and 38° N. lat., and the richest part of this district lies within the state of North Carolina. The axis of the gold formation lies generally in a north-east and south-west direction, and extends through the counties of Rockingham, Guilford, Davidson, Rowan, Cabarras, Mecklenburg,

and Anson, all of which belong to the hilly country or upper terrace. The metal is found in superficial deposits and in rock-veins, and usually in connection with quartz, but in slate, gneiss, and granite strata. The superficial deposits generally yield the richest ore, in the deeper veins the gold requiring much trouble to extract from the sulphurets with which it is combined. The gold is found in small flakes and grains, and also in lumps of from 20 to 30 ounces: lumps of 4 lbs. weight have occasionally been found, and on one occasion a mass was obtained weighing 28 lbs. No authentic account has been rendered of the quantity of gold annually obtained; it has been estimated at between three and four millions of dollars, but the estimate is of little value owing to the fact of a large part of the gold being purchased on the spot by dealers for manufacturers and others, while a good deal passes into the banks as deposits, and a good deal more circulates through the mining district, the smaller grains being put into goose-quills and employed as currency; and no return of these amounts is made. The quantity converted into coin at the mint of North Carolina, though considerable, affords a very insufficient indication of the entire quantity obtained.

Iron-ore is found extensively, and largely wrought, especially in the counties of Rockingham, Stokes, Surry, and Lincoln, where it occurs chiefly in the form of magnetic oxide; in the vicinity of the Deep River it is found overlying the coal, and consequently in the most advantageous situation for smelting: it also occurs in the form of argillaceous iron-ore, and as bog-iron. Copperas and plumbago are found in some places.

The great coal deposits are believed to occupy an area of 150 square miles. The region which has been most thoroughly examined occupies a length of 15 miles and a breadth of from five to six miles, chiefly in Chatham and Moore counties and along the valley of the Deep River, one of the principal affluents of Cape Fear River. The beds of coal average upwards of seven feet of thickness, and afford both bituminous and anthracite coal of the best quality. Coal is also found in some other parts of the state.

Climate, Soil, Agriculture.—The climate varies in the three natural divisions of the state. In the mountain region the frost sometimes lasts three or four months; but is not much felt in the hilly country, and still less in the low plain. The summers are hot and sultry in the plain; and the exhalations from the swamps render it unhealthy from June to October. In the hilly region the heat is moderated by cool breezes. The changes of temperature are sudden and frequent, a cold night being often succeeded by an intensely hot day. The climate of the mountains is very temperate and healthy. The average range of the thermometer at the University at Chapel Hill, 27 miles N.W. from Raleigh, is 86° Fahr., the greatest heat being 90°, the lowest 10°, mean temperature 59·7°. The average number of rainy days in the year is 93, of cloudy days 333, of clear days only 32. (Fisher.)

The difference of the climate influences the agricultural products. On the hot plain cotton is the staple production; rice also is extensively cultivated, and indigo to a small amount. Farther westward these crops are interspersed by wheat, maize, and other species of grain, as well as by flax and tobacco. In the mountain region grain is the principal object of cultivation. The fig-tree and the peach generally succeed; and in the western districts apples and pears are plentiful. The pine-forests occupy a vast space, covering nearly the entire eastern section of the state. In the swamps the pine attains an immense bulk, while long spongy mosses hang in clusters from the limbs. These forests produce a large amount of lumber for exportation, and also yield a great quantity of turpentine, tar, and pitch. Cedars and cypresses abound in this low part of the country. In the hilly districts the prevalent trees are the oak, elm, walnut, cherry, lime, &c. The maple and poplar are indigenous throughout the state. Among the wild-growing plants are the ginseng, sarsaparilla, myrtle, and sugar-maple. The wild vine is found all over the country, and in some parts the vine has been successfully cultivated.

In 1850 there were in the state 5,453,977 acres of improved farmlands, and 15,543,010 acres of unimproved land attached to farms, which together were valued at 67,891,766 dollars. The number of farms under cultivation on the 1st of June, 1850, was 56,916. The total produce of the principal crops in 1850 was as follows:—Wheat, 2,130,102 bushels; rye, 229,563 bushels; maize, 27,941,051 bushels; oats, 4,052,078 bushels; potatoes, 5,093,444 bushels; rice, 5,465,803 pounds; tobacco, 11,984,786 pounds; cotton, 29,539,600 pounds. Barley and buckwheat and peas and beans are also raised in considerable quantities. The culture of flax and hemp and the making of wine appear to be declining.

The number of horses in 1850 was 148,603; of asses and mules, 25,259; milch cows, 221,779; working oxen, 37,309; other cattle, 434,402; sheep, 695,249; pigs, 1,812,813. The products of animals were thus returned:—Wool, 970,373 lbs.; butter, 4,146,290 lbs.; cheese, 95,921 lbs.; and the value of animals slaughtered during the year, 5,767,866 dollars.

Wild animals were formerly very numerous, especially deer, bears, &c.; but except wolves and wild cats few of them now remain. In the upper country the wild turkey is still common, and sometimes weighs from 25 to 30 lbs. Snakes occur everywhere; alligators inhabit the swamps and lower parts of the rivers.

Manufactures, Commerce, &c.—North Carolina is mainly an agricultural state, but has considerable manufacturing industry. The cotton manufacture employs about 1600 hands and a capital of above a million of dollars. The woollen manufacture is at present only small, but is steadily increasing. The iron manufacture employs about 500 persons. There are extensive tanneries, breweries, distilleries, potteries, soap and candle-factories, machine-works, carriage-factories, hardware works, and numerous saw and grist-mills.

The exports in 1852 amounted to 576,399 dollars, the imports to 300,488 dollars. The exports consist of live cattle, tar, pitch, and turpentine, lumber, Indian corn, cotton, tobacco, pork, lard, tallow, bees'-wax, myrtle-wax, ginseng, and medicinal roots and plants. A considerable portion of these are sent to South Carolina and Virginia to be exported thence. The number of vessels entered at North Carolina in 1850 was 188 of 28,300 tons burden, of which 140 vessels of 19,185 tons were American, the remainder being foreign. The clearances in the same year were 274 vessels of 42,232 tons, of which 212 vessels of 30,739 tons were American. The total shipping owned in the state in 1850 amounted to 45,218 tons, of which about 30,000 tons were employed in the coasting trade.

Divisions, Towns, &c.—North Carolina is divided into 79 counties. None of the towns are very populous. The following are the principal: the population is that of 1850:—

Raleigh, the capital of the state, population 4518, is situated in 35° 47' N. lat., 78° 48' W. long., about 6 miles from the Neuse River. It stands on an elevated site, and is a regularly-built town, having in the centre a square of ten acres, from which extend four main streets, 99 feet wide, dividing it into four quarters, and in the centre of each of these quarters are squares of four acres each, from which proceed streets 66 feet wide. The state-house is said to be the finest building of its kind in the Union with the exception of the state-house of Ohio in Columbia. It is intended to be a copy of the Parthenon at Athens, but has the un-Grecian addition of a dome. The other principal buildings are the court-house, governor's house, secretary of state's house, a jail, market-house, a state deaf and dumb asylum, not yet finished, the grounds of which are four acres in extent, and several churches. There are several schools. Raleigh is a place of considerable business, and the centre of the railway system of the state. Ten newspapers are published in the town.

Newbern, the former capital of the state, population 4722, is situated on the right bank of the Neuse River, 100 miles E.S.E. from Raleigh. The town is well built, and has a good deal of commercial activity. The Neuse is one mile and a half wide, and the Trent, which here falls into it, is three-quarters of a mile wide, and of sufficient depth to admit steam-vessels. The principal exports are lumber, naval stores, and agricultural produce. There is also a good inland trade. The town contains a court-house, jail, and four churches.

Wilmington, the chief port of North Carolina, population 7264, is situated on the left bank of the Cape Fear River, about 35 miles from the Atlantic, in 34° 11' N. lat., 78° 10' W. long. The site is low, marshy, and unhealthy, but well adapted for trade. The harbour has a shoal at its entrance, but admits vessels of 300 tons burden. The total tonnage of the district in 1850 was 15,198 tons. The foreign commerce during the same year was—entries, 118 vessels of 20,670 tons; clearances, 175 vessels of 31,098 tons. The public buildings are the court-house, jail, and several churches. It has five newspapers. The Wilmington and Weldon, and Wilmington and Manchester railways greatly facilitate the trade of the town.

Payetteville, situated one mile from the right bank of the Cape Fear River, and 49 miles S. by W. from Raleigh, is one of the busiest towns in the state: population 4648. The town is regularly laid out with streets 100 feet wide, and contains a court-house, a United States arsenal of construction, and several churches. It has considerable trade in grain, flour, tobacco, and naval stores, contains cotton-mills and flour, grist, and saw-mills, and publishes three newspapers.

The only other places requiring notice are—*Beaufort*, a sea-port town and capital of Carteret county, 126 miles E.S.E. from Raleigh: population about 1300. The harbour, which is safe and spacious, admits vessels drawing 14 feet of water. The entrance to it is by Old Topsail Inlet, west of Cape Lookout. The town has a good coasting trade. *Charlotte*, the capital of Mecklenburg county, population about 1300, is situated between the Sugar and Little Sugar creeks. It is the centre of a gold mining district, and contains a branch of the United States Mint. Besides the county buildings it contains four churches, and supports two newspapers. The South Carolina railway has its terminus here. *Edenton*, population 1607, is situated at the head of Eden Bay, where the Chowan opens into Albemarle Sound. It is the capital of Chowan county, and contains the usual county buildings. A good deal of shipping belongs to the place. *Elizabeth City*, the capital of Pasquotank county, stands on the right bank of the Pasquotank River, 20 miles above its confluence with Albemarle Sound: population about 800. Vessels drawing 7 feet of water ascend to the city, and it has communication with the Hampton Roads by means of the Dismal Swamp Canal. It contains the usual county buildings, and several mercantile establishments. The exports are pine lumber, shingles, and staves, chiefly for the West Indies. Three newspapers are published here. *Elizabeth Town*, the capital of Bladen county, population about 600, is situated on the right bank of

Cape Fear River, 40 miles above Wilmington. It contains a court-house, jail, &c., and has a considerable river trade. *Greensborough*, the capital of Guilford county, population about 600, situated 75 miles W.N.W. from Raleigh, contains a court-house, jail, and several neat dwellings, and supports two newspapers; here is the junction of the North and the South Carolina railways. *Greenville* is the capital and situated near the centre of Pitt county, on the right bank of the Tar River, 35 miles above its confluence with Pamlico River: population, 1893. It contains the usual county buildings and several good stores, and is a place of some trade. *Halifax*, the capital of Halifax county, is situated on the right bank of the Roanoke, about 7 miles below the great falls, and at the head of the sloop navigation. A canal is carried round the falls and continues the boat navigation of the Roanoke 130 miles higher. The Wilmington and Weldon railway adds to the commercial facilities of the town. Halifax is a place of considerable trade in cotton, corn, and lumber. The town is regularly laid out, and contains the usual county buildings. *Lincolnton* is the capital and stands near the centre of Lincoln county, on the left bank of the Little Catawba River, 178 miles W. by S. from Raleigh: population about 1000. The town contains the usual county buildings, several large stores, and in its vicinity are some extensive cotton and paper-mills and iron-works. *Oxford*, population 1978, is the capital and stands near the centre of Granville county, 39 miles N. from Raleigh. It contains a court-house, jail, hospital, and market-house. *Plymouth*, population 951, the capital of Washington county, is situated near the Roanoke, a few miles above its entrance into Albemarle Sound, and carries on a large trade in lumber and the building of coasting vessels. *Smithville*, population 1464, on the left bank and at the mouth of Cape Fear River, opposite Smith's Island, has a good harbour, and is a place of some trade. It contains a court-house, jail, market-house, and several churches. *Tarborough*, on the right bank of the Tar, 63 miles E. by N. from Raleigh, population about 700, contains a court-house, jail, &c.: steam-boats ascend the Tar to Tarborough. *Washington*, population about 1300, is situated on the left bank of the Tar River, at its confluence with Pamlico River. Vessels drawing 9 feet of water can load and unload at its wharfs. There is a considerable coasting trade. The public buildings are a court-house, jail, and three churches.

Government, Judiciary, Education, &c.—The legislative body consists of a Senate of 50 members and of a House of Commons of 120 members. Senators are chosen biennially in districts apportioned on the basis of taxation. Members of the House of Commons are chosen also biennially, not less than one for each county. An apportionment of both houses was made in 1851, and a new apportionment is to be made every twenty years. All free white men twenty-one years of age, who have been inhabitants of the state for twelve months preceding the election, vote for members of the House of Commons; but a freehold of fifty acres of land is a necessary qualification to vote for a senator. No descendant of a negro to the fourth generation is to be accounted a white man or admissible to the suffrage. The governor is elected for two years by the persons qualified to elect members of the house. His salary is 2000 dollars a year, with the use of a furnished house. The governor, with the council of state, which is elected in the same way, forms the executive.

The revenue from all sources for the year ending October 31, 1852, was 366,728 dollars; the expenditure was 249,254 dollars, being an excess of income of 117,474 dollars. The state debt is a contingent one arising from endorsements by the state of railway bonds, and amounted on November 1, 1852, to 1,230,000 dollars. The militia of the state is composed of 79,448 men, of whom 4267 are commissioned officers. Every white male citizen between the ages of 18 and 45 years, unless exempt by law, is liable to militia duty.

The judiciary consists of a supreme court, presided over by a chief justice and two associate justices, who have a salary of 2500 dollars each; and seven superior or circuit courts, each presided over by a judge with a salary of 1950 dollars. The judges of the supreme and superior courts are appointed by joint vote of the two houses, and hold their office during good behaviour.

The instruction of the poorer classes is less attended to than in many other states of the Union. A board of literature was established in 1837 to devise a plan of common schools, for which a fund had been provided, but nothing effectual has yet been accomplished. There are in the state about 200 academies and above 800 common schools, which are attended by upwards of 18,000 pupils. The children of the coloured people are excluded by the laws from receiving instruction. The instruction of the upper classes is better attended to. The University of North Carolina is at Chapel Hill, 28 miles west-north-west from Raleigh. It was incorporated in 1793, and first conferred degrees in 1797. In 1853 it had 11 professors and 270 students; and a library of 13,700 volumes. A school of science and art was attached to it in 1853. Davidson College, in Mecklenburg county, founded in 1838, had 81 students in 1853. There is also a Baptist Theological College. In 1850 there were in the state 1678 churches belonging to all sects, containing sittings for 558,204 persons. The number of newspapers published in the state in 1850 was 52.

History.—North Carolina is the site of the first English settlement made in North America; a small colony which was sent out by Sir Walter Raleigh to occupy the country granted to him by letters

patent, having taken possession of a site on the Roanoke, in June 1585. The colonists however suffered so much from the hostility of the Indians and from scarcity of provisions, that after a time they became discouraged and re-embarked for England July 27th 1586. A ship which had been sent to them with a supply of provisions arrived a few days after their departure, and Sir Richard Grenville with three other ships sent out by Raleigh arrived a fortnight later. Grenville left 15 men with provisions for two years to maintain the settlement. Raleigh, as soon as news of the abandonment of the colony by the original settlers arrived, sent out another colony, which landed on the Roanoke in July 1587, but found no other traces of the men whom Grenville had left there than a few human bones scattered on the beach. The governor returned to England for directions as well as for further supplies, leaving about 100 persons at the settlement. He was unable to revisit the Roanoke till 1590, when he found the site of the settlement inclosed by a strong palisade, but no inhabitants remained. Their fate was never ascertained; but there is little doubt that they like the earlier settlers fell victims to the Indians. The first permanent settlement was made in 1650 by some whites from Virginia. After other settlements the colony received a representative government in 1667, two years after which the constitution called 'Locke's Scheme of Government' was tried but soon abandoned. [CAROLINA, SOUTH.] The present constitution was adopted in 1776, and amended in 1835.

(Colton, *Statistical Gazetteer of the United States*; Darby, *View of the United States*; *American Almanac*; *State Reports*; Lyell, *Elements of Geology, and Travels in North America*.)

CAROLINA, SOUTH, one of the United States of North America, is bounded E. by the Atlantic Ocean for 240 miles; N.E. and N. by the state of North Carolina for 300 miles; and S.W. by the Savannah River, which divides it from the state of Georgia, for 20 miles. It lies between 32° 4' and 35° 12' N. lat., 78° 25' and 85° 19' W. long. Its length from north to south on the meridian of the Savannah River is 268 miles; its width from the head of Tuguloo River on the west to the mouth of Little River on the east is 268 miles. The area is 24,500 square miles. The total population in 1850 was 668,507, of whom 274,567 were whites, and 393,940 coloured persons. The following table shows the increase of the free and slave population since 1820. The total population in

1820	502,741, including 6,726 free col. persons and 258,475 slaves.		
1830	551,185,	7,921	315,401
1840	594,398,	8,271	317,038
1850	668,507,	8,936	384,984

The federal representative population in 1850 was 514,513, in which number three-fifths of the slaves are included. This entitles the state to return six representatives to Congress. To the Senate, like each of the other United States, South Carolina sends two members.

Coast-Line, Surface.—The general direction of the coast of South Carolina is north-east and south-west. The northern portion of it, from the mouth of Little River, the boundary of North Carolina, to Winyaw Point forms an unbroken line of low sandy shore. South of that cape the shores, though low, are divided by a great number of inlets, which are the mouths of larger and smaller rivers, that generally divide into several branches before entering the Atlantic Ocean, and by their numerous channels cut the shores into islands, the surface of which is very little elevated above high tides. The principal of these islands are James's, John's, Edisto, St. Helena, Port Royal, and Hilton islands. These islands are covered with forests of live oak, pine, and palmettoes, and yield the black-seed or sea-island cotton. Formerly these islands were the haunts of alligators which swarmed in the inlets, and were covered with dense woods and rank herbage, nearly impenetrable to man. Now they are under cultivation and well peopled. Long sand beaches border the islands, and are the resort of thousands of sea-fowl. The line of coast, though generally uniform as to course from point to point, is very irregularly indented. The inlets dividing the islands as well as the rivers are comparatively very shallow, but the rivers in every instance are deeper within than at their bars. In two points only can the coast be approached by large vessels. One place is Charleston Harbour, which is formed by the junction of two small rivers, the Cooper and Ashley, the channel of which admits vessels of 16 feet draught. The other is George Town at the head of Winyaw Bay, which admits vessels of 11 feet draught. Port Royal entrance, formed by the Broad River, the common estuary of some little creeks into which the tide ascends to a considerable distance, also admits vessels drawing 10 or 11 feet of water; and on one of the numerous inlets which wind through the labyrinth of creeks and islands with which this portion of the coast is chequered, is situated the port of Beaufort, which is spacious, but does not admit vessels so large as those which enter Charleston Harbour; the place moreover is very unhealthy and few vessels enter the port. St. Helena Sound is nearly 8 miles wide, and runs 10 or 12 miles inland, but it is far too shallow and too much beset with shoals to admit vessels of even moderate tonnage. Stone Inlet has 9 or 10 feet of water, but is seldom used.

South Carolina, like North Carolina, exhibits three different regions. The most western districts are covered with ridges of mountains and hills which belong to the Alleghany system. East of this mountain region extends the hilly country, which is followed by a low

plain that spreads over the eastern districts of the state to the ocean. But the proportion of the surface belonging to each of these regions differs considerably from that of North Carolina. The low plain comprehends little more than one-fourth of the whole, and the remainder is almost equally divided between the other two regions. The line which separates the plain from the hilly region passes from Sneedborough in North Carolina to Camden on the Wateree, and thence to Columbia on the Congaree, or to the junction of the Saluda and Broad rivers, and terminates on the Savannah at Augusta.

The plain along the sea-shore, which extends from 80 to 100 miles inland, is a uniform level. At its western border it has an imperceptible ascent to about 200 feet above the sea. The soil, which on the arrival of the Europeans was covered with trees, but is now nearly devoid of them, is in general barren, consisting either of sand or a light blackish earth; but it is intersected, especially along the rivers, by fertile tracts which yield rich crops, especially of rice. A portion is covered with numerous swamps and morasses, which though not so extensive as in North Carolina, cover an area of 2000 square miles; they are overgrown with heavy timber, such as oak, ash, and cypress. On one side of all the rivers, and generally on both, the margin is a swamp from half a mile to three miles in breadth.

To the west of this plain stretches a chain of sandy hills from 20 to 40 miles in breadth, beginning at the upper course of the river Pedee in North Carolina, and extending across the state to the banks of the Savannah. This tract, known as the 'Middle Country,' produces nothing but small pine-trees and some shrubs, except in the narrow valleys, to which the vegetable mould has been carried by the rains, and which are very fertile. Some of the sand hills are 200 feet above the adjacent valleys. In this region the rivers form rapids. The country farther west, known as the 'Ridge,' rises somewhat precipitously from the Middle Country; it is agreeably broken into hill and dale, and loose stones and rocks frequently occur on its surface. But the valleys and the lower declivities of the hills have a fertile black soil which produces good crops of grain. The more elevated parts of the hills are covered with oak and other hard trees. The hilly country gradually rises into mountains, which at the western extremity of the state attain a considerable height, the Table Rock in Pendleton being 4000 feet above the sea. The country between the ridges and mountains may at a mean rise to 1500 feet above the sea. The soil is thought not to be inferior to that of the hilly tract, even the greatest part of the heights being covered with tall trees of hard wood. When it is cultivated it yields good crops of corn.

Hydrography, Communications.—South Carolina is very well watered, its rivers being numerous, and some of considerable length. But though their volume of water is considerable, and of great value for mechanical power, only two of them are fit for navigation in their lower courses, and even these only for small river boats, on account of their shallowness. But as the tide ascends to the sand-hills their navigation is easy. Higher up numerous rapids render the transport of goods tedious, difficult, and expensive. The principal rivers are the Pedee, the Santee, and the Savannah.

The *Pedee*, usually called the *Great Pedee*, rises in the Blue Ridge in North Carolina, 36° N. lat. and between 81° and 82° W. long., and is first called the *Yadkin*. It flows first north-east by east and then turns abruptly to south-south-east, in which direction it traverses the gold region of North Carolina. In South Carolina it continues in the same direction till its junction with the *Little Pedee*, whence it flows south-south-west to the port of Georgetown, at which place it is called *Winyaw Bay*, and forms a wide estuary. It is navigable for 200 miles by river-boats of 60 tons burden. The *Little Pedee* rises in North Carolina; from its entrance into South Carolina it flows south-east to its confluence with the *Lumber River*, which issues from the marsh district of North Carolina, when it turns to the south-west, but some distance lower again turns south-east to its junction with the *Great Pedee* 32 miles above *Winyaw Bay*. The *Great Pedee* is joined by several other tributaries in its course through this state, of which perhaps the most important is *Lynch's Creek*, which after a generally south-south-eastern course of 125 miles from its rise in North Carolina falls into the *Great Pedee* on the right bank, about 30 miles higher than the *Little Pedee*. *Lynch's Creek* is navigable by boats for about 60 miles. The *Santee* is formed by two great branches, the *Wateree* and the *Congaree*. The *Wateree* rises in North Carolina, a little west-south-west of the source of the *Yadkin*, and is there called *Catawba*. It runs first east, and then south-south-east, in which direction it continues through South Carolina to its junction with the *Congaree*, having flowed more than 150 miles. It is navigable for boats of 70 tons burden to Camden, above which town are the *Catawba Falls*, where the river in a mile and a half descends 90 feet; but as the falls may now be avoided by a canal cut along the river, called the *Wateree Canal*, it may be ascended much higher, at least by river-boats. The *Congaree*, the other great branch of the *Santee*, is formed by the confluence of two rivers, the *Broad River* which rises in North Carolina, and the *Saluda* which takes its origin near the *Table Rock*, in the most western portion of South Carolina. By their junction near *Columbia* the *Congaree* is formed, and to this point vessels of 70 tons burden may ascend. The *Congaree*, running in a curve to the south-east, unites with the *Wateree*, from which point the river is called *Santee*. It flows first south-east, and then turns by degrees to the east and is navigable for large barges

and steam-boats, but its mouth is shallow. Its course considerably exceeds 250 miles. All these rivers have numerous affluents. The *Savannah*, the noblest of the rivers, belongs equally to this state and Georgia. It has its farthest branches in the north-western district of South Carolina and the north-eastern parts of Georgia, and forms, during all its course, a distance of 250 miles south-south-east, the boundary between both states. It has 17 feet of water on its bar, and is navigable for large vessels to the town of Savannah, 17 miles above its mouth, and for river-vessels and steam-boats to Augusta, above which town some rapids occur. The tide ascends about 45 miles: the average fall from Augusta to its mouth, a distance, including the windings, of about 250 miles, is about one foot a mile. The *Edisto* is formed by two confluent streams, the South and the North Edisto, which rise in the western part of the state, and after being swelled by numerous small affluents unite near Branchville; the Edisto then flows east-south-east to its junction with the stream which flows through Four Holes Swamp, when it turns to the south, in which direction it continues during the remainder of its course. Some distance above its outfall a branch divides from the main stream and forms Edisto Island, which is 12 miles long, and from one to five miles wide. The Edisto is navigable by large boats for 100 miles. There are several smaller rivers in the southern part of the state which, though their mouths are obstructed by bars, are navigable by river-boats for a few miles. Among them are the *Ashley*, which issues from Cypress Swamp and is navigable by schooners for 20 miles above Charleston; near which city it joins *Cooper's River*, which is navigable for 30 miles, and is connected with the Santee by a canal: the *Coosawatchie* and the *Combahee* are also navigable for a short distance. Besides these rivers there are several short canals, such as the Santee Canal, extending from Charleston Harbour to the Santee River; the Winyaw Canal (7 miles), which connects Winyaw Bay and Kinlock Creek; the Saluda Canal, from Saluda Shoals to Granby Ferry (6½ miles); five canals cut for the improvement of the navigation of the Catawba River; and a few more of a similar kind. According to a statement of Governor Seabrook, South Carolina has now, apart from the creeks and inlets of the sea, an inland navigation of 2400 miles.

South Carolina was the first of the southern states to adopt the railway system. The lines of railways completed in this state in 1853 amounted to 649 miles. The South Carolina line commences at Charleston and terminates at Hamburg (137 miles), where it unites with the Georgia railway. It is connected with the railways of North Carolina by the South Carolina and Charlotte railway, 109 miles long. The Greenville and Columbia line, which connects the towns of those names, is 114 miles long. The Wilmington and Manchester line connecting Manchester in South Carolina with Wilmington in North Carolina is 115 miles long. Besides these there are the Columbia and Branchville, 67 miles; the Camden Branch, 37 miles; King's Mountain, 32 miles; Laurens, 15 miles; Anderson Branch, 13 miles; and Abbeville Branch, 12 miles. Several extensions of these lines, as well as entirely new lines, are in progress or projected.

Geology, Mineralogy, &c.—In its general geological character this state resembles NORTH CAROLINA. There are first the low alluvial tertiary plains bordering the Atlantic, which rise into the cretaceous rocks of the middle country; and then west of these the belt of slate rocks running still farther west into the primary formations of the mountain district. The low country is wholly tertiary, consisting mainly of sands and marly clays, with veins of burr-stone and white limestone. The burr-stone and limestone are stated by Lyell to belong to the Eocene period. In the alluvial strata have been found numerous remains of mastodons and other extinct gigantic quadrupeds, and vast numbers of shells occur in the Eocene strata. The clays afford good fire-clay and excellent materials for the manufacture of pottery and bricks. The rocks between the clay-slate and new red-sandstone, among which are the valuable carboniferous strata of North Carolina, are entirely wanting in this state. The gneiss rocks afford excellent building stones, but the slates do not generally split well. Several quarries of promising mica-slate have however been opened. Beds of fine soapstone, whetstone, &c., occur. Within the series of metamorphic rocks occurs the continuation of the auriferous veins of North Carolina. The granitic rocks afford excellent building materials: among the finer sorts may be mentioned the red granite of the neighbourhood of Columbia, and the porphyritic granites of Camden and Buffalo Creek. The sienites of Abbeville, Fairfield, and Lexington are said by Professor Tuomey to be very beautiful. According to the same authority, the white and variegated marbles of Spartansburg and Laurens form excellent materials for building and ornamental purposes; and porcelain-earth abounds throughout the primary region wherever the feldspathic granite is found in a state of disintegration. The undecomposed feldspar of the granites also affords a good glaze for pottery.

Among the minerals of South Carolina gold occupies a prominent place. The veins have been for some time worked to advantage, though the yield is considerably less than in North Carolina. The largest quantities have been obtained by washing the river deposits, but lumps or nuggets of a good size have been obtained by digging. Iron-ore of very fine quality is said to abound. Copper and lead have been met with in small quantities. Coal is not found in the state. Red and yellow ochres of superior quality abound in Chesterfield dis-

trict. Many of the precious stones are found in various parts of the state.

Climate, Soil, Agriculture.—The climate of the low plain is very hot in summer, but comparatively mild in winter. Snow seldom falls near the sea, and is soon dissolved. The thermometer ranges between 17° and 93°. In the months of July and August the country is deluged with torrents of rain accompanied by hurricanes, thunder, and lightning, and the air is loaded with noxious vapours which generate bilious fevers and other diseases. The driest months are April and May, which are also the healthiest, but November is considered the most agreeable. The cold weather seldom begins before December, and terminates in March. The temperature is liable to sudden and great changes. "It is not unworthy of especial remark," observes Governor Seabrook, "that the atmosphere of the swamps and marshes, so poisonous to the white man, are at all times innocuous to his slave. If it were not for this merciful provision of an All-Wise Being, the alluvial region of South Carolina in the immediate vicinity of its water-courses would soon become a dreary waste, and tenanted only by the beasts of the forest." In the upper country snow and frost occur annually, and the snow is sometimes from 12 to 18 inches deep, and remains on the ground for weeks and even months. The thermometer ranges in summer between 65° and 85°, and sometimes rises to 94° and 95°. In winter it ranges between 20° and 55°, and falls to 10° or 11° during the greatest cold, which lasts but a few days. But this country is healthy at all seasons. Hurricanes sometimes cause great damage in the lower country, and earthquakes are felt from time to time, though not frequently.

Respecting the soil, &c., of this state, we cannot perhaps do better than quote the official statement of Governor Seabrook:—"The soils though of every kind may be said to comprehend six varieties, each the best suited to a certain crop, yet all of them capable of advantageously producing three-fourths of the vegetable products grown in its limits. While local differences are everywhere observable, the surface and soil of the upper districts present a great similarity; and this is equally true of the lower districts. In the former the lands are broken and hilly, in the latter level; oak is the natural growth of the one, pine of the other. Clay is the soil of much the largest portion of the state, and, except in the immediate vicinity of the ocean, is almost the universal substratum. A close stiff land predominates generally in the parishes south-east, and an open sand on the sea-islands. The highlands of the country above the falls of the rivers are naturally much superior to those of the pine-covered region, but the alluvial bottoms of the former are greatly surpassed in richness by the river swamps of the latter. In its capacity for permanent improvement, the granite half of the state has been more highly favoured by nature than the alluvial. This is mainly ascribable to the open texture permeable to water of its clayey subsoil, and the potash in the soil and subsoil, formed by the decomposition of the feldspar and mica of the granite. In a few localities however the depth of the substratum and its proximity to the surface offer serious obstacles to its higher productions. These among other causes seem yet to be operating against the cultivation of perhaps the greater part of those peculiar soils known as the 'Flat Woods' of Abbeville; those in the neighbourhood of Dutchman's and Wateree creeks, in Fairfield, and the Black-Jack lands of Chester. Deriving their fertility from the hornblend disintegrated rocks, which lie below the close clay subsoil, it would appear that steady industry, incited and directed by ordinary skill, was alone wanting to preserve and perpetuate the uncommon productiveness which, in spite of long-continued and unimprovident tillage, still distinguishes these remarkable tracts of land. . . . The swamps, covering 2000 square miles of land of inexhaustible fertility, are capable of thorough and economical drainage and conversion into active and available capital. The pine-lands, embracing 6,000,000 of acres, constitute the most neglected portion of the state; . . . yet this is in all its relations a district of country of unmeasurable value.

"The natural means of resuscitating the soil are abundant and widely diffused. A large portion of the lower country shows exhausted beds of the richest marl. Limestone, though obtainable only in York, Spartansburg, Laurens, and Pickens, exists in such quantities in the first two districts, that by railroad communication the entire primitive region will at no distant day be furnished with this earth, so essential to the nutrition and development of plants. While the sea-shore parishes possess unfailing supplies of salt mud, salt grass, and shell marl, two-thirds of the state are most amply furnished with swamp, mud, and peat.

"The botany of the state consists of about 3000 species of plants; of these 2000 are flowering, and 1000 unprovided with flowers, as parts of their organs of fructification. In relation to the former, about 65 are naturalised—that is, foreign plants introduced and now growing wild. There are about 150 grasses, of which 15 are native; 30 species of esculents (for man), of which three or four are naturalised, and about 70 more used in medicine, agriculture, and the arts, of which five or six are naturalised."

The principal objects of agriculture in the low plains are rice and cotton, the latter being also cultivated in some districts farther inland. The finest cotton known to commerce is that grown on the sea-islands. About three-fourths of the rice raised in the United

States are grown in South Carolina. The sugar-cane is only grown with advantage in the Beaufort district, which forms the most southern part of the state. The fruits of the sea-coast are those of the southern countries of Europe—orange, lemons, pomogranates, olives, and figs. In the upper country all the grains and vegetables of England are grown, with maize in addition. The fruits are also those common in this country. Tobacco, indigo, and hemp were once staple products, and tobacco is still grown very largely. Hops, sesamum, &c., are also cultivated. Among the wild plants the ginseng, gentian-root, and wax-myrtle may be noticed. The forests contain many fine timber-trees, especially oak, beech, and hickory.

On June 30th 1850 there were in the state 29,669 farms under cultivation. The improved farm-lands amounted to 4,072,651 acres, unimproved lands 12,145,049 acres, valued together at 82,431,684 dollars. The principal grain crops in 1850 were, in bushels:—Wheat 1,066,277, rye 43,790, maize 16,561,454, and oats 2,322,155. The rice raised in the same year amounted to 159,930,613 lbs.; peas and beans, 1,026,900 bushels; potatoes, 136,494 bushels, and sweet potatoes, 4,337,469 bushels; sugar, 671,200 lbs.; cotton, 132,396,400 lbs., being an increase of 70,686,126 lbs. over the cotton raised in 1840; tobacco, 74,285 lbs.; hay, 20,295 tons; wine, 5880 gallons.

The domestic animals are those of Europe; black cattle are the most abundant. Many of the wild animals with which the country formerly abounded have disappeared; but still there are found in the mountainous districts, and even in some parts of the lower country, deer, bears, wolves, wild cats, foxes, squirrels, rabbits, racoons, opossums, and pole-cats. The wild turkey is pretty common in the upper country, and the wild pigeons come at certain seasons in great numbers. Several kinds of serpents are known, among which is the rattlesnake; but they become continually less numerous. Alligators abound near the head of tide-water in the rivers, and grow to a great size.

In 1850 there were in the state 97,171 horses; 37,483 mules and asses; 193,244 milch cows, and 684,439 other cattle; 285,551 sheep, and 1,065,503 swine. The products of animals amounted to:—Wool, 487,233 lbs.; butter, 2,981,850 lbs.; cheese, 4970 lbs. The value of animals slaughtered during the year was 1,302,637 dollars.

Manufactures and Commerce.—The manufactures are chiefly such as are required in an agricultural country. The number of manufacturing establishments in operation on the 30th of June 1850, and producing to the annual value of 500 dollars and upwards was 1473, of which 197 were in Edgefield district, 156 in Abbeville, and 141 in Laurens. Of these establishments 18 were cotton factories, employing 919 persons; 91 tanneries employing 264 persons; and 6 iron works employing 155 persons; the iron manufacture is confined to that of castings.

The commerce of South Carolina is very considerable, and chiefly centres in CHARLESTON. The exports consist of cotton, rice, tobacco, myrtle-wax, and hides; and the imports of manufactured goods, and the productions of the East and West Indies, with wines from the countries of Southern Europe. Both the exports and imports are chiefly made through the port of New York, so that the South Carolina trade is chiefly coasting. The railways which centre in Charleston, and the extensive inland navigation greatly facilitate the commerce of the state. The value of the exports in 1852 was 11,670,021 dollars, the whole of which consisted of the produce of the state. The imports amounted to 2,175,614 dollars—1,742,492 dollars in American and 433,122 dollars in foreign ships. The exports in 1851 were 15,316,578 dollars, the imports 2,031,312 dollars. The number of ships which entered in 1850 was 305 of 96,916 tons burden; cleared 375 of 125,052 tons. The total amount of shipping owned in the state was 36,072 tons, of which 7455 tons were propelled by steam.

Divisions, Towns, &c.—South Carolina is divided into 29 districts. The principal town in the state is CHARLESTON, which will be noticed in a separate article; the capital is Columbia, which with some of the other more important towns we notice here; the population is that of 1850.

Columbia, the capital, is situated on the left bank of the Congaree, immediately below the confluence of the Saluda and Broad rivers, in 33° 67' N. lat., 81° 7' W. long.: population, 6060. The town, which stands on an elevated plain, was laid out in 1787 on a rectangular plan, the streets being 100 feet wide. The principal buildings are the State-house, which is 170 feet long and 60 feet wide, the district buildings, the churches, market-house, banks, academies, a state lunatic asylum, and a jail. The buildings of Columbia College are extensive, but of no great architectural merit: one of them is an observatory well supplied with instruments. There are two theological institutions in the town. The dwelling-houses are mostly of wood, but many are of brick. The town is well supplied with pure water; and is considered to be very healthy. A good deal of trade is carried on: the river is navigable up to the town for boats of light draught; the Columbia Branch, the Charlotte and South Carolina, and the Greenville and Columbia railways meet in the town; and the surrounding country is a highly cultivated corn and cotton district. Five newspapers are published here.

Camden, on the left bank of the Wateree River, 31 miles N.E. from Columbia, population about 1200, is the capital of Kershaw district,

and contains the usual district buildings, several churches, a masonic hall, a library, and an arsenal. The river is navigable for boats of 70 tons, and the commerce of the place is further facilitated by the Camden Branch of the South Carolina railway. Some manufactures are carried on. Camden is noted as the scene of two engagements in the war of independence; and the most conspicuous ornament of the town is a white marble memorial of Baron de Kalb of revolutionary celebrity, the foundation of which was laid by Lafayette in 1825. **Edgefield** is the capital and stands near the centre of Edgefield district, 64 miles W.S.W. from Columbia: population, 2200. It contains a court-house, and the other usual district buildings, and three or four churches; and has a good local trade. **George Town**, the capital of the district of the same name, stands at the upper end and on the west side of Winyaw Bay: population, 2904. It is the next and indeed only other port of any consequence in the state after Charleston, but has comparatively little foreign commerce, though a good coasting-trade. The entrances in 1850 were 2 foreign vessels of 297 tons, the clearances to foreign countries 24 vessels of 3685 tons. The vessels of the district, mainly engaged in the coasting-trade, amounted to 2779 tons. Steamers ply regularly between George Town and Charleston. The harbour admits vessels drawing 11 feet of water. The principal buildings are the court-house, jail, and six churches. **Greenville**, population 1305, the capital of Greenville district, stands near the source of the Reedy River, one of the upper affluents of the Saluda, 106 miles N.W. from Columbia; it contains the court-house, jail, market-house, four churches, and two academies. **Hamburg**, 73 miles W.S.W. from Columbia, stands on the left bank of the Savannah, opposite to Augusta (Georgia), with which it is connected by a bridge 1000 feet long, and a railway viaduct: population about 2600. Hamburg consists of a lower town which lies by the river and contains the business houses, and an upper town which stands back from and 60 or 70 feet above the lower town. Hamburg is an important cotton mart, and has a large interior trade. Steam-boats ply regularly to the town, and the South Carolina and the Georgia railways connect here. **Newberry**, the capital of the Newberry district, is on the line of the Greenville and Columbia railway, 47 miles W.N.W. from Columbia: population, 1250. It contains the court-house, jail, six churches, and two academies; and is a wealthy and flourishing place. **Winnsborough**, the capital of Fairfield district, on the Charlotte and South Carolina railway, 24 miles N. by W. from Columbia: population, 1050. The town stands on an elevated and healthy site; and contains the district buildings, which are of a superior character, five churches, and four academies. A Baptist theological seminary, consisting of four handsome granite buildings, is in the vicinity.

Government, Judiciary, &c.—The legislative body is composed of a Senate and a House of Representatives. The senators, 45 in number, are elected by districts and by ballot for the term of four years; but half the number vacate their seats every two years. The representatives, 124 in number, are chosen for two years. Every free white male citizen 21 years of age paying taxes, or having a certain freehold qualification, and having resided in the state for two years, has a vote in the election. The executive power is vested in a governor elected by the joint vote of the legislature for two years, being the only governor of a state who is not elected by the people: his salary is 500 dollars a year, and house-rent.

The revenue of the state for the year ending September 30, 1852, was 739,696 dollars; the expenditure was 359,913 dollars. The absolute debt of the state was 1,914,438 dollars, and the contingent debt 1,051,422 dollars. The total property of the state was 5,240,467 dollars.

The militia consisted in 1850 of 55,209 men, of whom 2591 were commissioned officers.

The judiciary consists of law and equity courts of appeals, courts for correction of errors, and courts of common pleas and general sessions, which take cognizance of all civil and criminal cases in which white men are concerned. These courts are presided over by four chancellors in equity and six judges of general sessions and common pleas, who are appointed by a joint ballot of both houses, and hold their office during good behaviour, and each of whom has a salary of 3000 dollars. For contracts under 20 dollars, magistrates' courts have exclusive jurisdiction. For the trial of slaves and free people of colour for criminal offences, courts of magistrates and freeholders have been established.

In 1850 there were in the state, belonging to all denominations, 1163 churches, which afforded accommodation for 453,930 persons.

Of late years the instruction of the lower classes has been attended to by the legislature. A sum of 40,561 dollars was appropriated in 1850 to the maintenance of a free-school system; and in that year there were 1023 public schools, attended by 9122 scholars. The children of the coloured people, comprising a considerable majority of the children in the state, are entirely destitute of education, the law excluding them from all instruction. The education of the middling and higher classes is much better provided for than in the neighbouring states. The state college at Columbia enjoys considerable reputation: in 1853 it was attended by 120 students. There are also a college in Charleston having 70 students, a state medical college, three theological seminaries, and two learned societies.

History, &c.—The first settlement of whites in South Carolina was about 1670; but the first permanent establishment was made in 1680 on the site of Charleston. Previously to this, in 1662, Charles II. had granted to Lord Clarendon and seven others all that part of North America which lies between 31° and 36° N. lat.; shortly after the northern boundaries were extended to 36° 30'. The proprietary government of Carolina lasted till 1719, when the two Carolinas were separated and a royal government was established. During the continuance of the proprietary government Locke's scheme or constitution was tried, but not found to answer. The present constitution was adopted in 1790, since which date it has been twice amended. South Carolina was the scene of several serious engagements during the war of independence. Its more recent history has been almost wholly connected with the strife of parties, and consequently only of local interest.

(Coltun, *Statistical Gazetteer of the United States*, 1853; Darby; Hassell and Smith; *American Almanac*, 1854; *State Reports*; Lyell, *Travels in America*, and *Manual of Elementary Geology*; Featherstonhaugh, *Slave States*, &c.)

CARPATHIAN MOUNTAINS; *Karpáten*; *Krapack*. This great mountain range of Central Europe extends from the Danube at Presburg to the same river near Orsova in the form of a vast curve, with its concave side towards the south-west, and inclosing all of Hungary that lies on the left bank of the Danube and north of Transylvania. Its whole length perhaps exceeds 800 miles, for nearly one half of which it forms the watershed between the North Sea and Black Sea. On the north and north-west the mountains slope down to the great level of Northern Europe; on the south to the plain of Hungary. The range lies between 44° 28' and 49° 38' N. lat., 17° 0' and 26° 20' E. long. Its crest separates Hungary from the archduchy of Austria, from Moravia and Galicia; and Transylvania from Moldavia and Wallachia. In ancient times that portion of the range that lies north of Hungary was called Carpatæ Mons, and sometimes the Eastern Alps. It separated Dacia from Sarmatia.

The rock on which the castle of Presburg in Hungary stands is the most western point of the whole system. From this point the mountains extend north-north-east towards the sources of the Morava and Waag, and between the two wide valleys in which these rivers flow. This range, which is about 100 miles in length by 16 or 18 miles in width, is of moderate height, not exceeding 2000 feet above the sea, and is called the Little Carpathians, or White Mountains. The declivities are rather steep and covered with forests. It is traversed by numerous passes—one leads from Tyrnau on the Waag to Brunn; a second from Treutshin to Olmütz; and a third, the Jablunka Pass, at its northern extremity from Czolna to Teschen in Austrian Silesia.

At the Jablunka pass the Carpathian range turns east, and continues in that direction from 18° 40' to 23° E. long. Within these limits it bears different names. The most western portion is called Magura; the middle, Baba Gura; and the eastern, Beszkid, though it seems that the last name is frequently applied to all this range. Its length may be somewhat more than 200 miles, and its width about 20 miles or somewhat more. Its height increases towards the centre; the Lissa Hora, the highest summit of the Magura range, attains only 4500 feet; but the highest summit of the Baba Gura rises to 5760 feet. Between the north-western extremity of this range and the most eastern point of the Sudetic Mountains, which extend between Silesia and Bohemia, lies a plain of no great extent, traversed by the upper course of the river Oder; it has an elevation of about 1000 feet above the sea. A road traverses this range from the vale of the Arwa by the pass of Jordanow into Galicia, and leads to Cracow.

To the south of the Baba Gura Mountains, and divided from them only by a deep and not very wide valley, lies the highest part of the Carpathian Mountains, called Mount Tatra. It is, properly speaking, not a range, but one enormous rock, extending from west to east about 50 miles, and nearly 30 miles from north to south in the middle, but decreasing in breadth towards the west and east. This rocky mass is furrowed by numerous deep ravines on all sides. On the highest part of its surface, whose average elevation is estimated at about 7000 feet, rise several high summits in the form of peaks, of which some pass above the line of perpetual congelation. The highest is the peak of Lomnitz, which attains 8779 feet above the level of the sea. The peak of Eisthal (Ice Dale) is only about 36 feet lower, and on its northern declivity is the only glacier that occurs in the Carpathians. The number of peaks exceeding 8000 feet is about twelve, among which the Krywan is one of the most famous, though it does not exceed 8150 feet, and is lower than most others. This portion of the Carpathians presents generally bare rocks on its surface where it is not covered with snow; it contains several small alpine lakes. This enormous mass of rock is divided from all the surrounding ranges and masses by deep depressions. From the Baba Gura Mountains it is separated by the valleys of the Arwa and Donajec, which at their upper extremities, where they meet, hardly rise much more than 2000 feet above the sea. From the Beszkids, which extend farther east, the Tatra Mountains are divided by the river Poprad, which surrounds the eastern extremity, and running north joins the Donajec. The river Waag rises near the source of the Poprad, and running west separates the Tatra Mountains from the lower ranges, which extend farther south and west, and which from containing

numerous mines of metals are called by the Germans Ugarisches Erzgebürge (the Ore Mountains of Hungary). These Ore Mountains occupy a much larger surface than all the ranges already noticed, inasmuch as they extend over all that part of Hungary which lies to the north of 43° N. lat., between the river Hernad (which rises near the sources of the Poprad and Waag and falls into the Theiss) and the bend of the course of the river Waag. Its most southern extremity, Mount Matra, stretches even south of 43°. Its length exceeds 120 miles, and its width 70 miles; but the whole of this surface is not covered with mountains; it presents only a few ranges running west and east, and separated from one another by wide valleys, which at some places might be called plains. The range nearest to the Tatra Mountains rises to a considerable height, Mount Dumbier attaining 6500 feet, and Kralova Hora, at the source of the Waag, about 5700 feet; but the ridges farther south are much lower, and their summits rarely exceed 3000 feet above the plain of Hungary, which is about 350 feet above the level of the sea.

The high country extending east of the river Hernad runs to 22° E. long, due east: it then declines to east-south-east, and where it approaches 49° N. lat. to south-south-east till it reaches the sources of the Pruth, Suczava, and Theiss, a little south of which the Transylvanian portion of the mountains begins. The western portion of this elevated region is called Beszkids, but the whole is commonly comprehended under the name of the Waldgebürge (Forest Mountains) of the Carpathian range. In length it exceeds 200 miles, and its average width may be estimated at from 50 to 70 miles. The mountain masses do not rise to a great height, nor are the declivities steep; on their upper surface they do not exhibit high peaks, but extend in uneven plains, on which a few elevations with a very gentle ascent rise considerably above them. Only two ranges, of no considerable length and height, branch off from the Forest Mountains. One leaves the principal range between the sources of the Saan, an affluent of the Vistula, and those of the Dniester, near 49° N. lat., 23° W. long., passes south of the town of Lemberg, and dividing the Russian governments of Volhynia and Podolia advances towards the Dnieper, on whose banks it continues in a direction south-east to the cataracts between Kidak and Alexandrowska. Between the sources of the Pruth and those of the Sereth and Suczava, several lateral branches run to the north-east and east across the Bukowina; but they do not extend farther than to the banks of the Dneister and Pruth, with the exception of one range, which divides these two rivers, and terminates in low hills north of Kischeneff, the capital of Bessarabia. In Bukowina they are called Czorno Mountains.

The most remarkable ridge, branching off to the south, is the Telkabanga Mountains, which are united to the main range at the sources of the Hernad and Bodrog rivers, and run between these rivers to their junction with the Theiss, a distance of about 90 miles. The average width does not exceed 10 or 12 miles, and its elevation is not great, especially to the south, where it terminates with the hills, on which the wine of Tokay is grown.

Two great roads pass over the Forest Mountains. The most western runs north in the valley of the Bodrog, and traverses the mountains between Sztopko and Dukla by the Dukla Pass. The other road, farther east, unites Hungary with eastern Galicia, and the town of Munkacs with Lemberg, traversing the pass of Vereczke.

The Eastern Carpathians, called also the Transylvanian Carpathians, stretch southward from the sources of the Theiss and the Pruth, and surpass the Tatra range both in extent and elevation. They surround with their offshoots the high rugged plateau of Transylvania. Near the borders of the Bukowina and Transylvania the mountains attain an elevation of 6334 feet in Mount Petrosch; thence the main range runs under the names of Borszek, Kelemen Hahash, and Lipschen to the Bozza Pass, to the east of Kronstadt in the angle where Wallachia, Moldavia, and Transylvania meet, and reaches in Mounts Budös and Butesz the respective elevations of 9000 and 8160 feet above the sea. From the angle just mentioned the Carpathian Mountains turn west-south-west, separating Wallachia on the south from Transylvania and the Banat. The eastern end of this part of the system is called the Fagarasch Mountains, the highest points of which are Mount Szural (7122 feet) and Mount Budislav (6888 feet). The average height of these mountains is about 5000 feet; they extend westward to the Rothenthurn Pass, where the Aluta breaks through the chain into Wallachia on its way to join the Danube. West of the pass the range continues in the same direction under the name of the Hatzeg Mountains, which attain their highest elevation in Mount Retyczat (7755 feet). The termination of the range westward along the frontier of the Banat (the eastern part of which like the whole of Transylvania is traversed by its offshoots) does not exceed an average elevation of 3000 feet. At Orsova the Carpathian ridge slopes gradually down to the left bank of the Danube, and is connected by ledges of rock which form the last rapids in that river with a low offshoot from the Balkan on the Serbian bank of the Danube.

Of the great offshoots of the Eastern Carpathians towards the west, two are remarkable for their height and extent. One separates the upper valleys of the Theiss and the Szamos; the other divides the basins of the Szamos and the Körös from the basin of the Maros; both of them contain some lofty summits. [TRANSYLVANIA.] The principal offshoot on the eastern side of the Transylvanian Carpathians

runs between the Pruth and the Sereth, and traverses in a southern direction the Bukowina and Moldavia.

The principal passes in the Eastern Carpathians are—the Borgo Pass, which connects the basin of the Szamos with the Bukowina and the towns Bistritz and Suczawa; the Gyms Pass, leading from the source of the Aluta into Moldavia; the Bozza or Bouza Pass south-east, the Tomos Pass south, and the Torzburg Pass south-west of Kronstadt in southern Transylvania, which connect the town just named with Wallachia and Bukharest; the Rothenthurn Pass, which is traversed by the Aluta and connects Hermannstadt with the Wallachian town of Rimnik; and the Vulkhan, over which the road from Hlatzeg in the valley of the Syll, a feeder of the Maros, to the town of Krajova in Little Wallachia, is carried.

To a height of between 3000 and 4000 feet the Carpathians are very generally covered with forests; higher up they present bare precipitous rocks which frequently have a pyramidal form.

The Carpathians are composed largely of sandstone diversified by quartzose deposits, clay-slate, and beds of limestone; greensand occurs at rare intervals, and also masses of porphyry and hornblende. Only an inconsiderable portion of the Carpathians is of primitive formation. Tatra Mountain and the ridges south of it are composed of granite, gneiss, and mica-slate. The Forest Mountains consist almost entirely of sandstone and slate, and contain only iron in abundance and a small quantity of copper. The Transylvanian Mountains are composed chiefly of mica and clay-slate with masses of magnesian limestone and syenite interspersed. Trachytic rocks occur in the northern part of the Eastern Carpathians between Munkacz and Neustadt. Mount Budon, in the south-east of Transylvania and near the point where the Carpathians turn westward along the north of Wallachia, is of volcanic origin; its flanks are covered with sulphurous deposits.

The Carpathian Mountains are richer in metals than any other mountain system of Europe. Gold and silver are got from the mountains which surround the valley of the river Gran, at Bocza, Kremnitz, Königsberg, and Schemnitz. Copper is very abundant, and occurs in numerous places between the Grau and Hernad. Lead is found in great abundance in all the silver mines, and also in other places. Iron occurs over the whole system, but more especially in the Forest Mountains, and is worked with great advantage in many places. Quicksilver, zinc, antimony, arsenic, and cobalt are also extracted, and some of them in considerable quantity. Opals, chalcodouies, garnets, and other precious stones are found in the district of Scharosh, to the north of Eperies, in the valley of the Hernad, and also near Tokay, Kremnitz, and Kaschau.

Perhaps in no part of the globe is there such an extensive salt-rock formation as that which lies on the lower declivity of the north and north-east descent of the Carpathian Mountains, beginning at the town of Wieliczka, south-east of Cracow, and extending round the chain east and south-east to the boundary of Wallachia; its length cannot fall short of 600 miles; in width it varies very much. Its depth is conjectured to be upwards of 120 fathoms, at least this is the depth at Wieliczka and Bochnia, the only two places where it is worked by the Austrian government. But in many other places salt is obtained by boiling the water of salt-springs.

CARPENTARIA, GULF OF. [AUSTRALIA.]

CARPENTRAS. [VACUUSE.]

CARRARA, a town and territory of Italy, with the title of principality, is annexed to the neighbouring duchy of Massa, both of which belong to the Duke of Modena. The total area of the province of Massa-Carrara is 245 square miles, and the population in 1850 was 56,867. The territory of Carrara consists of about 30 square miles, mostly mountainous, but well cultivated, and with a population of 11,500 inhabitants. It is bounded N. by the territory of Fivizzano, which belongs to Tuscany, E. by the duchy of Massa, S. and S.W. by the Mediterranean, and W. and N.W. by the province of Lunigiana, which partly belongs to Sardinia and partly to Modena. It extends in length about eight miles from the sea, to the summit of the Monte Sagro, N.E. from the town of Carrara. The Monte Sagro is 5540 feet high, being one of the principal summits of the Alpe Apuana, a group of the Ligurian Apennines. From the south side of this mountain several lower projections or buttresses extend to the south-west, being separated from each other by narrow valleys, drained by small streams, all of which unite near the town of Carrara, and form the Carrone, which flows past Avenza into the sea, about three miles below Carrara. These lower ridges furnish the well-known white marble of Carrara. There are more than a hundred different quarries of marble of various qualities, some of which is streaked with purple or blue, and is called *Eardiglio*. Some of these quarries were worked in the time of the Romans. In the time of Augustus the marbles of Luna (for so they were called from the town of Luna, the ruins of which are seen about six miles S.W. from Carrara) were employed in the buildings of Rome (Strabo, p. 22, Casaub.); but the finer sort, for statues, was discovered about the time of Pliny, when it was substituted by the sculptors at Rome for the marbles of Paros and Pentelica. After the fall of the empire the quarries lay neglected till the 12th century, when, the republic of Pisa having taken possession of this district, the works were resumed and furnished the marble for the school of Niccolo Pisani and his disciples. Since

that time new quarries have been opened in succession. The various streams turn a number of mills for sawing the marble. The principal quarries employ 1200 workmen. The blocks are carried down in carts, drawn by oxen, to the beach of Avenza, where the storehouses are, and whence the marble is shipped on board the vessels that anchor in the roads.

The name of Carrara is supposed to come from 'Carraria,' the mediæval Latin for 'quarries.' The town, which contains above 6000 inhabitants, is situated at a distance of 60 miles S.W. from Modena, and near the mouth of the Avenza. It has a fine collegiate church, begun in the 13th century and finished in the 15th; also the church of La Madonna delle Grazie, rich in marbles, and that of S. Giacomo, annexed to the hospital, which has some good paintings. The principal square is called Alberica, from the name of the first prince of the house of Cibo. A colossal statue of the Duchess Beatrice d'Este adorns the square. In the town are shops for the sale of common objects and ornaments of marble, which are worked by native artists. There is also an academy of drawing and sculpture, founded by a former duchess of Massa and Modena: it has a president and several professors, and a good collection of models. Many foreign artists repair to Carrara for the sake of purchasing the blocks which they require for their works, and which are rough-hewn on the spot. The Court of Appeal is at MASSA, where the governor of the province of Massa-Carrara also resides. Avenza, the second town of the principality of Carrara, has 1900 inhabitants: it lies in a plain, about one mile from the sea, the lower hills around being all planted with vine and olive-trees. The high road from Genoa and Sarzana to Lucca and Pisa passes through Avenza. The principal agricultural produce is oil and wine; the corn raised on the territory is not sufficient for one-half of the consumption: the northern mountains are covered with chestnut and beech-trees, and pastures. Pellegrino Rossi, a distinguished French jurist, a peer of France, primo minister of the Pope in 1848, was a native of Carrara. He was assassinated as he was going to open the session of the Chamber of Deputies in Rome, Nov. 15, 1848, at the outbreak of the Roman revolution.

CARRICK. [AYRSHIRE.]

CARRICK-ON-SHANNON, county of Leitrim, Ireland, in the parish of Kiltoyhart and barony of Leitrim, with a small suburb in the parish of Killuken, barony of Boyle and county of Roscommon, a market, post, and assize-town, and the seat of a Poor-Law Union, lies in 53° 57' N. lat., 8° 5' W. long., 98 miles N.W. from Dublin. The population in 1851 was 1366, of which number 134 were in Roscommon county. Carrick-on-Shannon Poor-Law Union comprises 25 electoral divisions, with an area of 100,736 acres, and a population in 1851 of 34,821. The town is situated on the left bank of the Shannon, where that river is crossed by the leading road from Dublin to Sligo. The approach to the bridge is by a narrow lane diverging from the main street, which terminates in an open space on the river bank. Here are arranged the county jail, county court-house, and market-house, adjoining a small floating deck above the bridge. The church and Roman Catholic chapel are on the north side of the town; the barracks on the south. Here is also a small Methodist meeting-house. Carrick-on-Shannon, formerly called Carrickdrumrusk, returned two members to the Irish Parliament, but was disfranchised at the time of the Union. The assizes for the county of Leitrim and quarter-sessions in rotation are held here. Carrick-on-Shannon is the headquarters of the county constabulary force. The town is in the Dublin military district.

(Fraser, *Handbook for Ireland*; *Ordnance Survey Map*.)

CARRICK-ON-SUIR, county of Tipperary, Ireland, a market and post-town, and the seat of a Poor-Law Union, chiefly in the parish of Carrick-on-Suir and barony of Iffa and Offa East, lies in 52° 21' N. lat., 7° 26' W. long., distant 99 miles S.S.W. from Dublin. The population in 1851 was 6223, besides 1289 in the workhouse and other public institutions. Carrick-on-Suir Poor-Law Union comprises 22 electoral divisions, with an area of 112,629 acres, and a population in 1851 of 37,469.

The principal part of the town stands on the left or Tipperary bank of the Suir, and consists of one long street parallel to the river, with two streets leading to the fair green on the north, and another forming the approach to the bridge on the south. It was a place of considerable note soon after the Conquest. Here are the remains of a fine castle built by Sir Edmund Butler in 1309 on the site of an old priory of the knights of St. John of Jerusalem. The same Sir Edmund, who was created Earl of Carrick in 1315, built the bridge which is still standing. Carrick-on-Suir was formerly celebrated for its flourishing manufactures of woollens. The place is now chiefly remarkable for the fine scenery of its environs, which a late intelligent traveller considers superior to the vale of Clwyd; it has also been unfavourably distinguished by the wretchedness of its pauper population. The Suir has recently been rendered navigable to the town for vessels of considerable burden. The public buildings are the parish church, a large and handsome Roman Catholic chapel, a monastery of the Christian Brotherhood, a convent for nuns of the Pre-ordination order, a bride-well, sessions-house, barracks, and fever hospital. Quarter sessions for the county of Tipperary are held here in rotation.

(Fraser, *Handbook for Ireland*; *Ordnance Survey Map*; Thom, *Irish Almanac*.)

CARRICKFERGUS, Ireland, a county of a town, a sea-port town, and parliamentary borough, is situated in 54° 42' N. lat., 5° 47' W. long.; distant 112 miles N. from Dublin, and 9½ miles N. from Belfast by the Carrickfergus branch of the Belfast and Ballymena railway. The population of the town in 1851 was 3543. Carrickfergus returns one member to the Imperial Parliament. It is governed by town commissioners. The borough income in 1850 was about 821l.

The town stands on the north-western shore of Belfast Lough at the junction of the small river Undhum with the sea, and is favourably situated for commerce and manufactures. The houses are generally of stone and slated. The principal street, called High Street, is terminated by the former county jail and court-house. The county business is now however transferred to Belfast. At the opposite end of the main street where it diverges, one branch leading to the quays and castle, and another to the Belfast road, is the market-house, a respectable building, erected in 1755. The parish church of St. Nicholas, an ancient and commodious cruciform edifice, is situated on rising ground on the southern side of the town. The chancel window is of stained glass, and represents St. John baptizing Christ in the river Jordan. The old steeple at the west end of the building was taken down in 1778, when the present handsome spire was erected. The Presbyterians, Independents, Wesleyan Methodists, Roman Catholics, and Unitarians have places of worship. On a rock projecting into the sea is the castle, an extensive and imposing pile. It is still kept up as an arsenal, and is mounted with heavy guns. A small pier projects from the southern extremity of the rock on which the castle is built, and incloses a dock where vessels of 100 tons can lie at the quay. An extensive fishery is carried on in the vicinity of Carrickfergus. The town is not lighted, and water is procured from pumps.

Carrickfergus Castle is supposed to have been founded by De Courcy about the end of the 12th century. From the middle of the 14th to the end of the 16th century it was the only stronghold north of Dundalk which remained uniformly in the hands of an English garrison, and to the loyalty of the townsmen of Carrickfergus is chiefly to be attributed the recovery of the Northern Pale in the reign of Elizabeth. The castle was besieged and taken by Edward Bruce in 1315. In 1386 the town was burned by the island Scots, and suffered again in 1400. In 1555 the Scots, under Mac Donnell, lord of Cantyre, laid close siege to the castle till July 1556, when Sir Henry Sidney relieved the garrison with great slaughter of the besiegers. In 1573 the town was burned by Brian Mac Phelimy O'Neill, chief of Claneboy, who was hanged here along with Mac Quillan, chief of the Route, in 1575; the same year Sorley Boy Mac Donnell (a son of Mac Donnell of Cantyre, who had seized upon Mac Quillan's country a short time before) attacked the town and was repulsed with great loss. Sir Henry Sidney found the place in a very impoverished condition. The town had already begun to be walled with an earthen rampart in 1574, and in 1575 the corporation agreed with Sir Henry to build a stone wall 7 feet thick and 16 feet high round a part of the town. The work however was not completed till 1603, when after various delays the walls were finished with a wet ditch and seven bastions. In the wars consequent on the rebellion of 1641 the inhabitants had their full share of the troubles of the times. On August 29th, 1639, it surrendered to Duke Schomberg, commanding the army of William III. On Saturday June 14th, 1690, King William landed here in person, and immediately proceeded southward, on that important campaign which at the Boyne decided the future prospects of both countries. On the 21st February 1760, Commodore Thourot arrived in the bay with one 44-gun frigate and two sloops of war, and having disembarked about 800 men, attacked the town, which together with the castle he carried after a smart action the same day. Five days later the French forces re-embarked, having taken a supply of victuals and ammunition from Belfast, and were captured on the 23th off the Isle of Man, after a severe action with Commodore Eliot, in which Thourot was killed and 300 of his men killed and wounded. The last scene of violence connected with the history of this veteran fort was the capture of the Drake, a British sloop of war, in the roads opposite the town by Paul Jones, in the Ranger, an American vessel, on the 24th of April 1778.

Of the antiquities of Carrickfergus the castle is the most interesting. The castle rock, from which the town takes its name (meaning the rock of Fergus, an Irish king of that name, drowned there in pagan times), rises gradually to an elevation of about 30 feet towards the sea, and is entirely occupied by the works of the fortress, consisting of a double ballium, or upper and lower yard, with batteries mounting about 25 pieces of cannon. In the upper yard stands the keep, a square tower 90 feet high, formerly entered by an arched doorway in the second story. The court-house and jail occupy the site of a Franciscan monastery, founded here in 1232 by the famous De Lacey, who was buried within the precincts in 1264. Half a mile west of the town is the site of the priory of Woodburne or Goodburne, on the banks of the Woodburne River, which has here some pretty falls. Part of the town wall and one of the gates are still standing.

The cotton trade was at one time carried on with vigour here, but it has declined. There are three extensive flax spinning-mills, a muslin bleach-green, and a linen bleach mill and green in the vicinity. Some trade is also carried on in tanning, brewing, and distilling.

(M'Skimmin, *History and Antiquities of Carrickfergus*, 8vo. Belfast, 1823; Thom, *Irish Almanac*.)

CARRICKMACROSS, county of Monaghau, Ireland, a market and post-town and the seat of a Poor-Law Union, in the parish of Carrickmacross and barony of Farney, lies in 53° 58' N. lat., 6° 43' W. long., 50 miles N.N.W. from Dublin: the population in 1851 was 2534. Carrickmacross Poor-Law Union comprises 14 electoral divisions, with an area of 60,664 acres, and a population in 1851 of 28,207.

The town is well built of stone, and consists of one main street, on the line of road from Ardee to Monaghan, having the market-house in the centre, with two lateral streets terminating in the Dundalk road on the east. Near the parish church are the ruins of a castle built here by Robert, third earl of Essex, about 1621. The market-house was built from the materials of this castle in 1780. On the western side of the town, between the main street and a small river, is one of the residences of the Shirley family, the principal proprietors of this district. There are in the town a brewery, malt-stores, and an extensive distillery. There is a large weekly market for corn and provisions.

(Fraser, *Handbook for Ireland; Account of the Territory or Dominion of Farney*, by E. P. Shirley, Esq., London, 1845.)

CARRON. [STIRLINGSHIRE.]

CARSHALTON. [SURREY.]

CARTAGENA, a town and sea-port of Spain, in the province of Murcia, is situated on the shore of a bay of the Mediterranean Sea, in 27° 36' N. lat., 1° W. long., 30 miles S.S.E. from the city of Murcia. The population in 1845 was 27,727; in 1786 the population was 60,000. The bay forms a natural harbour capacious enough to contain the largest fleets, and is encompassed by hills which shelter it from all winds; the entrance is narrow, and is covered by a lofty island, La Isoleta, also called La Escombrera: the depth of water is 30 feet close to the shores. Forts and batteries on La Isoleta and on the hills defend the harbour and town. The great arsenal, once the largest in Europe, is now in a state of dilapidation; the pavements are broken up, the long ranges of magazines and store-rooms are empty and deserted. The dockyards also, whence many of the great Spanish ships of war were launched, are now unoccupied, and the whole presents a scene of comparative ruin and desolation.

The town occupies the declivity of a hill and a small plain which extends to the harbour. It is inclosed by walls, and near the centre the ruins of a Moorish castle crown the summit of a precipitous hill, which rises above a large pile of buildings called the Mariue School. The town contains some good streets, but all the pavements are in a bad state except that of the Calle Mayor, the principal street, which is paved with flat stones. A fine red marble is used not only in the buildings but for the commonest purposes, such as curb-stones. All the old streets have a Moorish aspect; the houses are irregularly built, and most of them have look-out towers (miradores); the windows are generally small, barred with iron, and where exposed to the sun screened with coloured matting. The cathedral is of Moorish architecture, and seems to have been a mosque; it is surmounted by a dome, and the interior consists of several small naves. There are several other churches, a town-hall, a custom-house, a royal hospital, a theatre, and a bull-arena. The town is unhealthy owing to an adjacent swamp, and the water is brackish. It communicates with the river Segura by the Lorea Canal. The loss of the Spanish American colonies put an end to the best part of its commerce, and what remained has mostly been transferred to Alicante. It has some manufactures of sail-cloth and glass, and exports barilla. The tunny-fishery is valuable, and the silver and lead mines in the neighbouring Sierra de Almagrera have of late years been re-opened, and are now wrought profitably by several joint-stock companies.

Cartagena was a colony of Carthage, and was built B.C. 242 by Hasdrubal, the son-in-law of Hamilcar Barca, and his successor in Spain. It was named *Carthago Nova* to distinguish it from the great city of Carthage in Africa. The Greek name was Καρχηδών ή Νέα. The old city seems to have stood on the site of the present town, was strongly fortified, and was 20 stadia in circumference (2 miles, 50 yards). It was the great seat of the civil administration and military power of the Carthaginians in Spain. Here Hannibal regularly established his winter quarters, and here he received the ambassadors from Rome. It was taken by assault by the Roman general P. Scipio (afterwards Scipio Africanus the Elder) B.C. 210. Under the early Roman emperors it was a colony, and had the full title of 'Colonia Victrix Julia Nova Carthago.' The mines were wrought by the Carthaginians and afterwards by the Romans, who are stated to have employed 40,000 men in them.

(Ford, *Handbook of Spain*; Haverty, *Wanderings in Spain*, 1843; Polybins, x. 10, 11, 15; Strabo, iii. p. 158.)

CARTAGENA, a sea-port in the republic of New Granada, on the northern shore of South America, is situated in 10° 25' 48" N. lat., 75° 30' W. long., about 70 miles S.W. from the mouth of the Magdalena. The harbour of Cartagena is one of the safest and most convenient in all America. It is formed by two islands extending along the coast southward and northward. The most southern island, called Tierra Bomba, is about two miles long and wide, and between it and the Cape Barn is the narrow entrance of the port called Boca Chica. The northern island is on an average hardly half a mile wide,

and low, whilst Tierra Bomba rises to a moderate height. The entrance of the port is so narrow that only one vessel can enter at a time, and as some sandbanks occur in it a pilot is always required. It is defended by two strong castles. The harbour itself is about six miles long; its width varies from two to four miles. It has a sufficient depth of water and good anchorage, and its surface is as little agitated as that of a river.

On the northern island and at the most northern corner of the harbour is situated the town, on a sandy tract of land. It occupies the whole width of the island, so that its north-western walls stand on the beach, and the south-eastern on the harbour. To the east of the town is another low island, on which the suburb, called Xiximani, stands: both are connected by a wooden bridge. Another bridge unites the suburb with the mainland.

The town is regularly built, with straight but rather narrow streets, which are still more narrowed by the projecting balconies, so that they nearly exclude the daylight, and give the town a gloomy aspect. The houses have commonly two stories, and are built in the usual Spanish style, with dead walls towards the streets, but inclosing a fine open space within, on which lofty and airy rooms open, and which is surrounded by a corridor. The town is strongly defended, and on the land side surrounded by several fortresses and by a massive citadel.

Among the public buildings are several fine churches and seven convents. The immense cisterns situated within the walls of the town are justly admired by travellers, and the water preserved in them is excellent. The climate is hot and yellow fever often makes great ravages.

The inhabitants, who amount to between 18,000 and 20,000, are mostly a mixed race, descendants of Spaniards and Indian women. The majority are sailors and fishermen, but many are shopkeepers and mechanics.

The commerce of this town was formerly considerable. But since the revolution in South America its commerce is limited to exporting the produce of the valley of the Rio Magdalena, and importing the manufactured goods which are consumed in it. Even this trade has recently declined in favour of Savanilla, a small port a little west of the mouth of the Magdalena. The chief exports of Cartagena are now confined to the precious metals.

CARTHAGE, called by the Romans *Carthago*, by the Greeks *Karchedon*, an ancient city and state in the north of Africa, long the rival of Rome, was a colony of the Tyrians, and one of the latest Phœnician settlements on the African coast of the Mediterranean. There seems to have been an older Phœnician settlement on the spot (probably an emporium or trading establishment), which, according to Appian and others, was founded before the siege of Troy, and hence much confusion has arisen concerning the foundation of Carthage, which Appian refers to the year B.C. 1234, and others assign to various dates between this year and that of the building of Rome. According to Aristotle, Carthage was founded 287 years later than Utica. The name Carthage is most probably the Roman pronunciation of the Phœnician *Karthadtha*, which means 'new city.' Most ancient writers agree in following an old tradition that Carthage was founded by Elissa or Dido, whose husband being murdered by his brother-in-law Pygmalion, king of Tyre, fled with many attendants and other citizens, and landed on a peninsula on the coast of Africa, between Tunes and Utica, which were older Phœnician colonies. She purchased or agreed to pay rent for a piece of ground to build a town upon, which was called Bozra ('a fortress'), a name which the Greeks altered into Byrsa ('a hide'). The name of Byrsa, and perhaps the shape of the peninsula, which resembled an ox-hide, gave rise to the well-known fable of the manner in which the Libyans were cheated out of their ground. As the town increased, the inhabitants excavated a port, which was called Cothon, and became a great maritime and commercial emporium. This is the part of the town which Dionysius and Velleius Paterculus say was built 60 years before Rome (B.C. 813). Megara, Magar, or Magalia, which was like a great suburb with fine gardens, probably owed its name to the first Phœnician habitations, called Magar or Magalia in the language of the country.

Of the early history of Carthage we know little or nothing except that it soon became a great commercial and maritime state. What we know of its institutions is derived chiefly from a chapter in Aristotle's 'Politics.' The government of Carthage was municipal; and the city ruled over all the rest of the country. The spirit of the constitution seems to have been highly oligarchical. The chief authority was vested in the senate, which appears to have been composed of the heads of a few rich, old, and powerful families, who divided among themselves the chief offices of the state. The senators appear to have been for life. The senate contained within itself a select body or council of state, which the Greek writers call Gerusia, or 'council of ancients.' Aristotle ('Politics,' ii. 20) says the Carthaginians had a body of 104 magistrates, similar to the Ephori of Sparta, but selected with greater discernment from among the most worthy; and that the kings and the Gerusia of Carthage resembled the kings and the Gerusia of Sparta in their respective offices. Justin says that the Gerusia was a select body chosen from among the senators to watch over and investigate the conduct of the magistrates and especially of the generals returning home from foreign command, and that it was first established at the time when the house of Mago, by its vast

influence and popularity, excited fears of some ambitious designs. Two attempts at establishing tyranny were actually made; one by Hanno (B.C. 340), and the other by Hamilcar (B.C. 306). They both failed, and their authors suffered death. This 'Council of the Hundred' is also mentioned by Aristotle as forming the highest magistracy, and deciding all causes. It was probably the same as the Ordo Judicum spoken of by Livy (xxxiii. 46). The Council were also guardians of the public morals, and, like the other civil magistrates, received no salary. The members, according to Aristotle, were elected by the Pentarchies, or 'Boards of Five' (probably a permanent committee of the senate), who are supposed to have managed the financial affairs of the state. They filled up their own vacancies, and no one was admitted into them who had not previously served the state in some official capacity.

At the head of the executive were two Suffetes (Shophetim, or judges, like those of the Hebrews), whom the Greek and Roman writers call kings. They presided in the senate, and laid before that assembly their reports on public affairs. It would seem that the Suffetes were renewed annually, but whether the same persons were re-elected is not known: they were always selected out of a few leading families. The election of the generals and foreign governors, which was the next office to that of suffete, took place in the Gerusia, but was afterwards referred to the senate and the people for their approbation. A suffete was at times general also, and as such headed the armies of the republic, while his colleague remained at home. When the senate and the suffetes could not agree upon some particular points, the question was referred to the people or citizens at large for their decision. Aristotle observes that bribery was resorted to, and that offices were bought and sold at Carthage. One variety of this corruption was the habit of constantly regaling the citizens in collective banquets of the curia, or political clubs. What proportion the *demos*, or people, bore to the whole population, is unknown; "but whether more or less considerable," says Grote, in his summary on the political constitution of Carthage ('History of Greece,' vol. x.), "it is plain that its multitude was kept under dependence to the rich families by stratagems such as the banquets, the lucrative appointments, with lots of land in foreign dependencies, &c. The purposes of government were determined, its powers wielded, and the great offices held—Suffetes, Senators, Generals, or Judges—by the members of a small number of wealthy families; and the chief opposition they encountered was from their fenda amongst each other. In the main the government was conducted with skill and steadiness, as well for internal tranquillity as for systematic foreign and commercial aggrandisement. Within the knowledge of Aristotle Carthage had never suffered either the successful usurpation of a despot or any violent intestine commotion." In the later ages of the republic however, bitter factions divided the state, and boys as eagerly as men took part in the popular tumults. (Polybius, xv. 30.)

Of the private and domestic manners of the Carthaginians we know very little. Their punishments were severe, and even cruel. Crucifixion was the most common mode of death. We may gather from Polybius, Appian, and others that conjugal and parental feelings were strong among them. The magistrates during the time of their office were required to abstain from wine. Their religion which was originally gloomy and cruel, they derived from Phœnicia. Melcarth ('king of the city'), the Tyrian Hercules, was the tutelary deity of Carthage, as he was of Tyre and all her colonies; he is identified by some with Baal and the Sun, by others with the Assyrian Bel and the planet Jupiter. The Carthaginians also worshipped Saturn, Melec or Moloch, to whom they immolated the children of the noblest families, and sometimes the captives taken in war to propitiate his wrath. Astaroth or Astarte, the goddess of the moon, was another of their deities. They had also on the summit of Byrsa a magnificent temple sacred to Esmun or Æsculapius. Among Genii and Herceæ the Genius of Death, and Dido, Hamilcar (who fell at the battle of Himera), the brothers Philæui and Iolæus (a Sardinian worthy) were worshipped. There was probably no sacerdotal caste at Carthage. Sacrifices were offered by the highest personages in the state.

The wealthy citizens of Carthage paid great attention to the cultivation and improvement of their estates, which were tilled by the forced labour of the subject Libyans and slaves (for Carthage trafficked largely in slaves both white and black). The country in the neighbourhood of Carthage, and indeed all that tract which formed its real territory, and which nearly corresponds to the present Regency of Tunis, was beautifully cultivated and extremely fertile. When Agathocles landed in Africa, and when Regulus half a century later, Scipio Africanus half a century later still, and Scipio Æmilianus another half a century after that, invaded the Carthaginian territory, their march lay through rich fields covered with herds of cattle, and irrigated by numerous streams; vineyards and olive grounds were spread on every side, innumerable small towns and villages were strewn over the country, and as they drew near to the 'Great Carthage' the neighbourhood was thickly studded with the country seats of the wealthy citizens. Mago, a suffete of Carthage, who is supposed by some to be the same as the head of the powerful family of that name, who flourished about B.C. 550, wrote a work on agriculture in 23 books, which is the only work mentioned as having been carried away by the Romans out of the libraries of Carthage

when they destroyed that city, and which was translated by D. Silanus, but is unfortunately lost.

The Carthaginians derived their ordinary public revenue, 1, from the taxes paid by the provinces (the district of the Emporia, Sicily, Sardinia, &c.) in produce, and by the cities in money; 2, from import duties, which were rigorously levied; and 3, the produce of the Spanish mines, which during the second Punic war sufficed alone to pay the military expenses of the state. The chief state offices of the home government were held without salary. The great demands on the treasury therefore were for the maintenance of the military forces and the expenses of colonial and commercial expenditure. Commercial intercourse with foreigners was carried on by barter. Manufactures and mechanical arts flourished, and great wealth flowed into the city by the importation of the precious metals, tin, &c. from Spain and elsewhere. Gold and silver were the standard of value at Carthage, but there is a strong probability that the republic coined no money, although the coins of other cities were doubtless current. We believe that not a single genuine coin of Carthage previous to her becoming a Roman city exists. The only money recorded as peculiar to the republic was a token consisting of a substance inclosed in leather, sealed, and bearing the stamp of the state, the whole being of the size and value of a tetradrachm. What the inclosed substance was, was kept secret.

The foreign trade of the Carthaginians was a system of monopolies—grasping and jealous. They carried on a very extensive inland trade with the interior of Africa by the agency of the nomad tribes, especially the Nasamoues. This trade extended to the Nile on one side, to the Niger on the other, and to the intervening oases; their chief importations from these regions being precious stones and a vast number of negro slaves. The maritime commerce of Carthage extended to all her own possessions and to the shores of the states in the western part of the Mediterranean. Oil and wine were imported from Sicily and South Italy for her own use and the markets of Cyrene; linen and fine cloth were imported from Malta for the African and other markets; wax, honey, and slaves from Corsica; iron from Æthalia (now Elba), and mules and fruits from the Balearic Isles. The Balearic Isles (before the conquest of Spain) were chiefly of importance as a station connected with the Spanish trade in oil, wine, and precious metals. The trade with Gaul was also probably carried on from the Balearics. Beyond the Strait of Hercules their trade extended to the tin and amber producing countries of Northern Europe; and along the west coast of Africa their colonies reached as far south as the Island of Cerne, where they hartered ornaments, wine, vessels, and Egyptian linen for elephants' teeth and hides. It is not improbable that they reached the gold producing countries about the Niger, and that their trading expeditions may have reached the Azores; but like their Phœnician ancestors the Carthaginians told exaggerated tales of the dangers of the Atlantic for the purpose of deterring other mariners from entering upon that commercial field. Carthage in her early treaties with Rome shows her object to be to exclude foreign merchants from all ports but her own; and her own colonies she regarded merely as means to extend her trade. The city exercised by means of her trading factories and colonies an imperial authority in a greater or less degree over all the north coast of Africa, from the Pillars of Hercules to the bottom of the Great Syrtis, where the *Aræ Philænormæ* fixed the boundary towards Cyrene.

The intercourse of the Carthaginians with Tyre seems to have been very closely maintained. We read in Josephus (*Cont. Apion.* lib. i.) that they sent assistance to the Tyrians when besieged by the king of Babylon about B.C. 600, and afterwards when Tyre was besieged and taken by Alexander the Great, the Carthaginians afforded a refuge to the women, children, and old men of Tyre.

Mago was the first who made Carthage a conquering nation. He is said to have freed his country from the tribute or rent which they still paid to the Libyans for the original ground on which they built their city. It was the policy of Carthage to establish colonies among the Libyans, by means of which a mixed race was formed, called by Polybius *Libyo-Phœnicians*, as distinguished both from the pure Phœnicians of Carthage, Utica, and other maritime towns, and from the Nomades or Numidians of the interior. These Libyans, among whom the Carthaginians settled, were husbandmen, or forced to become such by the intruders. They had fixed habitations, and they are evidently the same whom Herodotus mentions as living north of the Lake Tritonis, and distinguishes from the Nomadic Libyans. [AFRICA.] They consisted of several tribes which in course of time made together one body of subjects of the republic.

The military resources of Carthage were chiefly her powerful fleets and her armies of mercenaries. Although the Carthaginians were generally unlucky in their sea fights, their fleets were truly formidable in point of numbers. In the First Punic War they had 350 ships of war, carrying 150,000 men, in the great engagement at sea with Regulus, B.C. 254. The navy consisted during the Sicilian wars of triremes, in the Roman wars of quinquiremes, carrying 120 fighting men and 300 rowers. The rowers were public slaves, bought in the interior of Africa. After their repeated defeats at sea by the Romans, and the loss of their chief insular possessions, the naval power of Carthage was of little importance, and the republic adopting the policy of the Barciæ family afterwards fought its battles by land rather than by sea.

The army was composed of the Libyan subjects of Carthage, who were forced to serve as they were forced to till the ground; and of mercenaries, collected not only from the nomadic tribes of Africa, but from nearly all the countries of Western Europe. The officers were all Carthaginians. There was also in every Carthaginian army a body of infantry, consisting of 2500 citizens called the 'Sacred Band,' which formed the general's bodyguard; they were selected for their rank, wealth, and courage, and were distinguished by their rich and splendid armour. Upon dangerous emergencies all the citizens turned out as soldiers; to meet Agathocles 40,000 heavy-armed infantry, 1000 cavalry, and 200 war-chariots marched out of the gates of Carthage; and the desperate defence of the city during its final siege by Scipio proves the warlike mettle of the descendants of the Phœnicians. The Libyans formed the chief part of the infantry and heavy cavalry, and were armed with long lances. The Iberians, dressed in white linen vests, had swords with which to cut or thrust. The Gauls fought naked with broadswords. The Balearic slingers and the nomad cavalry were two descriptions of force peculiar to the Punic armies. This cavalry was hired among the nomad tribes all along the north of Africa. They rode on small well-trained active horses, without saddle and without bridle, for they were guided by a rush halter. A lion's skin served them for dress and bed, and a piece of elephant's hide for shield. War-chariots were used in the Sicilian wars; but they were superseded in the struggles with Rome by elephants, the use of which they had probably learned from Pyrrhus. In time of peace only the garrisons for the city and the foreign possessions were kept up. The military system of Carthage had two great sources of danger, which are respectively pointed out by Grote and Heeren—namely, the want of attachment to the cause in which they (the mercenary armies) fought, and the impossibility of calling a mercenary army together in a short time so as to meet a sudden attack. The main advantages of the system were a saving of the lives of the citizens, and the dispensing with great military skill in the generals, who till the appearance of Hannibal, made their conquests generally by overpowering numbers.

The real territory of Carthage seems to have extended about 80 geographical miles southward from the city, and its boundaries were about the same as those of the district named Zeugitana, coinciding nearly with the present state of Tunisia. It included also the strip of coast farther south, along which were Byzacium and the Emporia, or territory of the sea-port towns along the Lesser Syrtis. These districts consisted of fertile plains, which were cultivated under the direction of the nobles, and supplied most of the corn required for the consumption of the city. But besides her close connection and alliance with the older Phœnician cities, Utica, Leptis, Hippo, Hadrumetum, the political influence and indirect sway of Carthage extended far inland over many tributary native chiefs and nomad tribes.

The Carthaginians early took possession of Melita (Malta), Ganlos (Gozo), the Balearic, and Lipari isles, which had possibly been previously held by the Phœnicians.

The first foreign conquest of importance attempted was Sardinia in the first half of the 6th century B.C., under Malchus, who failed; it was renewed by Hasdrubal and Hamilcar, the sons of Mago. Hasdrubal, of whom we are told that he had been eleven times general, fell in battle in Sardinia; but his brother Hamilcar succeeded in reducing the south part of the island, where the Carthaginians settled the colonies of Caralis (now Cagliari) and Sulci. Sardinia yielded Carthage corn, gold, and silver.

Corsica was first occupied by the Tyrrhenians, but the Carthaginians early obtained a footing in it; and the two nations united their fleets to resist the Phœnicians of Aleria, who gained such a damaging victory that they soon afterwards abandoned the island, B.C. 536. The Tyrrhenians long maintained possession of a great part of the island, but in the Punic Wars it appears as a Carthaginian province.

About B.C. 480 Hamilcar was sent to Sicily with a great force, according to Diodorus, 300,000 men. This was the first attempt of Carthage to conquer that fine island, and it was made at the instigation of Anaxilas the tyrant of Messana, and of his son-in-law the tyrant of Himera, who being expelled his country had taken refuge at Carthage. The Carthaginians landed at Paormus (which, like Soluntum and Motya, was an old Phœnician settlement that came under the power of Carthage on the decline of Tyre) and moved thence to besiege Himera. Gelon the tyrant of Syracuse came to the assistance of the place, and by a stratagem surprised the Carthaginian camp, killed their commander Hamilcar, set fire to the ships, and totally defeated their army. The whole Carthaginian force was either destroyed or taken prisoners. Herodotus says that the battle of Himera happened on the same day as the battle of Salamis. On the news of the defeat the senate of Carthage sent messengers to Gelon to request peace, which Gelon granted, on condition that Carthage should pay 2000 talents and send to Syracuse two ships completely equipped, and also that the Carthaginians should abolish the cruel practice of sacrificing human victims to Moloch. There was after this a period of 70 years of peace, during which Carthage seems to have reached the highest point of its commercial prosperity. It was during this time that two fleets were sent to explore the western coasts of Africa and Europe. The first was commanded by Hanno, son of Hamilcar, who had died in Sicily. He took out with him 30,000 colonists, of the rural population, whom he

distributed in six settlements on the west coast of Africa. Hanno wrote an account of his voyage which he hung up on his return in the temple of Kronos or Saturn in Carthage; there is a Greek translation of it in Hudson's 'Geographi Græci Minores.' The other expedition under Himilco, another son of Hamilcar, was sent round the coast of Lusitania and northward as far as the (Estrymnon Cape, which some suppose to be Cape Finisterre. But the only information that we have concerning this voyage is derived from Festus Avlennus's poem, who says that he wrote it from the Paule annals: his account is extremely confused and perplexing.

The second Carthaginian expedition into Sicily took place about B.C. 410. The people of Egæata or Segeste, being oppressed by those of Selinus, applied to Carthage for assistance. The Carthaginians sent first a small force to relieve Segeste, and afterwards landed a much larger force, with which they besieged Selinus. In this siege they employed movable towers and battering-rams. After a desperate defence Selinus was taken, plundered, and burnt. They next took Himera, which they treated in a like manner, 3000 prisoners being slaughtered to appease the manes of Hamilcar. The next attack was on Agrigentum, which was also taken B.C. 406. When the Carthaginians attacked Gela, Dionysius the elder, tyrant of Syracuse, interfered, and a series of wars began between him and the Carthaginians, which, with some interruption by truces, lasted till the death of Dionysius. The wars were renewed under Timoleon, who at last made peace with Carthage, by which the territory of the latter state in Sicily was limited to the west extremity of the island, the river Italius, between Selinus and Lilybœum, forming its eastern boundary. War broke out again between Carthage and Syracuse about B.C. 310, when Agathocles was tyrant of the latter city. It was on this occasion that a large fleet, intended for Sicily, soon after leaving Carthage, was dispersed by a storm, in which 60 galleys and 200 transports were lost. They however assembled an army in Sicily, and totally defeated Agathocles, B.C. 309, who resorted to the bold attempt of carrying the war into Africa. This was the first deadly thrust at the power of Carthage, whose weak point being thus discovered, the example was afterwards followed by the Romans.

After the death of Agathocles, Pyrrhus, who had married his daughter, came over to Sicily to oppose the Carthaginians. He overran their territory, and took all their towns, except Lilybœum. Pyrrhus however returned to Italy, and the Syracusans elected Hiero for their commander. Hiero began by attacking the Mamertines, a body of Campanian mercenaries who had served under Agathocles, but being dismissed after his death, had gone to Messana, where after being kindly received they suddenly fell upon the citizens, killed or drove them all away, and took possession of their houses, wives, and property. Being hard pressed by Hiero, they applied to the Carthaginian naval commander, who was stationed at Lipara. The Carthaginians came and took possession of the citadel. The Mamertines afterwards revolted against them, and applied to Rome for assistance against both Hiero and the Carthaginians. This gave rise to the first contest between Carthage and Rome, B.C. 265.

The result of the first Punic war, which ended B.C. 242, was that Carthage lost Sicily and the Lipari Islands. This war was followed by another nearly as destructive to Carthage. The mercenary troops which had served in Sicily, and had been disbanded in Africa after the peace, without being paid their full stipend, revolted, and being joined by the subject Libyans devastated the territory of Carthage, threatened the city, and carried on the war (B.C. 240-237) until Hamilcar Barca, who had already distinguished himself in Sicily, succeeded in subduing or rather destroying the mutineers. Polybins calls this the Libyan war, and he gives a detailed account of it. It was attended with circumstances of the greatest atrocity on both sides.

At the end of the war of the mercenaries, which gave the Romans a pretext for seizing Sardinia, Corsica, and the smaller islands subject to Carthage, Hamilcar Barca was sent over to Spain to establish the power of Carthage over that rich country, and thus gain a compensation for the loss of Sicily and Sardinia. It was before setting out for Spain that he made his son Hannibal, then a boy nine years old, swear on the altar eternal hatred against Rome.

The inhabitants of Gades, an old Phœnician colony connected with Carthage by common descent and commerce, had asked assistance against some native tribes, and this had probably furnished a pretence for the first Carthaginian settlements on that coast. During nine years that Barca remained in command in Spain he extended the dominion of Carthage over the south and east part of that country, and founded the town of Bærcino (Barcelona). Hamilcar was killed in a battle against the natives (Appianus, 'De Reb. Hispan.' v.), and was succeeded by Hasdrubal, his son-in-law, who took young Hannibal as his colleague. The Saguntini, who are said to have been a colony from Zacynthus, being pressed on all sides by the Carthaginian conquests, sent deputies to Rome for protection. The Roman senate sent deputies to Carthage, and a treaty was concluded, by which the river Iberus (Ebro) was to be the limit of the Carthaginian possessions in Spain, and moreover the Saguntini and other Greek colonies south of the Iberus were to remain free and independent. Hasdrubal some time after was killed by a native while hunting, and Hannibal, then twenty-six years of age, was proclaimed his successor by the army, a choice which was confirmed by the senate of Carthage.

He began his command by the siege of Saguntum, which led to the second Punic war, B.C. 218. By the peace (B.C. 201) which terminated that memorable contest the power of Carthage as an independent state was annihilated. She lost her fleet and all her possessions out of Africa, and even there Masinissa, king of Numidia, was planted as a thorn in her side. By the administration of Hannibal however the tribute imposed by the peace was paid in ten years, and the great general was meditating to aid Antiochus the Great with what force Carthage could yet muster in order to check the triumphal career of Rome, when he was compelled by faction to fly from the city which his great talents had immortalised B.C. 195, and to seek refuge with Antiochus. Masinissa seized upon a territory called Tysca, with fifty villages upon it, within the Carthaginian boundary. Complaint was made to Rome, which sent a commission, of which Cato the elder was one. That inflexible old man inspected every part of the great commercial city, and being astonished at the sight of its still remaining wealth and magnificence, persuaded himself that nothing but its ruin could insure the dominion of Rome. Hence his well-known burthen to the senate on his return, "Delenda est Carthago." Some of the Roman senators were for moderate and conciliatory measures. Scipio Nasica, next appointed commissioner to arbitrate between Carthage and Masinissa, went to Carthage, and had nearly settled all controverted points when Gisco, a Carthaginian demagogue, roused the populace to assault Scipio, who was obliged to save himself by flight.

There is no doubt that, in the impending struggle with Antiochus in the east, Carthage, reduced as she was, would have been a source of danger to Rome; and the only safe policy of the latter was the total destruction of her rival, as expressed in the celebrated sentence of Cato. The armed resistance to which Masinissa at length drove the Carthaginians was looked upon at Rome as a violation of the late treaty (a clause of which bound Carthage not to undertake war without the permission of Rome), and seized as a pretext for the third Punic war. The consuls Marcus Censorinus and Manilius Nepos were appointed to the command of the fleet and of the land force, and they received secret orders from the senate not to desist from hostilities until Carthage was destroyed. The consuls sailed for Utica, where, having landed their troops, they encamped at the old Castra Scipionis. They then gave a public audience to the Carthaginian deputies, who appeared as suppliants before them, and were required to give up all their arms, as they had no more occasion for them, the Roman people taking them under their protection. The arms were delivered to the number of 2000 catapultæ, 200,000 complete suits of armour, besides an immense number of spears, swords, bows and arrows, &c. This being done, the deputies waited to hear the final sentence. The consuls then signified to them that Carthage must be razed to the ground, but that the inhabitants might rebuild their houses anywhere, provided it were ten miles distant from the sea, and there were no walls or fortifications. The indignation of the citizens at the base treachery of the Romans overcame all considerations of prudence or personal safety. They determined on defence, and the third Punic war began. It lasted only three years, and ended with the utter destruction of Carthage in the same year (B.C. 146) in which the fall of Corinth completed the subjugation of Greece. The horrors of that siege, the desperate resistance of the Carthaginians, the self-devotedness of their women, are described by Appian. Of 700,000 people who lived within Carthage only 50,000 surrendered to Scipio and were saved. By a decree of the Roman senate every part of the city was razed to the ground. The literature of Carthage likewise perished; the Romans gave its libraries, with the exception of Mago's work on agriculture already mentioned, to their Numidian allies; and we know through Sallust that King Hiempsal had a collection of Carthaginian historians from which Sallust derived some information on the early history of Africa.

Twenty-four years after the destruction of Carthage (B.C. 122) the Gracchi made a vain attempt to establish a colony on its ruins. Julius Cæsar revived the project B.C. 46, but was not suffered to live to complete his design. His successor Augustus sent 3000 new colonists, who were joined to the inhabitants of the neighbouring country, to build a new town, which was called Colonia Carthago, and which Strabo says soon became as populous as any city of Africa. Pliny calls it 'Colonia Carthago Magnæ in vestigiis Carthaginis.' It rose to considerable splendour, had its cohort, or harbour, and became the first city of Roman Africa. In Christian history it is known for its councils and for the spiritual labours of Cyprian and St. Augustine. In 439 it was taken by the Vandals under Genseric: it was retaken by Belisarius in 533; and lastly was taken and utterly destroyed by the Saracens in 697. Thus ended Roman Carthage, after an existence of about seven centuries.

The topography of Carthage is a difficult and much disputed subject. In the following details we have adopted the views of Falbo and Barth, which are confirmed in many particulars by inferences fairly drawn from the ancient descriptions of the siege of the city.

Carthage was built on a high peninsula, bounded N. and E. by the Gulf of Carthage; and S. by the lake, or bay, that now forms the harbour of Tunis. The peninsula terminated eastward in capes Ghamart and Carthago, which rise respectively to above 300 and 400 feet above the sea; and on the western side it was joined to the mainland by an isthmus between two and three miles across from the

Lake of Tunis to the sea. The alluvial deposits of the Bagradas (now Mejerdah) have made great alterations in this part of the coast; so much so that the sea, which in ancient times washed the northern shore of the peninsula, is now converted partly into firm land and partly into a salt marsh: the consequence is that the isthmus is greatly enlarged in breadth, and the peninsular form of the site has nearly disappeared. The Lake of Tunis itself from a deep open bay has become, in consequence of its receiving for so many ages the filthy deposits of the sewers from the city of Tunis (which stands on its western shore), a shallow lagoon. Southward from the peninsula a *Tœnia*, or sandy spit of ground, ran between the Gulf of Carthage and the lake and terminated at the north of the entrance to the latter; this strip of land is also enlarged since ancient times, so that the once wide entrance to the bay is now a mere narrow passage, called *Hak-el-Wad*, or *Goletta* ('throat'). It seems probable that the city did not occupy the northern slope of Cape Ghamart nor the southern slope of Cape Carthage, on the east of the peninsula; and that it did not quite extend to the isthmus on the western side; but stretched in the form of an irregular oblong, with its southern end resting on the lake before mentioned, the *Tœnia* and the gulf; its northern end on the sea, and its greatest length extending nearly due north and south.

Towards the east the city, the whole circuit of which was 360 stadia, or about 36 miles, was defended only by a single wall, as it was naturally defended by the precipitous nature of the coast. But on the land side it was defended by a triple line of walls, each 30 cubits high, below the parapets, and strengthened with towers four stories high and 200 feet apart. On the inside of each wall were two stories of vaulted chambers, formed into stables below for 300 elephants, and above for 4000 horses, with stores of forage for both. Between the walls were barracks, with magazines and stores, for 20,000 infantry and 4000 cavalry. These landward fortifications seem to have been strongest just behind the *Byrsa*, or citadel; where they approached the suburb of *Megara* on the north-west, and the *Tœnia* near the harbours at their southern extremity, they seem to have been weak and low, and accordingly Scipio in his assaults upon the city attacked these parts, while *Marcus* from the sea attacked the single wall on the eastern side. The walls of the Punic city cannot be traced with any certainty; but the remains of the walls of Roman Carthage, erected in A.D. 424, are clearly visible.

The port of Carthage was on the south side of the city, and was formed of a part of the Lake of Tunis, while the lake itself was probably used as a roadstead. It consisted of an outer harbour for merchantmen, there being a passage from the one to the other; and an inner harbour for ships of war. An island of considerable elevation, called *Cothon* (it is now a peninsula), situated within the entrance, gave its name also to the inner harbour; its height concealed the harbour from view to seaward, and made it serviceable as a signal station. On the land side the inner harbour was jealously screened from observation by a double wall. Wide quays lined the shores of the island and the inner port, and around it were 220 docks, each constructed for only one ship, with naval magazines and storehouses. As each dock was entered between two Ionic columns, the circuit of the island and the landward side of the harbour presented the appearance of a magnificent colonnade. Persons frequenting the outer harbour passed at once into the city through gates provided on purpose, that they might not pass through the docks. When Scipio had blocked up the entrance to the harbour by constructing a mole across the eastern angle of the Lake of Tunis, from near the south end of the land-wall to the *Tœnia*, the Carthaginians cut a new channel from the inner harbour direct into the Gulf of Carthage. The two basins, which were most probably formed by excavation, still remain, but their masonry has disappeared, having been probably used as a quarry by the natives that afterwards settled on the site of the Phœnician city. Of a spacious basin formed for merchantmen, on the sea-shore outside the walls, the structures are still visible.

Immediately to the east of the central and strongest part of the landward fortifications was the *Byrsa*, or citadel of Carthage. It was connected with the forum which lay between it and the harbours by three narrow streets composed of houses six stories high. The *Byrsa* is an eminence, supposed to be partly artificial, about two Roman miles in circuit and 200 feet high, its upper surface forming a plateau that slopes gently towards the sea. On the sides of the hill are traces of its ancient fortifications, which seem to have risen in terraces one above another. On it stood the rich temple of *Esmin*, or *Æsculapius*, raised on a platform ascended by 60 steps: the senate held secret meetings on important occasions in this temple. The *Byrsa* continued to be the citadel of Carthage under the Romans also, who restored the temple of *Æsculapius*. The Roman pro-consuls, the Vandal kings, and the Byzantine governors of Africa resided upon it. It is now called the Hill of St. Louis, from a French chapel erected on its summit in memory of that royal crusader, who died of the plague whilst laying siege to Tunis in A.D. 1270. It is supposed that the hill occupied by the *Byrsa* was formed when the Carthaginians excavated their harbours, and that the name of the original Phœnician settlement (which most probably occupied the height of Cape Carthage) was transferred to this their new citadel.

South of the citadel, and between it and the harbours, lay the forum, in which were the senate-house, the courts of justice, and the temple of the Phœnician god corresponding to Apollo, whose golden image stood in a shrine overlaid with 1000 talents weight of gold. The three streets connecting the forum with the citadel were stormed by Scipio house by house. The other streets seem to have been straight, and to have crossed each other at right angles.

On the lower terraces of the north side of the *Byrsa* are the ruins of two temples, supposed to be those of Saturn and *Astarte*, whom the Romans called *Colestis*. On the west and south-west side of the hill are the ruins of baths (famous in the Christian history of Carthage), a circus, and an amphitheatre. The city was supplied with water by an aqueduct 50 miles long: it derived part of its supply from the *Jebel Zaghwan*, which is above 30 miles in a straight line S. from Carthage, and the rest from *Zung-gar*, considerably farther south. Both fountains were covered in by domed temples of the Corinthian order: there are considerable remains of those at *Zung-gar*. The aqueduct may be traced all the way, and indeed in some places it is in a good state of preservation—as at the village of *Arriana*, two leagues N. from Tunis, where is (says Shaw) “a long range of its arches, all of them entire, 70 feet high, supported by columns (piers) 16 feet square. The channel that conveyed the water lies upon these arches, being high and broad enough for a person of ordinary size to walk in. It is vaulted above, and plastered on the inside with a strong cement, which by the stream running through it is discoloured to the height of about three feet.” The part of it that runs along the peninsula was elegantly built of hewn stone. Some suppose the aqueduct to be a Carthaginian work; others ascribe it to the Romans. The great reservoir also remains almost entire near the line of the western fortifications; it consists of more than twenty contiguous cisterns, each of them at least 100 feet long and 30 feet broad. Near the *Cothon* also is a less reservoir, which was contrived also for collecting the rain water from the *Byrsa* and adjacent pavements: the small earthen pipes for conducting the water from the roof still remain. Besides these there are numerous cisterns remaining for the supply of private houses. In rowing along the sea-shore Shaw observed the terminus of the sewers, “which, being well built and cemented together, length of time has not been able to impair.”

The broken foundation of two buildings—one supposed to have been a theatre, the other a temple of *Astarte*, and apparently the largest structure in Carthage—complete our enumeration of the remains on this interesting site.

The north-west side of the peninsula was occupied, as before stated, by the suburb of *Magalia* (called also *Magar* and *Megara*); this was surrounded by a wall and adorned with gardens irrigated by canals. The wealthy citizens of Tunis still have gardens here near the village of *El-Mersa*, which is situated near a salt-marsh to the north of the isthmus. Roman Carthage stood not as some assert on the site of *Magalia*, but on that of the Punic city. The land to the west and north-west is divided by roads into rectangular plots, each containing 100 herædia. There are twenty-eight of these plots distinctly visible, and the gardens of *El-Mersa* cover an area sufficient for two more, making altogether 3000 herædia (or farms of about two acres each) for the 3000 colonists settled in Carthage by Augustus. Cape Ghamart is supposed to have been the necropolis of Carthage: some few graves have been discovered in its rocky soil.

(*Grote, History of Greece*; Falbe, *Recherches sur l'Emplacement de Carthage*; Barth, *Wanderungen durch die Küstenländer des Mittelmeeres*; Heeren, *Ideen über die Politik*, &c.; Niebuhr, *Lectures on the History of Rome*; Aruold, *History of Rome*; Shaw, *Travels in Barbary*; *Dictionary of Greek and Roman Geography*; *Manuert*; *Diodorus*; *Appian*; *Livy*; *Justin*; *Polybius*, &c.)

CARTMEL, Lancashire, a market-town in the parish of Cartmel and hundred of Lonsdale, north of the sands, is situated in 54° 12' N. lat., 2° 56' W. long.; distant 26 miles N.W. by N. from Lancaster by road, or 14 miles across the sands at low water; and 254 miles N.W. by N. from London by road. The population of the entire parish of Cartmel was 5213 in 1851. The living is a perpetual curacy in the archdeaconry of Richmond and diocese of Chester.

Cartmel is situated in a vale surrounded by high and rugged eminences. In 1188 a priory for canons regular of St. Augustinus was founded in Cartmel by William Mareschal, earl of Pembroke. The funds of the ancient parish church of Cartmel were incorporated with the priory endowment, and the parishioners purchased the building that they might still use it as their parish church. It is a cruciform building with a central tower, a choir with richly ornamented stalls, and a fine east window. The nave is comparatively modern. The length of the church is 157 feet, that of the transepts 110 feet, and the height of the walls 57 feet. Cartmel Grammar school has an endowment of 110*l.* per annum; it was in existence in 1635, but the exact date of its foundation is unknown. There were about 25 scholars in 1851.

The streets of Cartmel are narrow and irregular. Most of the houses are built of stone. There is very little trade. There are cotton-mills at upper Holker. The market-day is Tuesday; fairs are held on Whit-Monday, Monday after October 23rd, Wednesday before Easter, and November 5th.

Three miles to the south of Cartmel is a medicinal spring of some repute, called Holy Well. Near the town is Holker Hall, a seat of the Earl of Burlington. In the vicinity are many private mansions, surrounded with plantations and pleasure-grounds which extend along the slopes of the fells, and impart to the scenery much beauty. From the rapidity with which the tide flows over such an extensive level surface the passage across the sands is attended with danger. Guides are appointed by government to conduct passengers from shore to shore. The distance across Lancaster sands to the east is about 9 miles, that across Leven sands to the west not quite 4 miles.

(Baines, *History of Lancashire*; *Communication from Cartmel*.)

CASALE, a province and town of the continental Sarlinian States. The province is bounded to the N. and E. by the Po, which divides it from the provinces of Verocelli and Mortara; on the S. it borders on the province of Alessandria, and on the W. on the provinces of Asti and Turin. It is intersected from north-west to south-east by the ridge of the Monferrato hills, which divide the valley of the Tanaro from that of the Po. The vine thrives on this tract, which produces some of the best wine in Piedmont. It is also known for its truffles. Great numbers of sheep are reared in the province. Silk is another of its chief products. The area is 334 square miles, and the population of the province in 1848 was 120,425.

Casale, the chief town of the province and formerly the capital of the marquise of Monferrato, an important city with 21,000 inhabitants, is situated on the right bank of the Po, 37 miles E. from Turin. It was formerly fortified, and its citadel, built at the close of the 16th century, was one of the strongest places in Italy. Since the disastrous campaign of Sardinia against Austria in 1849, the town of Casale has been strongly fortified under the direction of General de la Marina. The Po is crossed here by an iron bridge. The old castle which was once the residence of the marquises of Monferrato, is still standing. The cathedral of San Evasio, a Lombard structure, said to have been founded by King Luitprand in A.D. 742, contains some fine paintings, a richly decorated shrine, and a chapel eased with costly marble; the church of Santa Caterina is also rich in paintings. The church of San Domenico was built at the expense of the princes Paleologhi, and consecrated in 1513. A tomb in memory of the Paleologhi was erected in the church over their remains by the late king of Sardinia in 1835. The church was built after a design of Bramantino, it has a splendid façade, and for elegance of proportions and richness of decoration it is surpassed by few churches in Piedmont. The other remarkable churches are those of Sant' Ambrosio and Sant' Ilario; the latter was once a pagan temple, its consecration took place in the 4th century. Among the ancient civil structures of Casale mention must be made of the clock tower, built before the year 1000, and repaired in 1510; and the town-house, supposed to have been built by Bramante.

Casale has also several palaces belonging to the nobility, a theatre, a royal college, and a college for boarders. There are several silk factories in the town, and a considerable trade is carried on in corn, wine, and other agricultural produce. Casale is a bishop's see, and the residence of the Intendente, or governor of the province; it has a court of justice, from which appeals lie to the supreme court of Turin. The town of Moncalvo, with 3700 inhabitants, is next to Casale in importance. Its industrial products are spun silk and leather.

CASAN, properly Kasan or Kazan, the name of a khanat, or kingdom, founded by the Tartars in the north-east of Europe in 1441, and subjected to Russia in 1552. The five governments formed out of it—namely, Kazan, Perm, Simbirsk, Pensa, and Viatka—are sometimes historically spoken of as the kingdom of Kazan. The Russian government or province of Casan includes a portion of the basins of the Volga and its tributary the Kama; and is bounded N. by Viatka, E. by Orenburg, S. by Simbirsk, and W. by Nischnei-Novgorod. It lies between 54° 10' and 56° 45' N. lat., 46° 20' and 51° 45' E. long. The area according to official survey measures 23,868 square miles, and the population in 1846 was 1,342,900.

The surface is in general an undulating level, the south-eastern part of which is varied by the western branches of the Ural Mountains, while a small range of limestone hills, called the Undarian Mountains, runs parallel with the right bank of the Volga, but nowhere attains a greater elevation than 1000 feet.

The principal river in Casan is the Volga, which enters it from Nischnei-Novgorod in the north-west, runs through the heart of the province, where it is increased by the large river Kama, and quits it in the south, on the borders of the province of Simbirsk. The Volga has considerable breadth before the Kama joins it, but is enlarged to 2400 feet by the accession of that stream. The Verluga, the larger and lesser Lokshaya, Sviaya, Tsyvil, and Kasanka contribute also to augment the Volga in this province. The province contains many small lakes, which as well as the rivers are well stocked with fish. In the Undarian Mountains are many sulphurous springs, and much liquid asphalt is found.

The climate is on the whole salubrious; but the winter is so severe that the rivers are covered with ice from November to the end of March. The Volga, on the breaking up of the ice, rises above seven feet beyond its level in summer. The fruits of Western Europe ripen in the open air.

Agriculture is pursued to a limited extent; and a sufficient quantity of rye, wheat, flax, hemp, fruit, and vegetables is grown for ordinary consumption. The soil is generally fertile, but lands are wanting for its proper cultivation. Whole districts are occupied by forests and swamps; the chief kinds of trees are the pine, fir, and oak; and the woods abound in bears, wolves, and feathered game. Large herds and flocks are reared on the rich pasture-grounds which border the rivers; and the fleeces of Casan are of good quality. Horses are of good breed, and several fine studs are kept up. Goats are numerous, pigs much less so. Among wild animals are bears and wolves. The Tartar inhabitants collect much wax and honey. The province contains stone for building, chalk, and lime, alabaster, saltpetre, iron, and copper.

The inhabitants are engaged generally in spinning and weaving, tanning, turning and making articles of wood, and oil-pressing, for which last purpose they employ hemp-seed as well as nuts, of which large quantities are obtained, particularly in the districts that lie between Casan and Simbirsk. The population is composed chiefly of Russian Poles and Cossacks, who make up about half of the inhabitants. The Tartars who inhabit a particular slobode, or quarter of the towns and villages, are chiefly artisans, and number about 300,000; the rest of the inhabitants are composed of Tshuwashes, Circassians, &c., who occupy farms or live in detached villages, and are distinguished from the rest of the population by their dirty habits.

This part of Eastern Europe was formerly called *Volgaria*, or *Bulgaria*, from the river Volga, and was inhabited by a Tartar tribe. Forced from their settlements by new hordes of Tartars, the Bulgarians left their homes and finally settled among the Slavonic population of the right bank of the Lower Danube, whom they subdued. The name *Bulgaria*, by which this part of *Moesia* has been since distinguished, was thus derived from the Tartars of the Volga. [*BULGARIA*.] A great-grandson of Ghenghis Khan founded the city of Casan in 1257, which became the capital of the Kiptchak Tartars. In 1441 the Khan of Casan became independent, and erected his province into a kingdom, which subsisted till 1552, when it was conquered by Ivan II. and annexed to Russia.

CASAN (*Kazan* or *Kason*), the capital of the province, is an ancient Tartar town, which stands on a hill rising out of a low plain between the Casanka and the Bulak which flows into it, and about five miles above the influx of the Casanka into the Volga; population about 60,000. It is composed of the kremlin or citadel, the middle town, and the lower town; the whole is encircled by gardens, fields, and meadows, which, when the Casanka is swollen by the waters of the Volga in the spring, are subject, as well as the lower town, to inundations. The kremlin, which is on the banks of the Casanka, contains the governor's palace, archiepiscopal residence, barracks, prisons, and houses of correction, but particularly the highly-venerated 'Karsianskaya Boyenister,' or Cathedral of the Holy Virgin of Casan, the prototype of other Greek churches in various parts of Russia. The middle town is chiefly distinguishable by the Gostini-Dver, or Bazaar, and the market-place, which is surrounded in most parts by lofty houses, chiefly built of stone, and planted with rows of trees. Several of the churches are well built. The lower town, next to the Bulak, contains a number of rows of houses, separated by gardens, which are the residences of the merchants and dealers; and also the university buildings, a handsome pile embellished with Corinthian columns, and containing a library of 30,000 volumes, a cabinet rich in Russian and Tartar coins, collections in natural history and for experimental philosophy; a botanical garden, and a well-furnished astronomical and magnetic observatory. Casan has 41 Greek churches, 4 monasteries, 8 Tartar medshets, or places of worship; a Greek seminary for divinity students, 2 gymnasia and 4 other public schools, 9 Tartar schools, a military school for 350 boys, an orphan asylum, and a Russian and a Tartar printing-house. The city is strongly fortified, and contains an arsenal and an imperial powder manufactory. From the lowness of its situation the town is unhealthy, and there is also a want of good water for drinking. Casan is the seat of several manufactures, particularly woollens, cottons, Morocco and other leather, soap, cutlery, jewellery, ironware, earthenware, tiles, gunpowder, spirits, and beer. It is the great mart for the products of the adjacent parts of Russia, and carries on an extensive trade by the Volga, of which teas and Asiatic manufactures are leading articles. There is an active transit trade with Siberia, Bokhara, and several parts of European Russia. The Tartars live as a distinct community from the Russians, and have settled on the opposite bank of the Bulak, upon the eminences around Lake Kaban; their dwellings are small and rude. Casan was captured by the Czar Ivan II., after a siege of 43 days, in the year 1552. The town was nearly destroyed by fire in 1774, again in 1815, from the explosion of the government powder stores; and in 1842, when more than half the city was reduced to ashes. These disasters are soon repaired in a country where timber abounds and houses are chiefly constructed of wood.

CASBIN, otherwise written *Carrin* or *Kazrin*, a city in Persia, is situated in about 36° 12' N. lat., 49° 53' E. long., 90 miles W.N.W. from Teheran. It was built about the middle of the 4th century. Under the princes of the Saffide dynasty Casbin became the capital of the kingdom, and remained so until Shah Abbas removed the seat of

government to Ispahan. Although now of diminished importance, it may still be considered a flourishing place. The town stands in an extensive valley or plain upwards of twenty miles in breadth, called the Plain of Casbin. This plain affords good pasturage. An extensive system of irrigation by means of subterranean aqueducts called 'kanauts,' with the natural fertility of the soil, formerly rendered the plain of Casbin one of the most productive districts in Persia. Captain Wilbraham, who travelled through this part of Persia in 1837, describes the plain of Casveen as almost destitute of cultivation, owing to the want of water. "In the neighbourhood of Casveen," he adds, "long lines of canauts, or subterranean aqueducts, now choked with rubbish, intersect the plain, and bear evidence to the former cultivation of the district." The town is approached through a vast extent of vineyards and orchards interspersed with olive-trees and inclosed by high walls. From this it is clear that in the immediate environs of the town the system of irrigation still prevails. The grapes of Casbin are considered the best in Persia; and its pistachio-nuts also are abundant and highly esteemed. "The wine of Casveen," says Captain Wilbraham, "made by the Armenian inhabitants, is better than that generally met with in Persia." The town itself is inclosed by a mud wall with towers, but without any ditch. In extent it is said to exceed Teheran, but "whole streets lie in ruins, and it contains no buildings of note." The old traveller Herbert estimated the population at 200,000: in 1812 the males were estimated at 25,000. Velvets, brocades, and a coarse cotton-cloth called 'kerbas,' are manufactured at Casbin; and the place has also a considerable trade in raw silk and in rice obtained from the provinces along the Caspian. Any grandeur or magnificence which Casbin may once have possessed has been destroyed by repeated earthquakes, which have left little remaining of the more ancient structures but broken masses of domes, towers, and old walls. A ruined mosque, with a conspicuous dome, and the palace built by the Saffide princes, are the most remarkable remains. The palace, although surrounded with ruins, and for the most part abandoned, still serves as the residence of the prince-governor.

CASERTA. [TERRA DI LAVORO.]

CASHEL, county of Tipperary, Ireland, a bishop's see, a parliamentary borough, and the seat of a Poor-Law Union, in the parishes of St. John the Baptist and St. Patrick's Rock, and barony of Middle-third, is situated in 52° 31' N. lat., 7° 54' W. long.; distant 105 miles S.W. from Dublin by the Great Southern and Western railway, from the Dundrum station of which it is distant 5 miles east. The distance from Dublin by the high road is 100 miles. The population in 1851 was 4798, besides 3449 inmates of the workhouse and other public institutions. The borough returns one member to the Imperial Parliament. Cashel Poor-Law Union comprises 24 electoral divisions, with an area of 156,822 acres, and a population in 1851 of 45,176.

The city is built round the eastern and southern slopes of the remarkable eminence known as the Rock of Cashel, which rises abruptly from a rich plain about two miles east of the Suir. In the widest part of the main street are situated the market-house and shambles, and a public fountain. The principal public buildings are the modern cathedral, a large and handsome building with a lofty spire; the Roman Catholic chapel and a convent adjoining; the sessions court-house, bridewell, fever hospital, and infirmary. On the north side of the main street are the barracks, and on the southern acclivity of the hill is the deanery house, formerly the archiepiscopal palace, a handsome mansion with fine gardens and a good diocesan library of 9000 volumes annexed. Near the northern extremity of the main street access is had to the summit of the rock by a lane which passes behind the deanery gardens. The assemblage of buildings which occupies the summit is of remarkable interest, comprising, in addition to the extensive ruins of the old cathedral, a ruined tower and singular stone-roofed chapel of early Norman architecture, erected by Cormac Mac Carthy, petty king of Munster, in A.D. 1127.

The cathedral is in the form of a cross, the choir and southern transept embracing Cormac's chapel on two sides; the chapel however not being built due east and west, stands a little out of line, flanking the southern side of the choir, to which it serves as a chapter-house, and which is interposed between it and the round tower on the northern side. The other buildings on the rock are a hall for the vicars-choral, built by Archbishop Rd. O'Hedian (1421), who also repaired the cathedral, the old episcopal palace at the west end of the cathedral, and the remains of the abbey of the Rock of Cashel, founded by David Mac Carwell about 1260. A wall, intended for defence, some bastions of which were standing at the beginning of the present century, surrounds the platform on which the ruins stand, and completes the pile of building which, from its commanding situation, massive proportions, and singular variety of outline is justly considered the finest of the kind in Ireland. The chapel, an object of the highest architectural interest, consists of a nave and a small choir. There is a slender square tower built in the re-entrant angle of the choir at the south side, and rising considerably above the roof, which is of stone, of a very lofty pitch, springing from corbels, and concentrically vaulted underneath. The upper vault is gothic, being the only arch of that description in the entire building, and forms the ceiling of an apartment, the floor of which rests on the arch of the lower vault, which is Norman, and in like manner forms the ceiling of the nave below. This under-arch springs partly from

the thickness of the wall, and partly from the architraves of a double range of rudely-carved columns at either side: those of the lower range are square, adorned with a lozenge net-work, and form pedestals to the round columns of the upper tier, which are ornamented with bands and capitals. Outside, the corbels supporting the pedimented roof form the architraves to two similar tiers of pillars at either side, between the columns of the lower of which ranges the windows that light the nave are pierced. The principal dimensions are as follows: Length of the whole building outside, 53 feet; length of nave, 30 feet; breadth of nave, 18 feet; length of choir, 13 feet 8 inches; breadth of choir, 11 feet 6 inches; height of the roof from ground outside, 52 feet; slant of roof, 24 feet; mean thickness of the walls, 4 feet 1 inch; length of square tower, 10 feet; breadth, 6 feet 8 inches; height, 68 feet. These dimensions are given the more minutely as Cormac's chapel is by far the most perfect specimen of this description of building in the country, and as it gives a convincing proof not only of the existence but of the excellence of some works in stone and lime, exclusive of round towers, in Ireland before the coming of the English.

Donat O'Lonargan, the first bishop of Cashel who received the archiepiscopal pall, was succeeded in the see (1152) by Donald O'Hullucan, in whose time (1172) the great synod was held here, which has been so much celebrated by the early historians of the conquest as that at which the Irish prelates are alleged to have recognised the civil authority of the English king and the ecclesiastical superiority of the Anglican church. By this time a town had grown up around the seat of authority, large enough to make its burning in 1179 worthy of mention in the Irish annals. Donat O'Lonargan, the third archbishop of the name, erected the town of Cashel into a borough in 1223. David Mac Carwell, who became archbishop in 1253, founded the Chantry of St. Nicholas, the Abbey of the Rock of Cashel, and Hoar Abbey, a monastery for Cistercian monks, in the vicinity of the town, the ruins of which, still standing, attest its former splendour.

In the wars subsequent to the rebellion of 1641, Cashel was for some time garrisoned, and the rock put in a state of defence by Lord Taaffe, on the part of the Irish royalists; but Lord Inchiquin, who commanded the Irish parliamentary forces, having approached the town, which had been left by Lord Taaffe to defend itself, the inhabitants refused to accept Lord Inchiquin's terms, on which he carried the place by assault. On this occasion there was a great slaughter of the besieged, of whom above twenty priests and friars were slain before the assailants gained possession of the cathedral, when at length quarter was given, and the survivors suffered to return to their homes. The city was again taken by Cromwell. Up to the end of the last century Cashel seems to have been a flourishing place. Before the passing of the Irish Municipal Reform Act the town had fallen greatly to decay. The local administration is now vested in town commissioners, under whose care much improvement has taken place. The ancient water-works, alleged to be as old as the time of Edward II., have been repaired, and the streets have been lighted with gas. The income of the borough was 3679*l.* in 1849. Quarter sessions for the county of Tipperary are held here in rotation. Cashel possesses a National school and a savings bank. The market days are Wednesday and Friday. Fairs are held on the 26th of March, 7th of August, and on the third Tuesday in each month.

Prior to the passing of the Church Temporalities Act, 3 and 4 William IV. cap 37, Cashel was an archiepiscopal see, and united with the diocese of Emly; by that Act it was reduced to a bishopric, and united with the sees of Emly, Waterford, and Lismore. The income of the united dioceses is 5000*l.* a year. The diocese of Cashel comprises thirty-eight benefices, including all in the county of Tipperary. The chapter consists of a dean, archdeacon, precentor, treasurer, and five prebendaries.

(Fraser, *Handbook for Ireland*; Petrie, *Ecclesiastical Architecture of Ireland*; *Trans. Royal Irish Academy*, vol. xx.; *Ordnance Survey Map*; Thom, *Irish Almanac*.)

CASHMERE, the most extensive of the alpine valleys of the Himalaya range, lies imbedded in high mountains, between 33° and 35° N. lat., 74° and 77° E. long. It extends from south-east to north-west, between 74 and 75 miles, and about 40 miles in breadth, when the declivities of the mountains are included. In the middle of the valley, near the capital, Sirinagur, there is a level plain some miles in width, which seems to have been once a lake. The plain of Sirinagur is surrounded by high hills, with rather a gentle slope, and covered with fine large trees and excellent pastures. Behind them rise the mountains, the loftiest of which is about 15,000 feet high.

Almost innumerable rivulets descend from the sides of the mountains on the margin of the snow-line, and are abundantly filled with water at all seasons. They join in the centre of the valley a river, which rises at its south-eastern extremity. This river, called the Jelum, or Behut (the Hydaspes of Alexander), has at Sirinagur, about 60 miles from its source, so much water, that Bernier compares it with the Seine at Paris. Its course through the plain is gentle, and it continues so to the Lake of Wulur, issuing from which in a westerly direction, the river enters a hilly country, where it is soon narrowed by steep rocks. It forms several rapids and cataracts, until it reaches Muzzufferabad, a town of the Panjab. The Jelum joins the Chenab

(Acessines), and flows into the Indus. The Lake Wular has a circuit of about 40 miles. It is partly surrounded by extensive forests, in which there are numerous wild animals. Near the capital is another lake called Dhál, which, though shallow, is of considerable extent; it is divided by dams into several parts, and contains many floating islands.

Numerous canals intersect the plain in every direction, which, besides watering the contiguous lands, afford great facilities to communication, being large and deep enough to be navigated by river barges. In summer the heat though great is less oppressive than on the banks of the Ganges or Jnma. The winters are of course cold in a valley which is 5000 or 6000 feet above the sea. In 1822 Moorcroft found that the snow began to fall in the middle of December, and the plain was not clear of it before the end of March. The sky during the winter months (from December to March) is so misty that the sun is seldom seen, and when seen it is only for a short time. Towards the end of March and in April it is more frequently visible, but attended by a rapid succession of gusts of wind with hail. June, July, and August are hot; but the mornings, evenings, and nights are generally cool.

Sometimes, though rarely, a failure of the rice crop has been experienced, owing to the summer heat not lasting long enough to ripen the grain. Cashmere produces wheat, barley, buckwheat, millet, maize, pulse, and rice. Rice may be considered as the staple. It is grown at a considerable elevation on the declivities of the mountains, as the streams which descend from their sides afford facilities for watering the fields. The singhara, or water-tun, which during eight or nine months of the year is fished from the bottom of the Lake Wular, affords a supply of food for many of the poorer inhabitants. Of this article 60,000 tons are procured annually, sufficient for the support of 20,000 persons. The mucilaginous pith of the water-lily also supports a considerable number of people during eight months. Turnips, spinach, loose-leaved cabbages, and lettuces of the same description, are raised in the usual way; and cucumbers, gourds, and melons, in great quantities, by the ingenious and simple contrivance of platforms floating on the lakes. These swimming beds are commonly 2 feet thick, 7 feet broad, and of considerable length. Among the cultivated plants the crocus is the only one which furnishes an article of export, the saffron of Cashmere being known in all parts of Western Asia.

The principal fruits are apples, pears, peaches, quinces, apricots, almonds, pomegranates, mulberries, walnuts, hazel-nuts, pistachios, plums, cherries, and a nondescript species of grapes, called 'sungut' by the natives. This grape yields by distillation a beverage which, in the opinion of the Chinese, is not inferior to that of the ordinary grape. Common grapes also abound, and the wine which is made resembles Madeira. Most of these fruit-trees cover large tracts of ground on the declivities of the hills, and have no owners; the fruit is gathered by the labouring classes, and often constitutes their principal subsistence. No trees are cultivated with any care except the walnut, of which there are three different kinds. The kernel is eaten, and used for making oil; and the husks of the fruit are employed in dyeing black. Cashmere is famous for its flowers, especially roses, which are cultivated with care, and from them 'attar' is extracted.

Horses are not numerous, and are of a small size but hardy. More attention is paid to black cattle; the breed is not large, but gives abundance of milk. Sheep are very plentiful and their flesh is well flavoured: goats abound in different places. Neither poisonous nor carnivorous wild animals are said to exist in Cashmere; but the forests abound with some kinds of deer, and the rivers with fish and water-fowl. Bees are very numerous, and each farmer has several bee-hives in the walls of his house. These hives are of a cylindrical form, and extend quite through the wall. Silk-worms are reared to some extent. Iron is abundant. Copper, plumbago, and lead exist, but are not worked.

The population of Cashmere, formerly a million, was reduced by the tyranny of the Sikhs to about 200,000. It consists, with few exceptions, of the natives, who appear to be of Hindoo origin. The Cashmerians are industrious, which is shown in the excellence of their cultivation, and the perfection which their manufactures have attained. The principal branch of industry is shawl-making, in which 60,000 individuals are employed, though the number of looms, which two hundred years ago amounted to 40,000, has been greatly reduced. According to an estimate, 80,000 shawls are annually made, but the number is constantly fluctuating, so that no correct estimate can be formed. Paper is manufactured, and is considered the best made in Western Asia. The Cashmerians work with great skill and taste different objects in wood, which, as well as lacker-work, are exported to the neighbouring countries. The extraction of the attar of roses is an important branch of industry. The transport of goods over the high mountains is chiefly effected by men who carry them on their backs. Between Cashmere and Ladak sheep are employed to carry burdens.

Srinagar (Sranagara), the capital, contains not more than 40,000 inhabitants. It is nearly in the centre of the plain, on the right bank of the Jelum, and is traversed by two small rivers. The streets are narrow and dirty. The houses, built of wood, are commonly four stories high, and sometimes higher. The ground-floor serves as stables, and for holding agricultural or other utensils. The family

live in the first floor, and the third and fourth are used as magazines of goods and provisions. The roofs of the houses are covered with tulipan beds. There is no good public building. *Islamabad*, higher up the river Jelum, is also a considerable town, situated on the right bank, where the river becomes navigable for barges. *Sampre*, likewise a populous town, is also on the right bank of the Jelum, but about twelve miles below Srinagar.

Cashmere seems to have formed an independent kingdom up to the 13th or 14th century, when it was subjected to the Gaznevides, and afterwards united to the dominions of the emperors of Delhi. When that empire was destroyed, about the middle of the last century, Cashmere was taken by the Afghans, who remained in possession of it until 1819, when it became a part of the extensive dominions of the Maharaja Runjeet Sing, the sovereign of the Sikhs. It at present forms part of the territories held by Gholab Sing under British alliance and supervision. The area of the entire territories of Gholab Sing is 25,123 square miles, and the population amounts to 750,000. By the terms of the compact between the Maharaja and the British government the British supremacy is acknowledged on the one hand, and on the other the Raja is to be assisted in defending himself against his enemies. The Maharaja maintains a large military force.

(Bernier; Forster; Moorcroft in *Geographical Journal*; Von Hugel.)

CASOLI. [ABRUZZO.]

CASPIAN SEA, an inland salt lake of great extent, which lies on the boundary-line between Europe and Asia. It extends from its most northern point, near the mouth of the river Ural (47° 20' N. lat.), to its most southern point (36° 40') which is nearly at an equal distance from the towns of Resht and Asterabad, in a straight line about 740 miles; but a curve drawn through the centre from its north-eastern corner at the mouth of the river Elba Djem or Emba to its most southern shore measures about 900 miles. The general direction of its length is from south by east to north by west, but the northern part is curved to the east, and there forms a bay nearly as wide as the main body of the lake. Here its width from west to east is 430 miles, but its average breadth is only about 210 miles. Its most eastern point is the Gulf of Mervoi Kultuk, which extends to 54° 10' E. long.; the Bay of Kuma on its western shore reaches to 46° 50'. The area covered by the Caspian Sea probably exceeds 150,000 square miles, a surface as large as that of Spain.

The Caspian Sea has very few bays. The most important are the Mervoi Kultuk, or the Dead Sea, which forms the most eastern corner, and by one of its branches, the Tuk-Kara-su, incloses the peninsula of Manghislack on the east. Farther south, nearly in the middle of the eastern shores of the lake, is a smaller lake called Kooli Deria, which contains bitter water, and is united with the Caspian by an open strait. Still farther south is Balkan Bay, where the ancient mouth of the Amoo Deria, or Oxus, is said to have entered, and which Dr. Eichwald says he traced up its old bed for 5½ miles ('Alte Geographie des Caspischen Meer'). On the western side is the Bay of Salian, into which the Kur empties itself; and farther north the Bay of Kuma, which contains the mouths of the Terek and the Kuma. At the mouth of the Volga, the largest of the rivers that fall into the Caspian, there is no bay; the numerous islands formed by the deposits of the stream project some miles into the sea.

The shores of the Caspian are in general so low and flat that most parts are inundated when a strong gale from the opposite point blows for a few days. The highest shores are those of the peninsula of Abcheron, or Apsheron, which projects on the western side from 40 to 50 miles into the sea; but even here they do not rise to a great height. The southern portion of the sea, from the peninsula of Abcheron to the Bay of Asterabad, the south-eastern corner of the Caspian, is inclosed by the high range of the Elburz Mountains from 15 to 30 miles distant from the beach, between which and the water extends a low flat country.

The eastern shores, with the exception of the few gulfs above named, extend in nearly a straight line between 37° and 47° N. lat., from the Gulf of Asterabad to the height of Emba, which receives the waters of the Emba at the north-east extremity of the sea. All the shore of this height, as well as that adjoining it to the north and north-west, is extremely flat and shallow, in consequence of the sandy and other deposits carried down by the Volga, the Ural, the Tuck, and other large rivers. The consequence is that for several miles from the north and north-eastern shores there is only a few feet depth of water, and the great number of sand-banks and sand-hills make it difficult to land. There are similar sand-hills along the shore and inland among the steppes, but they do not form connected chains. From the Mervoi Kultuk a small chain of calcareous hills called the Chink Hills forms the rampart of the plateau of Usturt, or the Turkman Isthmus, which extends nearly in a straight line with a breadth of about 150 miles between the Sea of Aral and the Caspian. This plateau descends abruptly to the basin of both seas; its height in some places exceeding 727 feet, and never being less than 550 feet above the level of the Caspian. The extreme headlands of this high plain surround the bight of Tuk-Kara-su, the southern branch of the Mervoi Kultuk. The promontory of Tuk-Karagan is formed by the extremity of the Manghislack and Tuk-Karagan hills, which inclose the whole coast southward to Alexander's Bay, and extend nearly from

north to south. These hills consist throughout of recent tertiary formations. The depth along this coast is seldom so little as 6 fathoms, generally between 10 and 18 fathoms. Several rivers flow from the plateau into Alexander's Bay. Round the Bay of Kenderlin, still farther south, which is said to be very deep, the land shelves off, but a small chain of hills runs inland and is lost in the plateau. From 40° N. lat. the Bay of Balkan is bounded by the extreme points of the elevated plateau rising steep and precipitously from the shore, and presenting on the top porphyritic formations, which in remote times have broken through beds of granite, and which occur in some of the islands in the bay, and also at a great distance from the shore on the flat and elevated plateau. The plateau here also however is generally composed of the tertiary calcareous rocks, which towards the bay crop out in single protuberances. The extreme part of the plateau of Usturt is the Krasnovodo Mountains, which join the chain of the Great Balkan Mountains; these lie between the Bay of Balkan and the desert of Khiva. The south shores of the Caspian are low and swampy; but the mountains at a considerable distance show the porphyritic formations, especially about the snow-capped volcano of Demavend. The only considerable river that enters it from Persia is the Kizil-Ozein.

The depth of water is considerable towards the south extremity, where it attains 600 feet. In general the depth decreases considerably towards the shores. Along the western shore its waters deepen gradually by shallow steps. Its waters are not so salt as those of the ocean, as might be expected from the great volume of water thrown into it by the Volga and its other tributaries; along the shores, near the mouths of the rivers, horses do not refuse to drink.

The Russians of Astrakhan use brigs from 150 to 200 tons; but the Persians only small vessels from 50 to 70 tons. Russian steamers now ply on this sea between Astrakhan and the Persian coast. The navigation is dangerous, owing to the prevalence of north-west and south-east gales, which sometimes blow with great violence for many days together. They raise the surface of the sea from 3½ to 4 feet along the shores on which they blow, and inundate the contiguous low countries to a distance of several miles. The fisheries give employment to the inhabitants of the adjacent countries. Numerous shoals of sturgeons, belugas, sterlets, salmon, and other fish at certain seasons ascend the rivers, especially the Volga, where such large quantities are taken that this fishery is thought to be only inferior to that on the banks of Newfoundland. Seals are common, and are taken on some islands and on the eastern coast. [ASTRAKHAN.]

Naphtha or petroleum frequently occurs on the shores of this sea. In the peninsula of Abcheron the whole soil seems to be strongly impregnated with it. [BAKU.] It is perhaps found in still greater quantity on the island Naphthalia, or Tchilehon, the largest of the islands of the Caspian Sea, situated in the Bay of Balkan.

The Caspian appears to be subject to some extraordinary changes in the level of its surface, which have not yet been completely investigated. The inhabitants of Enzillon, the port of the town of Resht, assured Colonel Monteith that it rises and falls several feet in periods of nearly thirty years; and Hanway has collected some facts to prove that in his time (1746) it had a much greater depth at several places than when it was navigated by the expedition of Peter the Great. Monteith himself observed in a few years a considerable decrease of its waters. There are no tides on the Caspian. The northern portion of it is annually covered with ice.

Since the middle of the last century it has been known that the surface of the Caspian Sea is lower than that of the ocean. It was observed that in Astrakhan the barometer was generally above 30 inches. In 1812 an attempt was made by Engelhardt and Parrot to settle this question by a series of levellings and barometrical measurements. They effected this across the Caucasian isthmus at two different places. One of these measurements made the Caspian Sea 54 toises, or about 348 feet lower than the Black Sea; the other gave a difference of about 47 toises, or about 301 feet. Doubts being reasonably entertained respecting the correctness of these measurements, the Russian government ascertained by a trigonometrical survey and a system of levellings executed in 1836-7 that the surface of the Caspian was only 84 feet lower than that of the Black Sea.

Strabo (xi. p. 509) says that the Caspian was connected with the Euxine through the Palus Maotia (Sea of Azof)—an opinion revived by Pallas and other modern writers, who maintain that the Caspian Sea at some very remote period covered the extensive plain which lies between the most southern ranges of the Ural Mountains and the Black Sea. Pallas inferred this from the peculiar nature of the soil, which consists of sand partly mixed with other kinds of earth, and partly containing a portion of clay loosely mixed with it. There is no grass upon it; and shells frequently occur which are met with in the Caspian Sea. It is also impregnated with salt, and contains a great number of smaller and larger salt-lakes, among which that of Elton is the best known, from which large quantities of salt are annually procured. This plain is bounded on the north by a wall-like ascent, elevated at an average 300 feet above it, which in the peculiar form of its margin resembles very much that of the coast of the sea. This ascent extends from the south-western extremity of the Ural

Mountains (the Obshtshei Syrt) in a south-western direction, crosses the Volga below its great bend to the east, and divides the source of the small river Sarpa (an affluent of the Volga) from that of the Manytsh. Hence it runs west, and terminates not far from the confluence of the Manytsh with the Don. According to appearances it is very probable that when the surface of the Caspian Sea was at a higher level there was a passage along the present course of the Manytsh River between the Caucasus and the above-indicated ascent, which united the Caspian and the Black Sea. Engelhardt, who determined by a series of levellings and by barometrical measurements the difference in the level of the two seas, estimated the source of the Manytsh to be only 16 toises, or 102½ feet above the Black Sea.

It is the opinion of some writers, both ancient and modern, that the Sea of Aral once formed a part of the Caspian, or rather that they were connected by an arm of the Oxus; but from the nature of the Turkman Isthmus, which is stated in our article on the Sea of ARAL, it is extremely improbable that any river from Central Asia ever flowed into the Caspian. A further erroneous opinion, which is sanctioned by Strabo, extended the connection of the Caspian beyond the Aral, even to the Arctic Ocean; and Humboldt, in his 'Fragmens Asiaticques,' has traced out a comparatively narrow low tract of land, which extends on the eastern side of the Ural Mountains from the northern part of the Sea of Aral between the rivers Ishim and Irtysh, through the steppe of Baraba, and thence on the west of the Oby to the swampy coasts of the Arctic Sea. This low ground is indicated by a continuous series of lakes. Another ancient notion, preserved in a fragment of Hecataeus, was that the Caspian and the Euxine were connected by the Phasis.

The Caspian was known to the Greeks and Romans. Herodotus (i. 203), the first who mentions it, calls it the Caspian Sea, a name probably derived from the Caspi, who inhabited its western coast. This name it has preserved, though later writers limited the term Caspian to the western portion, calling the eastern the *Hyrcanian Sea*. Herodotus gives a pretty just idea of its extent, stating that its greatest width was about one-half of its length; that it took a vessel with oars 15 days to traverse its length, and 8 days to cross its broadest part. He also maintains (i. 202) that it is an inland sea having no connection with the external ocean. Aristotle ('Meteorologica,' chap. 2) does not differ from the historian in his opinion as to the Caspian lake; but about this time an opinion began to prevail that the length of the Caspian Sea was in the direction from east to west. This form of the Caspian is preserved on all our maps up to the beginning of the last century, when Peter the Great sent an expedition to explore the sea.

(Pallas; Engelhardt; Humboldt; Col. Monteith, Eichwald, *London Geogr. Journal*.)

CASSAGNE-BÉGONHES. [AVEYRON.]

CASSEL, HESSE, Electorate of. [HESSE CASSEL.]

CASSEL, the capital of the electorate of Hesse Cassel, is situated in the province of Lower Hesse, on the Fulda, which is navigable, in about 51° 18' N. lat., 9° 30' E. long.; at a distance of 124 miles by railway from Frankfurt-am-Mayn, and has about 33,000 inhabitants. It is surrounded by walls on every side except that which is bounded by the Drusel. It has 11 large and small gates, and is divided into the Old Town, Upper New Town, and Lower New Town, and the three suburbs of Wilhelmshöhe, Frankfurt, and Leipzig. The Old Town is a collection of crooked, narrow, and dirty streets, which are rendered still darker by the height of the houses. It contains the spacious square called the Palace Square, which is 900 feet long and commands a prospect of the beautiful valley of the Fulda; the market-place; the first story of a vast unfinished palace begun by a former elector of Hesse in 1820; the public offices; the old town-hall; the government buildings; the Stadtau, appropriated to public amusements; the packing-hall, and the furniture-hall. There are likewise St. Martin's Church, with the catacombs beneath it, in which the remains of the sovereigns of Hesse Cassel are deposited; several other churches, a synagogue, an orphan asylum, and an hospital; an arsenal, foundry for cannon, a house of correction, and other public establishments. The Upper New Town is the finest quarter of Cassel, and may vie in splendour with any city in Germany. It contains the Friedrichsplatz, 1000 feet in length and 400 feet in breadth. In the square stands the Elector's palace, a building of no pretensions to elegance; in the centre of the square is a statue of the elector Frederick II. In this part of the town also are several smaller squares; the boulevards; the Royal Street, nearly a mile long; the barracks; and the street of Bellevue, which overlooks a splendid country. Among other edifices in this quarter are the museum, which is considered the finest structure in the town, and contains a library of 90,000 volumes, collections in numismatics, natural history, antiquities, experimental philosophy, &c., and an observatory; the Bellevue palace, and other palaces; the electoral stables and riding-house, town-hall, mint, the academy, lyceum, a normal, and civic school, the theatre, the New Town and Roman Catholic churches, an hospital and infirmary, a poor-house, &c. The Lower New Town is the site of the Castell, an ancient structure surrounded by walls and a ditch, for the safe custody of state and military offenders: it contains the Lower New Town church, a Protestant orphan-asylum, infirmary, lying-in-hospital, house of correction, prison, &c.

In the Leipzig suburb are an hospital, an infirmary, and a spacious building with laboratories; in the Frankfurt suburb, a bridewell or house of industry, poultry-hall, &c.; and in the Wilhelmshöher suburb, a large hospital. The town and its environs abound in beautiful promenades. Among these must be mentioned the Angurten with its marble baths, statues, and bas-reliefs; the summer palace-gardens at Wilhelmshöher famous for their water-works, their conservatories, and the theatre, built by King Jerome Bonaparte, and now converted into ball-rooms, and the cascade of Kariburg with its colossal statues of the giant Enceladus and Hercules, in the hollow of whose club eight persons may stand.

Independently of the establishments already mentioned, Cassel possesses an academy of arts, with schools of painting, sculpture, and design; a society of antiquarians, an agricultural association, a bible society, and a medical college. The manufactures of the town, none of which are on an extensive scale, consist of silks, cottons, hats, tobacco, earthenware, refined sugars, woollens, gloves, outlery, &c. Cassel has two large fairs annually, but although it lies on a navigable river, it is not the seat of any great trade. Every great road about Cassel has avenues of trees.

CASSEL. [NORD.]

CASSINE. [ALESSANDRIA.]

CASSIS. [BOUCHES-DU-RHÔNE.]

CASSITERIDES, a group of islands, generally supposed to be the Scilly Islands. They are first mentioned by Herodotus (iii. 115), who professes however his entire ignorance of them. Strabo (ii. 175) observes—"The Cassiterides are ten in number, and lie near to one another, to the north of the port of the Artahri (Cape Finisterre), out in the open sea. One of them is uninhabited, but the rest are occupied by people who wear black clothing coming down to the feet and tied round the chest. They go about with sticks in their hands, and with beards as long as that of a goat. They live mainly on their flocks in nomadic fashion. They have mines of tin and lead, which with skius they give in exchange for earthenware, salt, and copper vessels, to the foreign merchants. In former times, the Phœnicians alone used to make this voyage from Gadeira (Cadiz), and kept it a secret from all the world.—The Komans, after repeated efforts, became acquainted with this navigation. P. Crassus having passed over to the islands, observed that the mines were worked at a very small depth, and that the inhabitants were peaceably disposed," &c.

The Greek name of the metal 'tin,' which is 'cassiteros,' occurs in the Iliad of Homer, and the name of the islands is obviously derived from the name of the metal. Cassiteros however may not be a genuine Greek word; it is probably derived from 'kastira,' the oriental term for tin, which may have been introduced to western Europe by the Phœnicians, who very probably traded in the tin of the Malayan Archipelago before they discovered that of Britain. It is difficult to suppose that Strabo's description applies to any other place than the Scilly Islands, and yet their position is not very accurately given by him.

CASTEL-DI-SANGRO. [ABRUZZO.]

CASTEL GANDOLFO. [ALBA LONGA.]

CASTEL RODRIGO. [BEIRA.]

CASTEL SARRASIN. [TARNE-ET-GARONNE.]

CASTEL VETRIANO, a town in the province of Trapani, in Sicily, is situated near the left bank of the Delia, 30 miles E. from the town of Trapani, about five miles from the nearest point of the south coast of the island, and has a population of about 13,000. The town is famous in works in coral and alabaster. It is built on a hill, and is an old-looking place, with an old castle, several churches, convents, and palaces. The country round Castel Vetriano is fertile in wine and rich pastures. A few miles from Castel Vetriano, to the south-eastward, are the ruins of the ancient *Selinus*. This ancient site is covered with broken columns, capitals, and other architectural fragments. The columns are all Doric, and of large dimensions; they are called 'Giants' Pillars' by the peasantry. A few columns are still standing. Some finely-sculptured metopes were discovered at the base of the façade of the central temple in 1822. There are ruins of six temples in all. [TRAPANI.]

CASTELLAMMARE, the chief town of a subdivision of the province of Napoli, in the kingdom of the Two Sicilies, is situated near the head of the Bay of Naples, on the lower slopes of the Monte d'Auro (an offshoot of the limestone ridge of Monte Sant'Angelo), 18 miles by railway S.E. from Naples, and has a population of 18,000. It is connected by a branch railroad with the Naples-Nocera line, the first railway opened in Italy. The town stands on or near the site of the ancient *Stabie*, which was ruined by Sylla in the Social war, and afterwards covered by ashes from Mount Vesuvius in the eruption of A.D. 79. During this eruption Pliny the elder lost his life at Stabie. The hill above Castellammare is called Monte Qui-si-sana, from its proverbial salubrity; it is covered with villas and casini; among the latter is the royal casino of Qui-si-sana, founded by Charles II. of Anjou, and now the property of the Russian prince Lieven. Behind the hill rises the imposing mass of Monte Sant'Angelo, which with its triple crest runs through the Sorrentine peninsula, and forms a conspicuous object between the bays of Salerno and Naples. The town derives its name (signifying 'castle by the sea') from its castle, which was erected by the emperor Frederick II., surrounded by walls and towers by Charles I. of Anjou in the 13th century, and subsequently strengthened by

Alfonso I. of Aragon. The town was sacked by the army of Pius II. in 1461, and again in 1654 by the Duke of Guise. The harbour has a depth of three to four fathoms water; it is surrounded by spacious quays and protected by a mole. In connection with the harbour are a bagnio for galley slaves, and a royal arsenal and dockyard, where the ships of the Neapolitan navy are built. These establishments contribute materially to the prosperity of the town. Castellammare has been celebrated since the time of Galen for its mineral springs, which are very efficacious in gouty and rheumatic affections. There are twelve of these,—four chalybeate, four saline, and four sulphureous,—and they all rise at the base of the Monte d'Auro, within a short distance from one another. They are all of moderate temperature, seldom exceeding 65° Fahr. Great numbers of visitors frequent Castellammare and its delightful neighborhood during the summer and autumn; the temperature is 8 or 10 degrees lower than that of Naples. The town, which gives title to a bishop, and has a handsome cathedral, is well built, partly on the lower slopes of Monte d'Auro but chiefly along a sheltered beach commanding a view of the whole bay of Naples. Some wheat is exported; the chief imports are coal, timber, and machinery. Among the industrial products are maccaroni, silk and cotton goods, and sail-cloth. The fisheries along the coast employ a good many hands. Some excavations made among the ruins of Stabie in 1745 brought to light a few fragments of sculpture, some papyri, and paintings, which are now in the Museum of Naples.

There is another *Castellammare*, or *Castellamare*, in the province of Trapani in Sicily. It is situated on the southern shore of the Gulf of Castellammare, 22 miles E. from the town of Trapani, 27 miles W.S.W. from Palermo, and has about 6000 inhabitants. The town, which is ill-built and dirty, is named from its old decaying castle. It carries on a considerable trade by sea, and has large granaries; the exports are corn, wine, fruit, cotton, manna, shumac, &c. The remains of the ancient Segesta are near Castellammare; they consist of a Doric temple in tolerable preservation, the ruins of a theatre, and a part of the city walls. Castellammare is said to occupy the site of the port of Segesta. [TRAPANI.] The town was half destroyed by a waterspout in December 1851.

CASTELLANE. [ALPES, BASSES.]

CASTELLAZZO. [ALESSANDRIA.]

CASTELLO BRANCO. [BEIRA.]

CASTELLON DE LA PLANA. [VALENCIA.]

CASTELLUCIO. [BASILICATA.]

CASTELNAU. [LOT.]

CASTELNAUDARY. [AUDE.]

CASTILE, the name generally given in English to the ancient Spanish kingdom and provinces of Castilla. [CASTILLA.]

CASTILLA, the name of one of the ancient kingdoms of Spain, which was at first a condado (county), subject in some degree to the kings of Leon. In 1028 the last Conde de Castilla died without issue, and the condado fell by inheritance to his sister, who was the wife of Sancho III., king of Navarra. In 1033 the condado was erected into a kingdom, in favour of Fernando, second son of Sancho, by treaty with Bermudo III., king of Leon, whose wife was sister to the wife of Fernando. The kingdom of Castilla thus established was on the death of Bermudo in 1037 united to that of Leon, and so continued till 1479, when Fernando II. of Aragon succeeded his father, Juan II., as king of Navarra. Fernando in 1469 had married Isabel, queen of Castilla, and the kingdoms thus united under Fernando and Isabel afterwards, on the death of Isabel in 1504, when Andalusia and the eastern kingdoms had been wrested from the Moors, constituted the present kingdom of Spain.

Castilla seems to have been so called from the number of forts or castles (castillos) which had been erected for the defence of the territory recovered from the Moors. The northern part of this territory, which was first recovered, and which is separated from the southern by a mountain range, received the title of *Castilla la Vieja* (Old Castile), and the southern that of *Castilla la Nueva* (New Castile), and they constituted two of the ancient provinces of the kingdom of Spain. They occupy the largest portion of the great central plateau or table-land of Spain, which has an average elevation of 2500 feet above the level of the sea.

CASTILLA LA NUEVA, an ancient province of Spain, one of the two divisions of the ancient kingdom of Castilla, is bounded N. by Castilla la Vieja, S. by Andalusia and Murcia, W. by Estremadura, and E. by Aragon and Valencia. It is situated between 38° 23' and 41° 15' N. lat., 1° and 5° 25' W. long. Its greatest length from east to west is about 250 miles, from north to south about 195 miles. It comprises the following modern provinces:—

Provinces.	Area in Square miles.	Population in 1849.
Madrid	1,315	403,737
Toledo	8,773	330,600
Guadalajara	1,940	199,746
Cuenca	11,295	252,723
Ciudad Real (La Mancha)	7,513	302,394
Total	50,872	1,490,800

Madrid, Toledo, and Guadalajara, occupy the northern portion of the province, Cuenca and Ciudad Real (La Mancha) the southern.

Surface.—The northern boundary of Castilla la Nueva is formed for the most part by a range of high mountains, which, sweeping round from the mountain mass of the Moncayo, on the borders of Aragon, extends in a west-south-west direction to the Tagus in Estremadura. This mountain range at the western end is named the Sierra de Gata, Sierra de Gredos, and Sierra de Avila; north of Madrid it is named the Sierra de Guadarrama, the Somosierra, and the Sierra de Guadalajara. Farther east it is called the Sierra de Deza, which is connected with the lofty sandstone mass of the Moncayo. It forms an unbroken chain which prevents all direct communication northward from Madrid, except by the lofty pass of the Somosierra. Two other roads however extending in a north-east direction cross the Guadalajara range, and uniting before they reach Calatayud, lead to Zaragoza. The summits of several parts of this mountain range are covered with snow all the year. Another mountain range of less elevation than the former commences also at the mountain knot of Moncayo, and entering Castilla la Nueva near the sources of the Tagus, takes first the name of the Sierra Molina and afterwards that of the Montañas de Toledo. The general direction of this series of mountains is from east-north-east to west-south-west, and they divide the province into two extensive plains. The more northern has a uniform inclination from east to west, and is watered by the Tagus and its tributaries. The southern plain, which is separated from Andalusia by the Sierra Morena [ANDALUCIA], has not a uniform inclination, the eastern part having a southern slope, while the western part has a general slope towards the west. The Sierra Molina taking a south-west direction separates into two ridges, one running west and joining the Montañas de Toledo, the other, called the Sierra de Cuenca, running south to the Sierra de Alcaraz, in the south-east of La Mancha.

The mountains consist chiefly of limestones, marbles, clay-slates, and gypsum. The province is rich in minerals, but they have not been wrought to any extent, with the exception of salt, iron, jasper, in the quarries near Cuenca, and quicksilver, in the great mine of Almaden. [ALMADEN.]

Rivers.—The northern plain of Castilla la Nueva, comprising the provinces of Madrid, Toledo, and Guadalajara, is drained by the Tagus (in Spanish Tajo) and its numerous tributaries, which before they reach the city of Toledo flow for the most part in a west-south-west direction across the great plain; but the Tagus, after passing Toledo, runs through a deep and long valley walled in on both sides by lofty mountains, offsets from the Montañas de Toledo on the south, and from the Sierra de Gredos on the north. The principal feeders of the Tagus, in Castilla la Nueva, are, on the northern bank, the Tajuña, the Henares, and the Jarama, which enter the Tagus by one channel near Aranjuez; the Guadarrama, which enters it below Toledo; and the Albroche, which enters it a little above Talavera de la Reyna. On the southern bank the Cedron and the Algodar unite, and fall into the Tagus above the city of Toledo; below, a large number of short tributaries reach it from the Montañas de Toledo. Neither the Tagus nor any of its tributaries is navigable in this province.

The southern plain, comprising the provinces of Cuenca and Ciudad Real, or La Mancha, is drained chiefly by the Guadiana and its tributaries, which have a general western direction, and by the Júcar and its tributaries, which flow to the south and east, passing through Murcia and Valencia to the Mediterranean Sea. The Guadiana rises about 30° N. lat., and after making a curve towards the south, runs north-west past Argamasilla; below this it flows underground for about 15 miles, reappearing through a series of small lakes called the Ojos de Guadiana (Eyes of the Guadiana) a little above the town of Daimiel, near which it receives the Giguela on the northern bank and the Azuer on the southern; thence its course is west till it receives the Cambron from the north, after which it takes a southern direction till the Jabalon enters it from the south-east, when its course becomes west, and having received the Bullache from the north enters Estremadura. It is not navigable in any part of this province. The Júcar rises in the Sierra Molina, and flowing south receives the Jara, and then turning east enters Valencia, where it receives the Cabriel with its tributaries the Moya and Guadazaon.

Climate and Productions.—The climate is dry and healthy, but owing to the elevation of the surface the winter is very cold. In summer the heat is great; violent winds sweep the plains, which then become dry and dusty. The soil is generally fertile, and produces abundant crops of wheat. Water is scarce, the average fall of rain on the table-land being only ten inches. There are few trees, and the plains being without hedges or inclosures of any kind have a cheerless and monotonous aspect. The slopes of the mountains and the valleys afford plentiful pasture to large flocks of sheep. Cattle and horses are also reared, but not in large numbers. Mules and asses are numerous and of great beauty. The principal objects of cultivation besides wheat are olive-oil, wine, fruits, saffron, honey, hemp, silk, and garbanzos, a sort of pea much used for food. The wines of Almagro and Val de Peñas are in high estimation. Wood for fuel is scarce except in the vicinity of the mountain forests, which contain plenty of timber and smaller wood, but are difficult of approach for want of good roads, in consequence of which almost the only means of transport for all kinds of produce is on the backs of mules. The

manufactures consist mostly of coarse cloths and other articles of common use.

Towns.—Madrid is the capital of the kingdom of Spain, of the ancient province of Castilla la Nueva, and of the modern province of Madrid. [MADRID.] *Alcalá de Henares.* [ALCALÁ DE HENARES.] *Arganda*, 16 miles S.E. from Madrid, has a population of 3800. It stands in a fertile district between the rivers Jarama and Tajuña. *Escorial*, 24 miles N.W. from Madrid, stands on the southern slope of the Sierra de Guadarrama: the population is about 1500. The town grew up round the magnificent monastery of San Lorenzo, founded by Philip II. The ground-plan of the building is in the form of a gridiron. It contains a fine collection of paintings; a library rich in ancient and especially in Arabic manuscripts; and vaults in which are the tombs and monuments of some of the kings and queens of Spain. A royal residence is attached to it. The grounds are beautifully laid out, planted with trees, and adorned with fountains.

Toledo is the capital of the province of Toledo. [TOLEDO.] *Alcazar de San Juan*, 57 miles S.E. from Toledo, is a small town, in the neighbourhood of which are mines of iron, and which has saltpetre-works and powder-mills. *Aranjuez*, 25 miles N.E. from Toledo and 28 miles S. by E. from Madrid, stands on the south bank of the Tagus, and contains a royal palace and gardens: the permanent population is about 4000. The situation is beautiful, and is much resorted to in summer. The town contains a large bull-arena (Plaza de Toros), a theatre, and numerous hotels, cafés, and public walks. *Consuegra*, 35 miles S.E. from Toledo, stands on the Amarguilla. There are remains of an ancient castle and Roman antiquities. Coarse woollens are manufactured: the population is about 5000. *Herencia*, 54 miles S.E. from Toledo, stands on the southern bank of the Amarguilla. It is a considerable town, with manufactures of soap and a large weekly market: population, 6400. *Madridejos*, 42 miles S.E. from Toledo, is situated near the northern bank of the Amarguilla, which sometimes overflows and damages the town. It is an ancient well-built town, with two parish churches. It has manufactures of serge and a large annual fair: population, 6000. Saffron is largely cultivated in the vicinity. *Talavera de la Reyna*, 45 miles W. from Toledo, stands on the northern bank of the Tagus. It is surrounded by walls flanked with towers. It contains eight churches and a college, and has manufactures of earthenware, leather, and soap: population, 8000. The Tagus is here crossed by a stone bridge. In the vicinity was fought the battle of Talavera, July 27th and 28th, 1809. *Tarancon*, 60 miles W.N.W. from Toledo, stands near the northern bank of the Rianzares: population, 5000.

Guadalajara is the capital of the province of Guadalajara. It is 35 miles N.E. from Madrid, and stands on the eastern bank of the Henares. The town is large, but ill-built; it contains however several imposing edifices, among which are eight churches, a fine old palace of the Mendozaes, and a royal cloth manufactory: population about 7000. Guadalajara is the chief town of the fine pastoral and wheat district called the Alcarria, which is an Arabic word meaning 'a place of farms.' *Briguega*, 20 miles N.E. from Guadalajara, stands on the west bank of the Tajuña, also in the district of Alcarria. It is an old town, with a population of 5000. *Siguenza*, 40 miles N.N.W. from Guadalajara, stands on the left bank of the Henares. It is an ancient episcopal town, and contains a large gothic cathedral richly decorated in the interior, and containing several fine monuments. There are three other churches, a college, and two hospitals: population, 5000.

Cuenca is the chief town of the department of Cuenca. It is 90 miles E.S.E. from Madrid. It stands on a high hill not far from the Júcar, and has a population of 8000. It is the seat of a bishop, and has a large handsome and richly-decorated cathedral. The town is surrounded by walls, is well supplied with water, and has some woollen factories, paper-mills, and establishments for washing wool. *Iniesta*, or *Hiniesta*, 43 miles S.S.E. from Cuenca, contains a fine parish church, and has manufactures of coarse woollens: population, 4000. There are some jasper-quarries in the neighbourhood. About two miles E. from *Minglanilla*, a village with 1500 inhabitants, there are very extensive mines of pure rock-salt. *Molina de Aragon*, 65 miles N. by E. from Cuenca, stands on a slope overlooking the Gallo, a small stream. It is surrounded by walls, and has a castle. A large part of the town was burnt by the French in 1810. There are manufactures of cloth and soap, and it has a good trade in corn and wool: population, 4000. *Molina* originally belonged to Aragon, but was incorporated with Castilla in 1293. *Requeña*, 70 miles S.E. from Cuenca, is situated on an elevation which overlooks a rich plain. It contains two gothic churches, and has manufactures of woollen, cotton, and silk: population, 11,000. *Utiel*, 9 miles N.W. from Requeña, has manufactures of hemp, linen, silk, soap, and leather: population, 6000.

Ciudad Real is the capital of the province of Ciudad Real, which comprises the greatest part of the old province of La Mancha. It is a city, 97 miles S. from Madrid, and stands in a plain between the Jabalon and the Guadiana, on the road from Madrid to Cordova. It is surrounded by walls, is tolerably well built, and has 10,000 inhabitants. In the Plaza Mayor there is a large bull-arena. The town has three fine churches, a college, and five hospitals, one of which, founded by Cardinal Lorenzana, is a noble building. A great fair for cattle, mules, and asses is held yearly. *Almaden* is celebrated for

its quicksilver-mine. [ALMADEX.] *Almagro*, 12 miles S.E. from Ciudad Real, is situated in a fertile plain, which produces corn, oil, and wine. It is celebrated for its mules, which are considered among the best in Spain, for the sale of which an annual fair is held. It has extensive manufactures of lace: population, 12,000. *Daimiel*, 20 miles N.E. from Ciudad Real, stands in a district where there are extensive salt-marshes. It has manufactures of woollens and linens, and is a flourishing place: the population in 1845 was 9123. *Manzanares*, 27 miles E. from Ciudad Real, stands in a plain. It contains a parish church, hospital, cavalry barracks, and an old castle: population, 8500. *Solana*, 5 miles S.E. from Manzanares, has manufactures of linens and woollens: population, 4400. *Val de Peñas*, 30 miles S.E. from Ciudad Real, is a large straggling town, celebrated for the red wine which is made from the viues grown in the surrounding rocky district: population, 9870.

(Miñano, *Diccionario Geográfico de España*; *Dictionnaire Géographique*; *Maps of the Society for the Diffusion of Useful Knowledge*; *Ford, Handbook of Spain*; *Madox, Diccionario de España*.)

CASTILLA LA VIEJA, an ancient province of Spain, one of the two divisions of the ancient kingdom of Castilla, is bounded N. by the Bay of Biscay and province of Vizcaya, W. by Leon and Asturias, E. by Navarra and Aragon, and S. by Castilla la Nueva. It is situated between 40° 5' and 43° 32' N. lat., 1° 40' and 5° 35' W. long. Its form is very irregular: the greatest length from north to south is about 220 miles, the greatest breadth from east to west is about 130 miles, but in some parts less than 30 miles. It comprises the following modern provinces:

Provinces.	Area in Square Miles.	Population in 1849.
Burgos	7674	234,022
Logroño		185,510
Santander		190,000
Soria		4076
Segovia	3466	155,000
Avila	2570	132,936
Total	17,786	1,037,477

Burgos occupies the western part of the province, Segovia and Avila the south-western, Soria and Logroño the eastern, and Santander the northern.

Surface.—The continuous chain of lofty mountains which extends in a south-western direction from the mountain mass of the Moncayo in Aragon to Estremadura, separates Castilla la Nueva from Castilla la Vieja, and divides the waters which fall into the Tagus from those which fall into the Douro (in Spanish Duero). The names of the different portions of this series of lofty sierras have been mentioned under CASTILLA LA NUEVA. The northern part of the province is crossed by the Cantabrian mountain range, a continuation of the Pyrenees, and this range separates the province of Santander from that of Burgos. The Sierra de Deza extends from the Moncayo in a south-west direction through the province of Soria, and unites with the Somosierra; whilst other mountain groups extend from the Moncayo north-westward towards Burgos, separating the streams which fall into the Douro from those which fall into the Ebro. North-east of the city of Burgos the Sierra de Oca, one of these groups, extends northward and joins the Cantabrian chain, separating the head-waters of the Pisuerga from those of the Ebro. In the south-west the province of Avila passes over the Sierra de Avila into the basin of the Tagus. The greater part of Castilla la Vieja is mountainous, but it has one large plain which is crossed by the Douro and its numerous tributaries, the northern part of it belonging to the department of Burgos, which extends south nearly to the Douro; the eastern part, which is hilly, to that of Soria, while the southern and western portions of it form the greater part of the departments of Segovia and Avila. There are other smaller plains between the different mountain groups, as well as numerous fertile valleys. The general height of the plains is not much less than 3000 feet. The province of Santander is almost entirely covered by high mountains, offsets from the Cantabrian chain; they are furrowed by deep and narrow valleys, and extend northward about 25 miles to the shores of the Bay of Biscay. The coast-line of this province is about 80 miles in length.

The great mountain range which separates the two Castillas consists of primitive rocks; the two great plains on each side of that range are lacustrine deposits of limestone, with fresh-water fossils. The Moncayo is a mass of old red-sandstone and mountain-limestone.

Rivers.—Castilla la Vieja has a general slope to the west, and is drained by the Douro and its affluents; but the portion which is north-east of the Sierra de Oca is drained by the Ebro and its affluents; while the rivers of the province of Santander have all a short and rapid course northward to the sea. The Douro rises in this province, and after flowing southward past the town of Soria takes a western course, and enters the province of Leon. [DOURO.] The Uvero has a southern course, and falls into the Douro on the north side. The Arlanzon has a western course past Burgos; it then turns to the south-west, and having received the Arlanza, which has

a western course past Lerma, enters the Pisuerga, a large tributary which flows south and south-west through the province of Leon. The Riaza, the Piron and Cega (which unite), and the Eresma and Adaja (which also unite), fall into the Douro on the southern side. There are several smaller affluents, which in summer are reduced to mere brooks, but during the rains of spring and autumn become rapid torrents. The Ebro crosses the northern part of the province of Burgos, and forms the north-eastern boundary of that of Soria. It receives the Neba on the northern bank, and the Oca, the Tirou, and the Oja on the southern bank. The principal rivers of the province of Santander are the Deba, the Nansa, the Besaya, the Miern, and the Anson.

Climate and Productions.—The climate is excessively hot in summer, and very cold in winter. A cold boisterous wind blows in October, and snow covers the ground often for three months, and rests on the summits of the mountains for a great part of the year. The surface of the great plain is of a truly monotonous character: it is arid, without meadows or trees, covered with a scanty vegetation, which in summer almost entirely disappears. A considerable quantity of wheat is exported, but care is paid especially to the rearing and feeding of sheep, the number of which is very great. In summer the mountain pastures of the sierras are frequented by countless numbers of migratory sheep, which remain here till the beginning of October, when they commence their return to Andalucía for the winter. The inhabitants live in hamlets, which are often several miles distant from each other. The want of wood for fuel is greatly felt. The offshoots of the mountains on the borders of the plain are covered with underwood and evergreens, and in many places with extensive forests; and in the sheltered parts peas, wine, wheat, and oil are abundantly produced. The manufactures of Old Castile are confined to coarse woollens, cotton, linen, leather, and glass. On the eastern side of the Sierras de Oca the country is very mountainous, but contains many fertile valleys and high plains, in which corn, wine, and all kinds of fruits, except oranges and lemons, are produced. This portion of the province forms the northern part of the provinces of Burgos and Soria. Sheep, mules, pigs, asses, and horned cattle are very numerous, and form the principal wealth of the country. The mountains are cold and wild, but in summer afford excellent pasturage; and in many places they are covered with forests of chestnut, fir, and pine. Iron and other minerals abound, but no mines are worked. In the province of Santander, maize, wheat, and wine of inferior quality are produced. The highlands contain fine pasturage, and in many places are covered with forests of chestnut, oak, pine, and fir. A great deal of butter is made. Goats are very numerous. There are iron-mines, from which a considerable quantity of iron of the best quality is obtained.

Towns.—*Burgos* is the capital of the province of Burgos. [BURGOS.] *Aranda*, 48 miles S. from Burgos, stands on the north bank of the Douro, among plantations of vines. The river is here crossed by a good bridge. The town contains a gothic church and a bishop's palace: population, 4000. *Briviesca*, 25 miles N.E. from Burgos, stands near the west bank of the Oca. It is a square town, regularly built, and walled: population, 2500. *Lerma*, 25 miles S. from Burgos, stands on the south bank of the Arlanza. It contains a fine old palace, built by the Cardinal-Duke of Lerma: population, 2000. *Miranda del Ebro*, 50 miles N.E. from Burgos, is situated on the southern bank of the Ebro, which is here crossed by a stone bridge of six arches: population about 3000.

Logroño is the capital of the province of Logroño. This province is of recent formation. It extends along the right bank of the Ebro, from near Miranda del Ebro to Alfaro and southward to the Sierra de Oca, thus including portions of territory which previously belonged to the provinces of Burgos and Soria. The town of Logroño is about 67 miles E. by N. from Burgos. It is situated on the southern bank of the Ebro, which is here crossed by a strong bridge, built in 1138. It is surrounded by walls, outside of which there are two suburbs. It is a well-built town. There are several churches, a college, and a theatre, and some manufactures of leather, hats, and brandy: population, 7000. The plains about the town are very fertile in corn. *Alfaro*, 37 miles E.S.E. from Logroño, stands on the Alama near the right bank of the Ebro. It is a walled town, contains a collegiate church, and has manufactures of soap and leather: population, 4000. *Arnedo*, 32 miles S.E. from Logroño, is situated in a fertile district, and has a good trade in wine and fruits: population, 3500. *Calahorra*, 27 miles N.S.E. from Logroño, is situated on a gentle eminence, at the foot of which the Cidacos enters the Ebro. It is the *Calagurris* of the Romans, and was a very strong place, celebrated for the sieges by Pompeius and Afranius. It was the birthplace of Quiutilian. Portions of a circus, an aqueduct, a naumachia, and towers, have been traced. It contains a cathedral of mixed gothic. It is now a decayed town: population, 6000. *Haro*, 46 miles E.N.E. from Burgos, is situated at the foot of a hill near the southern bank of the Ebro. It has manufactures of hats, leather, brandy, and liqueurs: population, 6000.

Santander, the capital of the province of Santander, is a large town and sea-port, on the shore of the Bay of Biscay, about 85 miles N. from Burgos. It stands on a headland, and is a well-built town, with a capacious well-sheltered harbour deep enough for large vessels. It

is a place of considerable commercial activity, and carries on an extensive trade with Cuba, to which it exports flour ground at the large mills in the neighbourhood. Wool is exported to England and other countries. The imports consist chiefly of colonial produce. The town is the seat of a bishop, and has a cathedral, three other churches, three hospitals, a prison, college, theatre, and baths. The population in 1845 was 15,236. *Laredo*, 17 miles E. from Santander, is a small town with a harbour formerly deep but now choked up with sand: population, 3000. *Santillana*, 17 miles S.W. from Santander, stands near the coast in a rich valley on the Besaja, a feeder of the Besaya: population, 2000. *Santoña*, 15 miles E. from Santander, is a small fortified town on a peninsular headland in the Bay of Biscay. It has a good harbour, and the town contains an arsenal and barracks, and there are anchor-forges: population, 1000.

Soria, the capital of the province of Soria, is 75 miles S.E. from Burgos. It stands on the right or western bank of the Duero, about 30 miles from its source. It is surrounded by a thick wall, but the citadel, formerly strong, is now in ruins. It has manufactures of silks and a good trade in wool. Much corn is produced in the plains near the town, and numerous sheep are pastured on the slopes of the neighbouring hills: population, 3500. *Agreda*, 30 miles W.N.W. from Soria, stands at the foot of the Moncayo, and is divided into two portions by the Queiles, which is here carried under ground, with the plaza, a fountain, and houses over it: population, 3300.

Segovia, the capital of the province of Segovia, 100 miles S. by W. from Burgos, stands on a rocky eminence between two deep valleys, one of which is watered by the Eresma, and the other by the Clamores. It is a very ancient city, and was the residence of the early kings of Castilla. It is a long city with narrow streets, is surrounded by walls, and contains many remarkable buildings, among which is a vast gothic cathedral, which has a tower 330 feet high. The alcazar, formerly the residence of the Moorish governors, is now converted into a military college. A magnificent Roman aqueduct, consisting of two tiers of arches built of square blocks of granite without cement, is in a state of great perfection. Segovia is the seat of a bishop, has a handsome plaza, a mint, and five churches. There are manufactures of woollen cloths, paper, earthenware, and glass: population, 7700. *San Ildefonso*, 8 miles S.E. from Segovia, stands on the northern slope of the Sierra de Guadarrama. It is famous for its manufacture of glass, and still more so for the splendid palace and grounds of *La Granja*, which is one of the seats of the Spanish kings, and the highest royal residence in Europe, being 3840 feet above the sea-level. The palace grounds include fine gardens, a richly-decorated church, and beautiful water-works. The palace contains many splendid apartments: population of the town 3390. *Sepulveda*, 35 miles N.E. from Segovia, is beautifully situated on the Duraton, an affluent of the Duero. It is an ancient town, now in a decayed state: population, 2000.

Avila, the capital of the province of Avila, is 50 miles S.W. from Segovia. It was formerly a place of importance, but is now decayed. It has still however a fine old cathedral and a Dominican convent, both of which contain beautiful monuments. The extramural church of San Vicente is curious. It is said to have been built in 813. The town has manufactures of woollen: population, 4000.

(*Miñano, Diccionario Geografico*; *Madox, Diccionario de España*; *Ford, Handbook of Spain*; *Macgregor, Statistics*.)

CASTILLON. [GIRONDE.]

CASTLE CAREY. [SOMERSETSHIRE.]

CASTLE COMBE. [WILTSHIRE.]

CASTLE HEDINGHAM. [ESSEX.]

CASTLE RISING. [NORFOLK.]

CASTLE WARD, Northumberland, the south-eastern division of the county, and giving name to a Poor-Law Union. The river Tyne separates the ward and the county from the county of Durham. Castle Ward Poor-Law Union contains 78 parishes and townships, with an area of 85,107 acres, and a population in 1851 of 13,897.

CASTLEBAR, county of Mayo, Ireland; a market, post, and assize-town, and the seat of a Poor-Law Union, in the parish of Aghish and barony of Carra, lies in 53° 51' N. lat., 9° 15' W. long., distant 159 miles W.N.W. from Dublin: the population in 1851 was 4436, besides 1584 in the workhouse and other public institutions. Castlebar Poor-Law Union comprises 19 electoral divisions, with an area of 151,900 acres, and a population in 1851 of 36,746.

Castlebar is situated on the Castlebar or Clydagh River, which, rising in the little lake of Castlebar, within a mile and a half of Clew Bay on the west, flows north-east with the Moy, which it meets in Lough Cullin, to Lough Conn, an inland lake in the centre of the barony of Tirawley, and thence runs northward to Killala Bay by Ballina. The river, winding in a serpentine direction through the town, is crossed by three bridges. The principal street, upwards of half a mile in length, occupies the line of road leading from Westport to Swineford. The public buildings are chiefly grouped together round an open space called the Green, near the entrance from Westport. They consist of the county jail, a large building with a castellated front, a county court-house for Mayo, the church, with a handsome embattled tower, the infirmary, and artillery barracks. A cross street, occupying the line of road from Dublin to Newport, leads by a bridge over the Clydagh to the northern division of the

town. The old jail and infantry barracks adjoin the entrance from the Dublin road by this street. The suburbs on both sides consist of wretched cabins.

The town is of comparatively modern origin; it is stated in the 'Report of the Commissioners on Bogs in Ireland' (1814), that 80 years before that time there was but one cultivated field of about eight acres between Castlebar and the sea. The castle, which gives its name to the place, was a stronghold of the De Burghs. In the wars of the rebellion of 1641 it was held by Sir Henry Bingham for the Parliament, when, being besieged by Lord Mayo and his son Sir Theobald Burke, on the part of the Irish Catholics, he surrendered on terms of being conveyed with his troops in safety to the next garrison town, but after three days' forbearance the fury of the insurgents could no longer be restrained, and Bingham, with all his company, was barbarously massacred. After the old lord's death his son Sir Theobald, then Lord Mayo, was tried for the offence by a special commission appointed for that purpose, 17th December, 1652, and being found guilty and sentenced to death was shot on the 15th January, 1653. Towards the end of the rebellion of 1793, General Humbert, having landed at Killala with a force of not more than 1000 French infantry, reinforced by about an equal number of undisciplined peasants of the country, met at Castlebar and put to rout 6000 British troops commanded by Generals Lake and Hutchinson. The action has since been generally known as 'the race of Castlebar.' The town fell into the hands of the insurgents, by whom it was occupied for about a fortnight, till the surrender of Humbert at Ballinamuck (8th September 1798) put an end to the expedition.

Castlebar has some trade in linens, but the vicinity of Westport, which at a distance of eight miles has the advantages of being a sea-port town and the residence of an enterprising proprietor, operates considerably to its disadvantage. The vicinity is picturesque and well cultivated. Castlebar as a parliamentary borough was disfranchised at the Union. It is the county town for Mayo, and suffered extreme impoverishment in consequence of the potato famine of 1846-7. There is a savings bank in the town.

(*Carte, Ormond*; *Fraser, Handbook*; *Ordnance Survey Map*.)

CASTLEBLAYNEY, county of Monaghan, Ireland, a market and post-town, and the seat of a Poor-Law Union, in the parish of Muckno and barony of Cremorne, is situated in 54° 7' N. lat., 6° 46' W. long.; distant 62 miles W.N.W. from Dublin by road, and 73 miles by the Dundalk and Enniskillen railway. The population in 1851 was 2084, besides 757 inmates of the Union workhouse and other public institutions. Castleblayney Poor-Law Union comprises 21 electoral divisions, with an area of 94,213 acres, and a population in 1851 of 46,511.

The town is prettily situated adjoining the richly planted and picturesque demesne of Castleblayney, within the grounds of which the parish church is situated. There are chapels in the town for Presbyterians, Methodists, and Roman Catholics. The town consists of three principal streets radiating from the market-house, and is substantially built, clean, and airy. Quarter sessions for the county of Monaghan are held here in rotation. There are here a bridewell, and a station of the revenue police. The town is the head-quarters of one of the constabulary districts. The adjoining country is billy and much encumbered with bogs and lakes.

(*Fraser, Handbook*; *Ordnance Survey Map*.)

CASTLECOMER, county of Kilkenny, Ireland, a market-town and the seat of a Poor-Law Union, is situated on the river Dinan, 11 miles N. by E. from Kilkenny. The population in 1851 was 1695, and 29 inmates of the fever hospital. Castlecomer Poor-Law Union contains seven electoral divisions with an area of 57,820 acres, and a population in 1851 of 18,472. The town is neat and well-built, and is sheltered by extensive plantations, which contrast strongly with the bleak sterile country to the north of it. The public buildings include an Episcopal church, a Roman Catholic chapel, a small Wesleyan Methodist meeting-house, a court-house, and infantry barracks. Close to the town is Castlecomer House, which stands on the Comer, a feeder of the Dinan, and facing the ruins of an old castle. A weekly market is held on Saturday.

CASTLEDERG, county of Tyrone, Ireland, a market and post-town and the seat of a Poor-Law Union, in the parish of Skirts and barony of Omagh, is situated in 54° 42' N. lat., 7° 37' W. long.; distant 140 miles N.N.W. from Dublin, on the road from Pettigo to Strabane. The population in 1851 was 596 and 225 in the workhouse. Castlederg Poor-Law Union comprises 14 electoral divisions, with an area of 91,775 acres, and a population in 1851 of 18,741.

CASTLEDERMOT. [KILDARE.]

CASTLEISLAND. [KERRY.]

CASTLELYONS. [CORK.]

CASTLEMARTYR. [CORK.]

CASTLEPOLLARD. [WESTMEATH.]

CASTLEREAGH, county of Roscommon, Ireland, a market and post-town and the seat of a Poor-Law Union, in the parish of Kilkeevan and barony of Castlereagh, is situated in 53° 46' N. lat., 8° 27' W. long.; distant 124 miles W.N.W. from Dublin. The population in 1851 was 1211, besides 1392 in the workhouse and 10 in the bridewell. Castlereagh Poor-Law Union comprises 19 electoral divisions, with an area of 162,363 acres, and a population in 1851 of 45,299. The town is pleasantly situated adjoining the extensive demesne of

Castlereagh, the residence of Lord Mount Sandford. It consists chiefly of one principal street, which is wide and straight and tolerably well built, having the market-house and bridewell at one end and a bridge over the river Suck at the other. Connected with the town are extensive distilleries. Quarter sessions for the county of Roscommon are held at Castlereagh in rotation. There are here a bridewell, a barrack station, and stations of the revenue police and the constabulary of the district. Petty sessions are held in the town.

CASTLETON. [DERBYSHIRE.]

CASTLETOWN. [ISLE OF MAN.]

CASTLETOWN, or CASTLETOWN-BERHAVEN, county of Cork, Ireland, a village and the seat of a Poor-Law Union, in the parish of Killaconagh, and barony of Bere, is picturesquely situated at the head of Berhaven, on the north-west side of Bantry Bay, in 51° 37' N. lat., 9° 54' W. long.; distant 27 miles S.W. by W. from Bantry. The population in 1851 was 1931, including 12 in the bridewell and 941 in the Union workhouse. Castletown Poor-Law Union contains 7 electoral divisions, with an area of 73,444 acres, and a population in 1851 of 18,269. Petty sessions are held at Castletown. There are here a bridewell and a dispensary. Fairs are held on January 1st, Easter Tuesday, May 12th, and September 4th.

CASTLETOWNDELVIN, county of Meath, Ireland, a small post-town and the seat of a Poor-Law Union, in the parish of Castletowndelvin and barony of Delvin, is situated on the road from Dublin to Granard, in 53° 33' N. lat., 7° 2' W. long., distant about 10 miles E. from Castlepollard: population 348 in 1851, with 6 inmates of the bridewell. Castletowndelvin Poor-Law Union comprises 19 electoral divisions, with an area of 74,775 acres, and a population in 1851 of 15,927. The town consists of a single street. In it there are an old church, which has been well repaired, a Roman Catholic chapel, the Union workhouse, a dispensary, a bridewell, and a loan-fund office. It is a station of the county constabulary. Petty sessions are held here monthly, and annual fairs on May 1st, August 1st, and December 1st. The ruins of a castle built by the De Lacys, consisting of the walls in a quadrangular form with towers at the corners, and several other ruined castles, are in the neighbourhood. Clonyn, the seat of the Marquis of Westmeath, is in the vicinity.

CASTLETOWNROCHE. [CORK.]

CASTLETOWNSEND. [CORK.]

CASTRES, a town in France, in the department of Tarn, is situated on the river Agout, in 43° 37' N. lat., 2° 15' E. long., 46 miles E. from Toulouse, and has a population of 19,250, including the whole commune. In the middle ages this town was remarkable only for an abbey, the heads of which were temporal lords of the place. It subsequently came into the possession of the counts of Vendôme, and passed from them by marriage to the counts of Armagnac. In 1567 Castres was taken and pillaged by the Huguenots, who destroyed the cathedral. It became one of the strongholds of the reformed party, but it was reduced to submission in the reign of Louis XIII., and the fortifications demolished. In 1316 Castres was made an episcopal town by Pope John XXII.; the diocese included Upper Languedoc; it was abolished at the Revolution, and the town is now included, with the rest of the department, in the archdiocese of Alby.

The south-eastern part of the town called Villegoudon, is joined to Castres properly so called by two stone bridges. The streets are pretty well built, and have been much improved of late years. The Place-Royale is the principal square. The most important public buildings are—the town-house, formerly the episcopal palace, to which is attached the public library and a beautiful garden; the churches of St. Benoit and Notre-Dame; the two hospitals; the cavalry barracks; the abattoir; and the theatre. Tribunals of first instance and of commerce are held in the town, which has also a chamber of commerce, a college, two theological seminaries, and a Calvinistic church. Castres is surrounded by beautiful shady promenades, called 'Lices,' from their occupying the site of the ditch that formerly surrounded the town, and in the Villegoudon quarter an extensive esplanade is crossed by five shady alleys of trees. In the neighbourhood of the town there is an immense rocking stone on the top of a hill, at the foot of which is a grotto that was once the retreat of St. Dominic.

Castres is a place of great manufacturing industry; for their care and skill, and the finish given to their productions, its artisans are considered the best in the south of France. It is particularly celebrated for its fine wool-dyed cloths, called 'cuirs de laine;' but all other sorts of woollen stuffs are manufactured, as well as linen, soap, leather, glue, and paper. There are also several bleaching, dyeing, and silk-weaving establishments, and iron and copper foundries. The commerce of the town is very considerable.

(*Dictionnaire de la France*; Macgregor, *Statistics*.)

CASTRIES. [LUCIA, ST.]

CASTRO MARINO. [ALGARVE.]

CASTROPOL. [ASTURIAE.]

CAT ISLAND. [BAHAMAS.]

CATALUÑA (in English generally written *Catalonia*), an ancient province of Spain, is bounded N. by the summit-level of the Pyrenees,

W. by Aragon, S.W. by Valencia, S.E. and E. by the Mediterranean Sea. It is situated between 40° 30' and 42° 50' N. lat., 0° 12' and 3° 20' E. long. The shape is triangular, one side extending about 200 miles along the shore of the Mediterranean, another about 150 miles along the frontiers of Valencia and Aragon, and the third about 140 miles along the crests of the Pyrenees. It is governed by a Captain-General, and is divided into the following modern provinces:—

Provinces.	Area in Square miles.	Population in 1849.
Barcelona	12,150	533,695
Tarragona		290,000
Lérida		197,445
Gerona		262,594
Total	12,150	1,283,734

The province of Barcelona comprises the eastern part of Cataluña, Tarragona the southern, Lérida the western, and Gerona the north-eastern.

Surface.—The northern frontier of Cataluña being formed by the crests of the Pyrenees, the whole of the northern part of the province is occupied by lofty ridges, offsets from the mountain chain. These ridges descend southward from the most elevated summits, such as the Malédeta, the Moncal, and the Canigu. From the last-mentioned summit especially, one great ridge, or rather series of ridges, extends through the centre of the province, dividing the waters of the Segre and its affluents, which enter the Ebro, from the Llobregat and numerous other rivers which flow directly to the Mediterranean. The upper portion of this central ridge has no general name. The lower portion, called the Sierra de Llena, runs parallel to the coast at the distance of about thirty miles, and, with the addition of the Monserrat, extends from the Ebro to the Llobregat. Cataluña is thus for the most part a mass of rocky mountains and precipitous valleys. The only exceptions are the rich plains about Lérida, Urgel, and Manresa, and the smaller portions of flat land behind Barcelona, Tarragona, and Tortosa.

Rivers.—The Ebro enters Cataluña at Mequinenza, where it receives the Segre united with the Cinca from Aragon. It has a winding course through this province to the sea below Tortosa. [EBRO.] The Segre rises among the south-western offsets of the Canigu, near Puigcerda, and flowing down the valley of Cerdaña, receives below Urgel the Valira from the valley of Andorra. [ANDORRA.] It then flows south by west through a long valley, receiving several feeders from the ridges on each side, till the Llobregat enters it below the village of Pons, when it takes a western course till it is joined by the Noguera Pallaresa, a large affluent which comes down from the slopes of the Moncal. It then flows south-south-west past Lérida, and receives the Noguera Ribagorzana, another large affluent, which descends from the Malédeta, and for more than fifty miles forms the boundary between Aragon and Cataluña. It soon afterwards takes in the Cinca, and enters the Ebro. The Llobregat and the Cardener both rise on the eastern flanks of the great central series of ridges, and after receiving many small streams unite below Manresa. After the junction the river retains the name of the Llobregat, and passing through a narrow gorge at the foot of the Monserrat, takes a south-eastern direction, receives the Noya on the south-western side, and enters the sea about five miles south of Barcelona. The Fluvià has a short eastern course, and falls into the gulf of Rosas. The Ter has a long semicircular course from the slopes of the Canigu, and passing by Gerona falls into the sea a short distance south of the Gulf of Rosas. The Besos enters the sea north of Barcelona. South of the Llobregat, the Foy, the Gaya, the Anguera, and the Francoli, run in deep channels, and in nearly parallel lines to the coast, the spaces between them being filled up with rocky hills. Between the mouths of the Francoli and the Ebro no river enters the sea. South of the Ebro the Cenja divides Cataluña from Valencia.

Climate and Productions.—The climate is variable, and subject to fogs and rain. In summer the heat in the valleys is excessive, but is tempered on the coast by the sea-breezes. In winter the cold on the mountains is very severe, but mild on the lower tracts along the margin of the sea. The valleys and plains of Cataluña are fertile, but a large proportion of the country is rocky and naturally barren. The system of irrigation is generally followed. Corn enough for home use is not grown, and there is also a want of cattle; but a good deal of wine is produced. Other articles of produce are oil, hemp, nuts, almonds, fruits, silk, and barilla. The forests abound with cork-trees, the bark of which is a considerable article of commerce. Cataluña is rich in mineral wealth, coal, copper, lead, zinc, manganese, cobalt, nitro, salt, and marble being found. It is the chief manufacturing province of Spain, the principal fabrics being woollens, cottons, silks, lace, leather, paper, iron, brandy, and liqueurs. The coasts abound with fish, and the industry of the Catalans renders the fisheries very productive. Since the loss of the Spanish American colonies the trade of Cataluña has greatly declined.

Towns.—Barcelona is the capital of the province of Barcelona. [BARCELONA.] Cardona, 50 miles N.W. from Barcelona, stands on the right bank of the Cardener, close to a hill nearly 500 feet high, which is a mass of pure crystallised salt. The town has a population

of about 3000, and has a castle and long lines of fortifications. It contains a gothic church, in which are some sepulchres of the Cardona family, whose palace also still remains, but in a dilapidated state. *Igualda*, 40 miles W. by N. from Barcelona, stands on an eminence near the northern bank of the Noya. The streets of the older parts of the town are narrow and tortuous, but the Rambla is a wide street, and there is a handsome suburb. It contains a parish church, college, hospital, and cavalry barracks, and has manufactures of cotton and woollen goods, hats, and fire-arms: population, 10,000. *Manresa*, 37 miles N.W. from Barcelona, is situated on an eminence in a fertile and well-irrigated district near the left bank of the Llobregat. It is a very picturesque town, and contains a collegiate church, four parish churches, an hospital, and barracks, and has manufactures of cotton and silk fabrics, broadcloths, ribbons, gunpowder, and brandy: population, 13,400. Between Igualda and Manresa stands the mountain Montserrat, 4000 feet high, celebrated for the large monastery built upon it. *Mataró*, 20 miles N.N.E. from Barcelona, with which it is connected by a railway opened in October, 1848, is situated on a hill which slopes down to the coast, where it has a small harbour with docks. The town is chiefly old, with narrow streets, but has a new quarter, a good principal street (the Riera), and two good plazas. It has a fine parish church, two or three other churches, an hospital, and manufactures of silks, cottons, velvets, ribbons, and leather. Ship-building is carried on, and it is a busy and flourishing place: population, 14,000. *Vich*, 40 miles N. from Barcelona, stands on the slope of a hill in a fertile plain, and consists of several irregular streets branching out from a central group. It is an episcopal town, and has a gothic cathedral. It has manufactures of coarse woollens and cottons: population, 11,000.

Tarragona, the capital of the province of Tarragona, is 55 miles S.W. from Barcelona. It is the *Tarraco* of the Romans, and was in their times a very large and important city and sea-port. It is situated at the mouth of the Francoli, and consists of an upper and lower town. The upper town is surrounded by ancient walls, now partly in ruins, but consisting of huge blocks of stone and of the most solid masonry. The lower town is protected by a range of bastions fronting the Francoli and the harbour. There are also two castles. Ships of war can lie at anchor inside the mole, and outside there is a roadstead. Beyond the rocky heights on which the town is built there is an open country called the Campo de Tarragona. The town contains a cathedral of early gothic architecture, an archbishop's palace, theatre, and barracks. It has manufactures of coarse woollens, cottons, hats, and soap, and a good export trade of nuts, almonds, cork, wine, and brandy: population, 12,000. There are remains of an amphitheatre, circus, aqueduct, and other works of the Romans. Tarragona was taken by the French under Suchet, by siege and assault, June 29, 1811, and they held it till the termination of the war. *Reus*, 8 miles W. from Tarragona, consists partly of an old town, but chiefly of a modern town which has arisen within the present century. It contains several churches, barracks, a theatre, hospitals, and manufactures of silk, cotton, and linen, soap, leather, glass, and spirits. A canal connects it with the small port of Salou, through which it exports nuts and other articles of Spanish produce to England. The population in 1845 was 25,043. *Tortosa*, 50 miles S.W. from Tarragona, stands on the eastern or left bank of the Ebro, 20 miles from the sea. The river up to Tortosa is an estuary, and is there crossed by a bridge of hosts. The town is built partly on the rocky slopes of a hill and partly on the flat ground close to the river. It is strongly fortified by walls and outworks, and is entered by seven gates. It contains a large cathedral, a bishop's palace, a town-hall, a college, an hospital, and a palace of the Valcabra family. There are manufactures of earthenware, glass, and paper, and an active fishery at the mouth of the river. The town was taken by the French under Suchet, by siege and assault, Jan. 1, 1811. The population in 1845 was 20,573.

Lérida, the capital of the province of Lérida, is 95 miles W. by N. from Barcelona. It is the *Ilerda* of the Romans, and when held for Pompeius by Afranius and Petreus was besieged and taken by Cæsar. It is situated near the west bank of the Segre, on the slope of a hill surmounted by fortifications, a tower, and an old cathedral. The Segre is here crossed by a good stone bridge. In the lower town is a cathedral of Corinthian architecture, built in the reign of Fernando VI. It has three other churches: population, 6650. *Cervera*, 35 miles E. from Lérida, is built on an eminence, and contains a large unsightly edifice built by Felipe V. for the university of Lérida, which he transferred to this place, but which has in recent times been removed to Barcelona. The town is well built, and is surrounded by old walls. It contains a gothic church, and there is a fine cloister in the Dominican convent: population, 5000. *Solsona*, 60 miles N.E. from Lérida, contains a cathedral and has manufactures of woollens and hardware: population, 2200. *Urgel*, 75 miles N.N.E. from Lérida and 80 miles N.W. from Barcelona, is situated beneath a spur of the Pyrenees, in the angle just above the junction of the Valira with the Segre. It has been the see of a bishop since the year 820. The hill which overlooks the town is surmounted by a citadel. The bishop is the spiritual head and in a great degree the temporal head of the small republic of Andorra. [ANDORRA.] Population, 3000.

Gerona, the capital of the province of Gerona, is 60 miles N.N.E. from Barcelona. It is a city, and has been the see of a bishop since

786. It is situated at the junction of the Oña with the Ter, is of a triangular form, and lies under a fortified hill called the Monjuich. The streets are narrow, but clean. There are three plazas. The early cathedral was pulled down, and the construction of the present was commenced in 1316. The approach is very imposing, a superb flight of 86 steps leading to the façade. The interior consists of a single noble nave, with a semicircular apsis, and contains some interesting sculptures. There is also a massive half-fortified collegiate church. The town has manufactures of coarse woollen and cotton goods, stockings, soap, and leather: population, 7660. The defence of Gerona, when besieged by the French in 1809, equalled if it did not surpass in heroism and perseverance, that of the two sieges of Zaragoza. *Ampurias*, 23 miles N.N.E. from Gerona, a village in the fertile district called Ampurdan, with a small harbour on the Gulf of Rosas. The town was once important, was called Emporium, and was occupied by a Greek colony from Marseilles about B.C. 545. *Figueras*, 20 miles N. by W. from Gerona, is situated in a rich plain above the junction of the Muga and Manol, which flow westward from the Pyrenees, and enter the Gulf of Rosas. It is a straggling town, but is defended by a large pentagonal citadel strongly constructed on the principles of Vauban, capable of accommodating 16,000 soldiers and vast stores. It was gained by Napoleon in 1808 by a deception. It was recaptured in 1811 by a Spanish partisan with some peasantry, by means of well-managed surprise, but was retaken by the French after a siege of nearly five months, when the ammunition of the garrison was all expended. The town has trade with France, and manufactures of leather and paper: population, 8000. *Hostalrich*, 22 miles S. from Gerona, was an important fortress during the Peninsular war. The town is the see of a bishop, but has a population under 1000. *Olot*, 21 miles W.N.W. from Gerona, is situated between a volcanic hill and the south bank of the river Fluviá. The base of the hill is chiefly basalt. There are several craters of extinct volcanoes in the vicinity. The town has good streets and squares, two parish churches, a cavalry barracks, and an hospital. There are manufactures of woollen and cotton goods, leather, soap, and paper: population, 12,000. *Ripoll*, 32 miles W. by N. from Gerona, is beautifully situated in the angle of the junction of the Fresne with the Ter, in a district of coal and iron, and has manufactures of fire-arms and nails: population, 3000. *Rosas*, 28 miles N.E. from Gerona, the ancient Rhode, was formerly an important place, strongly fortified, and carried on a brisk trade by means of its fine harbour in the Gulf of Rosas; it is now a mere fishing village with 2200 inhabitants.

History.—On the decline of the Roman empire in the west, the territory of this part of Spain was seized by the Goths and Alans, when it is said to have been called Goth-Alania, whence by corruption came the present name Cataluña. During a part of the 8th century Cataluña was held by the Moors, till they were driven from it by Charles Martell and afterwards by Charlemagne. The counts of Barcelona from that time were the rulers of Cataluña and the French county of Roussillon; but when Raimond-Beranger, Conde de Barcelona, was affianced to Petronila, the infant heiress to the crown of Aragon, Cataluña was annexed to Aragon, and he governed both with the title of Principe (prince). Cataluña afterwards became one of the provinces of Spain, with the title of Principality. It held its municipal privileges till the Wars of the Succession, when it supported the Archduke Charles of Austria, after which it was formally deprived of its cortes and liberties by the conqueror, Felipe IV.

The dialect of Cataluña is a mixture of the Romance language, or *Languo d'Oc*, with the Spanish.

(Miñano, *Diccionario Geográfico*; Madoz, *Diccionario de España*; Ford, *Handbook of Spain*; Napier, *Peninsular War*; Vacani, *Storie delle Campagne e degli Assedi degli Italiani in Spagna, dal 1808 al 1813*, 3 vols. 4to., with Atlas, Milan, 1823-5.)

CATAMARCA, one of the upper provinces of the Argentine Confederation, South America, is bounded N. and N.E. by the province of Tucuman, E. by Santiago, S. by Cordova, and S.W. by La Rioja, and comprehends the little visited country between the mountain ranges of the Sierra of Aconquija and Ambato on the east, and the Andes on the west. The inhabitants do not exceed 30,000. The country consists of a principal valley, Catamarca, from which the province derives its name and in which most of the inhabitants are settled; and of some other valleys, running between mountain ranges south-east and north-west, and terminating at their southern extremity on the borders of the Gran Salina, being thus separated from the other inhabited countries by high mountains and deserts. The rivers which water these valleys are lost in the Gran Salina. The climate is sultry, especially when the south winds blow, which come over the desert. Maize and wheat are raised to a considerable extent, but cannot be exported over the mountains. The province sends only cotton and red pepper (dried capsicums) to the adjacent countries, the latter chiefly to Buenos Ayres, where it is extensively used. The present capital is *Catamarca*, or *San Fernando del Valle de Catamarca*, in 27° 28' S. lat., whose population is stated to be 4000. The first capital, called London, being founded at the time when Philip II. of Spain married Queen Mary of England, was destroyed by the Indians. [ARGENTINE CONFEDERATION.]

CATANIA, a province in Sicily, is bounded N. and N.E. by the province of Messina, N.W. by that of Palermo, W. by

Calatanissetta, S. by Siracusa, and E. by the sea. It is 55 miles in length from south-east to north-west, and about 35 miles in its greatest breadth. The area is 1761 square miles, and the population in 1851 amounted to 379,991. The province includes the region of Mount Ætna, and extends along the coast from the mouth of the Giaretta to that of the Alcantara, a distance of about 30 miles, including the windings of the Gulf of Catania. The Alcantara and the Dinamari and Nettuni Mountains form the northern boundary. An offset from Ætna runs north-west above Bronte, joins the Nettuni Mountains, and forms the watershed between the basin of the Giaretta and the Alcantara. Westward the province extends to the source of the Traina, a feeder of the Giaretta, and to the limestone mountains of Enna, which run southward from the Nettuni range, and form the watershed between the Giaretta and the Salso. The lower offsets of the mountains of Noto, which consist of tertiary formations, bound the basin of the Giaretta and the plain of Catania, on the south. A great part of the surface is covered with ramifications of the mountains named; these are, with the exception of the region of Mount Ætna, already noticed [ÆTNA], generally bare of timber. The valleys have a very fertile soil, and are very productive. The basin of the Giaretta is drained by several streams—the Adriano, the Traina, the Dittaino, and the Ghirisa, which unite in the lower part of the plain of Catania and form the Giaretta, the ancient Simœthus, which falls into the Gulf of Catania. The plain of Catania, 20 miles long and 15 miles broad, is the largest plain in Sicily, and produces a great quantity of corn. The lower hills and valleys which belong to the volcanic mass of Ætna produce excellent wine. Oil, silk, liquorice, and all kinds of fruit are the other chief products of the country.

Towns.—*Catania*, the ancient *Catana* or *Catanè*, the capital of the province, is situated on the sea-coast, at the foot of the most southern offsets of Ætna, in 37° 29' N. lat., 15° 5' E. long., and has a population of about 55,000. Though not the largest it is the handsomest town in Sicily. Catania was a colony (B.C. 750) from Naxos in Sicily, which Naxos was founded by a colony from Chalceis in Eubœa. (Thucyd., vi. 3.) It suffered greatly in the wars between the Carthaginians and Syracuse, and was taken in the first Punic war by the Romans, who plundered it of its riches and statues. Among other things a sun-dial from Catania was sent to Rome and placed on the rostra. In ancient as well as modern times Catania has suffered greatly from earthquakes and the eruptions of Ætna, one of which is recorded by Thucydides (iii. 116) as having taken place B.C. 425; and he mentions another as said to have happened B.C. 475. The great earthquake of 1693 destroyed it, but the town has been completely rebuilt since that time. The streets are wide and regular, and the buildings are handsome, being mostly built of lava, faced with limestone and enriched with marble. Lava forms the pavement of the streets, and a natural mole of lava shelters the harbor. The university of Catania, which was founded by Alfonso of Aragon in 1445, is frequented by about 500 students, and has a good library, which is open to the public.



Coin of Catania.
British Museum. Actual size. Silver. 260 grains.

The splendid Benedictine monastery and church of San Nicolò d'Àrena is, after Mafra in Portugal, the largest and finest monastic building in Europe, in connection with which are a museum and a gallery of paintings. The cathedral of Catania, rebuilt since the earthquake of 1693, and dedicated to Santa Agata, is a vast building: the front is ornamented with fine granite columns taken from the theatre of the ancient city. In the square before it is a fountain, with an elephant made of lava, bearing on its back a small granite obelisk. Among the other buildings must be mentioned the senate-house, about thirty convents, and nearly double that number of churches, some of which are magnificent structures; the government Monte-di-Pietà; the several charitable institutions, such as hospitals, and houses for the destitute; the Magdalene asylum; and the Gioeni academy, which has rich collections in natural history, and publishes its memoirs. The port of Catania, which in ancient times was large and much frequented, is now very small, having been almost filled up by the lava-floods of 1693. It is only fit for small craft, by means of which however a considerable export trade is carried on in wine, corn, oil, almonds, figs, soda, manna, silk, cheese, macaroni, amber, (which is found at the estuary of the Giaretta), lava, and snow from Ætna, which is sent to Malta. The principal industrial products are silk goods and articles made from lava. Catania ranks as the third city in Sicily: it gives title to a bishop, and has a Gran Corte, or upper tribunal for civil and criminal causes, and a board of trade.

The remains of ancient Catania include a large theatre, an amphitheatre, a small theatre, ruins of baths, and fragments of an aqueduct. All these are of Roman construction, the Greek city having probably been destroyed by some of the earthquakes to which the city has in all ages been exposed. Catania was the birth-place of Charondas, the legislator and philosopher, and of the poet Stesichorus. The coins of Catania are of very superior execution.

Caltagirone, the second town in the province of Catania, is built on two hills joined together by a bridge; it has several palaces, a royal college, a town house, Monte-di-Pietà, and about 20,000 inhabitants. Good pottery is made in this place. Caltagirone is a corruption of Calata Girone. The Arabic word Calata, or Kalat, signifies an eminence, and was given as a prefix to the names of several towns in Sicily during the occupation of the island by the Saracens. The town gives title to a bishop, and is 30 miles S.W. from Catania.

Nicosia, 35 miles W.N.W. from Catania, is built on two hills, and has about 13,000 inhabitants, who live chiefly by agriculture, and by trading in wine, oil, corn, and cattle. In the neighbourhood are two petroleum and several sulphureous springs, a mine of rock-salt, and beds of clay-slate and iron pyrites.

Acì Reale stands on a lava rock, which projects into the sea at the eastern base of Ætna, with a castle above it on a higher cliff, which forms a little town by itself. The town is built chiefly with lava: it has many good buildings, a small harbour, and an active trade. Linen, silk, and cutlery are the chief industrial products. Acì Reale is famous for its mineral waters. In the neighbourhood are pointed out the cave of Polyphemus and the grotto of Galatea. The town stands on the site of the ancient *Acium*, which took its name from the river Acis, now the Finne-di-Jaci, which rises under a rock of lava and has a short course to the sea below Acì Reale. The river Acis is celebrated in fable, which ascribed its origin to the blood of the youthful Acis, who was crushed under an enormous rock by his rival Polyphemus. Acì Reale has a population of about 20,000.

Paternò, the ancient *Iybla Major*, is situated at the foot of Ætna, 10 miles W.N.W. from Catania, and has about 10,000 inhabitants. It gives the title of prince to a Sicilian family, who are the richest land-holders in Sicily. The town contains many convents and churches, and has a fruitful territory, yielding abundance of oil, wine, flax, hemp, and timber, the chief articles of trade. There are warm chalybeate springs at Paternò.

Aderò, 16 miles N.W. from Catania, is situated at the western base of Mount Ætna, near the Simeto or Adriano, and has above 6000 inhabitants. It is surrounded by walls, and contains several churches and convents. The principal church stands in a fine square, and its façade is decorated with columns of lava. Aderò occupies the site of the ancient *Adranum*, founded by Dionysius the Elder B.C. 400; but a temple to the old Sicilian god Adranus was built on the spot from very ancient times. (Diodorus, xiv. 37.) Adranum was taken by Timoleon in B.C. 345, and by the Romans in the first Punic war. Parts of the ancient walls and towers built of large square blocks of lava still remain, as well as massive substructions of the temple of Adranus, and Roman baths.

San-Filippo-d'Argiro, 27 miles W.N.W. from Catania, situated on an isolated rock near the right bank of the Traina, has a ruined Saracenic castle, several churches and convents, and about 7000 inhabitants. The neighbourhood of the town produces much saffron of good quality. San-Filippo occupies the site of the ancient *Aggrium*, the birthplace of Diodorus Siculus, and one of the most ancient cities in Sicily. It was a Sicilian and not a Greek city. About B.C. 400 it was under the government of a prince named Aggris, and had a population of 20,000 citizens (Diod. xiv.) It was long in alliance with the kings of Syracuse, and continued a wealthy city under the Romans. In the middle ages it became celebrated for a church (St. Philip's), a place of pilgrimage from all parts of the island. Scarcely any remains of antiquity are now visible. The territory of San-Filippo has been in all ages celebrated for its fertility in corn.

Bronte has been already noticed. [BRONTE.]

Among the other places are—*Nicolosi*, situated high up the southern flank of Mount Ætna, population about 3500; and *Traina*, a poor place in the interior, situated on a hill, 8 miles E. from Nicosia: population, 7500. At Traina is the oldest monastery (it is said) in Sicily.

CATEAU-CAMBRESIS, LE. [NORD.]

CATELET, LE. [AISNE.]

CATHAY. [CHINA.]

CATHERINGTON, Hampshire, a village and the seat of a Poor-Law Union, in the parish of Catherington and hundred of Finchdean, in Petersfield division of the county, is situated in 50° 55' N. lat., 1° 1' W. long.; distant 10 miles N. by E. from Portsmouth, and 62 miles S.W. from London. The population of the parish in 1851 was 1094. The living is a vicarage in the archdeaconry and diocese of Winchester. Catherington Poor-Law Union contains five parishes and townships, with an area of 12,265 acres, and a population in 1851 of 2298. The parish church, dedicated to St. Catherine, is an ancient edifice. It has a tower, which contains five bells. In the parish are two endowed schools for boys and girls, and a National school for boys. The population is chiefly agricultural.

CATMANDOO, or KHATMANDU. [NEPAUL.]

CATON, Lancashire, a village and the seat of a Gilbert's Poor-Law Incorporation, in the parish of Lancaster and hundred of South Lonsdale, is situated on the left bank of the river Lune, in 54° 4' N. lat., 2° 41' W. long.; distant 5 miles N.E. by N. from Lancaster. The population of the township of Caton with Littledale was 1434 in 1851. The living is a perpetual curacy in the archdeaconry of Lancaster and diocese of Manchester. Caton Poor-Law Incorporation contains 17 parishes and townships, with an area of 46,212 acres, and a population in 1851 of 9044.

The village of Caton existed at an early period; as far back as 1266 there was a church here, of which the Norman doorway still remains. The present church is a modern gothic building. There are a chapel for Wesleyan Methodists and a National school. Cotton, silk, and flour mills give employment to many of the inhabitants. The scenery of Caton Vale is much admired.

CATRINE. [AYRSHIRE.]

CATSKILL MOUNTAINS. [ALLEGHANY MOUNTAINS.]

CATTARO. [DALMATIA.]

CATTEGAT, or KATTEGAT. [BAL TIC SEA.]

CATTERICK. [YORKSHIRE.]

CATTYWAR, or KATTYWAR, a district occupying a portion of the interior of the Guzerat peninsula, is bounded N. by Jhallawar, E. by Goelwara, S. by Babreawar, and W. by Soret. The surface towards the north is irregular; in the south are jungles. The soil is variable; but sand prevails on the plains, where it is mixed with reddish-coloured rock, of which the hills are mainly composed. The hills are deficient in trees. The more usual kinds of produce are wheat and a few coarser grains. Many horses are reared, the breed being considered among the best in India. The inhabitants, who are not numerous, are known by the name of Catties. The men are an athletic race, and such of the females as are allowed to live grow up with a considerable share of personal beauty. The Catties are worshippers of the sun. The men are robbers by profession. The country is divided among numerous tributary chiefs and princes, each exercising independent power within the limits of his own division. There are 10 talooka, or districts, with 216 chiefs in all. Some of these chiefs are under the direct authority of the British, but the greater number are subject to the Guicowar, although these are also placed under the control and management of the Company's officers, by whom the tribute is collected and accounted for to the Guicowar. This arrangement has been found necessary in order to preserve peace in the country. The interference of the British extends to criminal as well as financial matters. All the rights which the British possess in Cattywar have been acquired from the Peishwa and the Guicowar; from the former by conquest, from the latter by mutual arrangement. Those rights have been considered as limited to the collection of tribute and the preservation of peace; in other respects the Cattywar chieftains have been left to exercise all the functions of government within their own immediate territories. The entire district includes an area of 19,850 square miles, with a population of 1,468,900. The total yearly revenue amounts to about 450,000*l.*; the annual tribute to the British government is nearly 105,000*l.*

CAUCASUS (*Kavkas*, *Goffkas*), an extensive mountain chain extending between the Black and Caspian seas, and forming part of the boundary between Asia and Europe, but in ancient times belonging entirely to Asia. The general direction of the range is from W.N.W. to E.S.E. It begins on the shore of the Black Sea, at a short distance south of the town of Anapa, at about 44° 40' N. lat., 37° 10' E. long., and terminates on the west coast of the Caspian Sea, in the peninsula of Apsheron, 40° 20' N. lat., 50° 20' E. long. The length of the range is about 700 miles; the width varies from 60 to 150 miles; the area covered by it is about 56,000 square miles, or nearly the surface of England and Wales taken together.

The Caucasus, in some summits in the centre of the range, rises to a greater height than the Alps, while its extremities subside into mere hills. The highest summit, formed by the rocky mass of the double peaked Mount Elbruz, in 43° 20' N. lat., 42° 30' E. long., rises to between 17,000 and 18,000 feet above the sea, and stands quite isolated, being surrounded by low and marshy ground. That portion of the range which extends west of Mount Elbruz to the shores of the Black Sea is called the Black Mountains, to distinguish them from the snowy crests and peaks of the more eastern part of the range. They do not rise to a great elevation. Along the shore the hills seldom exceed 200 feet in height. East of Mount Elbruz there are numerous summits and ridges which rise above the snow-line. Mount Kasbek, 42° 50' N. lat., 44° 20' E. long., is 16,000 feet high. It is of volcanic origin. The granite and porphyry of which its nucleus is composed are covered with volcanic deposits, and on the east they are flanked by limestone and clay. Farther east occur other high summits, as Mount Tersh, Shah-Dagh, and others, all of which are above the line of perpetual snow, which is here between 10,000 and 11,000 feet above the sea. On the peninsula of Apsheron the chain has only the appearance of moderate hills.

The offsets of the Caucasus approach near to the Black Sea, and often advance close to its shores between Anapa and the mouth of the Ingour, a distance of about 250 miles. Within these limits the shores of the Black Sea are high, bold, exposed, and rocky, except at a few points. On the Caspian side the mountains seldom approach the

shores. From the region of Mount Elbruz several mountain ranges run north-eastward and eastward, separating the head streams of the Kuban, the Kuma, and the Terek. Another offset on this side runs between the two arms of the Koi-Su, which inclose the country of the Avars, or Avari, to within a few miles of the Caspian. Farther south the mountains do not approach the Caspian nearer than about 30 miles, but the rock on which Derbent is built, which forms the extremity of another offset, is less than two miles from the Caspian. Another plain follows, which however only extends from 10 to 15 miles inland, and terminates about 12 miles N. of 41° N. lat. The remainder, including the peninsula of Apsheron, is rather high, and the country is hilly. The country that extends between the crest of the Caucasus and the shore of the Caspian from the lower Terek to some distance south of Kuba forms the territory of Daghestan, the greater part of which is covered with mountains, the abode of the Lesghis, who, led on by their prophet-chief ShamyI, have arrested the progress of Russian conquest in the Caucasus since 1831.

The Caucasus is connected with only one great mountain system, that of the Taurus. On the southern side of the range an offset branching off from the central mass, near 41° N. lat., and dividing the sources of the Faz, or Rion (Phasis), from the basin of the Kur (Cyrus), unites the Caucasus with the mountains north of the central table-land of Armenia, and with the Lazistan Mountains, from which it is divided at its western extremity only by the lower course of the Choruk-Su. [ARMENIA.] The plain to the south of this range is traversed by the Kur and slopes gradually to the Caspian. The plain, or steppe, which extends along the north side of the Caucasus, hardly contains an elevation that deserves the name of a hill; between the innermost corner of the Sea of Azof and the Gulf of Kuma, in the Caspian, it sinks so low that it is probably nowhere 120 feet above the Black Sea. The offsets of the Caucasus towards the steppe are by far the most numerous, and sometimes extend to 100 miles; but here as well as to the south the mountains terminate so abruptly that even many of the summits, which attain no great elevation, are nearly inaccessible.

As in the Alps glaciers are common in the higher parts of the Caucasus, and the scenery of both mountain systems has a strong resemblance, except that in the Caucasus there are no lakes, with the exception of a small one on Mount Khoi. There are however several marshes.

The sides of the mountains are furrowed by innumerable valleys, most of which have a very fertile soil, yielding abundance of corn of every sort, the cultivation of which is carried to a height of about 8000 feet above the level of the sea. The lower valleys produce cotton, flax, rice, tobacco, wine, and indigo. The mountain sides are covered with noble forests. The Caucasus presents a great variety of climates, according to the elevation. An arctic winter prevails on the summits while an Italian summer is felt at the foot of the range; the harvest is ripe below while the first buds of spring are only bursting in the forests on the mountain top. But with the exception of Mingrelia the climate is generally very healthy. The most beautiful and rare flowers enamel the meadows and mountain pastures. Wines and silk, both of superior quality, are the chief commercial products. Madder is extensively grown, and saffron is gathered. The Kur and the Phasis carry off the chief part of the drainage of the southern slopes of the Caucasus into the Caspian and the Black seas respectively. On the northern side the principal rivers are the Terek and the Kuban, the former rising in Mount Elbruz and flowing north-west into the Black Sea; the latter rising in Mount Kasbek and running first north and then east into the Caspian. The Kuma, another large tributary of the Caspian, carries off the streams that rise in the mountains between Mounts Elbruz and Kasbek. All the rivers abound in fish. Most of the other rivers are mere torrents, confined generally to narrow beds, and running rapidly towards the sea through a stony soil; but in spring they inundate their banks in some parts to a great extent.

In the Caucasus the argali (*Ovis Ammon*) is found, which was long considered peculiar to the table-land of Central Asia and the mountains of Siberia. This mountain range is also the native country of the common and gold pheasants. The auroch, a species of ox, is still found in some parts of the Caucasus, and fur-bearing animals abound in all the forests. The Caucasian breed of horses is highly esteemed for their speed, hardness, or temperance in food: they are used only for war and plundering excursions. Oxen are used for the plough. In Daghestan, owing to the mountainous nature of the country, horses are scarce, but small vigorous asses are numerous and the principal beasts of burden. Camels of the common and of the white species are used to carry loads in most of the Caucasian countries. The mountains abound in goats, chamois, and izards. The wild goat, or touri, also is hunted; to escape its pursuers it precipitates itself down frightful chasms and precipices, alighting on the tip of its horns, which, as well as its neck, are of great strength. Numerous flocks of sheep are kept in some parts of the Caucasus, especially in the Circassian country, where mutton is the principal article of food: of the wool good cloth is manufactured. The heaths, underwoods, forests, and plains abound with game. Vultures and eagles are numerous in the high mountains. Jackals, wolves, and bears are the principal carnivorous quadrupeds; the bears often devour the grapes. In mineral riches Caucasus is probably superior to the Alps. Traces of gold

are found, and silver and copper mines are worked near Tiflis. Iron abounds in many places, and is worked by the natives in a rude way.

The chain of the Caucasus is composed chiefly of secondary rocks, interspersed with those of volcanic origin. There are no active volcanoes however, but earthquakes happen sometimes. Naphtha or petroleum occurs in no part of the globe in such abundance as on the peninsula of Apscheron [BAKU]; but it is not limited to this part of the Caucasus: it occurs in several places on its southern side, and on the north, on the island of Taman, formed by the two branches of the Kuban. The mud-volcanoes of the Caucasus seem to be connected with the naphtha, for they occur only in the neighbourhood of it, especially on the island of Taman, and between Baku and Nawagi, where they are conical hills of earth, without any signs of vegetation on them. From a small crater on their summit issues the thick mud, with which a quantity of naphtha is mixed. Sometimes these eruptions are attended with flames, and followed by a gushing out of columns of water. On the north side of the Caucasus there is a great number of hot, warm, and sulphuric springs. Salt lakes abound on the peninsula of Apscheron.

The intercourse between the countries south and north of the Caucasus is carried on by two roads. The most eastern runs along the shores of the Caspian Sea, sometimes close to it, and sometimes traversing the plains which lie between the sea and the eastern extremity of the mountains. This road unites Baku with Derbent, and the latter town with Kizlar, or Kisliar, on the Terek. Though this road does not pass over high mountain ridges, it is not much frequented, a circumstance which may be attributed to the difficulty of crossing the numerous rivers which in spring and summer after the melting of the snow cover a considerable part of the plains with water. Its insecurity against the attacks of the Caucasian freebooters is another strong reason for its being disused for commercial purposes. The inundations also make the plains along the Caspian for the greatest part of the year very unhealthy.

The most frequented road, and the only one practicable for carriages, is that which traverses the Caucasus nearly in its centre, beginning on the south at Tiflis, on the banks of the Kur, and terminating on the Terek at St. Ekaterinograd, whence it branches off eastward through Modzok to Kizlar, and westward through Gheorghievsk and Stavropol to the mouth of the Kuban. The road on leaving Tiflis runs along the Kur, through a plain; it then ascends the valley of the small river Arakui, or Aragbor, which grows narrower as the road advances northward. Near its upper extremity is the small fortress of Passanaur, erected for the protection of travellers against the Caucasian mountaineers. Between this fortress and another, Kazibeg, lies the highest part of the pass, which is more than 8000 feet above the sea; and on each side of it mountains rise several thousand feet higher, the summit of Mount Kasbek being at a short distance from it to the westward. In other places the road runs on the edge of an abyss, which descends as far under it as the mountains rise above it. This pass preserves the same character as far as the fortress of Dariel (from which it has received the name of the *Pass of Dariel*), and even to that of Vladikaukas, where the valley of the Terek may be considered to begin. The part farther south is hardly more than a mere ravine. The difficulties encountered on this road by the traveller are often increased by the fall of avalanches, or the sudden swelling of the torrents which descend from the high mountains.

Both these roads were known to the ancients. That which passes the town of Derbent was called *Porta Albanica*, from Albania, the name of the country watered by the lower course of the Kur. It was sometimes also called *Caspian Pyle*. The Pass of Dariel was called by the ancients *Porta Caucasica*, and sometimes *Sarmatica Pyle*.

There is probably no country on the globe, of so small an extent, which contains such a number of different nations as the valleys of the Caucasus. The natives speak at least seven different languages; but the Tartar is understood by most of the tribes, except the Leaghia. Strabo states that in his time at least seventy languages were spoken on the Caucasus. The Abhasians, who with their numerous tribes are in possession of the southern declivity of the range between the Black Sea and Mount Elbruz, differ from the other tribes of the Caucasus in features, and in their peaceful disposition, which has made them willingly submit to the Russians, with the exception of two tribes—the Oubikhs and the Tchigates—who form the confederation of the Chapsouks; these have frequently repulsed the Russians, and seized their forts. The Abhasians were partially converted to Christianity in the time of Justinian; they are now chiefly pagans, and pay particular veneration to the oak. They are the most ancient inhabitants of the Caucasus. The northern side of the range, with its numerous valleys, is occupied by the Circassians, or Tcherkesses, among whom the tribe of Adigho holds the first rank, as being the purest in race. The Adigho are pagans, with the exception of the chiefs, who profess Islamism. Anapa is their chief town. Blood-fends are indulged in among these and all the Caucasian peoples to an extent and with a ferocity unknown even in Corsica; there are families at feud from time immemorial. The Circassians are said to number 700,000. The centre of the range, on both sides of the Pass of Dariel, is in possession of the Ossetes, who are said to be descendants of the

Alani. The Leaghians, or Longhis, the most powerful of the Caucasian mountaineers, occupy the greatest portion of the range east of the Pass of Dariel, and approach the peninsula of Apscheron. They are a warlike people, the terror of all their neighbours and the most determined enemies of Russia. Their number is about 400,000. The Tchechenes inhabit the country between the lower Terek and the Kuma. They number only about 25,000, but are in a state of almost constant revolt against Russia. The extensive mountain tract bordering on the north of Mount Tersh is inhabited by the numerous tribes of the Kisti, or Misheghies. The country about the sources of the Terek, to the east of Mount Elbruz, is called Kabardah, and is subject to Russia. In the plains south of the Caucasus live the Mingrelians, Imeritians, and Georgians. All these nations differ in their language. As great perfection of form and an ancient origin have been attributed to the inhabitants of this region, the highest rank in ethnological classification has been termed the Caucasian race.

Besides these aboriginal tribes, many others of foreign origin are met with in the valleys of the range. The most numerous are the Tartars. There are also Cosaks and Magyars, and on the south of the Caucasus, about Tiflis, there are several German colonies.

The Greeks became vaguely acquainted with the name and position of the Caucasus at an early period, as the expedition of Jason and the mythology of Prometheus evidently show. Herodotus (i. 203) describes the general position of the Caucasus with sufficient accuracy. The detailed description in the 11th book of Strabo evidently shows that in his time the country to the south of the Caucasus was well known. This was owing to the expedition of Pompey, who, in his war with Mithridates, advanced to the very foot of the great range, and got possession of both banks of the Cyrus and Araxes.

(Reinegg, *Beschreibung des Kaukasus*, Petersburg, 1796-7; Koch, *Karte des Kaukasischen Isthmus*, Berlin, 1850; *Reise nach den Kaukasischen Isthmus*, Stuttgart, 1843; Ivan Golovin, *The Caucasus*, London, 1854; Pallas; Klaproth; Biberstein; Eugelhardt, &c.)

CAUDEBEC. [SEINE-INFÉRIEURE.]

CAUX. [SEINE-INFÉRIEURE.]

CAVAILLON. [VAUCLUSE.]

CAVAN, an inland county of the province of Ulster, Ireland, bounded N. and N.E. by Fermanagh and Monaghan, S.E. and S. by Meath, an angle of Westmeath and Longford, and W. by Leitrim, is situated between 53° 46' and 54° 18' N. lat., 6° 32' and 8° 3' W. long. Its length from south-east to north-west is 51 miles, its breadth from north to south 28 miles; the area is 746 square miles, or 477,360 acres, of which 375,473 are arable, 71,918 uncultivated, 1325 in plantations, 502 in towns, and 22,142 under water. The population in 1851 was 174,071.

Surface, Hydrography, Communications.—Cavan is the southernmost county of Ulster. Stretching across the narrowest portion of Ireland, it extends on the east to within 18 miles of the Irish Sea at Dundalk, and on the west to within 20 miles of the Atlantic at Sligo Bay. The county is in form an irregular oval. It rises into mountains of considerable height at its north-western extremity, but the greater part of its surface, although high and very irregular, presents no elevations of any consequence. Cuilcagh, the highest point of the north-western chain (2188 feet), forms with the remainder of the Ballinageeragh Mountains the southern boundary of the basin of Lough Erne, the chief feeders of which lake flow from this county. From Lough Dawnagh on the south, where Cavan joins the county of Longford, the river Erne flows northward through Lough Oughter and Belturbet to the borders of Fermanagh, where, after nearly bisecting the county of Cavan, it enters Upper Lough Erne at the same point with the Woodford, a considerable stream which also crosses the county a little farther north from a small lake on the borders of Leitrim. The Erne between Lough Oughter and Upper Lough Erne receives the waters of the Annalee, which, rising from two lakes on the borders of Monaghan, runs nearly west through the flat country between Cootehill at its source and Butler's Bridge near its confluence. Lough Sheelin and Lough Ramor, or Virginia Water, are also two considerable lakes in this county: the first discharges its waters through Westmeath by the Inny, a feeder of the Shannon; the second through Meath by the Blackwater, a tributary of the Boyue. The chief lines of road are in the direction of the greatest length and breadth of the county, from Navan in Meath on the south-east to Belturbet and Florence Court on the borders of Fermanagh on the north-west, and from Killeshandra on the south-west to Cootehill on the north-east; the point of intersection is at Cavan, the assize town, situated very nearly in the centre of the county. The line of navigation of the Ulster Canal connects Belturbet with Lough Erne and Lough Neagh.

Geology, Mineralogy, &c.—In geological distribution Cavan belongs to the clay-slate and grauwaacke district. Indurated schist constitutes the surface rock throughout the whole of the county, except where it is overlaid by tabular masses of millstone grit in the mountainous district on the north-west and in the low ground containing the lakes of Upper Lough Erne, which is occupied by an extension of the limestone central plain. A patch of granite about seven miles square occurs in the eastern part of the county, and assists in explaining the broken character of the hills in that district, the presumption being

that the granite extends at no great distance under the grauwacke from this point to the neighbouring granite district of Mourne, and that to this is owing the contortion of the incumbent strata. The county boundary also includes a small portion of the coal-field extending from the northern extremity of Meath to the south of Armagh by Kingscourt. The whole county is rich in minerals. At Swanlinbar and Cuilcagh among the Ballynageeragh Mountains are mines of coal and iron; lead and silver ore have been discovered near Ballyconnell in the same district; lead and copper occur near Cootehill: coarse manganese and ochres are found in abundance in different parts of the county. A strong vein of blind coal occurs at Shercock on the east of the county, and at Ballyjamesduff, a village between Virginia and Cavan, indications of a vein of very good quality have been discovered. Excellent marl, fuller's-earth, potter's-clay, and brick-clay are abundant throughout the county. There are numerous mineral springs, particularly at Swanlinbar and at Kingscourt, on the eastern border of the county. The spring at Kingscourt feeds a remarkable lake on the summit of an adjacent hill. The lake is about half a square rood in area, has no outlet, preserves a constant level, and never freezes. The water for about six feet from the surface is pure and clear, but lower down becomes gradually more and more muddy, until at a depth of about thirty feet it approaches to the consistence of tar. In this mud the healing virtue of the spring is supposed to reside, and it has been found particularly efficacious when applied as poultices in scorbutic complaints. On the plain below is a chalybeate spring which is also resorted to by invalids, but has no connection with the pool above. The name of this pool in Irish is Lough-leighagh.

Soil, Climate, Agriculture.—The soil of Cavan is described as being naturally cold, spongy, and inclined to rushes, but with proper draining and manuring it can be rendered highly productive. In the district watered by the Erne and its feeders the crops are luxuriant, and the face of the country rich and pleasing. In the mountainous country the soil is very poor; plough-husbandry is totally unknown; and the crops, which consist of potatoes and a poor sort of black oats, are put in with a narrow-bladed spade called a sloy. In this part of the county there are few roads, and the slide-car is still in general use. In both districts the dry-stone fence is almost universal, quick and thorn hedges being only found on the farms of the wealthy or in the demesnes of the great resident proprietors. Such demesnes are however numerous, and some of them, particularly those of Lord Farnham near Cavan town and of Mr. Coote at Bellamont Forest near Cootehill, are of great extent and of remarkable beauty. The farms in general are very small.

The linen trade has declined here for some time back, but its revival in Antrim and Down is likely to render it again the staple trade of all Ulster. The ground in the lowlands is chiefly under tillage, but there is a little wheat grown; potatoes, oats, and flax are the principal crops raised. Grain is almost universally sown in ridges in consequence of the wetness of the soil. The corn-mills are small and for the most part attached to the several estates, as manor-mills, at which the tenants are obliged by their leases to grind. The breed of cattle is poor; but great exertions have been made of late years by spirited resident proprietors to introduce an improved stock, as well as to improve the system of farming by the example of green crops and stall feeding.

Divisions, Towns, &c.—Cavan is divided into 8 baronies, namely, Tullaghaw, comprising the mountainous district on the north-west; Tullaghonoho on the south-west; Clannaghon and Castleraghan on the south; Clonkes on the east; Tullaghgarvey on the north-east; Upper Loughtee on the north; and Lower Loughtee in the centre.

CAVAN, the county town; BAILIEBOROUGH, BELTURBET, and COOTEHILL are described in separate articles. The following smaller towns and villages may be noticed here:—

Arvagh, population 698, is finely situated near Lake Garty amid picturesque scenery. The shores of the lake have been planted by the proprietor, the Earl of Gosford, who has also considerably improved the town. The soil in the vicinity is fertile. Besides the Episcopal church, which was built in 1821 and enlarged in 1827, there are chapels for Roman Catholics and Presbyterians. Petty sessions are held in the town, and there is here a sub-inspector's station of the county constabulary. Ten fairs are held in the course of the year. *Ballyconnell*, population 503, on the Woodford River, 5 miles W. from Beltrubet, occupies a romantic situation at the foot of the mountain Ligavregra, or Slieve Russel. The town contains a court-house, a bridewell, and a dispensary. Petty sessions are held here, and there is a monthly fair. *Ballyhaise*, population 356, on the Annalee River, 3 miles N.N.E. from Cavan, possesses a market of some importance, held weekly. The market-house is of peculiar construction, being raised upon a series of arches. Nine fairs are held in the course of the year. Several large corn-mills are in the vicinity of the town. *Ballyjamesduff*, population 875, is beautifully situated in a hilly district about 11 miles S.S.E. from Cavan. It is a post-town, and possesses a weekly market. The soil in the neighbourhood is fertile. Petty sessions are held, and there is a monthly fair. The Episcopalians, Roman Catholics, and Presbyterians have places of worship. Near the town is an extensive lake. *Bawnboy*, although only a village of not more than twenty houses, is noticed here as it has been made the

seat of a Poor-Law Union: the Union comprises 25 electoral divisions, with an area of 104,504 acres, and a population in 1851 of 29,404. *Bellananagh*, or *Bellinagh*, population 681, about 4 miles S.S.W. from Cavan, is situated in a very pleasing part of the county, the neighbourhood being adorned with numerous mansions and diversified by wood and water. Petty sessions are held, and there are ten fairs in the course of the year. *Killashandra*, population 932, besides 235 in the auxiliary workhouse, is picturesquely placed on a ridge of low elevation, surrounded by a series of beautiful lakes which flow into Lough Oughter. A considerable amount of farm produce is disposed of at the weekly market; some coarse lineas also are sold, but there is little other trade. The Episcopalians, Presbyterians, Methodists, and Roman Catholics have places of worship. The town consists chiefly of one wide street. Petty sessions are held, and there is a sub-inspector's station of the county constabulary. Seven fairs are held in the course of the year. *Kingscourt*, population 1143, situated near the junction of the counties of Meath, Cavan, Louth, and Monaghan, consists chiefly of one long irregular street, and contains an Episcopalian church, a chapel for Roman Catholics, and several good dwelling-houses. Petty sessions and a monthly fair are held in the town. At the weekly market a good deal of agricultural produce is sold. *Mullagh*, population 368, is pleasantly situated on the road from Virginia to Moynalty. The site is elevated, and in the neighbourhood are several lakes, the banks of which are clothed with wood. There are places of worship for Episcopalians and Roman Catholics. Fairs are held on the last Friday in January, March, May, July, September, and November. Petty sessions are held on the second Tuesday of the month. *Shercock*, population 359, a rural village on the road from Dublin to Clones, about 6 miles N.N.W. from Kingscourt, has an Episcopalian and a Roman Catholic chapel, and a dispensary of the Bailieborough Poor-Law Union. Petty sessions and a monthly fair are held at Shercock. Near the village is Lough Shillan, a picturesque lake; and there are several good country seats, of which one named Shinan is surrounded by several small loughs. *Swanlinbar*, population 406, is situated on the Cloddagh rivulet in a wild district of country near the border of Fermanagh county, about 9 miles S. by W. from Euniskillen. There are here places of worship for Episcopalians, Roman Catholics, and Wesleyan Methodists. Petty sessions and a monthly fair are held, and there is a dispensary of the Bawnboy Poor-law Union. The constabulary force has a station here. A chalybeate spring near Swanlinbar enjoyed for some time considerable reputation, and attracted numerous visitors. *Virginia*, population 859, is a small town, prettily situated on the shore of Lough Ramor. The town has been much improved in appearance of late years. It forms part of the extensive estate of the Marquis of Headfort. The church is a small but remarkably neat edifice. There is a fever hospital. Petty sessions and a monthly fair are held. Lough Ramor with its small wooded islands presents much varied and beautiful scenery.

The county returns two members to the Imperial Parliament. It is in the north-west circuit. The assizes are held at Cavan, where are the county jail and the county infirmary. Quarter sessions are held at Bailieborough, Ballyconnell, Cavan and Cootehill; petty sessions at twenty-one places. There are bridewells at Bailieborough, Ballyconnell, and Cootehill. The district lunatic asylum, to which the county is entitled to send 33 patients, is at Armagh. Fever hospitals are at Bailieborough, Cavan, Cootehill, and Virginia. There are 21 dispensaries in the county. Cavan possesses a savings bank, and there is a loan-fund at Ballyjamesduff. The Poor-Law Union workhouses are at Bailieborough, Bawnboy, Cavan, and Cootehill. There are barracks at Cavan and Beltrubet, the former of which is in the military district of Belfast. The police force, numbering in all 419, is divided into 8 districts, comprising 39 stations: Cavan is the headquarters. Revenue police-stations are at Bailieborough and Beltrubet.

History and Antiquities.—Cavan was anciently called Breifne (*Brenny*), by which name it is distinguished in the history of the Conquest as being part of the territory of O'Rourke, the seduction of whose wife by Dermot Mac Murrough was the proximate cause of Strongbow's invasion. It was first made shire-ground about 1590. On this occasion the boundaries of the baronies were fixed, and the whole county was divided among the native possessors, five baronies being allotted to different members of the O'Reilly family alone, with a reservation of 220 beeves as a chief rent to the crown. In 1610 the O'Reillys having forfeited their possessions by rebellion, Cavan reverted to the crown. On the general plantation of Ulster, the introduction of a civilised and industrious population had the best effects in reclaiming the country, which up to this time had been waste and barbarous. Castles were built on all the chief undertakers' portions; the foundations of towns were laid at Virginia, Beltrubet, and Ballyconnell, and of numerous considerable villages throughout all the low part of the county. The principal settlers were Hamiltons, Auchmuties, and Bailies, from Scotland; Lamberts, Parsons, Ridgways, and Butlers, from England and the pale; and of the reinstated Irish the chief were O'Reillys. There is very little of interest connected with the subsequent history of Cavan. In this county are remains of raths, tumuli, castles, and religious houses, but none of any extent or historical interest. On the hill of Cuilcagh near Swan-

linbar, in the north-west part of the county, was formerly the place of inauguration for Macguire, lord of Fermuagh; the spot is still regarded with superstitious veneration by the peasantry.

(*Statistical Survey of Cavan; Pynnar, Surrey; Thom, Irish Almanac; Ordnance Survey and Geological Map.*)

CAVAN, county of Cavan, Ireland; the county town, a market and post-town, and the seat of a Poor-Law Union, in the parish of Urney and barony of Upper Longhtes, is situated in 53° 58' N. lat., 7° 13' W. long., and 70 miles N.W. from Dublin. The population in 1851 was 3254, besides 1266 in the Union workhouse and other public institutions. Cavan Poor-Law Union comprises 33 electoral divisions, with an area of 160,662 acres, and a population in 1851 of 67,005.

Cavan is situated in a rich and well cultivated vale adjoining the extensive demesne of Farnham. The principal public buildings are grouped together on the western out-skirt of the town. They consist of the county jail and court-house, both spacious and handsome buildings, the barracks, and a remarkably fine parish church. A public pleasure-ground, bequeathed by the late Lady Farnham for the recreation of the inhabitants, forms a pleasing feature in connection with this part of the town. The houses of the main street occupying the line of road from Dublin to Enniskillen are old and irregular, and the suburbs consist for the most part of wretched cabins. The Roman Catholic chapel is a large commodious building. There are also Presbyterian and Methodist meeting-houses; a fever hospital, and an infirmary. The Royal Endowed school, founded in the reign of Charles I., has a variable income arising from the rent of 800 acres of land; the number of scholars in 1851 was 26. Five exhibitions or Queen's scholarships, of 25*l.* a year each, have been attached to this school by the Board of Education. The neighbourhood is rich and closely cultivated; but the farms are very small, and much land is wasted by injudicious inclosures. Petty and quarter sessions are held in the town, and there are six fairs in the course of the year. A weekly market is held on Tuesday: a considerable retail trade is carried on in the town.

(*Fraser, Handbook of Ireland; Ordnance Survey Map.*)

CAVERY. [HINDUSTAN.]

CAWNPOOR, a district in the province of Allahabad, lies between 26° and 27° N. lat., 79° and 81° E. long.; bounded N. by the Etaweb district, W. and S. by the Junna, and E. by the Ganges. The soil of about two-thirds of the district yields maize, barley, and wheat, turnips, cabbages, and other European garden vegetables, with grapes, peaches, and several other fruits which have been introduced by European residents; the sugar-cane also grows luxuriantly. Irrigation is much practised.

From a statistical report recently made concerning this district, it appears that the number of townships it contains is 2279; its area is 1,480,101 acres, of which 781,173 are cultivated, 163,563 fit for cultivation, free-land 44,015, and 499,350 acres are wholly unproductive. The government assessment amounted to 2,046,197 rupees, or about 2½ rupees per acre on the cultivated portion of the land.

Cawnpoor, the capital of the district, situated on the right bank of the Ganges, in 26° 30' N. lat., and 80° 13' E. long., is one of the largest military stations in India. The old town stands a short distance north-west of the modern buildings, and higher up the Ganges. The principal street is composed of well-built brick houses two or three stories high, with balconies in front; the other parts of the town consist of mean houses built in a straggling manner. There are many handsome shops in the principal street containing generally an abundant supply of European goods, which are sold at moderate prices. Along the banks of the Ganges are many detached houses, or bungalows, the residences of the officers stationed at Cawnpoor.

The other principal towns are *Resoolabad*, in 26° 40' N. lat., and 79° 40' E. long., about 30 miles S.S.W. from Kanoje: *Jaujemow*, in 26° 26' N. lat., and 80° 16' E. long., 8 miles S.S.E. from the town of Cawnpoor; and *Akbarpore*, in 26° 23' N. lat., and 79° 52' E. long., 25 miles W.S.W. from Cawnpoor.

CAWOOD. [YORKSHIRE.]

CAXTON, Cambridgeshire, a decayed market-town in the parish of the same name and hundred of Long Stow, and conjointly with Arrington the seat of a Poor-Law Union, is situated in 52° 12' N. lat., 0° 5' W. long., distant 10 miles W. from Cambridge, and 50 miles N. from London by road. The population of the parish of Caxton, inclusive of 180 persons in Caxton and Arrington workhouse, was 630 in 1851. The living is a vicarage in the archdeaconry and diocese of Ely. Caxton and Arrington Poor-Law Union contains 26 parishes and townships, with an area of 48,853 acres, and a population in 1851 of 11,058.

The church, dedicated to St. Andrew, consists of a nave and north aisle, of the late perpendicular, and a chancel of the early English style, with a tower at the west end, embattled and surmounted with pinnacles. There is a chapel for Baptists. The inhabitants are chiefly employed in agriculture. A market was granted to the town in 1247, but it was discontinued about the middle of last century. A small fair is held in October.

CAYENNE. [GUYANA.]

CAYMAN. [JAMAICA.]

CAYSTER, RIVER. [ANATOLIA.]

CELANO, the ancient *Fucinus*, a lake in the Abruzzo in Italy. It

is remarkable as being almost exactly in the centre of the Italian peninsula and the only lake of any considerable extent in the Central Apennines. The lake is nearly oval in shape, about 20 miles round, 2176 feet above the level of the sea, and situated in a basin without visible outlet and screened on all sides by mountains. To the north rises Monte Velino with its double peak to the height of 8180 feet. To the east and west are limestone ridges steep and rocky, and of much inferior elevation. On the north-west a moderate acclivity separates the lake from the valley of the Salto, an affluent of the Tiber. The lake it appears was traversed in ancient times by a river called Pitonius, which must be the Giovenco, the only perennial stream of any magnitude that now enters the lake; and its surplus waters were carried off by subterranean channels, the opening of one of which is still visible and called La Pedogna, a name clearly derived from Pitonius. The outlets however being insufficient the lake frequently overflowed the low grounds along its banks. To obviate the evil Julius Cæsar designed to cut a tunnel from the lake into the valley of the Liris; his plan however was not carried into effect till the reign of Claudius, who celebrated the opening of the tunnel with great magnificence. In the middle ages the tunnel became obstructed by the falling in of stones and earth, and many attempts have been made since the year 1240 to render it efficient in preventing inundations of the lake, but without success. Between 1745 and 1830 the encroachments of the lake had swallowed up 10,000 acres of the best land in the Abruzzo. Important repairs however were made at the expense of the king of the Two Sicilies under the direction of Signor de Rivera (who examined the tunnel in detail and described it in 1825), and the ancient tunnel was so far rendered available as to carry off a constant though not a large stream of water into the Liris, or Garigliano. The area covered by the lake according to a late official survey is 36,315 acres. A company was formed at Naples in September 1852 to effect the complete drainage of the lake.

Considered as a remnant of antiquity, the tunnel of Claudius is an exceedingly interesting object. At the opening of it near the lake, the tunnel is about 30 feet high and 23 feet broad; but it contracts considerably as it advances through the mountain. Its whole length is three miles. It is in part cut through the solid limestone of Monte Salviano, and in part through a chalky earth that has little tenacity. Wherever the latter substance occurs the tunnel is supported by masonry of admirable workmanship. To admit light and air the Romans sunk shafts from above. The entrance to this tunnel is about a mile and a half to the south of the town of Avezzano on the north-west shore of the lake. [ABRUZZO.]

CELBRIDGE, county of Kildare, Ireland, a small town, and the seat of a Poor-Law Union, partly in the parish of Kildrought and barony of Salt North, and partly in the parish of Donaghcumper and barony of Salt South, is situated in the midst of a highly improved country on the river Liffey, 11 miles W. from Dublin, by the Great Southern and Western railway, from the Hazelhatch station of which it is one mile distant. The population in 1851 was 1674. Celbridge Poor-Law Union comprises 15 electoral divisions, with an area of 86,839 acres, and a population in 1851 of 22,543. The river Liffey flows for several miles in the neighbourhood of Celbridge through demesne lands of great beauty. A handsome stone bridge crosses the Liffey at Celbridge. The town contains some good houses, and presents rather a neat appearance. Petty sessions are held, and there are a savings bank, and a fever hospital. Fairs are held on the last Tuesday in April, September 8th, and November 7th. In the town is a large woollen factory, erected in 1805, but not recently at work.

CELEBES, a large island of singular shape in the eastern seas, lying between 2° N. lat. and 6° S. lat., 119° and 125° E. long. The extreme length of the island from north to south is nearly 500 miles. The coast on the south and east is so deeply indented by three bays as to give to the whole island the appearance of four large limbs or peninsulas united together. The central and widest part of the island lies between Tolo Bay on the east and Macassar Strait on the west, and measures about 130 miles. Tomini or Gorong-talu Gulf, the most northern of the three, separates the peninsula that project eastward. The other two peninsulas take a southern direction, and are separated by Sewa or Boni Gulf. The area of Celebes is about 70,000 square miles, and the population is estimated at between 2,000,000 and 3,000,000.

This island is separated from Borneo by the *Strait of Macassar*. This strait, which is 300 miles long from north to south, is about 120 miles broad, except at its northern termination, where it is contracted to half that breadth by Kaninagan Point on the eastern coast of Borneo. The gulf, which is formed by the northern peninsula of Celebes, by the north-eastern coast of Borneo, by the Sooloo Archipelago, and the island of Mindanao, is called the *Sea of Celebes*.

The island is divided into several small states, many of which are actually or virtually subject to the Dutch; but some of them, as Mandhur on the western coast and Boni to the east of it, and near the centre of the island, maintain a show of independence. The native sovereignties are all subdivided under numerous feudatory chiefs. The Dutch have exercised sovereignty over the island since 1660 when they drove out the Portuguese. Their principal settlements in Celebes are—in the north Menado, which comprises the northern peninsula: population in 1849, 183,000. In the south

Macassar or Mankasser, embracing the two southern peninsulas, population 1,569,000; and Ternate, which comprises the more southern of the two peninsulas that run eastward with several small islands to the east of it, and is probably named from its being included in the jurisdiction of the governor of the island of Ternate; population, 97,329. The chief towns of the Dutch are Menado and Kema in the north peninsula, both of which were made free ports in 1849, and Mankasser (5° 9' S. lat., 119° 36' E. long.,) which was declared a free port in 1846. Mankasser has good anchorage; the harbour is defended by Fort Rotterdam. There is a considerable trade with China, and Chinese form the bulk of the inhabitants of the town.

The centre of the island, the nucleus of the four peninsulas, is a mountainous tract from which four arms branch out into the four peninsulas respectively, and terminate in promontories. The central district is composed of primitive rocks; but in the northern and in the southern peninsula the soil is in many parts of volcanic origin, and in the Menado district there are said to be some active volcanoes. In the low parts of the island there are extensive grassy plains.

The island contains three considerable rivers. The largest, the Cbinraua, rises in the Wadjo country, in the centre of the island, crosses the kingdom of Boni, and discharges itself by several mouths into the Gulf of Sowa. This river is navigable to a considerable distance by ships of 300 or 400 tons burthen; the native proas ascend much farther; to a fresh-water lake called Sedenveng. The river Boli has a bar at its mouth with three fathoms' water; it discharges itself on the north coast after a long and winding course. The third river has its mouth on the west coast to the south of Macassar. Besides these rivers, there are numerous small streams, especially on the south coast, which are navigable for a few miles by the vessels of the country.

The island is for the most part fertile, but agriculture is generally in a very backward condition, the inhabitants preferring navigation, fishing, and commercial pursuits to the more quiet employments of farming. The Bugis, or inhabitants of Boni, are excellent seamen: their proas visit every part of the Indian Archipelago, and even go as far as the Gulf of Carpentaria for the purpose of taking the tripang, or sea-slug, which is a profitable article of trade with China. They also convey the native produce of the Eastern Archipelago to Singapore, where they exchange their cargoes for British and Indian manufactures, calicoes, ironware, gunpowder, and muskets.

The principal productions of the island are rice, maize, cassava, yams, sago, sugar, with some cotton and tobacco. Timber is not abundant, but in some parts there are said to be forests of teak. Iron mines are worked, yielding metal of an excellent quality. The island also contains gold mines, which have never been regularly worked. The whole coast abounds with fish, and the number of turtle taken is so considerable that 50,000 pounds weight of tortoise-shell is annually shipped. The women of the country weave cotton-cloths for domestic use, and for export to Java and other of the Indian Islands, and they manufacture also great numbers of variegated mats, which are in large demand all through the archipelago.

The Macassar horses are larger, stronger, and more mettlesome than those of Java, to which island many hundreds of them are annually taken for sale.

The population of Celebes is composed of several distinct races, speaking different languages. The Bugis are the most numerous, and include a large proportion of the coast population. The Macassar language is spoken by several tribes who inhabit the south-western limb. The Mandharena language prevails in the central part of the island and towards the western coast: the Manados inhabit the north-eastern limb. The centre of the island towards the north is inhabited by Turajas or Horaforas, who are supposed to be the aborigines of Celebes. Of all these people the Bugis are the first in enterprise and intelligence; they engross nearly all the carrying trade of the Indian Archipelago, the trading of other tribes being almost entirely confined to coasting voyages. The Bugis are esteemed to be very fair dealers, and they often embark in extensive speculations. The Portuguese formed a settlement at Macassar in the year 1512, and it was not until after that time that the Mohammedan religion was introduced. In 1603 the Raja of Macassar with the whole of his subjects embraced Mohammedanism, and soon after compelled their weaker neighbours to follow their example. In 1811 the Dutch authority in Celebes was transferred by conquest to the English, who ceded the island to the Dutch at the peace of 1815.

(Stavorinus, *Voyages*; Forrest, *Voyage*; Crawford, *Indian Archipelago*; Count Hogendorp, *Comp. d'Ét. sur l'Île de Java, &c.*; Report of Committee of House of Lords on the Affairs of India.)

CELLE. [LUNEBURO.]

CENTRAL AMERICA is the central portion of the long isthmus which unites North and South America, and extends from 8° to 18° N. lat., and from 82° to 94° W. long. Its greatest length is about 1000 miles; its width varies from 100 to 300 miles; the area is about 150,000 square miles. During the Spanish occupation Central America, with the exception of British Honduras and the Mosquito coast, formed the kingdom of Guatemala. For a short time after the declaration of independence by the Spanish colonies, this country was united to the Mexican kingdom of Iturbide; but in July 1823 a

new constitution was published, according to which the states of Guatemala, Honduras, Nicaragua, and San Salvador were formed into a federal union under the title of the United States of Central America. The union was however soon dissolved, and the several states became independent. At the present time Central America comprises the independent states of GUATEMALA, SAN SALVADOR, HONDURAS, NICARAGUA, and COSTA RICA, the settlement of HONDURAS BRITISH, and the protected MOSQUITO KINGDOM, which will be found described under their respective titles, and to which we refer for the physical geography &c. of this portion of America.

CEPHALONIA. [IONIAN ISLANDS.]

CEPHISSUS. [ATTICA; ATHENS.]

CERAM, an island in the Eastern Archipelago, between 3° and 4° S. lat., 123° and 131° E. long., is next to Gilolo the largest of the Molucca Islands. Its length from east to west is 230 miles, and its greatest breadth above 50 miles. The estimated area according to Captain Keppel ('Indian Archipelago') is about 10,000 square miles. The population is said to be close upon 30,000. The peninsula of Hoewamochil or Little Ceram is united to the island at its western extremity by a narrow isthmus, called the Pass of Tamoen. A chain of mountains runs through the island from east to west, ranging between 6000 and 8000 feet above the sea, and 'sending down innumerable streams to the sea.' The vegetation is everywhere luxuriant, and the trees gigantic. Cloves and nutmegs grow wild, but the Dutch take great pains to extirpate them in order to preserve their monopoly in the spice trade. A cluster of small islands off the east end of Ceram is called the Ceramlaut Islands. To the west of it is the mountainous island of Booro, which gives name to the Booro Strait between the two islands. At a short distance from the south coast are Amboyna and the Banda Islands. The soil in the valleys of Ceram appears to be fertile. The peninsula of Hoewamochil formerly produced great quantities of cloves and nutmegs, but the trees were destroyed by the Dutch about 1657. The cabinet wood known in commerce as Amboyna wood is for the most part the produce of Ceram, which contains also several large forests of the sago palm. The inhabitants of Ceram who are of the Papuan race, have been described by Dutch writers as the most bloodthirsty cannibals in the Indian Archipelago. The Malays have several settlements along the coast; they trade extensively with China in sea-slugs. They hoist the Dutch flag, and assist the Dutch in maintaining their protective system. Owing to the jealousy of the Dutch the interior of Ceram is very imperfectly known. Beautiful shells are found on the shores of this and the neighbouring islands.

The larger islands of the *Ceramlaut* group are called Great Keffing (or Kessing), Little Keffing, and Ceramlaut. They all lie on a coral bank covered with between two and four fathoms' water. In climate and productions the Ceramlaut Islands do not materially differ from the Moluccas, of which they are considered to constitute a portion. Many of these islands are well cultivated and very populous. The villages are large, and each of them constitutes an independent community, governed by a chief. These small states are continually quarrelling, and often at war, and the villages are fortified by walls of considerable height and thickness; and other walls have been erected to mark the respective boundaries. The inhabitants are Mohammedans, and almost every place contains a mosque.

The *Goram Islands*, a group immediately east of the Ceramlaut, consist of three rather large islands, Goram, Manowolko, and Salawako. These are remarkable as constituting a link in the commercial intercourse of the world. By means of these alone the inhabitants of Papua or New Guinea export the produce of their country, and are supplied with those articles of foreign merchandise which are in demand among them. Each island has a district on the coast of Papua with which it carries on an exclusive commerce. If the inhabitants of another island went to visit it for commercial purposes it would be the cause of a war. The inhabitants of Papua, on their side, are also disinclined to enter into a commercial intercourse with any persons except those who commonly visit them. The articles which are exported by them from Papua are slaves, nutmegs, tripang, tortoiseshell, and edible birds'-nests; and the imports consist of guns, gunpowder, small cannons, cotton-cloth, corals, Chinese goods, iron, hardware, and some smaller articles. The imported goods are sent by the islanders to Bali and Sumbauwa, or the Bugies carry them to Singapore.

The Ceramlaut, as well as the Goram Islands, are frequently visited by English and American whalers, which export a considerable quantity of nutmegs, mace, and cloves, obtained by harter for guns, gunpowder, cotton-cloth, and some other articles. The Dutch consider these islands as forming a portion of their widely-spread dominions in the Indian Archipelago. From time to time they send a vessel there to settle the disputes which have arisen between the small independent states. The commercial intercourse between Banda and the Ceramlaut and Goram groups is very great. The agricultural produce of the islands finds a ready market at Banda, where sago, oil, cocoa-nuts, live stock, wood, areca-nuts, and betel are imported in large quantities.

(Koffi, *Reize door den weinig bekenden zuidelijken Molukschen Archipel*; Captain Keppel, *Visit to the Indian Archipelago*, London, 1853).

CERDAGNE, FRANÇAISE, a district ceded by Spain to France, in 1660, in virtue of the treaty of the Pyrenees. It was included in Roussillon and now forms the *arrondissement* of Prades, and part of the *arrondissement* of Ceret in the department of Pyrénées-Orientales. It is a mountainous country, and contains abundant upland pastures. Its capital was Mont-Louis. [PYRÉNÉES-ORIENTALES.]

CERET. [PYRÉNÉES-ORIENTALES.]

CERIGO. [IONIAN ISLANDS.]

CERILLY. [ALLIER.]

CERNE ABBAS, Dorsetshire, a market-town and the seat of a Poor-Law Union, in the parish of Cerne Abbas, in the combined hundred of Cerne, Fotcombe, and Motbury, and in the Bridport division of the county, is situated on the little river Cerue, a feeder of the Frome, in 50° 48' N. lat., 2° 48' W. long., distant 7½ miles N. by W. from Dorchester, and 127 miles W.S.W. from London by road. Dorchester is 141 miles from London by railway via Southampton. The population of the parish of Cerne Abbas in 1851 was 1343. The living is a vicarage in the archdeaconry of Dorset and diocese of Salisbury. Cerne Poor-Law Union contains 20 parishes and townships, with an area of 43,237 acres, and a population in 1851 of 7777.

Cerne Abbas formerly possessed a Benedictine abbey of great antiquity; the abbey was rebuilt and endowed in the 10th century. The only remains are a stately square embattled tower, or gate-house, which is in a dilapidated condition. Of two stone bridges which cross the river Cerne here, one, of ancient construction, was formerly an appendage of the abbey. The parish church is a fine building in the perpendicular style, with a tower which has octagonal turrets and pinnacles. There are places of worship for Wesleyan Methodists and Independents, and National and British schools.

Cerne Abbas is pleasantly situated in a vale, surrounded by steep chalk hills. The town is of small extent. The property being for the most part let out on lives, old houses are being replaced by new ones as the leases fall in. There is little trade in the place. Tanning, glove making, malting, and brewing afford employment to some of the inhabitants. The market is on Wednesday for corn and provisions; there are three annual fairs. About 15 acres of land have been laid out in allotment gardens for the poor, which have proved of considerable benefit.

On the southern slope of Trendle Hill, a little to the north-west of the town, is a colossal figure of a man bearing a club, carved in the chalk. The figure is about 180 feet in height; the outlines are about two feet broad. On the same hill are the site of an ancient fortification and a barrow; and several barrows are on other hills.

[Hutchins, *History of Dorsetshire; Communication from Cerne Abbas*.]

CETTE, a flourishing sea-port town in the department of Hérault, in France, is built on the slope and at the foot of a hill (the ancient *Mons Sétius*, about 600 feet high), on a tongue of land between the shore-lake of Thau and the Mediterranean, which are united by a canal that runs through the town and terminates in the harbour. It stands in 43° 24' N. lat., 3° 42' E. long., at a distance of 422 miles S. from Paris, and has a population of about 18,000. The town owes its rise to the mole, which was commenced in 1666, and which, extending 656 yards into the sea, shelters the harbour from the south and south-east winds. At its extremity on the left of the entrance to the harbour is fort St.-Louis, which is surmounted by a lighthouse with a fixed light 82 feet high. The other side of the harbour is formed by a pier; and to prevent the accumulation of sand a break-water has been constructed in front of the entrance of the harbour. Fort St.-Pierre on the extremity of the pier and a citadel erected on the opposite cliffs complete the defences of the harbour. The space enclosed is about 30 acres, in which there is a depth of about 19 feet of water. A broad deep canal, lined with handsome quays and warehouses, connects the harbour with the shore-lake of Thau; and a new dock, 17 acres in extent, with quays above a thousand yards in length, was commenced in 1850. This basin is also connected with the harbour by a canal.

The town, which is entered by a causeway raised above the shore-lake of Thau, and by a bridge of 52 arches, is well-built, has tribunals of first instance and of commerce, a college, a public library, marine baths, a customs entrepôt, ship-building yards, and large salt works. The church of St.-Louis is the most remarkable building. The importance of Cette is owing to its being an outlet in the centre of the great wine districts of the south of France, and to its communication with Bordeaux by the Canal du Midi (which enters the shore-lake of Thau at Agde, and may be said to enter the Mediterranean through the harbour of Cette), with Lyon by the Canal des Etangs, the Canal de Beaucaire, and the Rhône. Its railway communications already reach to Nîmes, Marseille, and Avignon, and will soon be completed to Paris and Bordeaux. The foreign commerce and the coasting-trade of Cette are important and active; and there is besides an extensive traffic with the interior. The town has ship-building yards, and is largely engaged in the cod, anchovy, and oyster fisheries. The imports consist of wool, raw cotton, corn, oil, cork, colonial produce, hemp, timber, pitch, tar, iron, tallow, fish-oil, and Benicarlo wines from Spain to mix with French wine for the English and other markets. The manufactured articles are verdigris, green soap, brandy, sugar, perfumes, corks, liquors, glass, confectionery, great numbers

of wine casks, &c. The exports consist of these articles, and of wine to the amount of about 40,000 tons annually, salt which is made in large quantities in vast salterns near the town, brandy (about 5000 tons), besides almonds, dried fruits, dye stuffs, and flour. Steamers ply regularly to Marseille and the Languedoc Canal. In 1852 the total number of vessels that entered and left the harbour of Cette amounted to 3903, with an aggregate burden of 367,487 tons. Foreign consuls reside at Cette. The Duchess de Berri landed at Cette on her way to La Vendée in 1832.

[*Dictionnaire de la France; Macgregor, Statistics; Official Papers.*]

CEUTA, or SEBTA, a town and fortress belonging to the Spaniards, is situated on the north coast of the kingdom of Fez in the empire of Morocco, and at the eastern entrance of the Strait of Gibraltar, where a small peninsula about 3 miles in length juts out in a north-north-east direction exactly opposite Gibraltar. The peninsula is joined to the mainland of Africa by a narrow isthmus on which the town is built, and is well fortified on the land side against any attacks of the Moors. To the north-east of the town the peninsula spreads out in a rounded shape, and is almost entirely occupied by a mountain called El-Mina and also Monte del Hacho, a spur of the range of mountains (Jebel Zatout, anciently *Septem Fratres*) that runs parallel to the coast, and may be considered as the north-western end of the Lesser Atlas. The Monte del Hacho rises precipitously from the sea; it is the ancient *Abyla*, which with the opposite rock of Calpe (Gibraltar) formed the celebrated Pillars of Heracles. On the highest part of Abyla stands the citadel of Ceuta. Provisions for the inhabitants and the garrison are chiefly brought from Spain, for little peaceable communication is kept up between the inhabitants and the Moors. Ceuta has a small and not safe harbour, and 9200 inhabitants, exclusive of the garrison, which generally numbers 5000 men. The town is well built, very clean, and well paved. The chief objects in the town besides the fortifications are the cathedral, several convents, an hospital, and a convict establishment. Ceuta gives title to a bishop who is suffragan of the Archbishop of Sevilla. It is the seat of a royal court of justice, and the chief of the Spanish presidios, or convict establishments, on the African coast. The military commander is also political governor of the place, and has under him the other presidios on the coast of Morocco, namely, Peñon de Velez, Alhucema, and Melilla, the latter of which is about 150 miles east of Ceuta towards the frontiers of Algiers. The total area of the territory of these presidios is 32 square miles, and their population not including soldiers in 1849 was 11,431.

Ceuta, or Septa, was a town of Mauritania Tingitana under the Romans. John I., king of Portugal, took it from the Moors in 1415. It came under the dominion of Spain in 1580, when Philip II. conquered Portugal. The Portuguese afterwards formally ceded it to Spain by the peace of Lisbon in 1668. In 1690 the Moors besieged it unsuccessfully. The Monte del Hacho is in 35° 54' N. lat., 5° 16' W. long.

CÉVENNES, a chain of mountains in the south of France, forms the watershed between the Lower Saône and the Rhône on the east and the Loire and the Garonne on the west; and extends from the Canal du Centre, a few miles north-west of Chalon, to the Canal du Midi, or Languedoc Canal. These dimensions, which are those of a writer in the *Dictionnaire de la France*, give the chain a length of about 280 miles—much more than is commonly assigned to it, for generally the Cévennes are supposed to terminate northward to the west of Lyon. Geographically considered however the range has the length here given. The valley of the Dheune, which is traversed by the Canal du Centre, divides the Cévennes from the Côte-d'Or hills, which are connected by the plateau of Langres with the Vosges; and in the south the Canal du Midi marks the depression that divides the region of the Cévennes from that of the Pyrenees. On the eastern side these mountains slope down rapidly to the valley of the Rhône, into which they send out numerous short offsets; on the west they subside gradually into the plains of the west and south-west of France, except at one point (near 44° 30' N. lat., 4° E. long.), where they are joined to the Auvergne Mountains by the Margeride chain, which forms part of the watershed between the Allier and the Lot.

The general direction of the chain is from north-north-east to south-south-west. Immediately east of Castellaudary, near the Canal du Midi in the department of Aude, the Lower Cévennes Mountains commence under the name of Montagne Noire, and run north-east through the departments of Hérault and Gard, sending forth numerous offshoots into those of Tarn and Aveyron, and dividing the basin of the Tarn from that of the Hérault. On leaving Gard the chain increases in height, and running north-east by north enters the department of Lozère, where one of its summits, Mont-Lozère, attains the height of 4890 feet. From this point the Margeride ridge springs off towards the north-west, and unites the Upper Cévennes with the mountains of Auvergne. The Margeride Mountains attain the height of 4987 feet, and send out amongst other branches those of Levezou and Aubrac, which extend into Aveyron. Continuing in the same direction, the Cévennes cover nearly the whole of the department of Ardèche; from the south-west of which a ridge runs northward through the department of Haute-Loire, and divides the basin of the Allier from that of the Loire. In the department of Ardèche the Cévennes Mountains reach their culminating point in Mont-Mézen, which has an elevation of 6561 feet. [ARDÈCHE.] Leaving Ardèche, the chain

enters the eastern part of Haute-Loire, and taking a northern direction passes, under the names of the mountains of Vivarais, Lyonnais, Beaujolais, and Charolais, and with greatly diminished elevation through the departments of Loire, Rhône, and Saône-et-Loire, on the northern boundary of which it is separated by the Dheune from the Côte-d'Or Mountains, which divide the feeders of the Seine from those of the Saône. Thus throughout their whole length the Cévennes Mountains form the watershed between the Atlantic and the Mediterranean.

The Cévennes Mountains consist principally of granite; but basalt, lava-streams, extinct craters, and other evidences of volcanic action at some remote period abound in the central and highest part of the chain and its offshoots, especially in those that run eastward through the department of Ardèche. [ARDÈCHE; AVEYRON.] Gold dust is found in the granite deposits after inundations to which most of the rivers of the Uppsr Cévennes are subject. In some parts the rocks are calcareous, and contain grottoes and caverns of great extent. In the calcareous districts the disappearance of a river (locally called an 'aven') for one or two miles is not uncommon. Talc and clay-slate are found in different parts of the chain, while towards the base considerable beds of roofing-slate are found. The Cévennes afford abundant pasture for large numbers of cattle and sheep, and in some parts the higher summits are covered with forests of pine; chestnuts also are produced in immense quantities, and form an important article of food and of commerce. On the lower slopes the vine and other fruit-trees flourish. Game is abundant, and wolves are far from being rare. Iron, lead, antimony, copper, coal, gypsum, and marble are met with in various parts of the chain.

The cultivation of the lower slopes of the Cévennes is carried on in parts with great diligence, and places which would seem to be the least suited to it have been rendered available by the careful industry of the inhabitants. They raise across the ravines formed by the mountain torrents a wall of loose stones, through which the waters when clear pass readily; but when after a storm or sudden shower they bring down earth and stones, these walls act as a filter: the earth and stones are deposited, and in time form a platform of good ground. Successive platforms are raised one above another like a flight of steps. On these platforms vines and mulberry trees are planted, and potatoes, maize, and other species of grain are produced. In other places natural terraces are inclosed by walls of loose stones, and the basins thus formed are filled with vegetable soil obtained from the cavities of the mountain, or conveyed by the peasants from the foot of it upon their backs.

These mountains are mentioned by ancient authors, both Greek and Latin. Cæsar ('Do Bel. Gal.' vii. 3) calls them *Cevennâ*; Pliny (iii. 4) calls them *Gebenna*. Cæsar crossed them in his contest with the Arverni and their confederates under *Vercingetorix*. The presumed difficulty of the passage had encouraged the Arverni, who deemed themselves covered from attack by these mountains as by a wall. The passage was made early in the year, and Cæsar had to make a road through snow six feet deep. Strabo gives to this range the name of *Κέμμενον ὄρος*, while Ptolemæus uses the plural form, *τὰ Κέμμενα ὄρη*. The fastnesses of these mountains afforded refuge to the Huguenots in the religious wars of France. In 1703 the Huguenots of these mountains rose in arms and committed the most fearful excesses. They had been driven into rebellion by persecution. The revolt was of sufficient importance to justify the employment for its suppression of Marshal de Villars, who however was soon recalled to more important service, and it was not till 1705 that the revolt was put down by the Duke of Berwick.

Cévennes was also the name given to the northern part of Languedoc traversed by the highest part of the range. It included the districts of GEVAUDAN, VIVARAIS, and VELAY.

CEYLON, an island lying between 5° 54' and 9° 50' N. lat., 79° 50' and 82° 10' E. long. It is separated on the north-west from the continent of India by the Gulf of Manaar. Its extreme length is about 270 miles from north to south, and its extreme breadth 145 miles: the circuit is about 850 miles. Its area is about 24,664 square miles, or about 2000 square miles less than that of Ireland; but no accurate survey has been made. The population in 1843 was 1,442,062, of whom 8275 were whites, 1,413,456 coloured persons, and 20,431 aliens and resident strangers.

In Sanscrit writings Ceylon is called *Lunka* (holy or resplendent); in the Singhalese annals it is called *Sinha-la-dwipa* (the island of lions). The Arabs named it *Serendib*, which is only a corruption of the genuine name; and the Portuguese, *Selan*. It has been called *Hebenaro* (the fertile island); *Eelam* (the insular kingdom); and *Tenesserim* (the place of delight). To the Greeks and Romans it was known under the name of *Taprobane*, and *Salice*. (Ptolemæus.) Being favourably situated at the western entrance of the Bay of Bengal, and bounded on the south and east by the Indian Ocean, it is admirably adapted for an entrepôt of eastern commerce; and though at present but thinly peopled it promises to take rank among the most important of the English possessions.

Surface, Hydrography, Communications.—The eastern shore of the island is in many parts bold and rocky, and the water deep. The north-western and the western shore from Point Pedro to Colombo is uniformly low, and indented with bays and inlets. On this coast

about midway between Manaar and Colombo is the Gulf of Calpentyn, on the west side of the peninsula forming which is the town of Calpentyn, with the harbour of the same name. The south and south-eastern shore is elevated, and presents a highly picturesque appearance. At Trincomalee on the east coast, and Point de Galle on the south-west, there are harbours capable of containing the largest ships; and the roads of Colombo afford a secure anchorage at certain seasons. In the harbour of Trincomalee all the navies of the world might anchor, and be protected at any season. On the south-eastern coast there are four ports in which small vessels may find shelter, and five on the north-western coast.

The north-western coast of Ceylon is almost joined to India by the island of Manaar, ADAM'S BRIDGE, and the island of Rameserum. There are only two passages through the strait. One of these, called the Manaar Passage, which separates the island of Manaar from the opposite coast of Ceylon, near Mantotte, was formerly not above four feet deep at high water. The other, called the Paumbeen Passage, separates the island of Rameserum, celebrated throughout India for its pagoda, from the opposite coast of India, near Tonitorré Point. This passage is very narrow, and was once only six feet deep at high water. Both the passages have been deepened and widened.

The physical structure of the interior of Ceylon is but imperfectly known. Its mountain ranges do not in general approach nearer to the sea than 40 miles, leaving the island nearly surrounded by a rich belt of alluvial earth, well watered by numerous rivers and streams. The great mass of the high land is in the southern and wider part of the island, the central parts of this mountain region being intersected by the seventh parallel of N. lat. Numerous offsets from this nucleus are detached towards the south, south-eastern, and south-western coast, forming the boundaries between valleys which are drained by rivers rising in the central mass, and running south, south-east, and south-west. This part of the island contains Adam's Peak (7420 feet high), which was supposed to be the highest mountain in the island. But the most elevated point is now ascertained to be Pedrotallagalla, near the European station of Newerra Ellia, which is 8280 feet above the sea, and is surrounded by a tract of elevated country of very irregular surface, and well adapted for almost all the productions of temperate countries. This table-land is generally from 2000 to 3000 feet above the sea. From the central mass in the territory of Kandy, a range of high land runs northward nearly as far as 9° N. lat., forming the western boundary of the basin of the Mahavelli Ganga (the chief river of the island), and separating the waters which flow into this river, or towards the east coast, from those which run westward into the Gulf of Manaar. This range is very little known. The interior mountainous district contains numerous beautiful valleys, and prodigious forests. The northern parts of the island are generally flat.

The island abounds with mountain streams and rivers. The rivers are more numerous on the south and south-west than on the north-east sides. Those which flow through the districts on the east and north formerly filled the numerous but now ruinous tanks which once rendered those districts the most fertile and populous in the island. The principal rivers are the Mahavelli Ganga (the Ganges of Ptolemæus), the Kalani Ganga, the Kalu Ganga, and the Walawe Ganga, all of which rise in the central mountain region. They are navigable only for boats and rafts. The *Mahavelli Ganga*, after descending from the mountains, and traversing the valley of Kotmale under the name of Kotmale Ganga, is joined near Passage by a smaller branch issuing from the base of Adam's Peak. It then passes through the village of Peradenya, four miles from Kandy, where it is crossed by a modern bridge of one arch, 205 feet in span, constructed of satin-wood. Between Kandy and Bintenne the river descends above 1000 feet, and receives in this part of its course numerous streams. At Bintenne, at the foot of the mountains, its average breadth is 340 feet, and its depth at the ford 5 feet; in the dry season 1 or 2 feet, and during freshes 25 or 30 feet. After a slow northern course through the country of Bintenne it separates into two branches: the smaller, the Vergel Ganga, enters the sea 25 miles south from Trincomalee; the larger, retaining the name of Mahavelli Ganga, falls into the great Bay of Trincomalee. It flows through a country once the granary of the island, as indicated by the numerous remains of works of art for the irrigation of the land, which, now fallen into decay, serve only to form pestilential morasses. Its whole course is near 200 miles, and it might be rendered navigable for at least 80 miles. The *Kalani Ganga* runs a westerly course to Colombo, and is the medium for much internal traffic thence to Ruanwelle, a distance of 50 miles. The *Kalu Ganga* takes a western direction, and after passing through the districts of Saffragam and Three Korles enters the sea at Caltura. It is navigable a little above Ratnapoora. The *Walawe Ganga* has a south-eastern course to the sea, 8 miles to the north of Hambantotte.

In the highlands are several lakes which afford abundant supplies of fish, and are of use for irrigating the rice lands. The flatness of the districts bordering on the sea-coast has occasioned the formation of extensive salt-water lakes or lagunes, which are connected by canals having stupendous embankments, constructed by the Singhalese three centuries before the Christian era. These works greatly facilitate the intercourse between the maritime provinces. Small vessels from

India may land their cargoes at Calpenty, and have them conveyed by canal to Colombo.

The country being intersected by deep ravines, often impassable, and covered with thick jungle, the communications are rendered extremely difficult. Under the Kandian government the opening of roads was prohibited, and the passes were strictly guarded. Narrow paths were made by which men on foot could pass singly, climbing over the rocks and through the thickets. In thus providing for the defence of the country its improvement was necessarily retarded; and from the little intercourse which subsisted with the maritime provinces, the habits and institutions of the people were of the most simple and primitive kind, exhibiting curious remains of their social condition in very remote ages. But since the occupation of the country by the British many excellent carriage roads have been constructed at a vast expense. One of the finest of these is the main road to Kandy, a work of great magnitude, which has been carried through some difficult passes in the hills, and connected by several bridges, the largest of which, over the Mahaveli Ganga, has been already noticed. A sum of 10,000*l.* was appropriated in 1852 for the construction of an important line of road from Gampola to Yattototte; and the construction of new roads, as well as the maintenance and repair of those already existing, constantly engages the attention of the authorities. The government outlay on roads for the year 1852 was 36,520*l.* from the treasury, and 17,951*l.* from the road ordinance. There are now about 3000 miles of road open, of which a third has been added during the last ten years. That civilisation receives a powerful impulse by the opening of communications, and that it advances in proportion to the facilities of commercial intercourse, are facts which have been remarkably illustrated in Ceylon. Roads being opened they were soon covered with the vehicles of commerce. Bazaars and villages have sprung up along the roads, and the productions of Europe are sold in every village. A mail coach has been for some time established between Colombo and Kandy.

Geology and Mineralogy.—Primitive rocks in numerous varieties constitute the principal formations of the island. Granite and gneiss are the more prevalent; quartz, dolomite, hornblende, primitive greenstone, and a few others occur less frequently. The varieties of granite and gneiss which often pass into each other are very numerous. Regular granite is not common, but it is met with at Point-de-Galle. Gneiss is far more abundant than granite; a beautiful kind is found at Amanapoora (7° 15' N., 80° 30' E.), which contains a very large proportion of felspar. At Trincomalee quartz occurs in veins and in masses embedded in granite. Hornblende and primitive greenstone are found on Adam's Peak. Dolomite exists largely in the interior, and is used for making lime. It is in this rock that the nitro caves are found. The more recent rocks occur in the level belt near the sea. Fine-grained compact limestone is found in great abundance on the northern extremity of the island. Along the remainder of the coast sandstone generally prevails, lying in horizontal beds along the beach, but seldom extending beyond it.

Ceylon contains numerous useful minerals and many valuable gems. Iron is very generally diffused. The black oxide of manganese is found. Plumbago abounds, and is exported in considerable quantities. Tin has been found; copper exists, with quicksilver and coal. There are no less than 22 caves from which nitre, nitrate of lime, and a small proportion of alum are obtained. The sulphate of magnesia is found in only one cave, and according to Dr. Davy it is equal to the best Epsom salts. Salt is found in natural deposits, and is formed by artificial means in several parts of the maritime provinces, particularly in Mahagampatoo; it yields a revenue of 40,000*l.* per annum.

Of the gems of Ceylon those principally valued are the ruby, the cat's-eye, the sapphire, the amethyst, the topaz, the garnet, the cinnamon stone, the turmeline, the zircon or Matura diamond, and the golden beryl. Among the King of Kandy's jewels (sold by auction in London in 1820) was a beryl which measured two inches in diameter, and sold for more than 400*l.*

There are several hot springs in the island: five at Kanny, in the neighbourhood of Trincomalee, and two in the province of Uva. The former are resorted to by invalids suffering from rheumatic and cutaneous disorders: at 7 a.m. the temperature of the air being 77° of Fahrenheit, their heat varies from 86° to 107°. The water is pure, with the exception of the slightest trace of common salt and a little carbonic acid gas and azote. The Uva springs are more than 1000 feet above the sea, and have a temperature of 76° and 85° respectively. At Aloonooera there are two springs, the temperature of which is sufficiently high to dress food. In 7° 15' N. lat., 81° 20' E. long. near the Patapala river, there is a hot spring which constantly emits air bubbles.

Climate.—The climate of Ceylon is principally influenced by the two monsoons. The north-east monsoon prevails from November to February, and the south-west monsoon from April to September. In the intervening months variable winds and calms prevail. The seasons are however subject to fluctuation, the south-west wind being generally most prevalent. Sometimes indeed at Colombo this wind blows for five months together, and the north-west wind blows during the months of December and January only. Local circumstances modify the winds of the interior according to the distance from the

east and west coast; thus, at Badulla, in Upper Ouwah, during the months of June, July, and August, the wind is variable, and for the remaining nine months it blows from the north-east. The heat is not so great as on the neighbouring coast of India, the sea-breezes moderating the temperature, and making the air more agreeable and salubrious. At Colombo the mean daily variation of the temperature does not exceed 3 degrees, and the annual range of the thermometer is from 76° to 86½° Fahrenheit. At Galle the mean daily variation is 4 degrees, and the annual range from 70° to 87°. At Jaffoapatam the mean daily variation is 5 degrees, and the annual range from 70° to 90°. At Trincomalee the greatest daily variation is 17 degrees, and the annual range from 74½° to 91½°. At Kandy, 1457 feet above the sea, the mean daily variation is 6 degrees, and the annual range from 66° to 86°; and at Newerra Ellia, 6210 feet above the sea, the mean daily variation is 11 degrees, and the annual range 85½° to 80½°. The eastern part of the island, which is open to the north-east monsoon, partakes of the hot and dry climate of the coast of Coromandel. The western division, which is open to the south-west monsoon, has a climate like that of the Malabar coast, which is temperate and humid. The north-east winds although accompanied by rain are drier than those from the south-west, and the country over which they blow has an arid appearance as contrasted with the luxuriant verdure of the southern and western districts, which continues during the greater part of the year. The driest seasons are those which occur between the range of the two monsoons, partaking slightly of the influence of both.

The climate and seasons of the northern and southern districts may be thus strikingly contrasted:—On one side of the island, and even on one side of a mountain, the rain may fall in torrents, while on the other the earth is parched and the herbage withered. The inhabitants in one place may be securing themselves from inundations, while in another they are carefully distributing the little water of former seasons which is retained in their wells and tanks.

The salubrity of Ceylon has been greatly increased of late years by the extension of cultivation and the clearing and draining of jungle land, but very much remains to be accomplished. There can be little doubt that were the island cleared and generally brought under cultivation it would be as healthy as England.

Soil, Agriculture, &c.—Quartzose gravel or sand, and felspathic clay, mixed with oxide of iron, derived from the decomposition of the prevailing rocks, generally compose the soil of Ceylon, which seldom contains more than 3 per cent. of vegetable matter, while quartz often constitutes nine-tenths of the whole. In the cinnamon gardens at Colombo the soil is composed of pure and perfectly white quartzose sand. A brown loam formed by the decomposition of gneiss and granite, and a reddish loam resulting from the decomposition of clay iron-stone called 'cabook,' are the most productive soils, and the quartzose the least so. The soils in the elevated lands of Saffragam and Lower Ouwah, and the granitic soils in the mountains above, are fertile. The soil of the northern division is sandy and calcareous. Agriculture in all its branches is in a very backward condition. Notwithstanding all the advantages of Ceylon in variety of soil, gradations of temperature, and adaptability of climate, the cultivation of rice may be said to be the only successful tillage of the natives. Yet it is impossible to foresee the extent to which the productions of nearly every other country might be domesticated and extended throughout this island. Agriculture flourishes most among the Jamul population of the north. At Jaffna every cultivated spot is securely fenced; there is one well or more in every field, and by incessant watering the farmers succeed in obtaining a third harvest in each year. For home consumption they grow an innumerable variety of fruit and vegetables almost unknown to the rest of the island; and for trade and export, in addition to their great staple, tobacco, which is the finest in the east, they produce grain of all kinds and curry stuffs, especially onions and chillies, for shipment to India and the coast of Ceylon.

Among the trees indigenous to the island cinnamon, of which Ceylon may be said to have the monopoly, is the principal; but the cocoa-nut tree is the most important to the island. The cocoa-nut contributes largely to the subsistence of the people, and when the grain crops fail, or are destroyed by inundation, averts much of the misery of so serious a calamity. The leaves, each 12 or 13 feet long and 3 feet broad, are excellent food for elephants, and are plaited into 'cadjans' and 'cusingoes' for thatching houses. They are also wrought into brooms, and 'chools,' or torches for travellers. The sap, called 'toddy,' is extracted and used as a beverage in its natural state, and converted by distillation into arack. Vinegar is also made from this sap, and by boiling, a coarse sugar called jaggery is formed from it. The kernel of the nut is used in culinary purposes; but the principal part is converted into 'copperah,' by being dried in the sun, and in this state is transferred to the oil-press. The refuse oil-cake, called 'peonah,' furnishes good food for poultry and pigs. The shells of the nut are formed into goblets, ladles, and other domestic utensils; and from the capsule cordage of all kinds, from the smallest yarn to a ship's cable, is manufactured. During the six years preceding 1848 about 20,000 acres were surveyed and sold for cocoa-nut planting at Batticaloa and Jaffna; and at Calpenty, on the western coast, equally extensive tracts were in process of cultivation. When the addition thus made within so short a time is taken into consideration, along

with the prodigious extent of native plantations previously existing, which extend in a belt along the western coast of the island almost from south to north, and on the east as low as Batticaloa, an idea may be formed of the remarkable capabilities of Ceylon in this one article, now in so much demand in Europe. Large establishments for crushing the oil by steam have been opened at Colombo, where it is shipped to England for the manufacture of candles.

The Palmyra palm abounds in Jaffna, and being productive in seasons of drought, when the crops fail, is of great value to the people. The leaves are used in the construction of huts, and also as a substitute for paper, and various other purposes. Toddy is extracted from it as from the cocoa-nut tree. The timber is used for rafters, and is exported in large quantities. The kittul-tree is peculiar to the south: its sap produces a coarse sugar, and its fruit dried and pulverised serves as a substitute for rice flour. The leaves of the talipot-tree are so large that one will shelter many individuals. They are used by the natives to protect them from the sun and rain. When softened by boiling they serve to write upon, and are of great durability. The Ceylon areca-nut is celebrated for its superior quality, and is exported in great quantities.

The cinnamon grounds are situated between Tangalle on the south and Chilaw on the west, and in the more temperate part of Kandy. They present, when the tree is in flower, an extremely beautiful prospect, the small white petals affording an agreeable contrast with the flame-coloured extremities of the upper and the dark green of the inferior foliage. About half a million of pounds are exported in a year, but the amount is gradually decreasing.

A great variety of timber abounds in this island, and the restrictions by which government formerly prevented its being cut without a licence have been removed. Calamander, satin, rose, ebony, sapan, iron, jack, halmalille, and other beautiful woods for cabinet-work are in profusion.

The coffee-plant thrives, particularly in the interior, and has of late been greatly improved by culture. The number and size of the coffee plantations had largely increased for several years before the recent equalisation of the duty in England, which appears for a while to have checked the progress of the planters; but the quantity annually raised is still very great. The importation of coffee from Ceylon into the United Kingdom in 1832 was 2,824,998 lbs.; in 1852 it had risen to 35,316,916 lbs.; the entire quantity exported from Ceylon in 1852 was 41,706,448 lbs. It is only within the last few years that any attention has been paid to the sugar-cane in Ceylon; but there are now several extensive and flourishing plantations, and it is highly probable that sugar will soon form an important article in the export trade of the island. Chaya root, which yields a scarlet dye, was once monopolised by the government; but the monopoly has been relinquished. Tobacco is raised principally in the northern and southern districts. Indigo grows wild, but is turned to little account, though it was in ancient times exported from Trincomalee and celebrated all over India, Arabia, and Persia, and greatly enriched the Ceylon merchants. Some cotton is raised, but at present little more than is required for consumption in the island; 64,848 lbs. were however exported from Ceylon into the United Kingdom in 1852. The pepper-vine grows almost in a wild state. The cardamom plant is abundant. Fruits and culinary vegetables are produced in great variety and profusion. The cultivation of rice had become neglected, hardly enough being produced for the consumption of the inhabitants; its culture has however been vigorously resumed, and a considerable quantity is now annually exported to Great Britain. There are two rice harvests in the year; the first about February, the second in September. Gamboge, gum-lac, and cardamom seeds are among the articles produced in Ceylon.

The quadrupeds of Ceylon are for the most part like those of the opposite continent. Elephants are most numerous in the northern and eastern provinces; one European officer in two years killed 400. They often make predatory incursions in troops, and do great injury to the crops. Among the ancients the elephant of Ceylon was celebrated for its extraordinary size and beauty. Leopards, tiger-cats, hyenas, jackals, bears, racoons, and monkeys are among the more numerous of the wild animals. There are several species of deer, of which the elk and fallow-deer are found in the greatest number; there is also another of very diminutive size called the moose-deer (*Cervus Aris*), which is caught by the natives, and exposed for sale in the markets. Wild hogs abound in the plains to the eastward.

Of 20 different species of snakes examined by Dr. Davy, 16 were found harmless. The *Tic polonga* is the most venomous. Pea-fowl abound wild. Beche de Mer, used for food and paste in China, is collected off Chilaw and Jaffna.

The chank, a species of cowry (*Voluta gravis*), abounds on the north-west coast of Ceylon. There are two kinds, payel and patty, one red and the other white. A third species, opening to the right, is very rare, and highly valued by the Hindoos. It has occasionally been sold for 10,000 rupees, or 1000*l.* The demand for chanks, caused by the rites of the Hindoo religion, was once so great that the right of fishing for them was sold by the government for 60,000 rix dollars per annum; but the demand decreased, until the revenue from this source became not worth collecting, and now this fishery is free to all. The chank fishery was important as a nursery for divers.

The most productive pearl banks are situated off Condachy, extending 30 miles from north to south and 20 miles from east to west. The fishery generally commences in March, when the calm weather permits the boats to go out and return daily. Killecarré is probably the Colchi mentioned in the Periplus of the Erythraean Sea as the site of these fisheries, and they are carried on in the same manner as described by travellers several centuries ago. The ancient towns of Mantotte and Putlam probably derived much of their importance from their vicinity. In 1833 there were 1250 divers employed, of whom 1100 were volunteers from the opposite coast. Each pearl bank is available only for one period, of about 20 days in every 7 years; in no season does the fishery last for more than 30 or 35 days, commencing with the calm weather, about the 5th of March. If the oyster is taken before seven years old, its pearls are imperfectly developed; vigilance is therefore necessary to prevent indiscriminate fishing, which would destroy the banks, or at least render them quite unproductive. The banks are let, or the pearls sold by the government to the highest bidder. In 1797 the revenue derived from the pearl-fisheries was 140,000*l.*, being the largest ever obtained by the British government. From that time the fisheries gradually declined, until they at length became wholly valueless as a source of revenue; they are closed until 1855, when a valuable fishery is anticipated by the governor. The sea-fisheries are very productive on all parts of the coast.

Commerce.—We have historical proof that, from the Christian era until the beginning of the 6th century, Ceylon was the emporium of the trade carried on between Africa, India, and China. The Romans particularly, after the discovery of the passage by way of Bahelmandeb to Guzerat, by Hippalus, until the decay of their empire, traded extensively with India and Ceylon; the latter place being the usual limit of their navigation, where they exchanged their gold and silver, the chief instruments of their commerce, for the silks, fine cloths, and costly commodities of Eastern India and China. This trade was afterwards engrossed by the Persians, the principal part of whose imports consisted of horses for the king. The persons on the island engaged in this trade were settlers—Arabs, Persians, and Malabars successively. The great commercial ports were Colombo and Galle, though grain and provisions were exported in abundance from Trincomalee to the opposite coast. In the 11th century the trade was entirely in the hands of Mohammedan Arabs, who circulated its productions through the Red Sea and Persian Gulf, and various countries of Asia, Europe, and Africa.

The vast commerce of Ceylon was not materially checked till the Portuguese engrossed the trade of its principal productions, and interrupted those maritime relations which had existed previous to the discovery of the passage round the Cape of Good Hope. But it was reserved for the Dutch system of pernicious monopoly to inflict vital injury on its commercial interests. The narrow policy or individual interest of the Dutch governors shackled the commerce of the island, and almost destroyed her natural powers of production. These impolitic restraints have been removed; but it may be still long before Ceylon will cease to feel the effects of the evils which she has suffered from misgovernment in her commercial affairs.

The value of the exports from Ceylon in 1833 was estimated at 132,530*l.*; of imports at 320,391*l.* In 1852 they had increased to 943,000*l.* and 1,000,474*l.* respectively; exclusive of the specie from India, and of the imports re-exported. The principal articles of export are coffee, cocoa-nut oil, cinnamon, and areca-nuts. In 1847 the tariff of the island was entirely remodelled; a low fixed duty, instead of an ad-valorem duty, being charged upon nearly all articles imported; upon the exempted articles a duty of 5 per cent. ad-valorem is still charged. Cinnamon is the only export paying duty, and the duty on that is about to be removed; there has been for some time a falling off in the quantity exported. It used to average upwards of a million pounds annually; in 1850 it was 644,857 lbs., in 1852 it had fallen to 427,666 lbs.

Inhabitants.—The population is at present composed of Singhalese, Malabars, Mohammedans or Moors, Veddas or Beddas, a small proportion of Europeans and their descendants, and negroes, Malays, Chinese, &c. The Singhalese inhabit Kandy and the south and south-west coasts from Hambantotte to Chilaw, and comprise the great body of the people. They are probably descended from the aborigines and the Gangetic nations, who invaded the island about B.C. 543. The language and customs of the Singhalese are in some respects peculiar. A woman was frequently married to all the brothers of the same family, but this practice is going out of fashion like many others. The civil distinctions of caste are strictly observed. The abolition of the religious distinction of caste constitutes a remarkable peculiarity in the institution of the Buddhists.

The Malabars or Tamuls occupy the northern and north-eastern coast, and the peninsula of Jaffnapatam. Their own traditions and the Singhalese annals inform us that they came as invaders from the opposite coast, and formed a powerful kingdom in Jaffna, besides a number of petty states. They are Hindoos, and have retained the religious as well as the civil distinctions of caste, and the language and customs of southern India, under some modification, occasioned by their intercourse with the Singhalese.

The Mohammedans or Moors are derived from the various neighbouring islands and the continent, with the converts they have made.

They are found on all parts of the sea-coast, as well as in the interior, and in Pultam district they form the mass of the population. They tolerate the distinctions of caste, and class themselves into four orders: merchants, weavers, fishermen, and bankers. They are a fine, energetic, industrious race, who engross a large proportion of the commerce and traffic of the island. The Veddas, or Boddas, the aborigines of this island, are reduced to a very low grade of savage life, having neither habitations nor clothing. They dwell in the great forests which extend from the south to the east and north, and also in the most inaccessible parts of the interior.

The descendants of Europeans of unmixed blood, and the race which has sprung from the intercourse of Europeans with the natives, are called Burghers. From these Burghers, almost exclusively, individuals have hitherto been selected for the clerkships in public offices, and for subordinate magistracies.

Language.—The spoken language of the Singhaless is peculiar to themselves, but their classic and sacred writings are either in Pali or in Sanscrit. The Malabars use the Tamil, both for colloquial and literary purposes—except the Brahmins in Jaffna, who write Sanscrit in the 'grantha' characters. The Ceylon Portuguese prevails in the European settlements, but its use is not universal among the natives.

Religion.—Nicephorus supposes that St. Thomas, the apostle, preached the gospel in Ceylon; but modern writers agree in assigning to Nestorian missionaries, who accompanied the merchants from Persia, the introduction of Christianity into the island. From Cosmas Indicopleustes we learn that about the middle of the 6th century there were churches established here, but they no longer existed when the Portuguese arrived, and the permanent establishment of Christianity seems to have been effected by St. Francis Xavier, styled the apostle of the Indies. He preached in the neighbourhood of Manaar in 1544, and 600 of his converts fell martyrs to the faith which they adopted. By far the larger number of Christians in the island belong to the Roman Catholic communion. It numbered at the end of the year 1848 about 115,000 members, under a bishop and a vicar-apostolic, his coadjutor, and 28 apostolic missionaries. They have above 300 churches, which are maintained altogether from private resources. Of the Protestants, those of the Church of England are most numerous. The establishment is under the presidency of the Bishop of Colombo, who has an allowance of 1600*l.* a year from the East India Company. His diocese comprises the whole island. There are some Presbyterians, Lutherans, Methodists, and Baptists. Buddhism prevails among the Singhaless. In conformity with the treaty of 1815, the Buddhist religion is maintained in the interior by the British government, but the charge of the Dalada relic, or tooth of Buddha, and the temple patronage, which were important privileges of the kings of Kandy, and to which the British government succeeded, have very properly been relinquished since 1847 to the priests. In the northern parts the Hindoo religion prevails; its professors are followers of Siva.

Education.—There are a great many village and temple schools, conducted by Buddhist priests, in which reading and writing are taught; but there are few useful books in the Singhaless language. The portion of the population receiving education from approved sources scarcely exceeds one-eighth of the whole. The government elementary and English schools, to which scholars are admitted at a very low charge, while the vernacular schools are free, had 5676 pupils in 1852: in a few of the mission schools English is taught as well as the vernacular. The advantages of education are eagerly sought by the natives, and its progress is only impeded by the want of competent teachers. The expenditure on the government schools during the year 1852 (exclusive of rent of buildings) was 8648*l.*, and the receipts from school fees were 1121*l.* A college has been founded at Colombo under the patronage of the Bishop of Colombo, who very largely contributed to the funds, for the education and training of a body of native clergy, catechists, and schoolmasters for the service of the church. There is also a government academy or college at Colombo. The education of the native children is to some extent provided for by the missionaries of different denominations, who have also translated several English religious books into the Singhaless language for the use of the native converts.

The island is divided into five provinces, denominated respectively the Eastern, Western, Northern, Southern, and Central; and each province is subdivided into districts. The principal towns are Colombo, the capital; Kandy, the former capital of the dominions of the King of Kandy; Galle, or Point de Galle, the chief port; Calpentin, Caltura, Jaffnapatam, Newerra Ellia, and Trincomalee. COLOMBO, POINT DE GALLE, and TRINCOMALEE are noticed under their respective titles, the others we notice here.

Calpentin is situated on a peninsula on the west side of the Gulf of Calpentin, 8° 14' N. lat., 79° 53' E. long., and about 93 miles N. from Colombo: population, 3000. It was anciently called Araasadi, but the natives now call it Kalputti. The town consists of mud-thatched huts and a few large houses roofed with tiles. The extensive groves of cocoa-nut trees with which it is stocked, and the rich foliage of the Looria, forming a line on each side of the road leading to the bazaar, give it a pleasing appearance. In the town and its vicinity are numerous places of worship, Protestant, Roman Catholic, Hindoo, and

Mohammedan. A charity school is supported by government. On account of the shoals in the harbour, vessels exceeding 100 tons are obliged to lie in the bay at Mutual, and unload and convey their cargoes to Calpentin in small boats (dhonies), of which a great number belong to the place. The exports from Calpentin to Madras and other ports on the Coromandel coast are copperahs, cocoa-nuts, oil, shark's fin, coir-ropes, honey, bees'-wax, ghee (clarified butter), fish-oil, wood-oil, daumer, moss, chaya roots, and palmyra timber. The imports consist of cloths, paddy, rice, crockery, hempen-thread, spices, minerals, and drugs. The opening of the canal between Chilaw and Colombo proved very beneficial to the inhabitants of Calpentin, and the trade by means of inland navigation rapidly increased. The soil in the vicinity is very productive. In and about the town are about 600 groves of cocoa-nut and palmyra trees. The gardens produce every kind of vegetable, and mangoes, bananas, guavas, papayas, pomegranates, citrons, shaddock, bread-fruit, and very fine grapes. The fisheries of Calpentin have greatly increased within the last few years. A large quantity of lime is made from shells found here in great abundance.

Caltura, the principal town of the district of the same name, is situated on the left bank of the Kalu Ganga River, about 25 miles S. from Colombo. A small fort stands on a neighbouring mound commanding the river, but it is not well garrisoned. The soil of the surrounding district is remarkably productive. A great number of Jutra dhonies belong to the port, which trade to Madras and other places on the Coromandel coast. The Wesleyan missionaries have a handsome chapel and school-house here. There is also an excellent rest-house for travellers, which is much frequented in consequence of its being on the high road to Galle. The town is the seat of an assistant government agent, and assistant judge. Its climate is remarkably pleasant and salubrious, and the scenery of the vicinity very picturesque; it is therefore a favourite resort of invalids from Colombo. Since the establishment of the government sanatorium at Newerra Ellia it has however been less frequented than formerly.

Jaffnapatam, the chief town of the province of Jaffna, is situated on a peninsula at the north end of the island, 215 miles N. from Colombo: population, about 8000. It is defended by a large fort, which includes a church, the house of the commandant, and other good buildings. The town is to the east, half a mile distant, and consists of several broad parallel streets intersected by smaller streets. The inhabitants are mostly Dutch and their descendants. The bazaar is abundantly supplied with provisions at a cheap rate. The harbour is only accessible to small vessels, the water being shallow. The cargoes of large vessels are unshipped at Kails, and conveyed to the town in boats. Jaffnapatam is the seat of a government agent and of a provincial judge.

Kandy or *Candy*, formerly the capital of the King of Kandy's dominions, is situated in 7° 20' N. lat., 80° 50' E. long., about 65 miles direct distance E.N.E. from Colombo: the population is about 3000. The town stands in the midst of steep and lofty hills covered with jungle, and is very insalubrious. It is nearly encircled at the distance of about 3 miles by the Mahavelli Ganga. The principal street is on the declivity of a hill, and is nearly 2 miles long. The houses are of mud, and thatched, but those of the chiefs are tiled and whitewashed. There is a handsome new church; the governor's residence and the artillery barracks are the other public buildings. The palace of the Kings of Kandy covers a considerable space, and contains a great number of rooms. It was once a building of great magnificence, but has been permitted to fall into a very neglected and dilapidated condition. Among the objects of interest in Kandy are the temples and tombs of the kings, although now mere ruins. The town is surrounded by a mud wall, and thick thorn hedges are also extended round it along the sides of the hills, so as to form lines of circumvallation, leaving only narrow passes. Four miles from Kandy is Peradenya where are the Ceylon botanical gardens, and near which the Mahavelli Ganga is crossed by the great satin-wood bridge before mentioned.

Newerra Ellia stands on a lofty table-land 6200 feet above the level of the sea, about 7° 5' N. lat., 80° 54' E. long., and has risen into importance since its selection as the principal government sanitary station of Ceylon. Its elevated site renders the climate though keen peculiarly invigorating to Europeans, and the scenery by which it is surrounded is remarkably picturesque. Pedrotallagalla, the loftiest of the Ceylon mountains is a striking object from the station. The soil, which is very fertile, produces all kinds of European vegetables and cereals. Game is very abundant. In the town and its immediate vicinity are houses belonging to the governor, the bishop, the commander of the forces, and various government offices, barracks, an hospital, &c.

Government, Laws, &c.—The native government of Ceylon was strictly monarchical. The king was proprietor of the soil, regulator of the ferial payments and services, and distributor of all public honours and emoluments. The classification of the people and the distribution of lands being the basis of the system of government, the civil and judicial administration of the country was entrusted to chiefs placed over different departments and in various provinces and districts, with a gradation of inferior functionaries. The services of all were rewarded with certain privileges or possessions. The head

man of each village, to whom the people immediately referred, directed the labour of the people under the authority of the provincial chief, and superintended the police. But the superintendence of agriculture was the duty of a particular class of persons who attended to the embankments of tanks and canals, and to the distribution of water.

The government of Ceylon as a British colony is at present carried out by a governor and two councils—executive and legislative. The executive council consists of the governor, who is president, and of the following members: the officer commanding the forces, the colonial secretary, the treasurer, the queen's advocate, and the government agent of the central provinces. The legislative council is presided over by the governor, and consists of the following members: the chief justice, the commander of the forces, the secretary, the treasurer, the auditor-general, the government agent for the western provinces, the government agent for the central provinces, and the surveyor-general. With the legislative council are associated six unofficial members, natives or naturalised subjects of Ceylon, being chief landed proprietors or principal merchants. The governor, the commander of the forces, the chief justice, the queen's advocate, and the surveyor-general, are appointed by the secretary of state from England.

Until within the last year or two the revenue of the island has, ever since our acquisition of it, been below the expenditure. It appears from the report of Governor Sir G. W. Anderson, dated April 1852, that the revenue is now "fairly in advance of the expenditure;" the revenue for 1851 was 429,700*l.*, and the expenditure 409,123*l.*; the revenue for 1852 was 411,806*l.*, and the expenditure 412,871*l.*

In every province is stationed a government agent, and an assistant agent is stationed in each district. These functionaries administer the affairs of government and officiate also as magistrates. Every village has its native headman elected by the inhabitants, and officially recognised by the government.

For the administration of justice throughout the island there are in the civil and criminal departments—a supreme court, established at Colombo; a vice-admiralty court, and provincial courts stationed in various districts; besides magistracies. The powers of the supreme court are similar to those of the Queen's Bench and the High Court of Chancery combined. Justice is administered by judges appointed from England. There are in this court—a queen's advocate, with functions like those of the lord advocate of Scotland; a deputy queen's advocate and registrar; and a proctor, who is a barrister, for pleading the causes of prisoners and paupers. Trial by jury has subsisted since 1811.

In each district there is a court held before a judge and three assessors; the judge is appointed by the crown and removable at pleasure. The assessors are selected from amongst the inhabitants, duly qualified, not under 21 years of age. The district courts have civil and criminal jurisdiction. They try all offences except those punishable with death, transportation, or banishment, imprisonment for more than one year, whipping exceeding 100 lashes, or a fine of 10*l.* Appeals may be made from these courts to the supreme court. The criminal jurisdiction of the supreme court extends throughout the island. The sessions are held twice a year in each circuit, being presided over by one of the judges. Sentence of death pronounced at the criminal sessions by the supreme court is not executed until confirmed by the governor. Appeals from the supreme court are allowed to the Queen in council. The Dutch or Roman law, with certain exceptions, is administered in both the district and the supreme courts. All the witnesses in criminal cases are paid by government.

A savings bank has been for some years established with great success at Colombo, under the patronage of government, with nearly the same regulations as in England.

The British currency is in circulation throughout the island, and accounts are becoming generally kept in the same. The silver coinage of the island is the rupee, the current value of which is fixed at 2*s.* sterling, its real value being 1*s.* 10*d.* The silver coin formerly issued by the British government, the six-dollar, is equal to 1*s.* 6*d.*, or to 12 fanams (a copper coin which is equal to 4 pice). English weights and measures are also becoming generally used.

There are four regiments of European infantry, two companies of the royal foot artillery, and a regiment composed principally of Malays, a fine body of men, nearly 2000 strong.

History.—Onesicritus and Nearchus, commanders of the fleet dispatched by Alexander from the Indus to the Persian Gulf, brought the first accounts of the island to Europe. Its character and productions are described by Pliny and Ptolemaeus. Cosmas Indicopleustes relates, on the authority of his friend Sopator, a merchant, who visited Ceylon in the 6th century, that the coast inhabitants differed from those of the interior (the land of precious stones), and consisted of a proportion of Persians, who had formed a Christian establishment. In the latter part of the 13th century the island was visited by Marco Polo, who describes it as the finest island in the world. About half a century later it was visited by Sir John Mandeville, who mentions Adam's Peak.

The Singhalese annals extant profess to contain an uninterrupted historical record of events for 24 centuries, according to which their first king Hijaya founded his kingdom by the extirpation of the

original inhabitants about B.C. 543, and their last king, Shri Wikrama Raja Singha, was deposed by the British in A.D. 1798. Many remarkable vestiges of the Singhalese yet remain in various parts of the island.

Of European nations the Portuguese first established a regular intercourse with Ceylon. The island being torn by internal wars, and invaded from Arabia and Malabar, the king purchased the assistance of the Portuguese with a stipulated annual tribute of 250,000*lbs.* of cinnamon. The allies gradually gaining a footing in the island, at length, in 1520, strongly fortified themselves at Colombo, subjected the whole of the maritime districts, and retained possession of them for about 150 years. The Kandians having called in the Dutch, the Portuguese were expelled, but the struggle lasted from 1632 to 1656. The Dutch, like their predecessors, established their dominion over the maritime provinces, and in 1761, having taken Kandy, they would have subjected the whole island had not the sickness of their troops obliged them to withdraw from the interior. In the war with the French, in 1782, the British took possession of Trincomalee, but it was shortly after retaken by the French, and the sea-coast remained in the hands of the Dutch until 1796, when it was wrested from them by the British, to whom it was formally ceded by the treaty of Amiens.

In 1815 the tyranny of the native king, who had forced the wife of his prime minister to pounce to death her own children in a mortar, and committed other atrocities which rendered his dominion intolerable, led to his being deposed; upon which the British took possession of his dominions at the invitation of the Kandian chiefs, and have retained them ever since.

In 1848 an insurrection, which at first assumed a somewhat serious character, broke out in the Kandian part of the island, avowedly in consequence of the imposition of several new taxes by the British government. The insurgents collected in considerable numbers, and set up a native king; but the rebellion did not spread very widely, and was suppressed with little difficulty. The pretender was transported; a priest who had taken an active part in the rebellion was shot in his robes, and numerous executions and other severe punishments were inflicted after the suppression of the insurrection. The extent and character of these punishments caused much discussion, and the appointment of a committee of inquiry by the House of Commons. The committee decided not to report to the House their opinion on the evidence which they had taken, a decision which led to prolonged debates, while the investigation resulted in the recall of the Governor of Ceylon, Lord Torrington.

(Knox, *History of Ceylon*; Davy, *Ceylon*; Bennett, *Ceylon and its Capabilities*; Sirr, *Ceylon and the Cingalese*; *Parliamentary Papers*; Strabo, book xv.; Pliny, *Nat. Hist.*, vi. 22; Ptolemaeus, b. viii.)

CEYZERAT. [AIN.]

CHABLAIS (Sciabese), a province of Savoy, in the administrative division of Annecy, extends along the south coast of the lake of Geneva, and inland as far as an offset of the Alps, which detaches itself from the Dent du Midi, on the borders of Valais. Chablais is bounded S. by the province of Faucigny, W. by the Canton of Geneva, and E. by the Valais. Its greatest length from east to west is 25 miles, its greatest breadth from north to south is about 20 miles. The area is 228,045 acres, or about 356 square miles, and the population in 1848 was 57,562. It is a very mountainous country, with the exception of a strip of land along the shore of the lake of Geneva, which produces corn, wine, and fruit. A high country crowned by several lofty summits runs generally westward from the Dent du Midi, forming the watershed between the Dranse, which runs northward into the lake of Geneva, and the Arve, a feeder of the Rhône. Numerous ramifications run northward from the range between the tributaries of the Dranse, the principal river of Chablais, and subside into the plain that bounds the lake of Geneva towards the south-west; but in the eastern part of the province the mountains approach close to the shore. Several narrow valleys run inland between the offsets of the Alps, along the course of the Dranse and its affluents. These valleys abound in rich pastures, on which large herds of cattle are fed. Very good cheese is made in this part of the country, both for consumption and for exportation. The country abounds also with chestnut and walnut trees. The great Simplon road made by Napoleon I. traverses the north part of the province, following the curve made by the south shore of the lake of Geneva.

Towns.—Thonon, built on an eminence above the lake, 16 miles E.N.E. from Geneva, 31 miles N.N.E. from Annecy, in the midst of a fine and well wooded country, is the residence of the intendant, or governor of the province. It has a court of justice, a royal college, an academy for boarders, several churches and convents, a handsome town-house, an old castle, and about 4000 inhabitants. At Ripaille, near Thonon, is the once rich and handsome convent founded by Amadeus VIII., duke of Savoy and bishop of Geneva, afterwards Pope Felix V., all of which titles and dignities he resigned and retired to this retreat as an Augustinian monk. The building has been converted into a farm-house and dwellings for the labourers. Evian, a small town, likewise on the coast of the lake, nearly opposite Lausanne in Switzerland, has about 1800 inhabitants. Between Thonon and Evian, on the right bank of the Dranse, are the chalybeate waters of Amphion, which were much frequented in the last

century by visitors from Geneva. Inland among the Alps, is the village of *Abondance*, with 1400 inhabitants, in the valley of the same name, so called from the richness of its pastures. On the coast of the lake towards the borders of Valais, was a town called *Tauretunum*, which was destroyed by the fall of a mountain A.D. 563. The rocks of *Meillerie*, celebrated by Rousseau, and blasted by Napoleon to form the Simplon road, which is here carried partly through them in a terrace between 30 and 40 feet above the lake, are in this neighbourhood. Opposite *Meillerie* the lake of Geneva attains its greatest depth, 980 feet. At the village of *St.-Gingough* a deep ravine divides Savoy from the Valais. The highest summits in the Chablais are—the *Dent d'Oche*, on the borders of the Valais, 7000 feet above the sea; the *Col de Jouxplane*, which rises between the Chablais and Faucigny, above the valley of the *Giffre*, a feeder of the *Arve*, and is about 100 feet higher than the *Dent d'Oche*; and the *Roc d'Enfer*, which rises above the valley of the *Dranse*, near the centre of the province, and is about the same height as the latter.

CHABLIS. [YONNE.]

CHALONEIA, an old city of Bœotia, situated at the head of a small plain on the borders of Phocis, near the pass which led to Delphi by *Panopeus* and *Parnassus* (Thucyd. iv. 72; Pausan. x. 4). The name of this place does not appear in Homer's catalogue; Pausanias however conjectures (ix. 40, 3) that it is a later name for *Arné*, which stood on the same ground. It is principally celebrated for two battles fought here; one in which Philip of Macedon (Aug. 7, B.C. 338) signally defeated the united forces of Athens and Thebes; the other between Sulla and Mithridates (B.C. 86), in which the Romans gained a decisive victory. The Thebans slain in the former battle of *Chæroneia* we learn from Pausanias (ix. 40) were buried under a mound surmounted by a lion. The mound still exists about a mile from the village of *Kapurna*, which now occupies the site of *Chæroneia*; a few years ago it was examined, and a colossal lion sculptured in the best style of Grecian art, was found in detached fragments about the sides and interior of the excavation. "This lion," says Colonel Mure, in his "Tour in Greece," "may upon the whole be pronounced the most interesting sepulchral monument of Greece." During the Peloponnesian war *Chæroneia* was tributary to *Orchomenus* (Thucyd. iv. 76); but in later times it was one of the confederate Bœotian towns (Pausan. ix. 3, 4). Its situation was the cause of much good and evil to it; on the one hand its neighbourhood to the pass exposed it occasionally to plunder (Thucyd. i. 113); while on the other hand, as the main road from Rome to Athens passed through it, many of the advantages of the carrying-trade accrued to it. Pausanias tells us (ix. 41) that its inhabitants derived a great profit from the cultivation of the olive, and the manufacture of perfumes from flowers. There are some ruins of the citadel which stood on a high projecting rock (called *Petrachus* or *Petrochus*) above the town; there are also some remains of a theatre and other buildings. *Chæroneia* was the birthplace of *Plutarch*.

CHAGRES is a river in the republic of New Granada in South America. It traverses in a longitudinal valley a considerable portion of the Isthmus of Panama, rising in about 9° 10' N. lat., 79° 10' W. long., among the high mountains which approach the Bay of Mandinga. Its upper course is westward: nearly opposite the town of *Puerto Bello* it receives the *Pequeñi*, which comes from the south-west, and is as large and broad as itself. After this junction the river is considerable, and may be navigated by canoes; but the navigation is dangerous owing to the number of rapids, in some of which the stream runs with extraordinary velocity. This rapidity gradually diminishes, and at *Cruces*, a small town situated 23 miles direct distance from the sea, and 44 by the river, it seldom exceeds 3 or 3½ miles per hour, even in the rainy season. Here the river becomes navigable for large river barges. It afterwards gradually declines to the north, sensibly diminishing in rapidity, and enters the Caribbean Sea at *Chagres*, a small sea-port near 9° 18' N. lat., 80° W. long. The whole course of the river hardly exceeds 80 or 90 miles.

This small river was until lately of considerable importance, on account of its facilitating the commercial intercourse between Europe and the countries on the Pacific Ocean. Goods were brought on muleback from Panama to *Cruces*, where they were embarked in river-barges of considerable burden, and carried to the town of *Chagres*. This town is a miserable collection of huts, and is very unhealthy situated. The port is a little sandy bay, with a ledge of rocks across its entrance, which has not more than 15 feet of water in the deepest places, and in many parts the rocks rise to the surface. On the discovery of gold in California the wretched port of *Chagres* and its dangerous and unhealthy river rose for a while to great importance, as they lay on the readiest route from the eastern seaboard of America to the gold fields of California. Vast numbers landed from steamers and sailing vessels at *Chagres*, ascended the river as far as they could in boats, and clambered over the mountainous road across the Isthmus to Panama, whence other vessels conveyed them to the much-louged-for "digging." The exhaustless wealth of California still attracted more and more adventurers along the route, and it was soon resolved to lay down a railway across the Isthmus of Panama. This project is now (Feb. 1854) rapidly approaching completion; the railway is open for more than half its length, and *Chagres* river and town are now deserted. The latter is supplanted by the new city of *Aspinwall*,

which has been founded at *Navy Bay*, as the Atlantic termination of the railroad. [GRANADA, NEW; NAVY BAY.]

CHAILEY, *Surrex*, a small town, and the seat of a Poor-Law Union in the parish of *Chailey*, hundred of *Street*, and rape of *Lewes*, is situated in 50° 57' N. lat., 0° 1' W. long.; distant 6½ miles N. from *Lewes*, 47 miles E. by N. from *Chichester*, and 43 miles S. by E. from *London* by road. *Cook's Bridge* station of the Brighton and South Coast railway, 3½ miles from *Chailey*, is 47 miles from *London*. The population of the parish in 1851 was 1263. The living is a rectory in the archdeaconry of *Lewes* and diocese of *Chichester*. *Chailey Poor-Law Union* contains 11 parishes and townships, with an area of 37,040 acres, and a population in 1851 of 8054.

The town of *Chailey* occupies a pleasant site about the centre of the parish, on the road from *Lewes* to *London*. A good deal of timber is grown in the neighbourhood. The soil is generally productive. The parish church, dedicated to *St. Peter*, is a small building with a shingled spire, in which is a peal of six bells. There is a National school.

CHAILLOT, formerly a village in the immediate vicinity of *Paris*, from the main part of which it is separated by the *Champs-Élysées*: it was constituted a suburb of *Paris* by *Louis XIV.* in 1659 under the name of the *Faubourg de la Conférence*. It was inclosed within the wall erected in 1786-8, and now resembles a little city within a city, but still preserves a rural and suburban character, with its trees, gardens, and fine views. *Chaillot* is built on an eminence on the right bank of the *Seine*, and presents, when viewed from that river, a pleasant appearance. The salubrity of the air and the agreeableness of the prospects have led to the erection of many country houses in it: the gardens of some of these slope down to the river. It had formerly several religious houses, the most famous of which were the monastery of the *Minims* and the convent of the *Visitation*, founded in 1651 by *Marie of France*, the widow of *Charles I.* of *England*. On the site of the convent *Napoleon I.* commenced the erection of a palace for the *King of Rome*. The *Duchess d'Abrantes*, widow of *Marshal Junot*, died in a *Maison de Santé* in *Chaillot* in *June 1838*. The celebrated carpet manufactory, called the *Savonnerie*, is in *Chaillot*.

CHALABRE. [AUDE.]

CHALAMONT. [AIN.]

CHALCEDON, properly *CALCHEDON*, a town of *Bithynia* in *Asia Minor*, was situated on the coast of the *Propontis*, near the southern entrance of the *Bosporus*, and nearly opposite *Byzantium*. It was built by a colony from *Megara*, B.C. 675. The earliest history of *Chalcedon* is connected with that of the neighbouring *Megarian* colonies. Its territory extended along the Asiatic side of the *Bosporus*. It was taken by the *Persians* under *Otaeus* after the *Scythian* expedition of *Darius*, retaken by the *Atheuans*, then recovered its independence, and entered into a confederation with *Byzantium* and other neighbouring cities. It was afterwards subject to the kings of *Bithynia*. The city came into the possession of the *Romans* with the rest of *Bithynia* under the will of *Nicomedes*, B.C. 74; under the empire it was a free city. The *Chalcedonians* having embraced the part of the pretender *Procopius*, *Valens*, after his victory over the latter, ordered the walls of their town to be razed. *Chalcedon* was taken by *Chosroes the Persian*, A.D. 616. The final destruction of the city is owing to the *Turks*, who got materials for the mosques and other buildings of *Constantinople* from *Chalcedon*.

In *Christian history* *Chalcedon* is known for its council held A.D. 451, which was attended by 630 bishops from both the east and the west. It was the fourth œcumenic or general council of the church, those of *Nicaea*, *Constantinople*, and *Ephesus* having preceded it, and was convoked by the emperor *Marcianus*. The council condemned the heresy of *Eutyches* on the nature of *Jesus Christ*. By the 28th canon of the same council, the see of *Constantinople* was declared to be equal in dignity, though next in place to that of *Rome*, and full jurisdiction was given to it over the churches of *Thrace*, *Asia*, *Pontus*, and other eastern provinces. *Chalcedon* is now a poor village, two or three miles south of *Soutari*, which occupies the site of the ancient *Chrysopolis*.

CHALCIS, the capital of the *Island of Eubœa*, is situated at the narrowest part of the *Euripus*—a strait which separates the island from *Bœotia*, and is here only 40 yards across. A rock surmounted by a square castle, partly of *Venetian* partly of *Turkish* erection, divides the *Euripus* into two channels, and is connected with the *Bœotian* coast by a stone bridge about 70 feet long, and with the island by a wooden bridge about 35 feet in length, which is capable of being raised at each end to admit the passage of vessels. The western channel has a depth of only about 3 feet of water; the eastern one is about 7 or 8 feet deep, and has been remarkable in all ages for its irregular tides. [EUBŒA.] At its eastern end the wooden bridge communicates by a gate (over which is still seen the lion of *St. Mark*), with the large *kastrò*, or citadel, of *Chalcis*, which is built on a high promontory. The bastions of the *kastrò* are of *Venetian* construction; the rest of the outer walls were built by the *Turks*, who have left here an enormous piece of ordnance similar to those of the *Dardanelles* for the defence of the strait. On the land side the *kastrò* is surrounded by a glacis which formed the *Turkish* cemetery, and round this the town extends in the form of a crescent, each horn of which touches the *Euripus*. The town is inclosed on the land side by tur-

reted walls built by the Venetians, and now crumbling to ruin. The streets are narrow, but many of the houses are good and spacious; the best of the houses and a gothic church surmounted by square towers were built by the Venetians, who held the place for nearly three centuries before its conquest by the Turks in 1470. The only ancient remains in Chalcis are fragments of white marble in the walls of the houses and different structures in the town. The population of Chalcis is about 5000.

Chalcis is mentioned by Homer ('Il.' ii. 537). It was founded before the Trojan war by an Ionic colony from Athens, and it soon became a great commercial centre, trading with all parts of the western Mediterranean. Its early greatness is attested by its numerous colonies. The first of these was Cumæ in Campania, which was founded, it is said, in B.C. 1050. The peninsula between the Theraic and Singitic gulfs took the name of Chalcidice, in consequence of the number of cities the Chalcidians founded on it. Among its other important settlements were Rhegium in Italy, and Naxos, Tauromenium, and Zancle in Sicily. In the early period of its history Chalcis was governed by an aristocracy called Hippobotæ (horse-feeders), who were probably proprietors of the fertile plain that lay between Chalcis and Eretria, and was often the cause of deadly wars between the two cities. After the expulsion of the Peisistratidæ from Athens the Chalcidians joined the Boiotians against the Athenians; but the latter entering Eubœa with a large force defeated the Chalcidians, and divided the lands of Hippobotæ among 4000 Athenian allottees, B.C. 506. Those settlers retired on the approach of the Persian expedition under Datis and Artaphernes. From the close of the Persian to the close of the Peloponnesian wars, with the exception of a few months, Chalcis was subject to Athens. In the 21st year of the Peloponnesian war (B.C. 411) Chalcis recovered her independence for a short time. It was in this interval that the Chalcidians, in order to secure a constant communication with Boœtia, constructed a mole across the Euripus with the exception of a passage in the centre wide enough for only a single ship, and defended by two towers erected on each side of the opening in the mole. Subsequently Chalcis was subject to the Macedonians. During the absence of Alexander the Great in Asia the mole was fortified with towers and gates, and the hill Canethis (now Karababa) on the Boœtian shore inclosed with walls. At this time Chalcis was nearly nine miles in circuit, and contained many temples, gymnasia, theatres, and other public buildings. In the wars against Macedon the Romans took Chalcis B.C. 192, but did not occupy it permanently. The Chalcidians deserted the Romans in the war with the Ætolians, and received Antiochus into the city on his arrival in Greece; they subsequently joined the Achæans, and the town was in consequence destroyed by Mummianus. It was soon rebuilt however, and existed in the time of Strabo, who describes the mole. In the time of Justinian the mole was so dilapidated that communication with the mainland could be kept up only by placing wooden planks across the breaches. Chalcis was rebuilt by Justinian. Aristotle died in Chalcis; it was the birthplace of Isæus the orator and the poet Lycophon. Before the restoration of ancient names in the kingdom of Greece, Chalcis was called *Egripo*, a corruption of Euripus. Whilst the Venetians held it they called it *Negropont*—a name which was also extended to the whole of the island of Eubœa, and was most probably a corruption of *Egripo* and *ponte*, a bridge. [EUBŒA.]

CHALGRAVE. [OXFORDSHIRE.]

CHALON, or CHALON-SUR-SAÔNE, chief town of the third arrondissement of the department of Saône-et-Loire in France, is 239 miles by railway S.S.E. from Paris, and 69 miles N. from Lyon. It stands on the right bank of the Saône at the point where that river is joined by the Canal du Centre which connects the Saône with the Loire, in 46° 46' 51" N. lat., 4° 51' 22" E. long., and has a population of 15,719, including the whole commune. Chalon is an ancient place. It occupies the site of *Cabillonum* or *Caballinum*, a city which belonged to the Ædui before the Roman conquest of Gaul. (Cæsar, 'De Bel. Gal.' vii. 42.) Quintus Cicero, brother of the orator, spent the winter of A.C. 52 in Cabillonum. It is a large and handsome town built in the centre of a vast plain covered with meadows, cultivated fields, vineyards, and patches of coppice-wood. In the middle ages the town was much smaller than at present; but a new wall having been built several suburbs were inclosed. There is still the suburb of St.-Laurent, situated on the left bank of the river, and joined to Chalon by a stone bridge of five arches. This suburb contains an hospital remarkable for its internal arrangement and the excellent state in which it is kept.

The town is well built; the finest part of it extends along the river, the banks of which are lined with quays. The most remarkable objects are the former cathedral, a gothic structure of the 13th century; the church of St.-Pierre; the hospice of St.-Laurent above mentioned, which was founded by François I. in 1529; the hospice of St.-Louis, founded in 1682, and an asylum for poor old men and orphans; the obelisk erected in 1793 to commemorate the opening of the canal; and the public library. In the centre of the Place-de-Beaune, a handsome square, there is a beautiful fountain surmounted by a statue of Neptune. Chalon has tribunals of first instance and of commerce, an exchange and chamber of commerce, a college, an agricultural society, and a theatre. Among its manufactures are silk stockings, hats, hosiery, vinegar, oil, pottery, and imitative pearls. There are also

dye-houses, iron-foundries, and oil and flour mills worked by steam machinery. Corn, flour, wine, colonial products, cattle, wood, fuel-wood for Lyon, coal, charcoal, iron, gypsum, tiles, bitumen, and the manufactures both of the north and south of France enter into the commerce of the town. By means of the Saône (which from Chalon is navigable for steamboats), of the railway, and the Canal du Centre, the town has a large transit-trade.

(*Dictionnaire de la France*; Balbi, *Géographie*.)

CHALONNES. [MAINE-ET-LOIRE.]

CHALONS-SUR-MARNE, on the right bank of the Marne, the capital of the department of Marne in France; head-quarters of the Fourth Military Division; the seat of tribunals of first instance and of commerce, of a consultative chamber of manufactures, of a council of Prud' Hommes, and of an agricultural society, is situated in 48° 57' 21" N. lat., 4° 21' 31" E. long., 107 miles E. from Paris by the Paris-Strasbourg railway; and has a population of about 15,000, including the whole commune.

A town existed on this site during the Roman dominion in Gaul, and is mentioned in the 'Itinerary' of Antoninus under the name of Durocatalauni, and by Eutropius under that of Catalauni: the prefix Duro, from a Celtic word denoting water, indicates its position on the bank of a river. Near this town, A.D. 271, Aurelian defeated the army of Tetricus, and in A.D. 451 Aëtlius defeated Attila. Catalauni was the name of a tribe supposed to be a subordinate clan of the Remi whom Cæsar places in this part. D'Anville thinks that the ancient name of the town was Duro-Catalaunum.

Chalons is situated among meadows watered by the Marne, which is here crossed by a fine stone bridge. It was formerly surrounded by ramparts, now almost entirely demolished, and entered by six gates, one of which, on the road leading to Vitry, has the form of a triumphal arch. The town is badly built, most of the houses being timber-framed and coated with lath and plaster; but it contains some fine structures, among which are the cathedral of St.-Étienne, the churches of Notre-Dame, St.-Alpin, St.-Jean, and St.-Loup, the town-house, the former Benedictine abbey, now converted into barracks, and the residence of the prefect of the department, which is one of the finest edifices of its kind in France. The cathedral was originally built in A.D. 460, on the site of a pagan temple, and dedicated to St.-Alpin. It frequently suffered from fire, and has undergone many repairs. The structure, which is surmounted by three handsome spires about 120 feet high, and supported by eight flying buttresses terminating in sculptured pyramids, is entered by a majestic Greek door of the Corinthian order. The interior, 328 feet long and 72 feet wide, consists of a choir, nave, and aisles. The lofty vault of the nave is sustained by 10 columns, above 13 feet in circumference. In the sanctuary is one of the handsomest grand altars in France; it is surmounted by a baldachin supported by six marble columns. The painted windows, which have suffered much, represent the story of the creation and events related in the New Testament. Under the edifice is an ancient crypt. The church of Notre-Dame situated in the centre of the town was consecrated in 1322; it is built in the gothic style, and contains beautiful painted windows and a mosaic pavement covered with inscriptions. This church is classed among the historical monuments of France. Other remarkable objects at Chalons are the riding-school, the theatre, the college, the public library, containing 20,000 volumes, the royal school of arts and trades, in which 450 students are maintained by the government and instructed in several arts and mechanical trades; the cabinet of natural history, the botanical garden, and the magnificent promenade called 'Le Jard,' which is on the east side of the town, and covers an area of 19 acres. The Jard indeed is a sort of park laid out in plots of greensward, which are separated by 36 alleys shaded by magnificent elm-trees. St. Bernard preached to the Crusaders in the Jard. The town gives title to a bishop, whose see comprises the department of Marne, with the exception of the arrondissement of Reims. It has two ecclesiastical seminaries. The manufactures consist of fine râteaux, girtheb, woolcombers' cards, hosiery, cotton yarn, and leather; the chief articles of commerce are corn, hemp, wool, rapeseed oil, and Champagne wine.

(*Dictionnaire de la France*; Balbi, *Géographie*; *Annuaire pour l'An 1853*; *Almanac de Gotha*, 1854.)

CHALOSSE. [LANDES.]

CHALUS. [VIENNE, HAUTE.]

CHAMBÉRY, the capital of the province called Savoy Proper, is also the most considerable town in all Savoy, and the residence of the military governor of that duchy, and of the senate or high court of justice for all its provinces. It lies at an elevation of 930 feet above the sea, in a fine valley, between two ridges which run north-west and south-east from the Rhône to the Isère. The valley is watered by the river Leissac which falls into the pretty lake of Bourget, 8 miles north-west of Chambéry. The valley from Bourget to Montmélian is about 18 miles long and 3 miles broad. It abounds with vines, and the lower part is rich in pasture, but is subject to sudden inundations from the swelling of the mountain streams. The climate is mild, being sheltered from the north winds. Chambéry has a royal college, an academy of sciences, which publishes its memoirs; a society of agriculture and commerce; a public library of 16,000 volumes; a museum; a theatre; and a school of drawing. There

are many hospitals, houses for refuge, and other charitable institutions in the town. General de Boigne, a native of Chambéry, having made a large fortune in the service of the East India Company, spent three millions and a half of francs in founding two hospitals and making improvements in the town. A street has been named after him, and a monument was lately erected to his memory. With the exception of the principal street and a few squares which are adorned with fountains, the town is irregularly built. The principal buildings are the cathedral, four convents, three monasteries, and three barracks. There are remains of the old castle of the Dukes of Savoy at the entrance of the town by the Lyon road. The churches of Chambéry have some good paintings. The population of the town and suburbs is about 16,000, and in addition to this there is usually a garrison of about 2000 men stationed in the town. The old ramparts have been levelled and converted into public walks. Among the industrial products of Chambéry are silk-gauze, lace, leather, soap, hats, &c. There is also some trade in liquors, wine, metals, &c. Many families of the nobility of Savoy reside in this town. Amadeus V. was the first duke of Savoy who established his residence here. Chambéry gives title to an archbishop. It has produced many distinguished men; among others, the Abbé de St. Réal, Vangelas, Albanis Beaumont, known for his travels in the Alps; the painters Berongier and Berger; and the two Counts de Maistre, Xavier and Joseph, well known in contemporary literature. The province of Chambéry has an area of 634 square miles; in 1848 the population was 152,463. [SAVOY.] A railway has been projected to run from Chambéry to Turin, up the valley of the Aro as far as Modane, and thence by a tunnel under Mout Cenis into the valley of the Dora. Chambéry has electro-telegraphic communication with Turin.

CHAMBORD. [LOIRE-ET-CHER.]

CHAMOND, ST. [LOIRE.]

CHAMOUNY, or CHAMONIX, an Alpine valley in Savoy, at the foot of Mont Blanc. It runs north-east and south-west, being in length about 13 miles, and about 2 miles in breadth: it is watered by the Arve, which has its source in the Col de Balme, at the north-east extremity of the valley. The Arve is joined in the middle of the valley by the Arveron, which issues out of the glacier of Montanvert. The valley is bounded to the east and south-east by the great chain of the Peunine Alps, which divides this part of Savoy from the Val d'Aosta in Piedmont, forming a succession of lofty peaks called Aiguilles (Needles), covered with perpetual snow, and known by the names of Aiguilles de Tour, Argentière, Verte, Dru, Aiguille du Midi, and lastly Mont Blanc, which rears itself high above the rest, at the south-east extremity of the valley. The clefts between these different mountains are the receptacles of extensive glaciers, which slope down to the very edge of the fields of the valley of Chamouny. The principal one called La Mer de Glace spreads itself between two parallel masses of the great chain, formed by the Géant and Iorasse on one side, and the Dru, Montanvert, Charmoz, and Aiguille du Midi on the other. The length of this icy sea is about 6 miles, and its greatest breadth about 2 miles. A branch of it slopes down through an opening between the Dru and the Montanvert towards the valley of Chamouny. On the west side the valley of Chamouny is bounded by the Brevent, 8000 feet high, which is an offset of the group of the Buet, the summit of which is covered with perpetual snow, and which divides the valley of the Arve from that of the Giffre. From the Brevent there is a magnificent view of the great chain opposite, with all its peaks and glaciers, as well as of the group of the Buet towards the north, and of the other mountains of the interior of Savoy. The view from the bottom of the valley itself is too confined (the mountains rising abruptly like walls above it) to give a just idea of the extent and height of that great mass of Alps. The Montanvert is ascended on mules, and thus the sea of ice may be reached, but the latter part of the excursion is not without some risk, on account of the numerous crevices in the ice, which are of unfathomable depth; strangers who venture on the glaciers should trust implicitly to their guides.

The road from Geneva to Chamouny follows the course of the Arve by Bonneville, St. Martin, and Servoz. The approach to the valley of Chamouny from St. Martin is nearly as interesting as the valley itself. The cascade and the little lake of Chede, and the scenery about Servoz, are remarkably fine. Travellers put up at Le Prieuré, which is the principal village in the valley of Chamouny.

Besides Le Prieuré, which derives its name from a former convent of Benedictines, founded here in 1099, the valley of Chamouny has several other villages or hamlets. The whole valley contains about 3000 inhabitants, and is divided into four parishes. It produces some barley and oats, but the chief property of the inhabitants consists in cattle; very good honey is also got here. From 1000 to 2000 strangers visit this valley every summer, and their expenditure forms an important addition to the income of the natives. At Le Prieuré are collections of minerals, crystals, amethysts, topazes, and other fine stones which are found in the mountains. The village of Le Prieuré is, according to Saussure, 3346 feet above the sea, so that the perpendicular height of Mont Blanc above the level of the valley is 12,386 feet. Owing however to the vast buttresses which Mont Blanc throws out towards the valley of Chamouny its height does not strike so much on this side as on the Italian side, towards the narrow valley

called Allée Blanche and Val d'Entrêve, where it rises more abruptly and in a single mass.

The valley of Chamouny was not frequented by travellers till about the middle of the last century, when Saussure, Delue, and Bourrit made its beauties known, as well as its advantages, as a station from which to explore the group of Mont Blanc. In one respect the valley of Chamouny is inferior to the other Alpine valleys of the Bernese Oberland and other parts of central Switzerland; it has no waterfalls, but there is a stillness in its scenery which adds to its imposing effect.

CHAMPAGNE, one of the provinces into which France was divided before the revolution of 1793, was bounded N. by Belgium, E. by Lorraine, the duchy of Bar, and Franche-Comté, S. by Bourgogne, and W. by L'Isle-de-France. It was divided into 8 districts:—1. Champagne Proper, which contained the towns of Troyes, Châlons-sur-Marne, Sainte-Ménchould, Epernay, and Verins; 2. Reims, in which were Reims, Rocroy, Fismes, and Château-Poreien; 3. Rethelais, the chief towns of which were Rethel, Mézières, Charleville, and Donchery; 4. Perthois, in which were Vitry-le-François and St. Dizier; 5. Vallage, containing Joinville, Bar-sur-Aube, Arcis-sur-Aube, and Vassy; 6. BASSIGNY; 7. Seunois, comprising the towns of Sens, Joigny, Tonnerre, and Chably; 8. Brie-Champenoise, which contained Meaux, Provins, Château-Thierry, Coulommiers, Montereau-faut-Yonne, and Bray-sur-Seine. The greatest length of the province was about 180 miles, and the greatest breadth 150 miles. The surface presents extensive plains with ranges of hills, particularly towards the east and north. The soil and produce are of great variety. In some parts, especially in the plains, the soil is light, resting on a chalk bottom, ill fitted for tillage, but producing tolerably good pasture; in others it is deep and loamy, yielding excellent wheat, vegetables, and fruits of all kinds. Most of the hills are planted with vines, which produce the famous Champagne wine.

The greater part of Champagne is comprehended in the basin of the Seine, by which, and by its tributaries, the Marne, the Aube, and the Yonne, it is watered. To these rivers we may add the Aisne (a feeder of the Oise), with its tributaries the Suippe and the Vêle, the Armançon, and the Serain, feeders of the Yonne; and the Meuse, which waters the north-eastern and northern parts. The Seine, Aube, Marne, Aisne, Yonne, and Meuse are navigable.

Champagne included two archbishoprics, Reims and Sens; four bishoprics, Langres, Châlons, Troyes, and Meaux, and a great number of abbeys, the most celebrated of which was that of Clairvaux. It now forms the departments of MARNE, HAUTE-MARNE, AUBE, ARDENNES, and part of those of YONNE, AISNE, SEINE-ET-MARNE, MEUSE, CÔTE-D'OR, HAUTE-SAÛNE, and VOSGES.

In the time of Julius Cæsar the territory subsequently called Champagne was inhabited chiefly by the Remi, the Sénonés, the Lingoues, and the Tricasses, from whom the names of the cities Reims, Sens, Langres, and Troyes are derived. It was one of the parts of Gaul which remained longest in the possession of the Roman emperors. After the Burgundians and Franks had crossed the Rhine and acquired settlements in that country, and the south and west parts had been occupied by the Visigoths, nay even after the Roman empire itself had fallen, and the last emperor of Rome had been deposed in the person of Augustulus (A.D. 476), Ægidius and his son Syagrius, who governed this part of Gaul in the name of the emperor of the West, continued in possession of their authority and still upheld the Roman name. However in 486 Syagrius was defeated by Clovis and Ragnacarius, confederated princes of the Franks, and Champagne became a portion of the extensive kingdom over which Clovis reigned. After the death of Clovis (A.D. 511) it became part of the kingdom of Austrasia, one of those into which the states acquired and ruled by him were dismembered. It probably about this time got the name of Campania (Champagne), which is met with in the works of Gregory of Tours, who wrote in the 6th century. From the time of Charles the Simple to the year 1274 Champagne was governed by counts and dukes, who, at first appointed by the king, had contrived to render their power hereditary. On the death of Henri III., count of Champagne and king of Navarre, in the last-mentioned year, Champagne reverted to the crown of France in consequence of the marriage of his daughter, Joan of Navarre, to Philippe le Bel. The female nobility of Champagne enjoyed in the middle ages the remarkable privilege of transmitting their rank to their children, even if the husband were ignoble. This privilege, called 'la noblesse de la ventre,' was granted by Charles le Chauve after the battle of Fontenay (June 25, 841) in order to repair the loss of the Champagne nobles, almost all of whom were slain on that day.

(Beaugier, *Mémoires Historiques de la Province de Champagne*; Bérart, *Histoire des Comtes de Champagne et de Brie*, Paris, 1839; *Dictionnaire de la France*.)

CHAMPAGNE. [AIN.]

CHAMPLAIN, a lake of considerable extent, situated on the northern boundary of, but almost entirely within, the United States of North America. It derives its name from Samuel de Champlain, a French naval officer, who was governor-general of Canada in the 17th century. It divides, for more than 100 miles, the state of New York from that of Vermont, and its most northern extremity belongs to Lower Canada. It stretches in a direction very nearly from south to north from 43° 30' to 45° 4', or through 109 miles. The lake may

be considered as extending still farther north in the narrow channel called the river Chamhly, or Sorel, as far as the town of St. Jean, in Lower Canada; this will add about 30 miles more to its length. Its area may be between 600 and 700 square miles. Its breadth varies from about half a mile to 20 miles, and its depth from 50 feet to 280 feet. On both sides of the lake are high grounds which rise to a considerable elevation. Owing to this circumstance the numerous rivers which, from the east as well as from the west, empty themselves into the lake, though they run from 40 to 60 miles, are only navigable at their mouths; the entire fall in their course being from 500 to 1000 feet. The short river which issues from Lake George and enters Lake Champlain at its southern extremity is likewise unfit for navigation on account of its rapids and cataracts. Lake George is nearly 200 feet above Lake Champlain, and Lake Champlain only 90 feet above the tide-water in the St. Lawrence. This lake is navigated by vessels of 100 tons burden, and by steamers of large size. It discharges its waters by the Chamhly, or Sorel, which leaves it at its most northern extremity and falls into the St. Lawrence near the town of Sorel, or William Henry. The Chamhly is navigable for river-barges, and affords a line of communication between the United States and Lower Canada. The Champlain Canal commences at Whitehall, at the southern extremity of the lake, and runs in a general southern course to the Hudson at Fort Edward. From Fort Edward it runs southward along the west side of the river past Saratoga, and joins the Erie at Watervliet above Albany. The whole length of the canal, including about 17 miles of improved river-navigation, is 64 miles. By this canal a water-communication is opened between the Hudson and the St. Lawrence through Lake Champlain. It was completed in 1822. Among the numerous islands of Lake Champlain, the largest are North and South Hero and Lamotte, belonging to the state of Vermont. The lake abounds with salmon, salmon-trout, sturgeon, pickerel, and other fish.

The principal towns on or near the lake, are Plattsburgh, St. Albans, Burlington [BURLINGTON], and Whitehall. In September 1814, a naval battle was fought on this lake, near Plattsburgh, in which Commodore Maconough, the American commander, defeated the British fleet. (Darby; Bouchette.)

CHANDERNAGORE, the chief town of the French possessions in India, is situated on the river Hoogly, in 22° 52' N. lat., 88° 12' E. long., distant about 16 miles N.N.W. from Calcutta. The population in 1841 was about 36,000; of which number the European residents did not amount to 300. The town is well situated, the streets are straight and the houses are well built, but the town has decreased in importance owing to its trade having declined. The French settled at Chandernagore in 1676; the British dispossessed them of it in 1759: it was restored to the French after the conclusion of the war in 1816.

CHANTILLY. [ALLIER; OISE.]

CHAOURICE. [AUBE.]

CHAPEL-EN-LE-FRITH, Derbyshire, a market-town and the seat of a Poor-Law Union, in the parish of Chapel-en-le-Frith and hundred of High Peak, is situated in 53° 19' N. lat., 1° 54' W. long., distant 40 miles N.W. by N. from Derby, and 167 miles N.W. by N. from London by road. The population of the parish was 3214 in 1851. The living is a perpetual curacy in the archdeaconry of Derby and diocese of Lichfield. Chapel-en-le-Frith Poor-Law Union contains 17 parishes and townships, with an area of 69,498 acres, and a population in 1851 of 11,493.

Chapel-en-le-Frith is situated on the edge of the Peak district, and on the border of Cheshire. The parish church, dedicated to St. Thomas à Becket, is a Grecian building, erected at the beginning of the last century. The Wesleyan and Primitive Methodists and Baptists have places of worship, and there are National and Infant schools, a mutual improvement society for young men, and a savings bank. A county court is held in the town. The town of Chapel-en-le-Frith stands on the side of an eminence, at an elevation of 566 feet above the level of the sea at low-water. The town is partially lighted with gas, which is supplied by the owners of a cotton manufactory in the neighbourhood. A cotton manufactory and a paper-mill give employment to many of the inhabitants. The Peak Forest lime-works, which are about three miles east from the town, give employment in the carting of lime to Manchester. The Peak Forest Canal runs three miles to the north-west of Chapel-en-le-Frith; communication with it is maintained by a short branch of the Peak Forest railway. There is a small market on Thursday; and numerous fairs are held in the course of the year for the sale of cattle, wool, and provisions.

(Lysons, *Magna Britannia*; *Communication from Chapel-en-le-Frith*.)

CHAPEL-HILL. [CAROLINA, NORTH.]

CHARD, Somersetshire, a market-town, borough, and the seat of a Poor-Law Union, in the parish of Chard and hundred of Kingsbury East, is situated in 50° 52' N. lat., 2° 57' W. long., distant 50 miles S.S.W. from Bristol, and 139 miles W.S.W. from London by road. Taunton, the nearest station on the Great Western line of railway, which is 13 miles from Chard, is 163 miles from London. The population of the borough of Chard in 1851 was 2291. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor.

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The living is a vicarage in the archdeaconry of Taunton, and diocese of Bath and Wells. Chard Poor-Law Union contains 34 parishes and townships, with an area of 57,946 acres, and a population in 1851 of 26,085.

At the time of the Domesday Survey, the manor of Chard, then called Cerdre, was held by the bishop of Wells. The borough sent members to Parliament in the reigns of Edward II. and Edward III., but not since. The town stands on the high ground on the south border of the county, close to Devonshire. The streets, which are rather irregularly laid out, are lighted with gas; the houses are generally well-built. The market-house, an ancient structure, was originally built as a court-house for the assizes. The parish church, in the perpendicular style, was erected in the reign of Henry VII. The Baptists, Independents, and Wesleyan Methodists have places of worship. Chard possesses an Endowed Grammar school of ancient foundation, which had 30 scholars in 1852. There is a National school. An hospital founded in 1662 by Richard Harvey, and rebuilt in 1841, maintains 16 poor persons, legally settled in the borough, natives having the preference. The lace trade is carried on in Chard; two large manufactories employing several hundred persons. There are also two iron foundries. A canal connects Chard with Bridgewater, and on the wharf at Chard are extensive warehouses. The market is on Monday; fairs are held on the first Wednesdays in May, August, and November. A county court is held in the town.

(*Communications from Chard*.)

CHARENTE, a department in the south-west of France, takes its name from its principal river the Charente. It is bounded N. by the departments of Deux-Sèvres and Haute-Vienne, E. by those of Vienne and Dordogne, and S. and W. by those of Dordogne and Charente-Inférieure. The department lies between 45° 12' and 46° 7' N. lat., 0° 50' E. and 0° 30' W. long. Its greatest length from north-east to south-west is 75 miles; the average breadth is 35 miles. The area according to the cadastral returns of 1851 is 2295.6 square miles, and the population according to the census of the same year amounted to 382,912, which gives 166.68 to the square mile, being 8.03 below the average per square mile for the whole of France.

Surface.—The department comprises the whole of the former provinces of Angoumois, to which on the west has been added a small strip of Saintonge, on the north portions of Poitou and Marche, and on the east an inconsiderable part of Limousin. It presents a surface diversified by several ranges of hills, sandy and calcareous plains, artificial meadows, heaths, and rocks. The hills, which are pretty equal in height, consist of layers of the fossiliferous deposits, and are in many places covered with chestnut forests. The soil is dry, but produces abundance of corn and wine. There is but little natural grass-land, but the moorland pastures of the arrondissements of Barhezieux and Confolens serve for the outcrop of a large number of cattle and sheep.

Hydrography and Communications.—The chief river of the department is the Charente, which rising in Haute-Vienne and flowing north-west crosses the north-east of the department of Charente, and enters that of Vienne as far as Civray; from this town it turns south, and again entering the department of Charente passes Verteuil, Mansle, and Angoulême, whence flowing westward past Châteauneuf, Jarnac, and Cognac, it enters the department of Charente-Inférieure; here it runs north-west past Saintes, and Rochefort, of which it forms the harbour, and falls into the ocean opposite Isle-Madame. The Charente is subject to inundations which greatly contribute to the fertility of the land along its banks; its course is rapid, but the navigation upwards is facilitated by means of 27 large sluices designed to keep the water between each pair of sluices in a state approaching to equilibrium. Its whole length is 200 miles, of which 118 miles are navigable; the tide ascends it to a little above Saintes, and steamers ply up the river as far as Angoulême. The *Tardoire* rises in Haute-Vienne, flows west past La-Rochefoucauld, below which it receives the Bandiat on its left bank. These two rivers flow in high channels through a calcareous soil, abounding in caverns and grottoes, which absorb some of their waters, for the volume of the united stream becomes very much diminished as it approaches the Charente, which it enters after receiving the *Bogneure* a little above Mansle. The lost waters are supposed to give rise to another feeder of the Charente, the *Touvores*, the source of which at Beaulieu resembles that of the Sorgue in Vaucluse, and rivals it in beauty. The *Né* rises in the south of the department, and enters the Charente below Cognac. The *Seugne* flows through the south-west of Charente-Inférieure, and joins the Charente east of Saintes. The principal feeders of the Charente on the right bank are the *Antoine*, which falls in below Cognac, and the *Boutonne*, which, rising in the department of Deux-Sèvres, flows through the Charente-Inférieure, passing St.-Jean-d'Angély and Tonny-Boutonne, and enters the Charente about 15 miles from its mouth.

The north-east of the department is crossed by the Vienne, which is joined to the Charente by the Canal-de-Poitou. The southern border of the department is formed by the Nizonne and the Dronne, which receives the Nizonno and the Tude on its right bank, and falls into the Isle, a feeder of the Dordogne. In the arrondissement of Confolens, there is a great number of ponds. All the waters of the department abound in fish.

The department is traversed by 5 national and 9 departmental roads, and by one military road. The Paris-Bordeaux railway, through Orléans and Tours, has above 60 miles of its length in this department, which it enters between Ruffec and Civray on the north, and running south past Angoulême crosses the extreme southern boundary of Charente a little south of Chalais.

The department contains 1,469,201 acres, of which 917,108 acres are under tillage and meadows; 245,861 under vineyards; 195,355 are covered with woods and forests, and 89,967 acres with heaths, marshes, and waters. The annual quantity of bread-stuffs and potatoes produced amount to 515,000 quarters, of oats 48,000 quarters, and of chestnuts 35,000 quarters. Of wine 25,344,000 gallons are produced, none of which is in high repute; the wine-growers apply themselves more to the distillation of brandy than to the improvement of their wines, each possessing a still, and superintending the process of distillation on his own premises. The famous Cognac brandies, called 'fines Champagnes de Cognac' (of which not more than 6000 huts are produced annually, but the quantity sold under the name exceeds 15,000 butts), are distilled from the juice of a white grape called 'folle blanche'; brandies made from red wines are considered greatly inferior. Truffles are very abundant; it is calculated that the quantity annually brought to market produces about 300,000 francs. Saffron is cultivated. A great number of pigs are fattened, and cattle for the Paris market; poultry is good and plentiful. The climate is agreeable and temperate, and the air is pure; strong winds from the west and south-west sometimes prevail.

Mines of iron, lead, and antimony are worked; a good deal of bar-iron and steel are manufactured; huddling stone, gypsum, and grinding stone are found. Next to brandy, paper is the most important article of manufacture; broadcloth, linen, sailcloth, cordage, hats, corks, oak-staves, hoops, and pottery are also made. There are 1444 wind- and water-mills, including paper-mills, 5 smelting furnaces, and 387 factories of various kinds. The commerce of the department consists of the agricultural and industrial products named before, and of oil, nuts, casks, rags, large chestnuts called marrons, &c.

The department is divided into 5 arrondissements, which, with their subdivisions, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Angoulême	9	144	137,696
2. Cognac	4	70	57,959
3. Ruffec	4	82	69,260
4. Barbezieux	6	38	56,557
5. Confolens	6	70	71,440
Total	29	454	382,912

1. In the first arrondissement the chief town is ANGOULÊME. *Mont-Bron*, 16 miles E. from Angoulême, on the left bank of the Tardoire, has 3200 inhabitants, who manufacture iron and paper. *La-Rochefoucauld*, 12 miles N.E. from Angoulême, on the right bank of the Tardoire, which is here crossed by a very ancient bridge, has 2800 inhabitants; close to the town is an old castle, flanked by four round towers, in which the author of 'Les Maximes' was born. *St.-Amand-de-Boixe*, near the left bank of the Charente; *Blanzac*, in a fine corn and grape district, S. of Angoulême; *Rouillac*, N.E. of Angoulême; and *Ruelle* on the Touvre (which has a large foundry for iron cannon used by the French navy, a powder-mill, and several blast-furnaces and iron foundries), are the most important of the other towns, having each about 2000 inhabitants.

2. In the second arrondissement the chief town is *Cognac*, which has tribunals of first instance, and of commerce, a college, several brandy distilleries, and a population of 4118. It stands in a beautiful and fertile district, on the right bank of the Charente, and is pretty well built. It is the entrepôt for the excellent brandies of the neighbouring districts, has some potteries and tan-yards, and also a considerable trade in wine, spirits, linseed, and juniper-berries. The remains of the elm under which the Duchess of Angoulême gave birth to Francis I., in 1494, are still seen in the park that surrounds the old castle above the town. *Châteauneuf*, on the left bank of the Charente, has 2336 inhabitants; near it is a grotto containing curious stalactites. *Jarnac*, memorable for the defeat and death of the Prince de Condé in 1569, stands E. of Cognac on the Charente, which is here crossed by a fine suspension-bridge; it has large brandy distilleries, and a population of 2510. *Beynac*, 7 miles S. from Cognac, has 2620 inhabitants, who distil brandy of the best quality.

3. In the third arrondissement the chief town is *Ruffec*, 27 miles by railway N. from Angoulême, near the junction of the Lieux with the Charente. The town is well built, has a triennial of first instance, a college, and 3000 inhabitants, who trade in corn, chestnuts, truffles, cheese, &c. Near it there is an extensive forest, and the remains of a fine old castle called the Château de Broglie. *Aigre*, S. of Ruffec, in a district fertile in grapes, corn, flax, and hemp; *Manle*, on the Charente; *Vertueil*, 4 miles E. from Ruffec, on the left bank of the Charente; and *Villefagnan*, 6 miles W. from Ruffec, are the chief towns of the other cantons, each with less than 2000 inhabitants.

4. In the fourth arrondissement the chief town is *Barbezieux*, 20 miles S.S.W. from Angoulême, on the road to Bordeaux; it has

tribunals of first instance and of commerce, manufactures of linen and leather, and a population of 3335. *Aubeterre*, which stands on the slope of a hill near the Dronne, and has a church cut in the rock exactly under the court-yard of a castle that crowns the summit of the hill; *Baignes*, 8 miles from Barbezieux; *Chalais*, on the right bank of the Tude; *Montmoreau*, S. of Barbezieux; and *Brossac*, are small places that give names to the other cantons.

5. In the fifth arrondissement the chief town is *Confolens*, which stands at the junction of a small stream, called Goire, with the Vienne; it has a tribunal of first instance, a college, a public library of 12,000 volumes, and 2765 inhabitants, who rear great numbers of cattle on the pastures in the neighbourhood, and carry on some trade in timber, oak-staves, and leather. *Chabanais*, on the Vienne; *Champagne-Mouton*, on the little river Argent; *St.-Claud*, S. of Confolens, near which there are several iron works; and *Montembœuf*, are chief towns of the other cantons, with populations generally under 2000.

The department forms the see of the Bishop of Angoulême, is under the jurisdiction of the High Court of Bordeaux, and is included in the 14th Military Division, which has its head-quarters at Bordeaux. (*Dictionnaire de la France*; Balbi, *Géographie*; *Statistique de la France*; *Annuaire pour l'An 1853*.)

CHARENTE RIVER. [CHARENTE.]

CHARENTE-INFÉRIEURE, a maritime department on the west coast of France, is named from its geographical position on each side of the Lower Charente. It extends from 45° 5' to 46° 19' N. lat., from 0° 7' E. to 1° 13' W. long.; and is bounded N. by the departments of Vendée and Deux-Sèvres, E. by the department of Charente, S. by that of Gironde, and W. by the Bay of Biscay. The greatest length of the department extends from north to south about 85 miles; the breadth varies from 10 to 50 miles. The area is 2628 square miles, and the population according to the census of 1851 was 469,992, which gives 178.84 to the square mile, being 4.12 above the average per square mile for the whole of France.

The department comprises the old provinces of Saintonge and Aunis, the latter forming the portion between the river Sèvre and the mouth of the Charente. The Isle of Ré, which is separated from the mainland of the department of Vendée by the channel called Pertuis-Breton; the Isle of Oleron, S. of Ré, and separated from it by the Pertuis-d'Antioche; the Isle of Aix, N. of the embouchure of the Charente; and Isle-Madame, which commands the entrance to the Charente from the south, are included in this department.

The coast line of the department, including the north-eastern shore of the Gironde, measures 105 miles, and has several good harbours and well-sheltered roadsteads. The coast is low, consisting of salt marshes, partially separated from the sea by sand-hills liable to be flooded by every tide, and extending a considerable way inland. Of these marshes however a very large extent has been converted into most productive land; the sea being shut out by means of dikes, and the surface of the marshes drained by canals, in pretty nearly the same way as the 'polders' in Holland and Belgium are drained. [ANTWERP, Province of.] In those to which the sea still has access, a great quantity of excellent salt is made. The rest of the department is level and very fertile. The soil, which consists of a vegetable and sandy mould, resting in most places on chalk, affords excellent pasture for great numbers of cattle, sheep, and horses; abundant supplies of the farm produce mentioned in the preceding article; and a vast quantity of wine, in the growth of which Charente-inférieure ranks second among the wine-growing departments of France. The climate is temperate and healthy, except in the low grounds along the coast, in which agues and fevers prevail in summer and autumn.

The department is drained by the Charente, one of the deepest rivers in France, the Boutonne, and the Seugne, described in the preceding article [CHARENTE]; by the Gironde, which borders it on the south-west [GIRONDE]; by the Sèvre-Niortaise in the north [DEUX-SÈVRES]; and by the Seudre, which rising north of Jonzac flows north-west past Saujon, and enters the Bay of Biscay opposite the Isle of Oleron, and a little north of the Passe de Maumusson. All these are tide rivers and navigable, and together with the canal from La-Rochelle to the Sèvre-Niortaise, and that from Brouage to Rochefort, afford great facilities for internal and external trade. The department is traversed by 9 royal and 16 departmental roads, besides the military road from Saumur to La-Rochelle. A branch railroad is projected from Poitiers on the Paris-Bordeaux line to the naval harbour of Rochefort.

The department contains 1,681,205 acres, of which 812,025 acres are arable; 195,000 meadow and pasture; 276,000 under vines; and 195,217 acres under woods and forests, in which the chestnut, oak, and resinous trees are the most common. Grain of all kinds is produced in quantity more than sufficient for the consumption. The annual produce of wine, as estimated by the government, is 52,668,000 gallons, of which about one-third is used for home consumption; the remainder is distilled into brandy or exported. None of the wines of the department are of high repute; the red wines of the right bank of the Charente rank as third-class vins d'ordinaire; the white wine grown on the left bank and in the eastern part of the arrondissement of La-Rochelle are converted into brandy and sold as Cognac, but are greatly inferior to the Champagnes de Cognac, mentioned in the article CHARENTE. A large quantity of apples, plums, walnuts, peaches, &c. are grown. Other articles of produce are clover and flax-seed, hemp,

saffron, garden beans, which are an article of export, wormwood, &c. Great numbers of pigs are fattened; poultry is very abundant; hares, rabbits, and winged game are plentiful; aquatic birds in countless numbers frequent the marshes along the coast; the pilchard and oyster fisheries are extensive and valuable.

The industrial activity of the department is considerable. Besides the distillation of brandy, which is generally managed by the farmer on his own premises, and the manufacture of salt, the following industrial products, though only of secondary importance, deserve mention: namely, woollen hosiery, shoe and glove leather, fine pottery, vinegar, hoops, oak-staves, and timber. In almost all the ports, but especially at La-Rochelle and Rochefort, ship-building is carried on. The commerce of the department consists in the products already named, and in colonial produce, butter, oil, bottles, wine-casks, liquors, &c. Ships are fitted out for foreign trade and for the cod fisheries; the coasting trade is active; about 600 fairs are held in the department yearly. Traces of iron and copper have been found, but no mines of any kind are worked.

The department is divided into six arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. La-Rochelle	7	55	82,293
2. Rochefort	4	47	61,760
3. Marennes	6	34	51,689
4. Saintes	8	99	107,513
5. Jonzac	7	120	83,706
6. St.-Jean-d'Angély	7	126	83,031
Total	39	481	469,992

1. In the first arrondissement the chief town is *La-Rochelle*, the capital of the department and of the former province of Annis. It stands on the north side of a small inlet (which extends about two miles inland and terminates in a salt-marsh), in 46° 9' N. lat., 1° 10' W. long., 295 miles S.W. from Paris, and has 14,420 inhabitants, including the whole commune. By the marriage of Eleanor of Guienne and Poitou to Henry II. the town came into the hands of the English kings, from whom it was taken by Louis VIII. in 1224, again ceded to England by the treaty of Breigny in 1360, but finally recovered for France by Bertrand du Guesclin in 1372. The Huguenots held it from 1557 to October 28, 1628, when the garrison reduced by famine surrendered to Louis XIII., who demolished the fortifications. The present defences were erected by Vanban. The entrance to the inlet which forms the outer harbour is defended by forts. The inner harbour, round which the town is built, consists of two basins, both surrounded by fine quays, and one of them is closed by flood-gates, whereby ships are kept constantly afloat. The largest vessels can come up to Rochelle at high water. The town, which is entered by 7 gates, is well built with broad straight streets and houses adorned with porticoes. The finest square is the Place-du-Château, three sides of which are planted and serve for promenades. Outside the walls there are two other extensive walking-grounds, called the Du-Mail and Champ-de-Mars. The chief buildings are the cathedral, the town-house, the exchange, the tower called Porte-de-l'Horloge, the marine baths, and the public library, which contains 18,000 volumes. The exports consist of the produce of the department; the imports chiefly of colonial produce. The town is the seat of a bishop, has tribunals of first instance and of commerce, a college, mint, school of navigation, besides numerous glass-works, sugar-refineries, potteries, ship-building yards, and cotton-yarn factories. Vessels are fitted out here for the Newfoundland fisheries. *Marans*, which is situated in a district recovered from the sea, near the confluence of the Vendée and Sèvre-Niortaise, has a tide harbour which admits vessels of 100 tons up to the quays, while larger vessels load or unload in a safe roadstead near the mouth of the Sèvre. A canal recently cut admits vessels of 300 tons quite up to the town. The town is well built, has 4713 inhabitants, and a very important export trade in corn. It has also large timber-yards and salt-stores, and a good commerce in clover and oleaginous seeds, brandy, flax, hemp, flour, hoops, staves, &c. *Courçon* and *La-Jarric* are small towns with rather more than 1000 inhabitants each.

To this arrondissement belongs also the *Isle of Ré*, which at its south-eastern extremity approaches within 2½ miles of the mainland; on its northern extremity there is a lighthouse called *Tour-des-Baleines*, and marking the entrance to the Pertuis-Breton. The isle is 17 miles long; in some places 5 miles, in others only 1 mile wide. It has neither grass, nor spring, nor tree; but vines flourish on it, and a great deal of brandy is made; salt also is manufactured and exported from the numerous harbours of the isle. Filtered sea-water is used for drink. The isle is defended by four forts, and has about 16,000 inhabitants, who are chiefly engaged in fishing and making salt. The chief towns are—*Ars-en-Ré*, on the west coast, which has a small harbour and 3668 inhabitants; *St.-Martin-en-Ré*, on the east coast, which is fortified, has a tribunal of commerce, and a population of 2617; and *La-Flotte*, which has a harbour for vessels of 300 tons and 2429 inhabitants.

2. In the second arrondissement the chief town is *Rochefort-sur-Mer*,

situated partly on a hill and partly on a marsh, on the right bank of the Charente, and 9 miles from its mouth, in 45° 56' 39" N. lat., 0° 58' W. long.: population above 20,000. The approach to the town is defended by forts all along the banks of the river. The streets of the town are broad, regularly built, and several of them planted with double rows of acacias and poplars; the houses are low. The finest buildings are—the marine hospital, which stands on a height outside the town, the residence of the port admiral, the bagnio, the civil and military hospital, and more especially the arsenal and naval artillery school, in connection with which are dock-yards, rope-walks, and other establishments for manufacturing everything necessary to the completion of the largest men-of-war, fast sailing-vessels, and steamers. Other remarkable objects are the large saw-mills, the water-works for cleansing the harbour, the theatre, &c. The naval harbour, which ranks as the third harbour of its kind in France, has a depth of 22 feet at low water, and 40 feet at full tide. In the part of the harbour allotted to merchantmen, ships of 900 tons can enter at all times. The town is the seat of a maritime prefect, has tribunals of first instance and of commerce, a college, schools of hydrography and of naval medicine, several sugar refineries and vinegar works, and a large trade in colonial produce and the staple products of the department. It is surrounded by ramparts which are planted with trees. The importance of Rochefort dates from 1666, when it was made a naval station by Louis XIV. *Tonnay-Charente*, 10 miles E. from Rochefort, on the right bank of the Charente, has a safe harbour, into which vessels of 600 tons can enter; and a population of 3435, who carry on a brisk trade in the products of the country, colonial produce, coal, deals, oak-staves, oil, bricks, &c. The other towns are *Surgères*, which has a population of 2153, and *Aigrefeuille*: population, 1688.

The *Isle of Aix*, which belongs to the arrondissement of Rochefort, is about half a mile long and a quarter of a mile wide. It is fertile, has a population of about 500, and is very important on account of its position and fortifications, which command the approach to Rochefort from the Pertuis-d'Antioche. Here Napoleon went on board an English line-of-battle-ship, July 15, 1815. *Isle-Madame*, which is situated close to the mouth of the Charente, and is still smaller than the Isle of Aix, is also strongly fortified.

3. In the third arrondissement the chief town is *Marennes*, situated on the northern side of the embouchure of the Seudre, on which there is a harbour about half a mile from the town. It is a well-built place, has tribunals of first instance and of commerce, and 4469 inhabitants, who carry on a brisk trade in the produce of the country, and in salt made in the marshes near the town, which are a source of great profit, but very insalubrious. *Royan*, a watering-place on the north shore of the Gironde, has a lighthouse, and 2957 inhabitants; there is regular steam-communication between this place and Bordeaux. *La-Tremblade*, on the south side of the embouchure of the Seudre, has a small harbour, and a population of 2551. *Brouage*, a fortress and sea-port, a few miles N. of Marennes, and on the navigable canal of Brouage before mentioned, is now almost deserted on account of the unhealthiness of the site.

The *Isle of Oleron* (the ancient *Uliarus*), which lies off the coast, between the mouths of the Charente and the Seudre, is included in the arrondissement of Marennes. Its southern point is separated from the mainland by the Passe-de-Maumusson, a strait about 2½ miles wide, commanded by a fort. The length of the island is about 19 miles, its greatest breadth 5 miles. The isle is traversed in its whole length by a road which terminates at the north-west extremity, near the Chassiron lighthouse, at the entrance of the Pertuis-d'Antioche. It is very fertile, yielding all the products mentioned in this article, and has a population of 16,000. The western coast is bold, and without harbours. On the south-east of the isle, opposite Brouage, is the town of *Oleron* or *Château-d'Oleron*, which has a harbour, distilleries, rope-walks, ship-building yards, and 3135 inhabitants. *St.-Pierre*, which stands near the centre of the island, has a tribunal of commerce, and a population of 4769.

4. In the fourth arrondissement the chief town is *Saintes*, the capital of the former province of Saintonge, which stands on a hill above the left bank of the Charente, 43 miles S.E. from Rochelle, in 45° 44' 40" N. lat., 0° 38' W. long., and has 10,000 inhabitants. The appearance of the town from whatever side it is approached is very picturesque; but the interior consists of crooked streets, and generally ill-built houses. The former cathedral, the churches of St.-Entroppe and Sainte-Marie-des-Dames, are the most remarkable buildings. The town is the seat of the court of assize for the department, of tribunals of first instance and of commerce, and possesses a college, public library, theatre, cabinets of natural history, antiquities, and natural philosophy. The departmental nursery is close to the town. Woollens, hosiery, pottery, shoe and glove leather, and wine-casks are the chief industrial products; there is also a good trade in corn, brandy, timber, wool, &c. *Saintes* is the Roman *Mediolanum*; in the time of Ausonius it was called *Santonnes*, from the people whose capital it was, and hence the modern name. Of ancient remains the most interesting are the Roman baths, amphitheatre, and a triumphal arch which bears inscriptions dedicatory to Germanicus, Tiberius, and Drusus. Roman thermæ were discovered in 1851 in this town, with the wall-paintings in parts still fresh and perfect. *Pons*, 14

miles from Saintes, beautifully situated on the left bank of the Seugne, has an ecclesiastical school, and 4543 inhabitants; in the centre of the town are the ruins of the ancient castle of the lords of Pons, a square tower of which, 108 feet high, is used as a prison. *Saujon*, 16 miles W. from Saintes, stands on the Seudre, which here begins to be navigable, and has 2217 inhabitants. *Génosac*, W. of Pons, has a population of 2610. *Burie*, *St-Porchaire*, and *Cozes*, have each a population under 2000. Near the last, which is on the road from Saintes to Rochefort, is the largest oak in France, calculated to be the growth of at least 2000 years.

5. In the fifth *arrondissement* the principal town is *Jonzac*, which stands on the Seugne, is defended by a strong castle, and has a tribunal of first instance and 2569 inhabitants. The other towns are—*Mirambeau*, which has a fine castle, a church built by the English, and 2354 inhabitants; *Archie*, *St-Genis*, *Montendre*, *Montguyon*, and *Montlieu*, the population of each of which does not exceed 1500.

6. In the sixth *arrondissement* the chief town is *St-Jean-d'Angely*, 20 miles E. from Rochefort, on the right bank of the Bontonne, which here begins to be navigable for small craft. It is irregularly built; but the usage common to this part of Anis of whitewashing the houses every year gives it a clean, gay look. The town has tribunals of first instance and of commerce, a college, and a population of 6107. The corn market-house, the former abbey of *St-Jean*, public baths, and gunpowder-mills are the most remarkable objects in the town. Brandy, wine, seeds, timber, &c., are the chief articles of commerce. *St-Savinien*, on the right bank of the Charente, has 3507 inhabitants. *Aulnay*, *St-Hilaire*, *Tonnay-Bontonne*, and *Matha* have each less than 2000 inhabitants.

The department forms the see of the Bishop of La-Rochelle. It is included in the jurisdiction of the High Court of Poitiers, and belongs to the 14th Military Division, of which Bordeaux is the headquarters.

(*Dictionnaire de la France; Statistique de la France; Annuaire pour l'An 1853.*)

CHARENTON. [SEINE.]

CHARING. [KENT.]

CHARITÉ, LA. [NIÈVRE.]

CHARKOFF, or CHARKOW, a province of Southern Russia; formerly called Slobodsk-Ukraine. The territory came into the possession of the Czars about the beginning of the 17th century, and being almost uninhabited in 1651, the emperor Alexei Michaelowich allowed the Cossaks of the Western Ukraine to settle in it, and to enjoy the privileges guaranteed to them by Stephen Bathory, king of Poland. They then founded five large villages, or 'slobodas'; and from this circumstance the name of Slobodsk was derived.

The province of Charkoff is bounded N. by Knrsk, E. by the country of the Don Cossaks, S. by Ekaterinoslaf, and W. by Poltava. It contains 20,846 square miles, with a population of 1,467,400. The country is generally flat and the soil very fertile, yielding about 4,000,000 quarters of corn of all kinds, one-fourth of which is exported. Flax, hemp, tobacco, hops, and potatoes are grown. Cattle are excellent, and bees very abundant. The industrial establishments include numerous distilleries, some tan-yards, saltpetre-works, and salgans, or tallow-melting houses. The forests in this province belong chiefly to the crown, and cover about 2000 square miles. Game is scarce, but the forests abound in wolves and foxes.

The population consists of Malo-Russian, Cossaks, Great Russians, German colonists, converted Calmucks, Jews, and Gipsies. Besides the military population of the Cossaks there are five colonised regiments of cavalry. The chief occupation of the inhabitants is agriculture. The roads are bad and the rivers not navigable. The *Sievernoi-Donetz* is the principal river, which after receiving the *Oskol* in the neighbourhood of *Izyum* falls into the Don. The other rivers are the *Vorskla* and the *Psol*, both falling into the Dnieper, the former of which belongs to the southern districts and the latter to the northern.

The capital town, CHARKOFF, is noticed in a separate article. The other towns are:—*Akhtyrka*, in the west of the province, near the *Vorskla*, which has 8 churches and 13,000 inhabitants; *Sumy*, in the north, on the right bank of the *Psol*, famous for its traffic in horses, population 12,000; *Walki*, S.W. of Charkoff, on the road to Poltava, with 10,000 inhabitants; *Tehugujew*, S.E. of Charkoff, on the *Sievernoi-Donetz*, which is the head-quarters of a Cossak regiment, and has 10,000 inhabitants; *Belopol*, or *Bielopalje*, N.W. of Sumy, on a feeder of the *Desna*, population 10,000; *Lebedjan*, or *Lebedine*, S.S.W. of Sumy, with 9000 inhabitants; *Bogoduchow*, N.W. of Charkoff, population 6300; *Miropolje*, population 6300; *Kramokutzk*, W. of Charkoff, on the right bank of the *Merlo*, with 5000 inhabitants; and *Smijew*, or *Zmiew*, on the *Sievernoi-Donetz*, population 5000. Many of these towns are fortified, and nearly all of them, even including the public buildings, are constructed of wood.

CHARKOFF, or CHARKOW (pronounced Kharkoff), a town in Southern Russia, in 49° 59' N. lat., and about 33° 26' E. long., between two small rivers, the Charkowa and the Lopan, which fall into the *Donetz*, one of the largest tributaries of the Don. Charkoff is the capital of the province of Charkoff, and may be considered as being placed on the boundary-line between the fertile country which

extends over the centre of Russia, and the large deserts known under the name of steppes which occupy the southern districts of the empire. This town consists of numerous narrow winding streets of wooden houses: it contains about 18,000 inhabitants. Charkoff has been chosen by the Russian government as the centre of instruction for the southern provinces. The university, erected in 1803, has connected with it a botanic garden, a collection of natural objects, an observatory, and a library of 21,000 volumes. There is also a seminary for clergymen, a military academy for forty children of poor noblemen, a grammar school, and an institute of education for young ladies, with some other schools. Charkoff is a place of considerable trade; the manufactures include articles of Cossak clothing, excellent carpets, felt cloaks, soap, candles, and leather. Four great fairs are held in the course of the year; of these one is for wool; at the others vast quantities of manufactured goods are sold. The fair held in May generally lasts for about two weeks. Many merchants from the interior of Russia frequent the fairs of Charkoff.

CHARLBURY. [OXFORDSHIRE.]

CHARLEMONT, a frontier fortress of France, is so united with the adjacent town of Givet on the opposite side of the river Meuse as to form one town, which under the name *Givet* will be found noticed in the article ARDENNES.

CHARLEROI, or CHARLEROY, a town in the province of Hainault, in Belgium, situated on the banks of the Sambre, 20 miles E.S.E. from Mons, and 33 miles S. from Brussels, in 50° 23' N. lat., and 4° 25' E. long.: the population of the town is 6150. This town, with the whole of Hainault, was united to the French republic, and formed part of the department of Jemmapes. In 1814 it became part of the kingdom of the United Netherlands; and in 1815, during the hundred days, it being in possession of the Prussians, they were attacked by Napoleon, and driven from it a few days before the battle of Waterloo. Since the general peace the fortifications have been greatly improved.

Charleroi is built in the form of an amphitheatre, on the side of a steep hill which rises from the banks of the Sambre. The town contains glass-houses, tanneries, dye-houses, rope-walks, salt and sugar refineries, and factories for spinning wool. But the principal sources of prosperity are the coal-mines and iron-furnaces in the district. About 90 coal-pits, 70 high furnaces, and 50 iron-foundries are in and near the town. The iron-works are so near together that the whole are visible from one spot. In the town and neighbourhood about 6000 persons are said to be employed in uail-making.

Charleroi is connected by railway with most of the principal towns of Belgium; the high roads from Brussels, Mons, and Namur meet at Charleroi. The Brussels and Charleroi Canal affords great facilities of water communication.

CHARLESTON, the principal port and largest city in the state of South Carolina, is situated in the county of Charleston, upon a narrow tongue of land formed by the confluence of the rivers Ashley and Cooper, in 32° 46' 33" N. lat., 79° 57' 27" W. long. The population of the city in 1840 was 29,261; in 1850 it was 42,985, exclusive of the suburb of St. Philip, which contains about 16,000 inhabitants. The city is divided into four wards, and is governed by a mayor and 12 aldermen. Charleston harbour, which is spacious and convenient, is formed by the estuary of the two rivers, and protected from the Atlantic by Sullivan's Island on the north, and Folly Island on the south. The entrance, which is between these islands, is obstructed by a range of sand-banks, which make three channels by which vessels drawing 16 feet of water may enter the port, but the passage is rendered difficult and uncertain by the tides and the shifting of the sands. The city is protected by Fort Moultrie, on Sullivan's Island, Castle Pinckney two miles, and Fort Johnson about five miles below the city.

Charleston was founded in 1650, 17 years after the granting of the colony by Charles II. to the Earl of Clarendon. There had indeed been a settlement formed on the site in 1672, and another named Oyster Point Town in 1677, but both were soon abandoned. For rather more than a century Charleston was the capital of the province, Columbia, now the seat of government, not having been founded until 1787. The site on which the city is built is low, and far from healthy. The city is regularly laid out in parallel streets extending between the two rivers and crossed by other streets at right angles. The houses are for the most part of brick, spacious and lofty, and furnished with balconies and verandahs, in order to protect the interior from the sun. The streets are generally narrow, ranging from 35 to 70 feet in width, and unpaved, and the soil being sandy, considerable annoyance is experienced in windy weather from dust and sand. To shelter the passengers from the sun, rows of a tree called the 'pride of India' are planted on each side of the streets; this tree does not grow to any considerable height, but its branches are spreading and its foliage thick, and it possesses the further advantage of not harbouring insects.

The town contains a city-hall, exchange, custom-house, district court-house, guard-houses, theatre, orphan-house, hospital, almshouse, two arsenals, two markets, a college, nearly 40 places of public worship, several high-schools, an orphan asylum, and other buildings devoted to benevolent purposes. There are besides an academy of fine arts, a literary and philosophical society, and a city library con-

taining about 24,000 volumes. There are several banks and assurance companies. Four daily and four weekly newspapers are published in the city. Charleston possesses one of the finest floating dry docks in the United States. The yellow fever has made frequent ravages in Charleston, but its effects have been chiefly confined to strangers, and especially those from more northern climates. The place is not considered unhealthy by natives.

Charleston is a place of very considerable trade. Nearly all the cotton and rice exported from the state are shipped from this port. The amount of registered and licensed tonnage belonging to the port in 1850 was 33,293 tons, of which 17,916 tons were employed in the coasting trade. In the year ending 30th June, 1850, the vessels that entered and left the port in the prosecution of foreign trade were—inwards 303 of 96,619 tons; outwards 351 of 121,367 tons; but the main trade as explained under CAROLINA, SOUTH, is carried on coastwise with New York, whence the staple commodities of South Carolina are shipped to foreign countries. For carrying on this trade with New York there are several well provided lines of steam-ships and sailing vessels. Regular lines of packets also sail between Charleston and Boston, Philadelphia, Baltimore, Providence, New Orleans, Wilmington, and Savannah. The cotton received in Charleston from the interior in 1850 amounted to 400,714 bales, and of sea-land to 17,994 bales, of which 365,327 bales of upland, and 16,437 bales of sea-land were exported. The receipts of rice in the same year amounted to 147,690 barrels, and the exports to 134,417 barrels. Cotton and rice are now the staple exports; the former staple exports of Charleston, staves, lumber, furs, peltries, indigo, and tobacco being of very inferior importance. The inland communication of the city is facilitated by the Santee Canal which connects the port with the Santee River. But a far more important auxiliary has been the system of railways carried out in South Carolina, by which the city is placed in close connection with most of the more fertile districts of the state; and when the railways now in course of construction are completed Charleston will have access both to the Mississippi and the Ohio.

The Charleston College was chartered in 1785; it is now one of the most flourishing institutions of the kind in the southern states: in 1850 it had 6 professors and 70 students. The college buildings are commodious. It possesses a good philosophical apparatus, and a library of 2000 volumes. The Medical College, which was established in 1833 is empowered to confer medical degrees: in 1850 it had 8 professors and 150 students. The building is a handsome edifice, for which the city council of Charleston appropriated 15,000 dollars. The other public schools are a high-school founded in 1839, which averages from 130 to 150 pupils, and free schools with about 400 scholars.

CHARLESTOWN. [ABERDEENSHIRE; FIFESHIRE; MASSACHUSETTS.]

CHARLEVILLE. [ARDENNES.]

CHARLOTTE TOWN. [PRINCE EDWARD'S ISLAND.]

CHARLOTTENBURG. [BRANDENBURG.]

CHARLOTTESVILLE. [VIRGINIA.]

CHARLY. [AISNE.]

CHAROLLAIS, a district of Bourgogne, named from its chief town Charolles, gave during their father's lifetime the title of count to Philippe le Bon and Charles le Téméraire, the two last of the great feudal dukes of Bourgogne. It is now included in the department of Saône-et-Loire, except a small part west of the Loire, which is in the department of Allier. The Canal du Centre which connects the Loire with the Saône, is sometimes called the Charollais Canal.

CHAROLLES. [SAÔNE-ET-LOIRE.]

CHARTRAIN, a district in France comprising the territory about Chartres, formed part of the more extensive district of La-Beauce. It takes its name immediately from its capital, Chartres, but originally from the Celtic tribe *Carnutes*, by whom, at the time of the Roman invasion, it was peopled. This nation is mentioned by Livy among the tribes which invaded Italy in the time of Tarquinius Priscus. In the time of Cæsar they extended from the Seine to the country south of the Loire; their chief towns were Genabum (Orléans), Autricum (Chartres), and Durocassis (Dreux). The district of Chartrain is now included in the department of Eure-et-Loir.

CHARTRES, a city in France, capital formerly of La-Beauce, now of the department of Eure-et-Loir, the seat of tribunals of first instance and of commerce, of a communal college and diocesan seminary, stands on the slope and at the foot of a hill above the Eure (a feeder of the Seine), 55 miles by railway S.W. from Paris, in 48° 26' 24" N. lat., and 1° 29' 53" E. long.; and has a population of 16,680, including the whole commune.

Chartres is a very ancient city. Under the Roman dominion it was called *Autricum* (from *Autura* the ancient name of the Eure), but in the 4th century this name was replaced by that of the people, the *Carnutes* [CHARTRAIN], in whose territory it was. The only remains of Roman antiquity are some subterranean aqueducts and passages. The town is supposed to have been a great centre of Druidical worship; to Druidism succeeded the worship of the gods of the Capitol, and these gave place to Christianity about the end of the 4th century A.D. On the downfall of the Roman empire it passed into the hands of the Frankish kings. About A.D. 600 Thierry II., king of Orléans and Bourgogne, besieged the town, which

was well fortified, and succeeded in taking it by making a breach in the aqueduct and depriving the inhabitants of water. In 858 it was pillaged and burnt by the Normen; when re-built it was soon after taken again by them under their famous leader Hastings, but given up on the townsmen and the bishop agreeing to pay a certain sum as a ransom. Their neglect to pay this tribute caused another siege and capture of the town in 872. In 911 the townsmen successfully resisted the attacks of the famous Rollo, the first duke of Normandie.

In the middle ages Chartres was the capital of a county which was in the 10th century united with that of Blois and Tours. Towards the end of the 11th century the city was surrounded by ramparts which still remain. The ramparts were pierced by seven gate-entrances, one of which (Porte Guillaume) still retains its warlike appearance, being flanked by two massive towers united by a curtain, and crowned by a projecting gallery with parapets and machicolations.

In the bloody feuds between the Bourguignons and Armagnacs Chartres was taken by the former, and passed under the dominion of the English, who held it till 1432, when it was recovered from them by surprise by Dunois. In 1591 it was taken by Henri IV., who was consecrated in the cathedral three years afterwards. The county of Chartres when bestowed on the Duchess of Ferrara was erected into a duchy; it subsequently came by marriage to the dukes of Nemours, by whom it was resigned to the crown. Louis XIII. bestowed it upon his brother Gaston, duke of Orleans; upon his death Louis XIV. gave it to his brother Philippe, duke of Orleans, from whom the duchy was inherited up to the period of the first French revolution by his lineal descendants. The eldest son of Louis Philippe bore the title of Duke of Chartres at the time of his father's accession to the throne.

The city of Chartres is situated on the brow of a hill, at the foot of which is the river Eure, which flows here in two channels—one within and the other without the ramparts, which are surrounded by a circuit of public walks. Chartres is divided into the upper and lower towns: the upper has some tolerably commodious streets, and contains the principal public edifices; the lower town is ill built and ill laid out; the streets which unite the two are so steep as to be almost inaccessible to carriages. Everything about the place has an air of antiquity: the houses are for the most part old and built of wooden planks; many of them have the gable towards the street and the doorway in the form of a pointed arch, with gothic ornaments. The suburb of Bourgneuf by which the road from Paris enters the town is long and straggling, and consists of cottages with their gables towards the street. There are in Chartres four squares: one in the lower town, that of St.-Pierre, bordered with two rows of trees, and adjacent to the ancient gothic church, from which it takes its name; two in the upper town, namely, the corn-market and the herb-market; and one, the handsomest of all, called La Place des Barricades, outside the walls. The herb-market is adorned by an obelisk erected in memory of General Marceau. The Eure below the town drives a great number of mills.

The finest edifice in Chartres is the gothic cathedral of Notre Dame, which is one of the largest churches in France, and one of the most vast and imposing structures of the middle ages. It was commenced about 1020 by Bishop Fulbert, but dedicated only in 1260 when still unfinished, one of the spires not having been erected till the 16th century. The principal front, which is 164 feet in breadth, presents two square towers surmounted by two lofty octagonal pyramids, and separated by an interval of 55 feet. The old spire, which rises to the height of 374 feet, is of plain architecture, but cased with stone curiously carved like the scales of a fish, and appears to lean towards the spectator on whatever side he stands. The new spire is 413 feet high, built in the florid style, and so much admired as to have become proverbial for its beauty. The lower story of the façade, which is approached by five stone steps, has a triple portal with pointed arches, and adorned with statues. Above the doorways are three arched windows with stained glass, and still higher a superb rose window. The entrances on the north and south sides are also approached by flights of stone steps; that on the south has 17 steps, on the extremities of which are columns and statues. In each of these fronts are triple projecting porticoes with deep doorways between them; over these are niches for statues and a series of five windows, with a circular window above as before. The interior of the church is admirable for the justness of its proportions; it is richly decorated and dimly lighted through above 130 painted glass windows, most of which date from the 13th century, and are so charged with colour as scarcely to allow light enough to penetrate the building to enable persons to read. Among many decorations of the interior must be named the screen that separates the choir from its aisles, the tracery work on which has been compared to 'point-lace in stone.' The choir is beautiful; it is adorned with statues and bas-reliefs of various merit: the Descent from the Cross, a bas-relief by Bridan, is a chef-d'œuvre; and the Presentation of our Saviour in the Temple, by the same sculptor, is much admired. There is a noble group behind the high altar of the Assumption of the Virgin, also by Bridan. The inner dimensions of the cathedral are as follows:—entire length, 436 feet, breadth, 111½ feet; length of transepts, 213 feet, breadth, 39 feet; nave, 246 feet in length; height to the keystone of the vault, 115 feet. The aisles are 22 feet wide and 52 feet high. There are double aisles round the

choir, and the circuit of the church may be made by a gallery formed in the walls above the great windows of the nave and choir. Under the cathedral is a subterranean church, the descent to which is by five different staircases. The cathedral was covered with a metal roof in 1841, the old roof having been destroyed by fire in 1836.

Other remarkable buildings are the church of St-Père and that of St-André, which was not long ago used as a storehouse; the barracks; the public library, which contains 40,000 volumes; the general hospital; and the residence of the prefect. The town gives title to a bishop; and has a fine botanical garden.

Chartres has the best regulated corn-market in France. The measuring and selling the grain, and receiving payment for it, is managed by a corporation of women, who in an hour, at most, effect all the transactions of the market, often comprising the sale of 6000 quintals of wheat, besides what is sold by sample and delivered at the stores. The town has also an important market for wool. Some woollen goods and hosiery are manufactured; a good quantity of leather is made, and there are several dye-houses. The railway from Paris to Brest passes through Chartres.

(*Dictionnaire de la France*; Balbi, *Géographique*; *Annuaire pour l'An* 1853.)

CHARTREUSE. [ISÈRE.]
 CHÂTEAU-CHINON. [NIÈVRE.]
 CHÂTEAU-D'OLERON. [CHARENTE-INFÉRIEURE.]
 CHÂTEAU-GONTIER. [MAYENNE.]
 CHÂTEAU-PONSAT. [VIENNE, HAUTE.]
 CHÂTEAU-RENAUD. [BOUCHES-DU-RHÔNE.]
 CHÂTEAU-THIERRY. [AISNE.]
 CHÂTEAUBRIAND. [LOIRE-INFÉRIEURE.]
 CHÂTEAUDUN. [EURE-ET-LOIR.]
 CHÂTEAULIN. [FINISÈRE.]
 CHÂTEAUROUX, capital of the department of Indre, in France, stands in 46° 48' 50" N. lat., 1° 41' 51" E. long., on a rising ground in a vast plain near the left bank of the Indre, 165 miles S. from Paris by railway through Orleans and Vierzon, and has 14,276 inhabitants, including the whole commune. The town, which was formerly ill built and dirty, has been within the last twenty years greatly improved. The streets are now straight, wide, and well paved; and there are several spacious squares. The principal buildings are—the old castle (built in 950 by a Frank chief, Raoul le Large), which gave origin and name to the town, and part of which now serves for government offices, the town-house, the theatre, the church of the Corteliers, and the residence of the prefect, which adjoins the old castle. Châteauroux is one of the principal seats of cloth manufacture in the centre of France; its cloths are manufactured from excellent wool, but are more remarkable for strength than for fineness. Cotton hosiery, worsted, tiles, paper, and leather are also manufactured; and there is a good trade in corn, iron, wool, cattle, sheep, &c. The town has tribunals of first instance and of commerce, a college, and a consultative chamber of manufactures. (*Dictionnaire de la France*; Macgregor, *Statistics*; *Annuaire pour l'An* 1853.)

CHÂTELLERAULT. [VIENNE.]
 CHATHAM, Kent, a market-town and parliamentary borough, in the hundred of Chatham and Gillingham and lathe of Aylesford, stands on the right bank of the river Medway, in 51° 23' N. lat., 0° 31' E. long., 24 miles W.N.W. from Canterbury, 30 miles E.S.E. from London by road. The Strood station of the North Kent railway, which is two miles from Chatham, is 31 miles from London. In 1851 the population of the parliamentary borough of Chatham was 28,424. The borough returns one member to the Imperial Parliament; it is governed by a head constable under the magistrates of Rochester. The living of Chatham is a perpetual curacy in the archdeaconry and diocese of Rochester.

The town of Chatham includes Brompton, a village connected with the dockyard and naval and military establishments. The High-street in Chatham, about 1½ miles in length, is narrow; and a considerable portion of the town itself is irregular and ill-built. Many of the houses are constructed of timber, probably from the facility of purchasing refuse wood from the dockyard in former times. The water supply is chiefly obtained by wells and pumps from the upper chalk formation: the wells vary in depth from 18 to 120 feet; five of the pumps are public.

From various discoveries made in erecting the fortifications which inclose the naval and military establishments at Chatham it seems probable that the Romans had a cemetery here. Several ancient graves and other excavations have been opened, and Roman bricks, tiles, coins, and weapons found. The name of the town is Saxon, and was written Ceteham or Cæththam, which appears to signify 'the village of cottages.' It continued an insignificant place until the formation of the dockyard, to which the town owes its origin.

The parish church was almost entirely rebuilt in 1788. St. John's church was erected in 1821 by the commissioners for building new churches. There are chapels for Wesleyan Methodists, Baptists, Independents, Bible Christians, Irvingites, Swedenborgians, and Unitarians; two National schools, a British school, a Proprietary school, a Ragged school, and a mechanics institution. An hospital for lepers was established in Chatham by Bishop Gundulph in the reign of William the Conqueror. The only portion of the building now

existing is a small chapel; the revenues of the estate are in the hands of the Dean of Rochester. In the High-street is an hospital for ten decayed mariners and shipwrights, which was founded by Sir John Hawkins in 1592, and incorporated by Queen Elizabeth in 1594. A military lunatic asylum provides accommodation for 30 officers and 100 privates. There are several minor charities.

The extensive naval and military establishments are at Brompton, a little distance from the town, and entirely separated from it by a line of fortifications. The dockyard was founded by Queen Elizabeth, previous to the invasion of the Armada, on the site of what is now termed the Ordnance Wharf, and occasionally the Old Dock. It was removed to its present situation in 1622, the demands of the navy requiring increased accommodation. Elizabeth erected Upnor Castle, on the opposite side of the Medway, for the purpose of defending the dockyard and shipping. But this fort proved ineffectual for protection from the attempt of the Dutch, under De Ruyter, who in 1667 having taken Sheerness, dispatched his vice-admiral, Van Ghent, with 17 sail of light ships and 8 fire ships to destroy Chatham. He succeeded in breaking a chain stretched across the Medway, and in spite of the fire from the castle burnt and sunk some ships. Finding the country alarmed, he retired, carrying off a ship of war named the Royal Charles. This event was the cause of additional and stronger fortifications being erected. The dockyard was subsequently considerably enlarged.

From the year 1757 down to 1805, new buildings were erected, and the extensive area occupied by the different establishments was inclosed by a strong line of fortifications on the land side, and protected on the river side by strengthening Upnor Castle, by the erection of a martello tower called Gillingham Fort on the Chatham side, and other defences. Upnor Castle is at present merely a powder magazine.

The naval and military establishments now comprise the dockyard, nearly a mile in length, which has four wet docks capable of receiving vessels of the largest size, and nine building-slips, of which six are for first-rates; metal mills; an extensive arsenal; barracks on a large scale for artillery and engineers, infantry and royal marines; a park of artillery; magazines and store-houses; besides a handsome dock-chapel, and a number of habitations for the civilians who are employed. The principal mast-house is 240 feet long by 120 feet wide. The rope-house is 1128 feet in length, and 47½ feet wide: in it cables 101 fathoms in length and 25 inches in circumference are made. The sail-loft is 210 feet in length. The machinery used in all the departments is of the very best kind. A duplicate of Brunel's block-making machine is kept here, ready for use in case the machine at Portsmouth should get out of order. The engineer barracks are built in a plain and simple style, and are extensive and convenient. Near the dockyard gate is a large naval hospital, which was erected at the suggestion of William IV. when lord high admiral.

After the fire at Devonport dockyard in 1840, which was greatly extended owing to the tarred wooden and paper roofs which covered the building-slips, the admiralty began gradually to replace such roofs with others made of metal. Nearly all the slips at Chatham have been recently either rebuilt or strengthened and repaired. The metal mills are more extensive than at any other of the dockyards. In 1848 the metal mills produced 700 tons of sheet copper, 400 tons of bolt copper, and 800 tons of remanufactured iron per annum. All the old copper sheeting from the various dockyards is re-melted here into sheets.

There are saw-mills at Woolwich, Chatham, and Sheerness; but those at Chatham are the most complete. The Chatham mills could indeed, it is said, cut timber enough for most of the yards. It is merely straight cutting: the machinery employed is not fitted for cutting the curved pieces required in a ship, which are still cut by hand.

There is an establishment at Chatham, founded in 1812, for the instruction of officers and privates of the engineer branch of the army. Men belonging to the Engineers, and to the Sappers and Miners, are here instructed in all that relates to fortification, garrison operations, and field service. Young men intended for officers in the engineering corps, after preliminary training at Addiscombe or Woolwich, receive the practical part of their professional education at the Chatham institution.

The 'Chest' at Chatham was established in the reign of Elizabeth, and was originally a voluntary contribution from the monthly wages of seamen for the support of their maimed and superannuated brethren, but which soon settled into a compulsory payment. On the recommendation of the Commissioners of Naval Inquiry, it was, by the 43 George III. c. 119, removed to Greenwich. Instead of a monthly payment from the wages of seamen the amount is now charged annually on the consolidated fund.

At Rochester Bridge the Medway, which discharges into the same estuary with the Thames, is a large tidal river. The rise is 18 feet at spring and 12 feet at neap tides at Chatham. Above Rochester the high lands approach each bank of the river, forming a kind of amphitheatre about Chatham and Rochester on the east side, and also on the west, closing on the river at Upnor Castle. Below Chatham dockyards the high lands decline, first on the right and then on the left bank, forming a flat marshy country to the spacious outlet of the Medway at Sheerness.

(Hasted, *Kent*; Douglas, *Nenia Britannica*; Pepys, *Diary*; *Communication from Chatham*.)

CHATHAM ISLANDS are a group of islands situated in the Pacific, east of New Zealand, between 43° 40' and 45° 20' S. lat., 176° and 177° 20' W. long. They consist of one large island, two of moderate extent, and several smaller islands. The largest is called Warekauri, and is in the form of a hammer with a short handle, the head of the hammer towards the north being 48 miles long from east to west, and the handle, or southern peninsula, about 36 miles in length. Dieffenbach, by a rough computation, gives the area at 477 nautical miles, or 305,280 acres, of which however 57,600 acres at least are water, being lakes, lagoons, &c., so that the land is not more than 247,680 acres. The southern shores of the southern peninsula are lined with rocky cliffs, but the remainder terminates in a low sandy beach, with the exception of a few headlands along the northern coast, which are formed by low rocky masses. The country rises gradually from the beach for one or two miles, when it extends on an undulating level. The central part of the island is occupied by a large lake called Te Wanga, which is about 25 miles long and between 6 and 7 miles broad. It is surrounded by hills, either wooded or boggy.

The surface of the tract which lies west of the northern part of the Te Wanga Lake is diversified by a considerable number of hills of a pyramidal shape, and consisting of basalt. Of these hills there is none above 800 feet in height. In their vicinity the soil is very fertile, being in its natural state covered with a vegetation of fern and trees, mixed together and appearing like oases in the surrounding bog. The intervening tracts are covered with bog. Wherever the superfluous water has been carried off by a natural outlet a rich vegetation of fern and New Zealand flax (*Phormium tenax*) has sprung up, which gives additional firmness to the soil by the decayed leaves, and yields a rich harvest to the native planter. This is particularly the case on the low hills above the sea-shore. In this part several lakes occur at the back of the low hills which run parallel to the coast. They are surrounded by gently sloping hills, but have generally an outlet for their waters into the sea. The best portion of the island is that south of the lake, which has an undulating surface, is not so boggy as the rest, and is either covered with an open forest of moderate sized trees or with high fern, in which case the land can be brought under cultivation with little labour. The soil is very fertile and the vegetation is vigorous.

On the western side of the island is a large bay, called Waitanga Bay, in which there are five harbours behind some projecting headlands. On the southern shore of the bay is Waitanga harbour, which has excellent anchorage in between 5 and 12 fathoms water. This harbour receives the largest river in the island, the Mangatu, which comes from some hills on the south; though its whole course does not exceed 12 miles, it is navigable for boats for about three miles from its mouth, but it has a bar across its mouth, which is passable for boats only at high-water. On the northern side of Waitanga Bay are four harbours, one of which, Wangaroa, is frequently visited by vessels, and affords complete protection against all winds. The northern shore of the island is much exposed, but contains a sheltered bay called Kaingaroa, which is stated to have good anchorage, in from 10 to 12 fathoms water. Whalers frequently visit Onga, the south-eastern headland of the island, where the hills offer some protection against wind and sea.

The climate is very mild. In winter (from May to July) the thermometer never rises above 60°, nor descends below 45°, after eight o'clock in the morning. The air is always moist and cool, but never misty, the vapour being carried off by the constant breezes. In winter there are showers of rain for a few hours every week. The prevailing winds are north-east and south-west. The climate appears very favourable to Europeans.

The natives cultivate potatoes, different kinds of turnips, cabbages, taro (*Arum esculentum*), some tobacco, and abundance of pumpkins, which form a great part of their food. There are several kinds of trees, which are of the species found in New Zealand: the karakara-tree (*Corynocarpus laxigatus*) forms the largest part of the forest. No kind of quadruped occurs, except the Norwegian rat. Birds are numerous: in the lakes and on the sea-shores are ducks, snipes, plovers, curlews, and redhills; in the forests the mocking-bird, a little green parroquet, the mako-mako, a singing-bird, and the large New Zealand pigeon. Fish are abundant. Both the spermaceti and black whales are seen in great numbers off the shore.

These islands were discovered in 1791 by Broughton, of his Majesty's ship Chatham, who took possession of them in the name of the king. They were afterwards frequently visited by whalers, and in 1840 a whaling station was established at Onga. Broughton found them inhabited by a people belonging to the Malay race. They are not so tall, muscular, and well proportioned as the New Zealanders; and their complexion is darker. The natives, of whom a comparatively small number remain, have been reduced to a state of slavery and degradation by two tribes of New Zealanders. The number of the New Zealanders who settled in the Chatham Islands is stated to have been 800: and, by means of the labour of their slaves, a portion of Warekauri was soon brought into cultivation, so that they could furnish supplies for the few vessels which annually resort to the island.

South-east of Warekauri lies Rangai-haute, or Pitt's Island, which is about 12 miles long and 8 miles broad. It consists principally of

a hill of moderate elevation, having a flat top, whose declivities terminate near the coast. It has no harbour, and is stated to be inhabited by a small number of aboriginal natives. The other islands are mere rocks, and only frequented by sea-birds.

(Dieffenbach, 'Account of the Chatham Islands,' in *London Geographical Journal*, vol. xi.)

CHATILLON-DE-MICHAILLE. [AIN.]

CHATILLON-LES-DOMBES. [AIN.]

CHATRE, LA. [INDRE.]

CHATSWORTH. [DERBYSHIRE.]

CHATAHOOCHEE RIVER. [ALABAMA.]

CHAUDIÈRE. [CANADA.]

CHAUDPOOR. [BAREILLY.]

CHAUMONT. [MARNE, HAUTE.]

CHAUNY. [AISNE.]

CHAUSSEY. [MANCHE, LA.]

CHAUX-DE-FOND. [NEUFCHÂTEL.]

CHAVANGES. [AUBE.]

CHEADLE, Staffordshire, a market-town and the seat of a Poor-Law Union, in the parish of Cheadle and hundred of Totmonslow South, is situated near the Tean Brook, which flows into the Churnet, in 52° 59' N. lat., 1° 59' W. long.; 14 miles N.N.E. from Stafford, and 146 miles N.W. by N. from London by road; Alton station of the North Staffordshire railway, which is 4 miles from Cheadle, is 144 miles distant from London. The population of the town of Cheadle in 1851 was 2728. The town is governed by the county magistrates. The living is a rectory in the archdeaconry of Stafford and diocese of Lichfield. Cheadle Poor-Law Union contains 15 parishes and townships, with an area of 54,631 acres, and a population in 1851 of 18,177.

Cheadle is called Ceda in the Domesday Book. The town is within the moorland district of North Staffordshire, and is situated in the midst of hills formerly barren, but recently covered by plantations of timber-trees. Cheadle is irregularly laid out, and consists of indifferently-built houses.

The old church had some fine examples of the decorated style in its windows, arches, and tracery; but in 1837 it was found necessary to take it down, and a new one was built in its place. A splendid Roman Catholic church built from designs by Mr. Pugin was opened with great ceremony in 1846. The chief portion of the expense of this building was borne by the Earl of Shrewsbury. There are places of worship for Independents and Wesleyan, New Connexion, and Primitive Methodists.

In the town are a Free school, two National schools, and an Infant school. The school-house belonging to the Roman Catholics is a large and fine building. There are a public parochial library and a savings bank. A county court is held in the town.

The chief manufactures of Cheadle are copper works, brass works, and a tape manufactory; a little coal-mining is also carried on. The Caldron Canal passes along the valley of the Churnet two or three miles from the town.

(Communication from Cheadle.)

CHEDDAR. [SOMERSETSHIRE.]

CHEDUBA. [ARACAN.]

CHELMSFORD, Essex, a county town, and the seat of a Poor-Law Union, in the parish and hundred of Chelmsford, is situated on the river Chelmer, in 51° 44' N. lat., 0° 28' E. long.; 29 miles N.E. by E. from London by road, and 29½ miles by the Eastern Counties railway. The population of the town of Chelmsford was 6033 in 1851. The parish is under the management of a Local Board of Health. The living is a rectory in the archdeaconry of Essex and diocese of Rochester. Chelmsford Poor-Law Union contains 31 parishes and townships, with an area of 81,738 acres, and a population in 1851 of 32,258.

Chelmsford is situated nearly in the centre of Essex, on the high road from London to Ipswich. The town derives its name from an ancient ford over the river Chelmer, near its confluence with the river Cann. The manor was formerly in possession of the bishops of London. About the time of Henry I. it became a place of some importance. Maurice, then bishop of London, built a stone bridge over the Cann and diverted to it the public road which previously passed through Writtle, by which means he made Chelmsford the great thoroughfare to Suffolk and Norfolk. The present bridge over the Cann, a handsome stone structure of one arch, was built in 1787. The High-street, which is wide and commodious and contains many good houses, extends from this bridge to the Shire Hall. There are several other streets. The town is well lighted with gas. A tolerably good supply of water has been furnished for a considerable period from a conduit in the market-place, which is fed by pipes from Burgess Wells, near the entrance of the town on the south-east. The fountain was re-constructed in 1841, the expense being defrayed by public subscription. The parish church, dedicated to St. Mary, is a spacious gothic structure, rebuilt in 1424. In June 1800 the roof and a portion of the walls fell in, but the church was afterwards rebuilt. At the west end is a square embattled tower of the 13th century surmounted with a lofty spire. The interior contains many interesting monuments. There are a district church dedicated to St. John, and chapels for Independents, Baptists, Quakers, Irvingites,

and Roman Catholics. The Grammar school, founded by Edward VI., has an income from endowment of 488*l.* a year, and is free to 40 boys, but in 1852 the number of scholars was under 20. There are National, British, and Infant schools, a philosophical society, a mechanics institution with a museum and reading-rooms, a savings bank, and a dispensary. The Shire Hall is a handsome building, having a front of Portland stone. The new jail is built on the radiating principle, and will accommodate 272 prisoners. The county assizes are held at Chelmsford; also quarter sessions and a county court. Besides the stone bridge already noticed, there are a cast-iron bridge over the Cann and two bridges over two branches of the Chelmer, which surround a small island called Mesopotamia. Upon this island a ludicrous mock election of a member of parliament has been long conducted on the occurrence of elections of the county members. On these occasions there are the usual nomination, speech-making, chairing, &c., and the proceedings end with the newly-elected member receiving a ducking in the river.

Chelmsford is chiefly dependent on agriculture for its prosperity. There are here tan-works, corn-mills, coach-works, an organ factory, and works for the manufacture of agricultural implements. The river Chelmer was made navigable from Chelmsford to Maldon (about 15 miles) towards the close of the last century; the basin and wharfs are at Springfield, near to the town: barges of 30 tons are employed in the navigation. The channel is 30 feet wide at the top and 20 feet at the bottom. The market is held on Friday: fairs are held on May 12th and November 12th.

(Morant, *Essex*; Wright, *Essex*; *Communication from Chelmsford.*)

CHELSEA, Middlesex, formerly a village reckoned about 2 miles from London, but now constituting a portion of the suburbs, is on the left bank of the Thames, in the hundred of Ossulston. The population of Chelsea district in 1851 was 56,538. The parish is a rectory in the archdeaconry of Middlesex and diocese of London. Chelsea is the seat of a Poor-Law Union, which is co-extensive with the parish and district.

Chelsea stands on a slight eminence, about 15 feet above the Thames. Sir Thomas More, who had a house here, wrote the name *Chelchith*. In the 16th century it began to be written *Chelsey*. Many of the nobility and gentry had residences here, and there were several noted coffee-houses, taverns, and public-houses with gardens, which were much frequented in the 17th and 18th centuries.

The parish church of Chelsea being insufficient for the wants of the rapidly increasing population, a new church was erected in Robert-street, and consecrated in 1824. It is a spacious building, in the pointed style of architecture. The old church is situated near Battersea Bridge; and is an interesting structure, both for the remains of ancient work which it contains, and for its monuments, several of which are to persons celebrated in English history, or in literature. The monument to Sir Thomas More is the most famous. The rapid increase of buildings in and around Chelsea, within the present century, has led to the construction of many new churches. Besides the two churches above named, there are Christ church, in Queen's Road, and St. Jude's in Turk's Row; together with Upper Chelsea church and St. Saviour's, also in Upper Chelsea. The new church and college of St. Barnabas, opened in June 1850, is near the eastern margin of Chelsea. In Park Walk is an Episcopal chapel. There are also a considerable number of chapels for Wesleyans, Independents, Baptists, Presbyterians, and Roman Catholics. Among the educational establishments the chief is St. Mark's Training College, a normal school for schoolmasters belonging to the National Society, which had 72 students in residence in 1852. A training institution for school-mistresses, belonging to the same society, situated in King's Road, had 90 students in residence in 1852. There are several National, British, and Infant schools, and a savings bank.

Chelsea is chiefly lighted by two gas companies, the Westminster and the Imperial. Chelsea Water Works are at Thames Bank. In the Fulham Road is the London and Westminster Cemetery.

The Royal Hospital for invalid soldiers is at Chelsea. In the reign of James I., Dr. Sutcliffe, dean of Exeter, projected a college for the study of polemical divinity, which met with the king's approbation. The foundation stone of the building was laid on May 8th, 1609. In the charter of incorporation it is styled 'King James's College at Chelsey.' During the civil wars it was appropriated by the Parliament to different purposes. Charles II. gave it to the then newly established Royal Society; but not being adapted to their use, it was restored to the king for 1300*l.*, in order that the site might be occupied by the Royal Hospital. The architect of the Royal Hospital was Sir Christopher Wren. The foundation-stone was laid on the 16th of February 1682 by the king, who was attended by a great concourse of nobility and gentry. The building was completed in 1690, at an expense it is stated of 150,000*l.* It is of brick, ornamented with stone quoins, cornices, pediments, and columns. The building consists of three courts, two of which are spacious quadrangles; the third, the central one, is open on the south side next the Thames. It consists of three sides of a square, ornamented with porticoes and piazzas, and has a pleasing appearance. The north front is simple in its style, and consists of a centre and wings, in a straight line, with no other ornament than a plain portico. In the centre of the hospital are the chapel and the great dining-hall. The business of

the Royal Hospital at Chelsea is managed by commissioners appointed under the great seal. The establishment consists of a governor and lieutenant-governor, and various subordinate officers. There are usually upwards of 500 invalids in the hospital, who are divided into classes, and regulated by military discipline. In addition to their provision and clothing they receive a weekly pension. There are besides numerous out-pensioners. The body of the late Duke of Wellington lay in state in Chelsea Hospital for a few days previous to the public funeral, which took place on November 18th 1852. On Nov. 13th the pressure of the crowd who thronged to the hospital to see the lying-in-state was so great, that several persons lost their lives.

The Royal Military Asylum is also in Chelsea. The building is on an extensive plan: the foundation-stone was laid by the Duke of York in 1801, and it was completed in 1805. It is appropriated to the support and education of children (especially orphans) of soldiers and non-commissioned officers. In 1851 there were in the Normal school 40 students, in the Model school 270 scholars, and in the Infant school 80 scholars. The Apothecaries Company of London have a botanical garden at Chelsea. In the centre of it is a statue, by Ryabrack, of Sir Hans Sloane, from whom the company received the freehold of the ground, the consideration paid being an annual presentation of plants to the Royal Society.

A very large steam-boat traffic has become established at Chelsea; it is accommodated by three piers, one of which, erected by the Earl of Cadogan, is a handsome structure. Cremorne House and gardens have passed into the hands of proprietors who have opened them as a place of public amusement. A new bridge in connection with the proposed Battersea Park is in process of erection; the estimates for the bridge amount to 70,000*l.* By the New Reform Bill, introduced by Lord John Russell on February 13th, 1854, it is proposed to form Chelsea and Kensington into an electoral district to return two members to the Imperial Parliament.

(Lysons, *Environs of London*; Faulkner, *Historical Description of Chelsea*; *Communication from Chelsea.*)

CHELTENHAM, Gloucestershire, a market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish and hundred of Cheltenham, and eastern division of the county, is situated in 51° 54' N. lat., 2° 4' W. long.; distant 8 miles N.E. from Gloucester, 88 miles W. by N. from London by road, and 121 miles by the Great Western railway. The population of the borough and parish, which are co-extensive, was 35,051 in 1851. The town is governed by commissioners. For sanitary purposes the management is in the hands of a Local Board of Health. The borough returns one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry of Gloucester, and diocese of Gloucester and Bristol. Cheltenham Union contains 13 parishes and townships, with an area of 24,303 acres, and a population in 1851 of 44,193.

Cheltenham appears to have been of some importance at an early period. British and Roman remains have been found in the neighbourhood. A priory existed here at the commencement of the 9th century. In Queen Elizabeth's reign the inhabitants of Cheltenham petitioned to be relieved from the burden of sending two members to Parliament, and the prayer of the petition was granted. The franchise was re-conferred on the town by the Reform Act. At the close of the 17th century however, Cheltenham was a mere rural village. In 1716 the discovery of the healing properties of a saline spring first attracted visitors to Cheltenham. From that time the place gradually increased till 1788, when it suddenly became a fashionable resort in consequence of George III. having been directed by his physicians to try the waters of Cheltenham, and having derived benefit from them. In the present century the increase has been remarkably rapid. In 1804 the town consisted of one long street, through which a branch of the Chelt flowed, and was crossed at intervals by stepping stones; it then contained 710 houses and 3076 inhabitants; at the Census of 1851 there were found to be 6996 houses, and as above stated, 35,051 inhabitants.

The town is pleasantly situated in a valley along which runs the streamlet from which the town derives its name. The Cotswold hills form a vast amphitheatre, sheltering the town on the north-east, and causing the temperature of the valley to be equable and pleasant. Cheltenham possesses no manufacture, and the houses and public buildings being entirely of recent erection, and constructed especially for the accommodation of visitors, the town is altogether an agreeable place of residence.

Cheltenham consists of a principal street above a mile long, with numerous other streets, squares, crescents, and terraces on each side of it. The different places of public resort, the pump-rooms, hotels, and lodging-houses are considered to be superior to those of most other watering places. The Promenade, Old Well Walk, and other walks, afford pleasant public promenades. There are four spas, the Royal Old Well, the Montpelier Spa, Pittville Spa, and the Cambray Spa. There are also numerous baths. The waters are all saline, and contain as their chief ingredients muriate of soda, sulphate of soda, and sulphate of magnesia.

The parish church, dedicated to St. Mary, is almost the only ancient building in Cheltenham. It is a spacious cruciform edifice, chiefly of the decorated style, with a tower rising from the intersection of the cross, and a very lofty spire. The interior is incumbered and dis-

figured by huge pews and galleries. In the churchyard is a mutilated cross. The other churches are—Trinity, St. John's, St. James's, St. Paul's, St. Philip's, Christ church, and St. Peter's. Christ church, the most generally admired of these buildings, will accommodate 2000 persons; it is a pleasing edifice of a mixed modern gothic style, with a tower 174 feet high. St. Peter's is a picturesque specimen of the Norman style; the interior has a very chaste appearance. The Wesleyan, Calvinistic, New Connexion, Primitive and Association Methodists, Independents, Baptists, Quakers, Unitarians, Roman Catholics, Jews, and Mormons have places of worship in the town.

The principal educational establishment in Cheltenham is the Proprietary College, situated in the Bath-road. The building, an imposing structure in the Tudor collegiate style, was erected in 1843. It has a frontage of 240 feet; the lecture-room is 40 feet by 32 feet; the principal windows are 35 feet high by 20 feet wide. In 1852 the college was attended by 412 students. The Free Grammar school, in the High-street, was founded in 1578; it has now an income of about 800*l.* a year. There were 175 scholars in 1852. The school possesses 10 scholarships and exhibitions at Oxford University, none of which is less than 60*l.* a year. There are six National schools, three British schools, and four Infant schools. A Church of England Training College has been founded for educating masters and mistresses of infant and parochial schools. The building for male students recently erected contains residences for the principal, vice-principal, assistant-master, and 100 students. The cost of this building (defrayed by subscription, aided by a government grant) was upwards of 10,000*l.* The architect of the building, which has a quaint monastic character, was Mr. Dawkes. For the female establishment a house is rented which accommodates three governesses, a superintendent, matron, and 60 pupils. There were 75 male and 60 female students in residence in 1852.

Cheltenham possesses an hospital, an infirmary, a dispensary, almshouses, parochial charities, and a very large number of benevolent and charitable institutions. There are also a savings bank, a literary and philosophical institute, horticultural, choral, and numerous other societies and clubs. A county court is held in the town. There is a daily market; seven fairs are held during the year.

Of the numerous mansions in Cheltenham and its vicinity, Thirstane House, the seat of Lord Northwick, in the Bath-road, deserves particular mention, on account of its extensive and excellent collection of paintings, including many admirable works by both old and modern masters. It is open to the public under certain regulations.

(Atkyns, *Gloucestershire; Cheltenham Histories and Guides; Communications from Cheltenham.*)

CHEMMIS. [ACHMIN.]

CHEMNITZ, a town in Saxony, the capital of the Erzgebirge circle, is situated at the foot of the Erzgebirge, in a beautiful and well-watered valley which extends about ten miles in every direction. It stands in 50° 50' N. lat., and 17° 55' E. long., and about 976 feet above the level of the Baltic. Chemnitz was for four centuries a free Imperial city. It is now the principal manufacturing town in Saxony. In no place indeed have the English improvements been introduced with such care and skill as in Chemnitz. There are several large spinning and weaving establishments, numerous manufactories for printing cotton goods, and some in which the yarn is dyed red like Turkish yarn. The woollen manufactures, which were formerly very considerable, have much decreased in the last fifty years; but in the town, as well as in its neighbourhood, there are many stocking manufactories. The manufacture of linen-cloth and of spinning machinery also employs many of the inhabitants. Chemnitz carries on a considerable trade, being situated where the road between Prague in Bohemia and Leipzig, and that which unites Bavaria with Dresden, cross one another. Its exports to the United States of North America are of considerable amount. The town contains 28,650 inhabitants, and is well built; the streets are spacious and mostly straight, and many of its houses look more like palaces than dwelling-houses. It is lighted with lamps and is remarkable for the great cleanliness of its streets. The public edifices are in a good style, but none of them particularly distinguished. Among them may be named the Great Church, the Rathaus, or town-hall, and the Gewandhaus, or cloth-hall.

CHEPSTOW, Monmouthshire, a market-town and port, and the seat of a Poor-Law Union, in the parish of Chepstow and upper division of Caldicott hundred, is situated on the right bank of the river Wye, in 51° 38' N. lat., and 2° 39' W. long.; 16 miles S. by E. from Monmouth, 135 miles W. from London by road, and 141½ miles by the Great Western and South Wales railways. The population of Chepstow town was 4295 in 1851. The living is a vicarage in the archdeaconry of Monmouth and diocese of Llandaff. Chepstow Poor-Law Union contains 38 parishes and townships, with an area of 64,930 acres, and a population in 1851 of 19,000.

Chepstow is situated about 2½ miles from the junction of the Wye with the estuary of the Severn. The town was at an early period strongly fortified. The castle is now in ruins, but its remains indicate its former strength and extent. The remains consist of four courts and a central building, and stretch for a considerable distance along a precipitous cliff. The area of the castle is above three acres: but it is narrow in comparison with its great length. The entrance is by a gateway between two large round towers, and has been protected by

an iron door, double portullises, machicolations, and other defences. Chepstow Castle is said to have been founded shortly after the Conquest by Fitz-Oshorne, earl of Hereford, but the greater part of the building is of at least two centuries later date. The castle has endured several sieges. In 1645 it was taken by the parliamentary forces; in 1646 it was retaken by Sir Nicholas Kemeys, at the head of a small hand of Royalists. Cromwell himself, with a considerable force, endeavoured to regain possession of the castle, but the garrison refusing to yield, and time pressing, he delegated the conduct of the siege to Colonel Ewer, who obliged the garrison to surrender, though not till their commander, Sir Nicholas Kemeys, and 40 of their number were slain, and their stock of provisions was exhausted. Henry Marten, one of the Judges who tried Charles I., was confined for upwards of 20 years in the keep of Chepstow Castle: he was however allowed to have his family with him, and to receive the visits of his friends. He died in the castle and was buried in Chepstow church. The keep is now commonly designated Marten's Tower. One of the ancient gate-houses of the town is still in a tolerably good condition.

Chepstow church is an edifice of Norman erection, and originally formed part of the Benedictine priory of Chepstow. In the interior are some handsome monuments. The church has been lately enlarged, and affords sittings for 1600 persons. The Roman Catholics, Wesleyan Methodists, Independents, Baptists, and Irvingites have places of worship. There are a Free school for 12 boys, a National school, an hospital, and several almshouses: also some parochial charities. The town possesses a literary institution, a horticultural society, a choral society, and a savings bank. A market-house and a theatre are among the public buildings. The railway bridge across the Wye is a remarkable construction, the part on the Gloucestershire side being tubular but open at top, while on the Monmouthshire side the rail runs upon arches: this construction was necessary to avoid impeding the navigation.

The town of Chepstow is built on a hill, which rises with a gentle slope from the river, and has a picturesque appearance. The bridge, erected in 1816, is constructed of iron: it is a substantial and rather handsome structure of five arches, and is 372 feet long. The rise of water at Chepstow bridge at high tide, is 50 feet, being the greatest tidal rise in Europe. On a few occasions it has risen much higher. The river being narrow the rush of water at rise and fall of the tide is extremely fierce. For large vessels the Wye is navigable to Chepstow bridge; barges of from 18 tons to 30 tons can ascend the river as far as Hereford. The number and tonnage of vessels registered as belonging to the port, on 31st December 1852 were as follows:—sailing vessels under 50 tons, 42, tonnage 1154; above 50 tons, 14, tonnage 1309; steam vessels 1 of 17 tons, and 1 of 53 tons. During 1852 there entered and cleared at the port, in the coasting trade—inwards, 396 vessels, tonnage 10,247; outwards, 112 vessels, tonnage 7426; and 1 steam vessel inwards of 65 tons. In the colonial trade—inwards, 1 vessel of 145 tons; in the foreign trade—inwards, 4 vessels, 320 tons.

There are no manufactures in the town or neighbourhood. The town is lighted with gas; the streets are well paved and cleansed. A county court is held at Chepstow. The market days are Wednesday and Saturday; four fairs are held in the course of the year.

Near Chepstow is Hardwick House, the seat of the Bishop of Llandaff. Mathern House, the former residence of the bishops of Llandaff, is near the sea about a mile and a half from Chepstow. Close by Chepstow is Piercefield, the grounds of which are of much celebrity. From the walks are obtained rich and extensive views of the valley of the Wye and the country beyond. Views of equal beauty and nearly equal extent are also obtained from the summit of Wyndcliff, a rock 970 feet high, situated about a mile and a half farther up the Wye. Five miles from Chepstow are the famous and most picturesque ruins of Tintern Abbey. But the whole country around Chepstow is unusually beautiful and interesting.

(Cox, *Monmouthshire; Cliffe, Book of South Wales; Land We Live In*, vol. i.; *Communication from Chepstow.*)

CHER, a department nearly in the centre of France, comprehends that part of the ancient province of Berri called Upper Berri and a portion of Bourhonnais. Its northern boundary is formed by the department of Loiret, on the south it has the department of Allier, on the west the department of Loir-et-Cher and Indre, and on the east the department of Nièvre and the river Loire. It is included between 46° 18' and 47° 40' N. lat., 1° 50' and 3° 5' E. long. Measured north and south its greatest length is 86 miles, and its greatest width east and west 56 miles. The area is 2780 square miles, and the population according to the census of 1851 was 306,261, which gives 110.16 to the square mile, being 64.554 below the average per square mile for the whole of France.

The department consists almost entirely of a vast plain of very unequal fertility. The eastern part, which belongs to the basin of the Loire, is extremely fertile. The northern district (which is called Sancerrois, from its chief town Sancerre) has several ranges of low hills, which sweep in parallel curves from south-east to north-west and west; between them are valleys watered by rivers, which follow the direction of the hills, and here the soil is sandy and in many parts covered with heaths and marshes. In the north-western districts, which form part of the dismal region called Sologne [LOIR-ET-CHER],

the soil consists of a hungry sand that yields little else than heath and broom. In the south and south-west the land is tolerably good, but here and in the centre of the department there is a great number of ponds and marshes. The extent of natural pasturage and moorland throughout the department is very considerable.

The river *Cher*, from which the department is named, rises east of Anbusson in the department of Crouse, on the borders of which, having received the *Tardes* from the left, it crosses the north-west of the department of Allier, and running north separates Allier from Cher, in this part of its course taking in the waters of the *Aumance* from the right; turning from the boundary a few miles south of *St.-Amand* it runs north-west through the department of Cher to the neighbourhood of *Vierzon*, where it receives the *Arnon* from the left and the *Yèvre* from the right, and begins to be navigable. Below *Vierzon* it turns west and enters the department of *Loir-et-Cher*, taking in the *Sauldre* a little below *Sollea* on the right bank; hence its course is generally west to its junction with the *Loire* a little below *Tours*, after a course of about 200 miles. The *Cher* is subject to floods, which sometimes rise 16 feet above the usual level of its surface, and as the grounds in the lower part of its course along the right bank are low, its inundations are often attended with great destruction, notwithstanding that dykes have been erected along the right bank for 17 miles from its junction with the *Loire*. The *Loire* and the *Allier*, both of which are navigable, form the eastern boundary. The most northern part of the department is drained by the *Grand Sauldre* and *Petit Sauldre*, which to the east and north-east of *Bourges* respectively flow north-west, and unite beyond the western boundary to form the *Sauldre*.

The department is traversed by the *Canal du Due de Berri*, called also *Canal du Cher*, which runs along the left bank of the *Cher* from *Montluçon* in the department of *Allier* to *St.-Amand*; hence it enters the valleys of the *Marmande*, the *Yèvre*, and the *Auron*, passing *Bourges*, and joins the *Cher* again at *Vierzon*. A branch joins this canal to the lateral *Canal of the Loire*, which runs from *Digoin* to *Briare*, where the *Canal du Loing* commences, uniting the *Loire* and the *Seine*. The department is crossed by the railroad from *Orléans* to *St.-Etienne*, which passes through *Vierzon* and *Bourges*; it thence runs eastward to *Nevers*, and then south up the valley of the *Allier* to *Moulins* and *Varenne*, in the department of *Allier*. All this part of the railway is now (*March, 1854*) open; the section between *Varenne* and *Roanne* when finished will complete the line. A branch railway from *Vierzon* runs south-west to *Châteauroux* in the department of *Indre*. The common road-way accommodation is by 8 national and 21 departmental roads.

The whole surface of the department contains 1,779,060 acres. Of this area 916,000 acres are capable of cultivation, 274,958 are natural grass-land, 31,820 are under vineyards, 291,100 under woods and forests, and 155,183 under heaths, ponds, and marshes. The common bread-stuffs are grown in sufficient quantity for the consumption. Hemp is extensively cultivated; the annual produce is 14,760 cwt. This department supplies the wine from which the best *Orléans* vinegar is made. The annual yield of the vineyards is only 5,500,000 gallons. Other articles of produce are fruits, flax, chestnuts, truffles, &c. Horses, goats, pigs, and sheep are numerous; the wool of the sheep is esteemed for its fineness. Game, bees, and poultry abound.

Iron and coal mines are worked; and marble, building, and mill stone are extensively quarried. *Mauganese*, lithographic stone, gypsum, porcelain, and fuller's clay are found. There are fifteen blast-furnaces and thirty forges, in which the smelting of the ore and its conversion into malleable iron and steel is effected near the mines, chiefly by means of charcoal supplied from the neighbouring forests. It is probable however that the spread of railroads and the recent lowering of the duty on imported coals have led to the substitution of better fuel in these metallurgic establishments. The other industrial products are coarse cloth, druggot, canvass, nails, cutlery, porcelain, saltpetre, oak-staves, cotton and woollen yarn, &c. The commerce of the department consists of the agricultural and industrial products mentioned, and of fat cattle, goat-skins, timber, and heech-wood toys.

The department is divided into three *arrondissements*, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Bourges	10	111	120,146
2. Sancerre	6	75	77,585
3. St.-Amand	11	121	108,530
Total	29	307	306,261

1. In the first *arrondissement* the chief town is *BOURGES*. *Gracey*, an ill-built town, 20 miles N.W. from *Bourges*, has 3075 inhabitants; near it there is a *Druidical* altar, consisting of a large stone slab inclining to the north supported by three other slabs, and surrounded, except towards the south, by twenty-one huge stones. *St.-Martin-d'Azaigny*, 10 miles from *Bourges*, has 2318 inhabitants. *Méhun-sur-Yèvre* stands in a very fertile district near the *Yèvre*, and on the railroad from *Vierzon* to *Bourges*, and has 3333 inhabitants. The town is very ancient; near it are the ruins of the old castle in which *Charles VII.* lived with *Agnes Sorel*, and in which he subsequently

starved himself to death, July 22, 1461. *Ménetou-Salon* has 2451 inhabitants, who are engaged in the manufacture of brandy and iron; there is an ochro mine near this town. *Vierzon*, 50 miles S. from *Orléans*, 19 miles N.W. from *Bourges*, and 39 miles N.E. from *Châteauroux*, with which towns it has communication by railway, stands at the junction of the *Yèvre* with the *Cher*, and has about 6000 inhabitants, including the whole commune. It is well and regularly built, and its site on a navigable river and canal among vine-clad hills and vast meadows is very delightful, and presents a most agreeable contrast with the dismal region, well named *La Triste Sologne*, which lies north of *Vierzon*, and is traversed in coming here from *Orléans*. The houses are mostly covered with slates. *Vierzon* is a place of great and increasing commercial activity. Cloth, serge, iron-ware, hosiery, porcelain, and leather are manufactured; great quantities of the best iron of *Berri* are manufactured at the furnaces and the forges near the town.

2. In the second *arrondissement* the chief town is *Sancerre*, near the left bank of the *Loire*, an ill-built place, but prettily situated on a hill, the sides of which are covered with vines. It is 23 miles N.E. from *Bourges*, and has 3488 inhabitants, a college, tribunal of first instance, manufactures of hosiery and leather, and a considerable trade in corn, cattle, wool, and marble raised from the neighbouring quarries. *Aubigny*, N.W. of *Sancerre*, is a wretched, ugly, ill-built town, with 2176 inhabitants and a large market for wool. *Henrichefont*, formerly called *Bois-belle*, is a pretty and well-built town a few miles W. from *Sancerre*, with 3018 inhabitants; in the centre of the town is a spacious square in which the four main streets meet; the houses are all built of brick; the town has cloth-factories, tanneries, and a large wool-market. *Ivoy-le-Pré*, 17 miles from *Sancerre*, has blast-furnaces, forges, and iron-foundries, and 2703 inhabitants.

3. In the third *arrondissement* the chief town is *St.-Amand-Montoron*, which has a tribunal of first instance, a college, and 8153 inhabitants, including the whole commune. [*AMAND, ST.*] *Château-Mellant*, in the south of the department, has a population of 2711, and a very ancient castle. *Château-neuf-sur-Cher*, on an island formed by the *Cher*, has 2219 inhabitants, who trade in wine, horses, and cattle; there is a wire-drawing factory and an ancient ruined castle in the town. *Dun-le-Roi*, N. of *St.-Amand*, on the right bank of the *Auron*, a feeder of the *Yèvre*, was formerly a very important town defended by walls and a strong citadel; but it seems never to have recovered its capture in the reign of *Charles VII.* by the English, who pillaged the town and burned the suburbs: the population is 4097. Large cattle fairs are held in *Dun-le-Roi*. *Guerche*, on the *Aubois*, a feeder of the *Loire*, has 2090 inhabitants, and smelt-furnaces, which produce metal of the best quality. *Lignéres*, in the beautiful valley of the *Arnon*, and near the large pond or rather lake of *Villiers*, has 2200 inhabitants, and an old castle rich in historical associations. *Sancoins*, near the source of the *Aubois*, has 2464 inhabitants, who trade in corn, wood, cattle, gypsum, lithographic stones, &c.

The department forms, together with that of *Indre*, the archiepiscopal see of *Bourges*; it is within the circuit of the High Court and University of *Bourges*, and is included in the 19th Military Division, of which *Bourges* is head-quarters.

CHERBOURG, a sea-port town, naval station, and fortress of the first class, is situated on the north coast of the peninsula of *Cotentin*, in the department of *Manche*, in France, at a distance of 75 miles due S. from the *Needles* and the *Isle of Wight*, 213 miles W. by N. from *Paris*, and has 24,212 inhabitants, including the whole commune. It stands at the mouth of the *Divette*, which falls into the bay lying between *Cape Levi* on the east and *Cape la Hague* on the west. The streets are narrow and dirty; the houses are built of stone and roofed with slates, which are got from quarries near the town. The only objects deserving of mention besides those connected with the harbour are the old tower, which formed part of the ancient fortifications, the church near it, and the *Chapelle-de-Notre-Dame-du-Vœu*, first erected by the empress *Maude* on a spot called *Chantereyne*, outside the town and close to the dockyard; the public library; the collection of pictures in the town-hall; and the theatre.

The commercial port at the mouth of the *Divette* consists of an outer harbour, which communicates with the sea by a channel 656 yards long, 55 yards wide, and with a depth of 20 feet at low water; and of a basin, closed by flood-gates, in which vessels are kept always afloat. The harbour is lined with quays; on the eastern side of the outer harbour is the old arsenal, and east of the jetty which forms the channel is a large bathing establishment.

The naval harbour, which is better than half a mile N.W. from the river's mouth, is excavated out of the solid rock; it has a depth of 52 feet at high water, and is large enough to contain fifteen vessels of the line. To the south of the harbour are dry docks, and round these four slips for building the largest ships, two slips for frigates, besides powder magazines, barracks, forges, furnaces, workshops, a large timber-shed, and various other establishments necessary to a naval arsenal. The naval port is surrounded with strong fortifications, and carefully guarded at all points, and on the hills which surround the town and look down upon the harbour some twelve or fourteen forts and redoubts are built.

The triangular bay opening to the north of these harbours forms the *Cherbourg Roads*, which are capable of holding 400 large vessels,

have good holding-ground, plenty of water even at low tide, and are naturally well sheltered, except from the north winds. To protect the roadstead from these winds, as well as to defend that part of it which is beyond the range of the guns of the forts, a breakwater (digue) has been erected, of which we subjoin a notice taken from the 'Moniteur' on the completion of the work.

"The breakwater of Cherbourg is at present entirely terminated, and from the 1st of January 1854 it must rank amongst the constructions which require only to be kept in perfect repair. This gigantic work, commenced in 1783, suspended during the revolutionary tempest, resumed under the empire, suspended once more during the whole period of the restoration (1814-30), is at length terminated after 70 years' expectation and 41 of constant efforts. For a length of time the success of the undertaking had been called in question; terrible disasters had at certain moments caused apprehensions to be entertained that the sea would remain victorious in this desperate contest against the boldest attempts of human genius; but at present every disquietude of that nature may be set aside, and the only thing now remaining to be done is to consecrate the work of four generations. It is known that the project of the breakwater at Cherbourg was conceived by the illustrious Vauban, who saw the necessity of our navy having in the channel a port accessible for the largest ships of the line, and after successive attempts it (the breakwater) has been established at about 4000 metres (nearly 2½ miles) from the entrance of the commercial port. Its length is 3700 metres i. e. 2 miles 536 yards (the breakwater at Plymouth is only 1800 metres, or 1 mile 208 yards, in length), and it presents a relief of upwards of 20 metres (65½ feet) above the bottom of the sea; 2000 artificial blocks, each of 20 metres cube, of 44,000kil. (nearly 44 tons) in weight defend against the waves the foundation of the extreme musoirs (or points of the breakwater). The last one and twenty years of this admirable work have been exclusively employed in the construction of the wall in masonry, which has 10 metres 50 centimetres (34 feet) of height above low-water mark, and above the level of the foundation of the musoirs of the two extremities, of the central fort, and of the intermediate fort. The expenses since 1783 up to the present time have amounted to 67,300,000 francs. The law of June 25, 1841, had appropriated to the completion of the breakwater an extraordinary credit of 18 millions: but owing to the caro with which the money of the state has been administered, a saving of nearly 1,500,000 francs has been effected out of that sum. Thus a bay previously formidable to sailors offers at present a sure refuge to the largest vessels in the most violent tempests, and the fleets of France could find there a shelter against the sea and the enemy; it is at the same time a safe asylum open to the commercial shipping of all maritime nations."

The breakwater extends with a slight curve (the convex side towards the north) between Isle-Pélée, on the eastern side of the Bay of Cherbourg and a ledge of rocks called La Roche Chavaignac, which stretch out into the sea from the western shore of the bay. The entrances to the harbour, at each extremity of the breakwater, are about 1000 yards wide; the eastern one commanded by strong forts on Isle-Pélée and on the eastern end of the breakwater, and the western entrance by similar forts on the western end of the breakwater and on La Roche Chavaignac. A large and important fort (Le Fort Central), built on the centre of the breakwater, commands all the interior of the harbour, and is capable of commanding respect to a good distance outside of it. Opposite this central fort are the forts and batteries above the naval harbour. On a ridge of rocks at the east end of the harbour, not far from Isle-Pélée, and exactly facing the eastern extremity of the breakwater from the south, is the Fort des Flamands, a third and formidable guardian of the eastern entrance; and a corresponding additional defence of the western entrance is found in Fort Querqueville, which is erected on the coast to the west of La Roche Chavaignac. The fortified arc of coast round the harbour of Cherbourg is little short of eight miles in length; the chord drawn from Fort Querqueville along the breakwater to the eastern coast is rather more than half that distance. At its base the width of the breakwater is 99 yards, on the summit 33 yards; and the depth of water about it varies from 36 to 45 feet. In the central fort there is a lighthouse 65 feet high, in 49° 40' N. lat., 1° 37' W. long.; there are lighthouses also on the fort in Isle-Pélée and on Fort Querqueville, and the harbour is said to be the best lighted in the English Channel.

Cherbourg is a place of considerable commercial activity. The principal industrial articles are cotton-yarn, hosiery, refined sugar, soda, of which about 12,000 tons are produced annually in the neighbourhood; chemical products, and leather. There are also dye-houses, large provision-stores, and a lace-factory, superintended by four nuns, which gives employment to 350 females, 150 of whom are young girls instructed in the process of lace-making. The exports consist of the articles named, and of butter, eggs, peas, vegetables, provisions, cattle, slates, &c.; the imports of coal, fir, hemp, and flax, for the use of the navy, groceries, wine, iron, &c. The town is an entrepôt for colonial produce and salt; several vessels belonging to the harbour are engaged in the Newfoundland fisheries. Cherbourg is the residence of a maritime prefect; has tribunals of first instance, commerce, and naval affairs; and possesses a school of hydrography, an academical society, and a college. A railroad is rapidly approaching completion from the

Paris-Rouen line to Cherbourg through Caen. Electro-telegraphic wires have been for a considerable time laid down between Cherbourg and Paris.

(*Dictionnaire de la France*; Macgregor, *Statistics*; *Paris Moniteur*; *Letter from Cherbourg*.)

CHERITON. [GLAMORGANSHIRE.]

CHEROKEES, the name of one of the native Indian tribes of North America. The remaining body of Cherokees now inhabit the district situated between 36° 10' and 37° 2' N. lat., extending west from the boundary of Arkansas state, in 94° 40' to about 100° W. long., and containing in all about 16,000 square miles. The number of the tribe is now about 28,000. The district of country occupied by the Cherokees forms part of the Indian territory appropriated by the United States for the residence of the various communities of native Indians, each tribe occupying a distinct territory, and being governed by its own rulers, under a separate constitution. About a century ago the Cherokees formed a numerous and powerful nation, which was in possession of the southern portion of the Appalachian Mountains and the countries on both sides of the range, so that their hunting-ground extended over a part of the states of Tennessee, North and South Carolina, and Alabama, and over nearly half the state of Georgia. After a British colony had been settled in Georgia (in 1732), the native tribes began to lose ground. The Cherokees however maintained their footing for a long time, even after these countries had obtained their independence. Since 1790 they have sold different portions of their territories to the government of the United States. In 1816 they ceded the country still possessed by them within the state of South Carolina, and some districts in Georgia and Alabama, receiving in consideration of this cession, besides presents and annuities, a tract of country of equal extent west of the Mississippi, to which some families emigrated. They afterwards removed to their present abode in the far west.

The Cherokees are considered the most civilised of the American Indians. They have made considerable progress in agriculture and domestic manufactures, and in the rearing of cattle. They manufacture salt from brine springs, which are numerous in the territory. The cloth required for use by themselves they make, and also such agricultural implements as are employed by them. They have been able of late years to export a considerable amount of produce to New Orleans. They chiefly cultivate cotton and Indian corn. They have a written language; the alphabet, which was invented by a native Cherokee, consists of eighty-five characters. Their language is derived from the same source as that of the Creeks, Chickasaws, Choctaws, Pasiagoulas, and some other tribes; and as all these tribes lived in the neighbourhood of Florida, these languages have obtained the name of the Floridian languages.

The Cherokees have a written constitution, embodying the forms of republican government. The chief or governor of the tribe is elective; he is assisted in the administration of affairs by a general council, elected annually. The general council consists of an upper and a lower house, somewhat corresponding to the Senate and House of Representatives of the United States. There is also a judiciary, observing all the legal forms prescribed by the legislature. The English language has been very generally adopted, and London and Parisian fashions in dress are followed to a considerable extent. The Cherokees receive from the United States government an annuity on account of the lands formerly possessed by them on the east side of the Mississippi River. Christian missionaries of several denominations have laboured amongst the Cherokees with considerable success. Education has made good progress amongst them, and the school system maintained by the tribe is in a very efficient state.

CHERSON (pronounced Kherson), or *Nikolajeff*, a government of European Russia, lies between 46° 12' and 49° 4' N. lat., 29° 10' and 35° 5' E. long. It is bounded N.W. by Podolia, N. by Kieff, N.E. by Pultawa, E. by Ekaterinoslaf, S.E. by Taurida, S. by the Black Sea, and W. by Bessarabia. The area is 28,186 square miles: the population of the province (excluding Odessa, which contains 75,900 inhabitants) is 766,500. Its extreme length from east to west is about 250 miles, and its breadth from north to south about 100 miles for one-third of the length from west to east, and for the other two-thirds almost 130 miles. The province, which consists of an immense plain, lies between the Dnieper and the Dniester. A branch of the Dnieper range traverses it for a short distance on the north-east, and on the south-west a small chain belonging to the outskirts of the Carpathians runs into the country from Podolia. It is only on the north-west and north-east borders that there is some wood, and in the neighbourhood of Elizabetgrad there are considerable forests. The rest of the country is a steppe, beginning at Mirgorod and extending across the whole province, where scarcely a tree is to be seen; the soil is however covered with a luxuriant vegetation of grasses and other plants. In the interior the soil is a gray clay mixed with sand, which is not very well adapted to agriculture, but produces the richest pastures. The Black Sea washes the south of the province from the Dniester to the Dnieper. The principal rivers are the Dnieper and the Dniester, of which the latter forms the boundary between Cherson and Bessarabia. The course of the rivers in the whole province is exceedingly slow, and their water bad. There are very few wells of fresh-water. The climate is very variable; in summer the heat is from 85° to 90° of Fahrenheit.

Thunder storms of tremendous violence sometimes occur. The nights are generally cool. The winter is very cold: most of the rivers freeze over, though but for a short time; and not always so much as to bear a man.

The ground, when by great labour it is cleared of the roots of the grass, and when the saltpetre, which generally appears when the surface is bare of vegetation, is got rid of, will produce from ten to twenty fold. But the inhabitants dislike agriculture, and prefer the breeding of cattle, so that they never raise corn enough for their own consumption. Almost every two years swarms of locusts desolate the country, but they seldom come farther than Cherson, about seventy miles up the Dnieper. Hemp and flax are grown for domestic consumption. Tobacco, mustard, and saffron are articles of commerce. There are several varieties of the vine. The banks of the rivers, especially of the Dnieper, are covered with strong reeds, which are used both for thatch and for fuel. Of tame animals the most common is the sheep. The wool of the native breed is rather coarse, but great numbers of Merinos have been lately imported. Oxen and buffaloes are numerous, and used for draught; the horses (of which many are wild) are slight, but very spirited and swift-footed. Wild animals of all kinds abound, especially wolves and wild-cats. The fields are covered with hussards, gray partridges, ortolans, snipes, &c. Besides locusts the country is infested by large rats, which come from Taurida. There are great numbers of water and other snakes, scolopendras, whose bite is as venomous as that of the tarantula, incredible numbers of lizards, and swarms of gnats. The fisheries on the sea-coast and in rivers are very important. The minerals are—fine potter's clay, freestone, slate, chalk, talc, saltpetre, agates, and garnets. The manufactures are of little importance; the chief are carried on at Odessa. The province is happily situated for trade. The foreign commerce of the country, which is very important and rapidly increasing, will be best described under Odessa, which, though founded only in 1796 by the Duke of Richelieu, is now the staple place for the commerce of all Southern Russia. [ODESSA.]

The other towns which require notice here are Nikolajeff, Elizabetgrad or Elizavetgrad, and Cherson. Nikolajeff, population about 12,000 exclusive of the suburbs, is situated near the confluence of the rivers Bug and Ingul. These rivers by their junction below the town form a spacious estuary, in which the Russian Black Sea fleet usually rendezvous during winter. The town covers an extensive area, the houses being in general only one story high, with large plots of ground attached to each dwelling, and the streets being of great width. There are here extensive dockyards, with improved ship-building machinery, nearly all of which is English; an observatory, the governor's house, and barracks for seamen. The Boulevard near the river is covered with shrubbery to the river's brink. Nikolajeff was founded in 1790, and is inclosed by walls. The chief buildings in the town are the cathedral, the town-hall, the admiralty-house, with museums and library, schools for pilots and for the daughters of soldiers, and several hospitals. *Elizabetgrad*, or *Elizavetgrad*, population about 10,000, the chief town of the circle of the same name, is situated in a beautiful plain on the banks of the river Ingul, about 130 miles N. from Cherson. The town which was built in 1754 is hexagonal in shape, and is defended by six bastions. Besides a large arsenal within the walls of the town, there are four suburbs. The whole is regularly built; the streets are straight, and of considerable width, and are planted with avenues of trees. In the town are five churches, a large hospital, and numerous magazines. Many of the inhabitants are of Greek or Servian origin, but the majority are Rostolnicks, who observe the rites of the primitive Russo-Greek Church. Much traffic is carried on in the produce of the surrounding districts. There is considerable commercial intercourse with Poland and Moldavia. An annual fair, the largest in the province of Cherson, is held at Elizabetgrad, and is attended by many thousand dealers. Upwards of 30 windmills are in the vicinity of the town. Elizabetgrad is the head-quarters of the military colonies on the east side of the river Bug, and has therefore the constant presence of numerous cavalry. *Cherson*, founded in 1778, is on the right bank of the Llmán, or estuary of the Dnieper, which is here nearly four miles wide, when its numerous shoals are covered with water. The want of sufficient depth of water for the constant passage of large ships has frustrated the object contemplated in founding this place. It is now a town of little importance, with a comparatively small number of inhabitants. The cathedral contains the tomb of Potemkin, the founder of the town. The small amount of trade carried on in the town is in the hands of the Greeks, who inhabit the Greek suburb. One of the adjacent villages, called Dauphigny, contains a monument erected in honour of John Howard, who died here in 1796.

The inhabitants of the province of Cherson consist of Great Russians, Little Russians (among whom are many Cossaks), Poles, Moldavians, Rascians, Bulgarians, Tartars, Greeks, Armenians, and Jews, all settled; even the Cossaks of the Bug have renounced their nomadic life, follow agriculture, and have fixed habitations. There are in this government numerous foreign colonists, chiefly German, dispersed in fifty or sixty colonies, and possessing in all about 60,000 acres of land. There are also a great many gipsies. The Greek Christians are under the archbishop of Ekaterinofslaf, Cherson, and Taurida, who resides at Ekaterinofslaf, where his cathedral is. In Cherson he has 367 parishes.

CHERTSEY, Surrey, a market-town and the seat of a Poor-Law Union, in the parish of Chertsey and second division of Godley hundred, is situated in 51° 24' N. lat., 0° 30' W. long.; distant 13 miles N. by E. from Guildford, 20 miles W.S.W. from London by road, and 22 miles by the South-Western railway. The population of the town in 1851 was 2743. The living is a vicarage in the archdeaconry of Surrey and diocese of Winchester. Chertsey Poor-Law Union contains 9 parishes and townships, with an area of 44,406 acres, and a population in 1851 of 16,118.

Chertsey stands on a slip of low land between the Thames and the brook which issues from Virginia Water, hence its Anglo-Saxon name Ceortse-Eye, or Ceort's Isle. A monastery was founded here in 666 by Frithwalde, governor or sub-regulus of Surrey, under Wulfhere, king of Mercia. In 964 King Edgar refounded the monastery for Benedictine monks. Subsequently it became a very wealthy and powerful establishment. Of the abbey buildings scarcely a fragment is now left.

The parish church, a brick building situated in the centre of the town, was, with the exception of the chancel and tower, rebuilt in 1806. There are chapels for Wesleyan Methodists, Independents, and Baptists. An educational foundation, producing about 400*l.* per annum, provides instruction for 130 boys and 130 girls, of whom 30 of each sex, belonging to the parish of Chertsey, are clothed as well as educated. There are National schools for boys and girls, an Infant school, a literary and scientific institution, with reading-room and lecture-room, and a savings bank. An agricultural society is maintained here. A county court is held in Chertsey.

At Chertsey is a stone bridge of seven arches, built in 1785, connecting the county of Surrey with that of Middlesex. The town of Chertsey is irregularly built: the principal street runs east and west; the streets are paved, and are lighted with gas. The market-house is modern. The chief trade of the town is in malt and flour; vegetables are raised in considerable quantities in the vicinity for the supply of the London markets; bricks are made to some extent. The market is on Wednesday for corn and provisions: it is a considerable market for poultry. Fairs are held on the first Monday and Tuesday in Lent for cattle, on May 14th for sheep, and on August 6th and September 25th. A branch of the South-Western railway, three miles in length, goes to Chertsey from the main line at Weybridge. The Porch House, in Guildford-street, Chertsey, was the residence of the poet Cowley. On St. Anne's Hill near the town was the residence of Charles James Fox. In the church is a tablet, erected by his widow, with an inscription to his memory.

(Manving, Surrey; Brayley, Surrey; Communication from Chertsey.)

CHESAPEAKE BAY. [MARYLAND; VIRGINIA.]

CHESHAM, Buckinghamshire, a market-town in the parish of Chesham St. Mary and hundred of Burnham, is situated to the right of the road from London to Aylesbury, in 51° 42' N. lat., 0° 37' W. long., distant 12 miles S.E. from Aylesbury, and 26 miles N.W. from London by road. Berkhamstead, which is 5 miles from Chesham, is 28 miles from London by the North-Western railway. The population of the town of Chesham was 2496 in 1851. The living is a vicarage in the archdeaconry of Buckingham and diocese of Oxford.

Chesham is situated in a pleasant and fertile valley which is watered by the river Chess, a branch of the Colne. The parish church is a commodious cruciform building: the chancel, which is the oldest part, is of the decorated style, the remainder is perpendicular, of the close of the 14th century. There are chapels for Independents and Baptists; National, British, and Infant schools; and a mechanics institute. An almshouse for four poor persons was endowed by Thomas Wedon, who died in 1624. A county court is held in Chesham. Markets are held on Wednesday and Saturday, and fairs on April 21st, July 22nd, and September 28th. Boots and shoes are manufactured to a great extent, chiefly for the London market. Wooden ware in great variety is made. The manufacture of straw plait employs a considerable number of females. There is a silk-mill in the town; and in the neighbourhood are paper-mills.

(Lysons, *Magna Britannia*; Llpscomb, *Buckinghamshire*; Communication from Chesham.)

CHESHIRE, a county palatine on the west side of England. The name is formed from the ancient city of Chester, and is an abbreviation of Chestershire, formerly written, in Saxon, *Cestre scyre*. The boundary-line is very irregular. On the north-west a tract of a peninsular form is included between the estuaries of the Mersey and the Dee; and on the north-east a long narrow tract, containing part of Featherbed Moss and Holme Moss, which belong to the central highlands of England, is included between the Thame and the Etherow, which by their junction form the Mersey. The county is said by some writers to be "like the wing of an eagle stretched forth at length." (King's 'Vale Royal of Cheshire.')

The whole county received the name of Vale Royal of England, from the magnificent abbey so called, which was founded by Edward I. on the Weaver. Cheshire lies between 52° 56' and 53° 34' N. lat., 1° 47' and 3° 11' W. long. Its northern boundary is chiefly formed by Lancashire, and partly by Yorkshire and the Irish Sea. The Mersey forms the boundary between Cheshire and Lancashire. On

the E. the county has Derbyshire and Staffordshire; on the S. is Shropshire and a small portion of Flintshire; on the W. are Denbighshire, Flintshire, and the Irish Sea. The greatest length of the county from north-east to south-west, in a straight line, is about 58 miles; the greatest width from north to south about 32 miles; the whole circuit is nearly 200 miles. On the north-western extremity, a line of sea-coast extends for about 8 miles from east-north-east to west-south-west, besides about 20 miles on the estuary of the Mersey, and about 14 miles on the great estuary of the Dee. The area of the county is 707,078 statute acres. The population of the county in 1841 was 395,660, in 1851 it was 455,725. Chester, the county town, is 183 miles north-west from London.

Surface, Hydrography, and Communications.—The surface of Cheshire is in general a nearly uniform level, but there are a few inequalities. Several elevated tracts stretch in a generally northern direction. One is between the Goyt and the Bollin; and a second between the Bollin and the Weaver. A tract of high land extends also from north to south, across Delamere Forest, terminating to the north near Frodsham in a high promontory which overlooks the Mersey, and to the south in the rock on which Beaton Castle stands; the height of this rock is 366 feet above the sea. Alderley Edge, a few miles north-west from Macclesfield, is an isolated hill which rises abruptly out of a level country, and presents one of the richest and most extensive prospects in the county; but Cheshire, from its general flatness, is not commonly remarkable for picturesque beauty. In former times there were numerous forests in Cheshire; one is mentioned in the Domesday Survey of Allicross as being 10 miles in length and three miles in breadth. At present there are only a few large woods. Some at Dunham Massey contain many noble old oaks. Around Delamere Forest, in the hundred of Eddisbury, are several extensive plantations, chiefly of Scotch firs and larches. This forest, so called, is a large sterile tract of whitish sand, partially covered with heath and peat-moss. It occupied 10,000 acres; of which a considerable part has been inclosed and brought into cultivation. The timber supplied by the great profusion of hedge-row trees is principally oak, and furnishes abundance of tanner's bark. A large quantity of fine timber is also produced on the numerous estates of the nobility and gentry; especially on those of the Marquis of Westminster, of the Earl of Stamford and Warrington, and of the Marquis of Cholmondeley.

Cheshire abounds not only with rivers and brooks, but with broad sheets of water called meres, which generally contain fish. The principal are Oak Mere, Pick Mere, Budworth Mere, Rostern Mere, Mere Mere, Tatton Mere, Chapel Mere, Moss Mere, Broad Mere, Bab Mere, and Comber Mere, which is three-quarters of a mile in length.

The chief navigable rivers are the Dee, the Mersey, and the Weaver. The navigation of these rivers is superintended, and has been greatly improved, by companies incorporated by Acts of Parliament. The source of the *Dee* is in Merionethshire; whence it runs through Denbighshire, by Llangollen to near Overton in Flintshire, where it turns northward to Bangor Iscoed. It becomes the boundary of Cheshire nearly from Worthenbury to Aldford. It then intersects the northern part of the hundred of Broxtou to Chester, which it balfencircles. From Chester it flows in a straight artificial cut into the estuary of the Dee. A surface of about 2500 acres has been reclaimed from the south-eastern extremity of this estuary. From Bangor bridge the Dee is navigable for barges. At Chester bridge it is 100 yards wide, and vessels of considerable tonnage can pass by the new channel to Chester. The whole length of the course of the Dee is about 55 miles. It supplies salmon, trout, and other kinds of common fish. This river, called in Latin *Deva*, in Welsh *Pfifrdwy*, was anciently held in great veneration, and its waters were considered sacred for religious ablution: as such it is celebrated by Drayton, Browne, Spenser, and Milton.

The *Mersey* in its whole course divides Cheshire and Lancashire. It is formed and first receives its name by the confluence (near Stockport) of the Thame and Goyt; the Etherow (which joins the Goyt a little above Stockport) and the Thame rise in the central highlands, north and north-east of Stockport; the Goyt rises near Buxton on the east side of the highlands between Macclesfield and Buxton. Leaving Stockport, the Mersey runs a general west course to Northenden and Ashton. After passing by Carrington, it receives on the right bank the Irwell from Manchester, and on the left, a little below Warburton, the Bollin. It continues with a very winding course through a low, flat country past Warrington, and expands at its junction with the Weaver into a wide estuary which forms the Liverpool channel; and though much obstructed with banks of sand, is rendered safe by the excellent system of pilotage. The Mersey is navigable from its confluence with the Irwell. At Warrington it is 40 yards in width; opposite Liverpool the width is a mile and a quarter, with a considerable depth at low water. The greatest width of the estuary above Liverpool is between Eastham and Frodsham, where it is above three miles wide. Its whole course from Stockport to the outlet of the estuary is about 55 miles. A large marsh at the confluence of the Weaver, extending to Helsby and Frodsham, is subject to occasional inundations. The river and estuary contain congers, plaice, flounders, and shrimps; with annual shoals of smelts, called sparlings, remarkable for size and flavour.

The *Weaver* traverses the central parts of Cheshire from south to north. It rises in the north of Shropshire, near the village of Stych, and after receiving several considerable brooks and rivulets, runs by Nantwich, Minsbüll, and Winsford, to Northwich, where it forms a confluence on the right bank with the Dane, which rises in the same swamp as the Goyt, and a little farther north, with the Peover. It then winds west-north-west and falls into the Mersey below Frodsham. From Winsford to Frodsham it has been rendered navigable by ten locks, the total fall being 50 feet. Vessels of from 20 to 100 tons convey rock-salt down the river and return with coal. The whole course of the Weaver is about 40 miles. Among the less important rivers is the Dane, which is joined by the Wheelock above Northwich. The source of the Bollin is in Macclesfield forest, near that of the Dane. It passes Macclesfield and Wilmslow, is crossed by the Bridgewater Canal, and enters the Mersey near Warburton, after a course of about 23 miles. The Peover rises south of Macclesfield, near Gawsforth, and flows west-north-west to its junction with the Weaver near Northwich.

Several canals intersect the county. The Bridgewater Canal enters Cheshire by crossing the Mersey near Ashton: its length within the county is about 24 miles. The Grand Trunk, or Trent and Mersey Canal, which was commenced in 1766, runs south-east from Preston Brook, by Northwich, Middlewich, and Sandbach, and leaves Cheshire at Church Lawton, on the borders of Staffordshire. Between Preston-on-the-Hill and Dutton, not far from its commencement at Preston Brook, it passes through a tunnel 124 yards in length; at Barnton, through another of 572 yards; at Salterfield, through one of 350 yards; and finally, at Hermitage, through another of 130 yards. The whole of its line in Cheshire is about 20 miles.

The Chester and Nantwich Canal, which connects these two towns, was completed in 1778. At Chester it forms a junction with the Dee, and with the Dee and Mersey Canal, which runs across the peninsula of Wirral to the Mersey, at Ellesmere Port. Four miles north of Nantwich a branch from the Chester and Nantwich Canal runs to Middlewich, and is called the Middlewich branch. From the point where the Chester and Nantwich Canal and the Middlewich branch unite, the canal which thence runs south to Nantwich and past Audlem into Shropshire is called the Birmingham and Liverpool Junction Canal. The Ellesmere Canal branches off from a point between Nantwich and the point where the Chester and Nantwich Canal is joined by the Middlewich branch, and runs to the neighbourhood of Whitchurch. From Church Lawton the Macclesfield Canal runs past Congleton, Macclesfield, and so on northward to the Peak Forest Canal, which it joins a few miles north of Disley.

The Peak Forest Canal enters Cheshire at Ashton-under-Line, where it crosses the Thame, and passing near Disley, quits the county at Whaley Bridge. It crosses the Goyt below the junction of the Goyt and Etberow, by an aqueduct 100 feet in height, which has three arches, each 60 feet span and 78 feet high.

Several important roads traverse this county. The road from London to Manchester by Derby enters the county near Bosley, and passes through Macclesfield and Stockport. Another branch of the same road enters at Whaley Bridge and leaves the county at Stockport. The road from London to Manchester by Lichfield runs by Church Lawton, Congleton, Wilmslow, and Cheadle. The road from London to Liverpool enters Cheshire at Lawton, and runs to Warrington by two branches, one through Knutsford, the other through Middlewich and Northwich.

Cheshire is well provided with railway accommodation. The main line of the London and North-Western railway enters the southern border of the county a few miles from Betley, and passes northward nearly through the centre of it towards Warrington. The length of the main line in Cheshire is about 27 miles. At Crewe several branches diverge from it. One runs 21 miles north-west to Chester, and thence 15 miles to Birkenhead. Another line runs from Crewe 23 miles north by east to Stockport. Another branch, of which only a few miles are in this county, runs west from Crewe to join the Staffordshire railway near Burslem. From Chester the Chester and Holyhead line runs westward, but it soon passes out of the county, as does also the Chester and Shrewsbury line, which runs southward from Chester. A short line from Manchester to Altringham belongs to Cheshire for about half its extent.

Geology, Mineralogy, &c.—The general character of the Cheshire soils is a clayey or sandy loam; tracts of peat-moss cover a large extent of the eastern portion of the hundred of Macclesfield. Some mosses of smaller extent are at Warmincam and Copenball. The latter, which has been almost cleared of peat, contained numerous trunks and branches of trees, chiefly of oak, beech, and fir, apparently broken off at different heights, and partially exhibiting the marks of fire. An ancient road of gravel passed through the moss of Copenball.

Cheshire generally belongs to the new red-sandstone formation. The range of high land to the east of Macclesfield is a sandstone rock, which contains beds of coal: this sandstone range is bounded on the east by the limestone of Derbyshire. The high land, which includes Delamere Forest, is also sandstone. The most important mineral productions of Cheshire are fossil or rock-salt, and coal. The rock-salt is obtained near the banks of the Weaver and its tributary streams. It

was first discovered near Northwich, in 1670, in searching for coal; it has since been found very abundantly in the townships of Witton, Wineham, Winington, and Marston, near Northwich. There are salt-works also at Nantwich, Middlewich, and Winsford. The salt is of two kinds, the one white and transparent, the other reddish-brown. The former has been found by analysis to be an almost pure muriate of soda; the latter contains a small portion of oxide of iron, from which its colour is derived.

The principal salt-works are in the neighbourhood of Northwich, where there are mines, in addition to brine-springs. The rock-salt is found from 28 to 48 yards beneath the surface of the earth. The first stratum is from 15 to 25 yards in thickness, extremely solid and hard, and resembling brown sugar-candy. Many tons at a time are loosened by blasting with gunpowder. The second stratum is of hard stone, from 25 to 35 yards in thickness. The salt lies beneath the stratum, in a bed above 40 yards thick, generally quite white and clear as crystal. The external surface above these strata is of whitish clay and gypsum. The quantity of salt annually taken from the pits around Northwich, amounts to many thousand tons; besides this quantity of fossil salt many thousand tons are annually manufactured at the same place from brine-springs, which are from 20 to 40 yards in depth.

Coal of a good quality is found in great abundance in the north-east part of the county, especially in the townships of Worth and Poynton, where there are very extensive collieries, which supply the manufactories of Stockport. At Denwell, in the hundred of Wirral, there is also coal. Copper and lead are found at Alderley Edge and the Peckforton Hills; the former place supplies a considerable quantity of cobalt. There are several quarries of excellent freestone in this county, of which those at Runcorn, Manley, and Great Bebbington, are the most important. Limestone is found only at Newbold Astbury. Mowcop Hill, or Molecop, which is partly in Staffordshire, has long been famous for its mill-stones. Marl is found in almost every part of the county, and is generally used for manure. Dr. Woodward ('Cat. Brit. Fossils') speaks of a fibrous staly substance, a kind of asbestos, as found in great abundance in beds of marl about High Leigh.

Climate, Soil, Agriculture.—The soil and climate of Cheshire are peculiarly well adapted for the growth of grass. The soil is mostly composed of loams of various degrees of tenacity; the climate is moister than the more eastern parts of England. Situated in an extensive plain between the Derbyshire and Welsh mountains, Cheshire is seldom exposed to long droughts. The low meadows along the banks of the rivers are very subject to be flooded, which is one reason for keeping them in grass. Two-thirds at least of the county possess a soil above mediocrity, of which the greater part is in permanent pasture, and produces the excellent cheese known as Cheshire cheese. The arable land is generally that which is thought too sandy for pasture, or of which the grass has deteriorated by neglect. Hence the arable part of a farm in Cheshire is seldom cultivated with that attention which is paid to similar land in those counties where good grass land is scarce. Very few farms consist chiefly of arable land. Everywhere there is a predilection for the dairy.

Dairy farms require considerable buildings, and some have been erected by wealthy proprietors in the best and most substantial manner. The habitations for the family are quite sufficient for their comfort. Many of the cow-houses are constructed on the Dutch plan. Large farms are not common in Cheshire. The average size may be considered as from 50 to 150 acres, that quantity being sufficient for the full employment of a family, and for a dairy of 12 to 20 cows. The rent of land is higher than that of the same quality in other parts of England, which is owing to the smaller outlay with which a dairy farm is managed. The effect of the dairy husbandry may be observed all through the county. Land is ploughed in order to have winter fodder for cattle, and to improve pastures overrun with weeds. Where the land is fit for turnips, which is not often the case, they are raised for the cows. Cabbages have been cultivated with some success on several farms. The cultivation of potatoes has been much encouraged in Cheshire, to supply the demands of Liverpool and the manufacturing districts. The sandy and turfy soils, which are unfit for permanent pasture, are peculiarly fitted for the growth of potatoes. The best potatoes grow on land broken up from grass, which had been laid down in a rich state; in this case no manure is required. Early sorts are raised for the Liverpool market by a slight forcing. Many farms have little or no arable land attached to them. A very rich loam is not considered so good for pastures where cheese is made, as one less fertile, as it is apt to make the cheese heavy. The natural grasses found in the good pastures are chiefly of the kinds which have been most approved of for sowing when arable land is laid down to grass, namely, *Poa pratensis*, *Poa trivialis*, *Festuca pratensis*, or, on sandy loams, *Anthoxanthum odoratum*.

Draining has been introduced extensively, and with the best effect. The abundance of marl found in Cheshire is one of the chief means of improving the poor soils. Marling is a permanent improvement. Lime, and also sand, are put upon strong heavy lands to ameliorate the texture. In the neighbourhood of the salt-mines refuse salt has been successfully used for manure.

Besides the making of Cheshire cheese, the dairy occupations

include the making of butter, which is made from the cream or from the whole milk allowed to coagulate and become sour. Good butter may be obtained in either way; but that made from fresh cream is always the best. An inferior butter is made from the cream which rises on the whey.

Divisions, Towns, &c.—When the Domesday Survey was made, this county, exclusive of the lands between the Ribble and the Mersey, now a part of Lancashire, though then considered a part of Cheshire, was divided into twelve hundreds. The modern hundreds are: Wirral on the north-west of the county; Bucklow and Macclesfield, on the north and north-east; Northwich and Eddisbury, in the centre; Nantwich and Broxton, on the south.

There are 14 market-towns besides Chester:—namely, ALTRINGHAM, BIRKENHEAD, CONGLETON, FRODSHAM, KNUTSFORD, MACCLESFIELD, MALPAS, MIDDLEWICH, NANTWICH, NORTHWICH, RUNCORN, SANDBACH, STOCKPORT, and TARPORLEY. Frodsham, Malpas, and Tarporley, with the more recently founded town of Hyde, may be noticed here: the other towns will be found under their several names.

Frodsham, formerly a market-town, 10 miles N.E. from Chester, population of the town 2099, is still a place of some local importance, although the market has been long given up. Salt constitutes the chief article of trade, but there are flour-mills, and timber, coals, and slates are dealt in. A sandstone quarry is worked. The church is partly of Norman date. There is a chapel for Wesleyan Methodists. The Free Grammar school has an income of 45*l.* a year, and had 120 scholars in 1852; there is also a National school.

Hyde, population 10,051, a manufacturing town, recently a village, forming part of the parish of Stockport. The extension of the cotton manufacture has considerably augmented the importance of this place. Coal abounds in the township, and means of conveyance are furnished by the Peak Forest Canal and by railway. There are here a new church, a chapel of ease, dedicated to St. Thomas, and chapels for Independents and Wesleyan Methodists; National schools for boys and girls; a public library, and a mechanics institute. Extensive cotton-mills, iron-works, and water-works are in operation. A county court is held in Hyde.

Malpas, situated on an elevation near the river Dea, is 15 miles S. by E. from Chester: the population of the parish, which is partly in Flintshire, was 5710 in 1851. The parish contains two rectories, one held with the curacy of St. Chad, and the other with the curacy of Whitwell. The church was formerly the chapel of a religious house for monks of the Cluniac order; it is built of unhewn stone, and consists of a nave and chancel, without either aisle or steeple; it is partly of Norman date. There are also two chapels of ease, and places of worship for Independents and Wesleyan Methodists; an Endowed Grammar school which has an income from endowment of 25*l.* a year, and had 6 scholars in 1851; National and Infant schools, and many charitable institutions. The town is irregularly built. The market is held on Wednesday; there are fairs on April 5th, July 26th, and December 8th for cattle and pedlery. Malpas is the birthplace of Matthew Henry, the commentator on the Bible.

Tarporley, 10 miles E.S.E. from Chester, is a small market-town near Beeston Castle, on the great road from London to Chester. The population of the parish of Tarporley in 1851 was 2632. It was anciently governed by a mayor, but is now governed by a constable. In 1642 a battle was fought at this place between Sir William Brereton's forces and the Royalists from Chester, who on this occasion were victorious. Tarporley is pleasantly situated, clean, and neatly built. It is now chiefly known as the scene of an annual fox-hunt in November. The church is an ancient structure of red-sandstone; its interior contains several interesting monuments. The Wesleyan Methodists and Baptists have places of worship. The town possesses a National school, some almshouses, and parochial charities. The inhabitants are employed in the manufacture of stockings and leather breeches. The market-hall is a commodious building. The market is on Thursday. There are fairs in May, August, and December.

The following are some of the more important villages, with the population in 1851, and a few other particulars. Except where specially mentioned the population given is that of the parish:—

Acton, population 3165, about 1 mile W. by N. from Nantwich, has an ancient church. The Free Grammar school, founded in 1662, has an income from endowment of 12*l.* a year; the number of scholars in 1852 was 8; there is also a National school. *Ashton-upon-Mersey*, 31 miles N.E. from Chester, population 2894, is a large scattered village, of which Cross-street forms a part. The church is a substantial edifice; there is a Wesleyan chapel. *Audlem*, population 2870, about 7 miles S. from Nantwich, has a small market on Thursday and a fair in the month of July, both recently revived. Besides the parish church, there are chapels for Baptists and Wesleyan and Primitive Methodists. The Free Grammar school, founded in 1655, has an income from endowment of 40*l.*, and had 12 scholars in 1851. There is also a National school for girls. *Bebington*, 12 miles N.N.W. from Chester and 4 miles S. from Birkenhead, consists of two villages, Higher and Lower Bebbington: the population of the parish in 1841 was 5008, in 1851 it was 10,016, having doubled itself in the ten years. Both villages are on the line of the Chester and Birkenhead railway. The parish church is partly of Norman and partly of early English

date. *Becston*, 10 miles E.S.E. from Chester, population of the township, which is in the parish of Bunbury, 397, is celebrated for its castle, which has been already noticed. The ruins have a picturesque appearance, and a very extensive view is obtained from them. *Bolington* is an extensive village and chapelry in the parish of Prestbury, 40 miles E. by N. from Chester and 3 miles N. from Macclesfield: population of the chapelry 4655. The inhabitants are employed in cotton factories and silk mills; there are also some collieries. The Macclesfield Canal passes by the village. There is a chapel of ease, erected at the cost of the late Mr. Turner. The Wesleyan and Primitive Methodists have places of worship. *Bowdon*, 29 miles N.E. from Chester, population of township 1164, is pleasantly situated on an elevation about 1 mile S. from Altringham. From the church tower there is a very extensive and pleasing prospect. The church is in part of Norman date. In it are some good monuments. There is an Endowed Grammar school. *New Brighton*, population included with that of Wallasey parish, 24 miles N.N.W. from Chester, is situated at the mouth of the Mersey. The village has increased rapidly in population within the last few years. Several large hotels have been constructed, and numerous good villa residences. The beach is well adapted for bathing, and the sea views are very fine. By the steamer it is only 4 or 5 miles from Liverpool. *Bromborough*, 11 miles N.N.W. from Chester, population 538, was formerly a market-town, but is now a place of little consequence. A station of the Chester and Birkenhead railway is at Bromborough. There was formerly an abbey here. The church is small but ancient. *Great Budworth*, population of the township 643, of the parish 17,990, is pleasantly situated near Pickenre Mere and Budworth Mere, about 2 miles N. from Northwich. The parish comprises an area of 35,920 acres. Besides the parish church there are a chapel for Wesleyan Methodists, and Parochial and Infant schools. The Wilton Free Grammar school, founded in 1556, has an income from endowment which amounted in 1837 to 269*l.* a year. It is now conducted as a National school, the schoolmaster receiving only 75*l.* a year from the endowment. *Buglawton*, 34 miles E. from Chester, population of the township 2052, is a short distance from Congleton, with which town it is pretty closely connected. The inhabitants are chiefly employed in the manufacture of cotton and silk. A new church was erected here in 1829. *Bunbury*, 12 miles S.E. from Chester: population of the township 931. The church is a very fine one of the perpendicular style. In the interior are several interesting monuments. The Wesleyan Methodists have a place of worship. The Free Grammar school, founded in 1594, is free to children of the parish. The number of scholars in 1852 was 72. There is also a National school. *Burton*, population 467, on the right bank of the Dee estuary, 9 miles N.W. from Chester, possesses a Free school with an income from endowment of 37*l.* a year. *Cheadle Bulkeley*, population of the township 5489, and *Cheadle Moseley*, population of the township 2319, are two contiguous villages, about 3 miles W.S.W. from Stockport. The inhabitants are occupied in calico-printing and silk-weaving. On the Mersey are some corn-mills. The parish church, which is ancient, contains some good monuments. *Compstall Bridge*, 5 miles E.S.E. from Stockport, in the parish of Stockport, is a busy and populous village. The inhabitants are chiefly employed in cotton-spinning and calico-printing. Besides the church, there are places of worship for Wesleyan and Primitive Methodists. *Darnhall*, population of township 186, about 8 miles W.S.W. from Middlewich, possesses an Endowed Grammar school, founded in 1631, which is free to 26 boys in Darnhall and Swanlow; the income from endowment is 70*l.* a year; the number of scholars in 1852 was 94. *Disley*, or *Disley Stanley*, about 6 miles S.E. from Stockport, on the eastern border of the county: population of the township 2225. Cotton factories and print works give employment to the inhabitants; there is also a large whiting factory. The chapel is of the perpendicular date and style. The Wesleyan Methodists have a place of worship. *Eastham*, 9½ miles N. by W. from Chester: population of the township 419. The village, which is pleasantly situated on the Mersey, is much resorted to by the inhabitants of Liverpool during the summer. A steamer plies regularly to Liverpool throughout the season. *Ellesmere Port*, in Eastham parish, 8 miles N. from Chester, has risen into some consequence since the construction of a capacious dock and extensive warehouses by the Ellesmere and Chester Canal Company. Many good villa residences have been erected by the Marquis of Westminster. Besides a chapel belonging to the Establishment, there are a chapel for Wesleyan Methodists, and a National school. *Ge Cross*, about 4 miles E.N.E. from Stockport, is a populous village: the population is returned with the parish of Stockport. There are extensive cotton-mills here. Besides a chapel of the Establishment, there are chapels for Wesleyan Methodists and Unitarians. *Godley*, 45 miles N.E. from Chester: population of the township, 1353. There are several cotton-mills. *Halton*, 14 miles N.E. by N. from Chester: population of the township 1570. A castle was erected here soon after the Norman conquest; John of Gaunt, duke of Lancaster, possessed the castle, and resided much in it. A portion of the remains is now fitted up as an inn. Halton is in much favour as a summer residence. The village contains a Grammar school, also almshouses for six poor persons. *Hazel Grove*, 4 miles S. from Stockport, of which parish it is a hamlet. Till 1836 this place was

called Bullock Smithy. Wesleyan and Association Methodists and Independents have places of worship. There are National and Infant schools, and a dispensary. The chief occupation is the weaving of silk and cotton. *Holmes Chapel*, or *Church Holme*, 24 miles E. from Chester: population of the township 555. The church consists of a nave, chancel, and aisles, and has an embattled tower with pinnacles. In the village are a Wesleyan Methodist chapel, and an endowed Blue-Coat school. Fairs for cattle and horses are held in April, October, and November. *West Kirby*, population of township 435, about 7 miles W. from Birkenhead, is situated on the shore of the Dee estuary, near its outfall. There is here a Grammar school, founded in 1636, which is free to sons of parishioners; the income from endowment is 58*l.* a year. The number of scholars in 1852 was 30. *Leftwich*, 18 miles E. by N. from Chester: population of the township 2528. A Wesleyan chapel and an Infant school are in the township; salt-works and a tannery are carried on. *Liscard*, situated at the mouth of the Mersey, 4 miles N. by W. from Birkenhead, population of Liscard township, 4100; has a rather handsome church. *Lymm*, population 3156, about 8 miles W.S.W. from Altringham. The church is ancient; the tower was rebuilt in 1521; from the tower is obtained an extended view of picturesque scenery. There is here a Wesleyan Methodist chapel. The Grammar school, established in 1698, has an endowment of about 120*l.* a year, and had 100 scholars in 1851. There is also a National school. Lymin Hall, and other excellent mansions, are in the neighbourhood. A cross, the lower steps of which are cut in the rock, stands opposite the gates of Lymin Hall. *Marple*, population of the township 3558, is on the eastern border of the county, 5 miles E.S.E. from Stockport. All Saints church has been rebuilt; in the tower are placed the old bells of Stockport church. There are chapels for Wesleyan and Primitive Methodists, a Grammar school, and a National school. Cotton-spinning, bleaching, and calico printing are extensively carried on; there is also some boat building. On the river Goyt are corn-mills. A branch of the Peak Forest Canal from Marple joins the Mersey Canal at Lawton. Marple Hall, an interesting old mansion, is in the possession of a descendant of John Bradshaw, who presided at the trial of Charles I. *Mottram-in-Longendale*, population 3199, is situated near the north-east extremity of the county, about 7 miles N.E. from Stockport, surrounded by rugged and picturesque scenery. In the vicinity are Mottram hill and the Car Tor. The Car Tor is a singular eminence rising abruptly from the plain to a height of about 80 feet. It is composed of regularly arranged strata of rock, freestone, and a kind of slate or coal. Besides the parish church, there are chapels for New Connexion Methodists and Moravians. The Free Grammar school, founded in 1610, had an income in 1837 of 65*l.* a year from endowment. Its affairs have been the subject of proceedings in Chancery. Iron foundries, and collieries, with cotton-spinning, calico-printing, and other establishments, give employment to the inhabitants. *Great Neston*, on the right bank of the estuary of the Dee, 10½ miles N.W. from Chester, population of the township 1524, is chiefly dependent on visitants during the summer. The parish church, dedicated to St. Mary, is ancient; the tower was repaired in 1697. There are here a Wesleyan chapel, a National and an Infant school. *Northern*, population of the township 679, is pleasantly situated on the left bank of the Mersey and north border of the county, about 6 miles W. from Stockport. The church, dedicated to St. Wilfrid, has a nave, chancel, side aisle, and a tower. There is here an Infant school. *Over*, population of the township 2926, is situated near the left bank of the Weaver, about 4 miles W. from Middlewich. This town, though small, claims to be a borough by prescription, and is governed by a mayor. In the principal street, which forms a part of the high road, are remains of several crosses. The parish church, an old building, has some good specimens of stained glass. There is a chapel for Independents. A small weekly market is held. The annual fair continues for three days. A brewery, and brick and tile-works, afford some employment. *Parkgate*, a small bathing town on the right bank of the Dee; adjoins Great Neston, with which township the population is included. The houses, which are neatly and regularly built, command a fine prospect of the opposite Welsh coast. Communication with Flint and Bagillt on the Welsh side is maintained by ferry boats. A sand-bank off the town prevents vessels of heavy burden coming up to the quay. The Independents and Wesleyan Methodists have places of worship here. *Preston Brook*, or *Preston-on-the-Hill*, 14 miles N.E. from Chester, population 594, situated on the line of the Liverpool and Birmingham railway, has extensive warehouses for the accommodation of the traffic by the different canals in the district. The carrying trade is here of considerable magnitude. *Rosther*, population of the township 338, is pleasantly situated about 4 miles S. by W. from Altringham. By Rosther Mere, a beautiful sheet of water, is the ancient church, dedicated to St. Mary; it is partly of Norman date, and has a stone tower, built in 1538. At Hoo Green, a place much resorted to by the neighbouring gentry, a bowling-club is established. *Seacombe*, population of the joint township of Poulton-cum-Seacombe 3044, is on the left bank of the Mersey, opposite Liverpool, with which there is constant communication by ferry. There are here large copper-mills, an iron foundry, smelt-works, and a varnish manufactory. The Wesleyan Methodists have a chapel. *Tarvin*, 6 miles E. from Chester, popula-

tion of the township 1181, had formerly a market, but it has long been discontinued. Fairs are held in April and December. In 1752 the village was nearly destroyed by fire. Besides the parish church, there are Dissenting meeting-houses and a National school. Hargrave Free Grammar school, founded in 1627, is free to all children paying 1s. a quarter: it possesses an endowment of 40l. a year with a house, and had 118 scholars in 1852. *Tiverton*, 11 miles E.S.E. from Chester: population of the township 747. The Baptists have a place of worship here. The Chester and Nantwich Canal passes by Tiverton. A corn market, at which extensive transactions in grain take place, is held on Monday at Fern Lane Ends in this township. *Wallasey*, population of the township 1195, situated near the shore of Liverpool Bay, about 4 miles N.N.W. from Birkenhead, has much increased during the last few years in consequence of increased communication with Liverpool. The parish church, which stands on a considerably elevated site, was rebuilt about a century ago, with the exception of the tower, which dates from 1560. The Free Grammar school, founded in 1654, has an income from endowment of 114l. a year; the number of scholars in 1852 was 58. A question as to the right of patronage of this school is under consideration in Chancery. *Wearham*, population of the lordship and township together 1529, is 16 miles W.N.W. from Chester. The parish church, dedicated to St. Mary, has a fine tower. There are chapels for Wesleyan and Association Methodists; also a National school for boys and girls. The Free Grammar school, which has an endowment of 46l. a year, had 55 scholars in 1852. *Weston*, population of the township 933, including 234 in barges, is situated near the confluence of the Mersey and the Weaver, about 13 miles N.N.E. from Chester. The Wesleyan Methodists have a place of worship in the village; at Weston Point, two miles distant, is a church, with National schools for boys and girls. A lighthouse was erected at Weston Point a few years back. There is a considerable carrying trade in barges on the estuary of the Mersey. The village is much resorted to in summer for bathing. *Wilmslow*, population 4952, is situated on the left bank of the river Bollin, 37 miles E.N.E. from Chester. The parish church is a fine building of different styles. The interior contains several interesting monuments. The Wesleyan Methodists and Independents have places of worship, and there is a National school. Extensive cotton and silk factories are established here. Wilmslow, being within 12 miles of Manchester by railway, is a place of residence for many of the Manchester merchants. *Winsford*, population included with that of Over township, is situated on the high road, 17 miles E. from Chester. Winsford church, parsonage, and school were built by the trustees for the navigation of the river Weaver, the church being for the use of the watermen on the river. The Wesleyan and Wesleyan Association Methodists have places of worship. The Weaver is here crossed by a bridge. There are extensive brine pits on both sides of the river, and large quantities of salt are produced, for the conveyance of which the Weaver affords the required accommodation. At Winsford is a station of the London and North-Western railway.

Ecclesiastical and Legal Jurisdiction.—Of the 87 parishes 46 are rectories, 23 vicarages, and 18 donatives, or perpetual curacies; many are of great extent. The parish of Prestbury extends over an area of 63,125 acres, and comprises 32 townships and 14 chapelries. The county is in the diocese of Chester, and province of York: it forms an archdeaconry, and comprises seven deaconries. A few parishes are in the archdeaconry of Liverpool and deanery of Wirral. According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 933 places of worship, of which 252 belonged to the Church of England, 188 to Wesleyan Methodists, 135 to Primitive Methodists, 66 to Independents, 50 to Wesleyan Association Methodists, 29 to New Connexion Methodists, 17 to Roman Catholics, 14 to Particular Baptists, 14 to Unitarians, and 68 to other bodies. The number of sittings amounted in all to 235,593. The county is divided by the Poor-Law Commissioners into 10 Unions: Altringham, Great Boughton, Chester, Congleton, Macclesfield, Nantwich, Northwich, Runcorn, Stockport, and Wirral. The Unions include 453 parishes and townships, with an area of 550,257 acres, and a population in 1851 of 410,247; but the boundaries of the Unions are not strictly co-extensive with those of the county. Cheshire is in the South Wales circuit. The Lent and summer assizes and the quarter sessions for the county are held at Chester, where also is the county jail. The city of Chester has a separate jurisdiction, and tries by its own recorder. County courts are held at Altringham, Birkenhead, Chester, Knutsford, Nantwich, Northwich, and Runcorn.

Cheshire before the Reform Act of 1832 sent four members to the Imperial Parliament: it was then formed into a north and a south division, each of which sends two members. The boroughs of Chester, Macclesfield, and Stockport return two members each to Parliament.

Manufactures.—The cotton and silk manufactures are extensively carried on in and around Stockport, Macclesfield, Marple, Congleton, and Sandbach. At Knutsford there is a large manufactory of thread. At Nantwich, and the places just named, are manufactories of bats for exportation. Shoes are extensively made at Sandbach. Some woollen cloths are also made in the same district. Tanning is very extensively carried on throughout the county. There is a large manufactory of gloves, ribands, and buttons. The copper, lead, and iron of the Alderley Edge and Ickerton Hills are manufactured in

the county, and constitute a small item in the export trade. But cheese is the principal product, which is not only well known and highly esteemed in every part of England, where the consumption is immense, but also in most parts of Europe. The whole annual produce of this article in Cheshire is about 11,500 tons, of which 4000 tons are exported. (Holland's 'Agricultural Survey.') The prime cheese is made chiefly in the districts where the salt abounds; that is, along the banks of the Weaver. Potatoes are raised in very large quantities, especially in the western portion of the county, including the peninsula of Wirral. Besides a very large home consumption, they are exported in great quantity by the Mersey to Liverpool and Manchester.

Civil History and Antiquities.—At the time of the Roman invasion this county formed part of the territory occupied by the Carnabii. In the first division of Britain by the Romans it was included in Britannia Superior; and in their subsequent subdivision it became part of Flavia Cæsariensis. From inscriptions which have been found, the twentieth legion appears to have continued at Chester as late as the 3rd century.

On the departure of the Romans, the Britons continued to hold Cheshire until about the year 607, when it was wrested from Brocmael, king of Powys, by the successful arms of Ethelfrid, the Saxon king of Bernicia. Prior to the battle, the Saxon troops are said to have massacred the monks of Bangor. [BANGOR-ISCOED.] Several of the British princes however having collected an army and marched to Chester, Ethelfrid was defeated in turn, and this district was not again subjected to the Anglo-Saxon power until about the year 828, when it was taken by King Egbert, and made a part of the kingdom of Mercia. According to Peter Langtoft, Atelwolf held his parliament at Chester after the death of Egbert, and there received the homage of his tributary kings, 'from Berwick unto Kent.' About the close of 894, an army of Danes advancing from Northumberland took possession of Chester, and seized the fortress: the Saxons under Alfred however having arrived in the vicinity, by destroying the cattle and corn, and intercepting the provisions of the Danes, drove them to such extremities of famine, that they quitted the city and retreated to North Wales. Upon the division of England into three districts by Alfred, Cheshire was included in the Mercian jurisdiction. Cheshire acquired the privileges of a county palatine in the reign of William the Conqueror, who granted it to his nephew, Hugh d'Avranches, commonly called Hugh Lupus, to hold it as freely by the sword as he himself held the kingdom of England by the crown. Until the final subjugation of the Welsh, the city of Chester was the usual place of rendezvous for the English army, and the county was exposed to all the evils of a border warfare.

In 1287, on the death of Jobu Scott, the seventh earl of Chester of the Norman line, without male issue, Henry III. gave the daughters of the late earl other lands in lieu of the earldom, being unwilling, as he said, to 'parcel out' so great an inheritance 'among distaffs': the county he bestowed on his son Edward, who did not assume the title, but conferred it on his son Edward of Caernarvon, since which time the eldest sons of the sovereigns of England have held the title of earls of Chester. The inhabitants of Cheshire took a part in the rebellion of the Percys, and the greater part of the knights and esquires of the whole county, to the number of 200, with many of their retainers, fell in the battle of Shrewsbury, on the 22nd of July 1403. From the time of Henry III. to the reign of Henry VIII., the palatinate was governed as independently as it had been by the Norman earls. Henry VIII. however made it subordinate to the crown of England, but reserving several privileges in favour of the county. The county being solely under a distinct jurisdiction, and to a certain extent like a separate kingdom, never sent representatives to the English Parliament, either for city or shire, until the reign of Edward VI., when in the year 1549, on the petition of the inhabitants, two members were summoned from each. On the out-breaking of the civil war the Parliament sent Sir William Brereton with a troop of horse, who took possession of Nantwich, which he fortified and made his head-quarters; while Sir Nicholas Byron, being appointed colonel-general of Shropshire and Cheshire, and governor of Chester by the king, made it the head-quarters of the Royalists. Lord Byron, the nephew of the governor, defeated the parliamentary forces under Sir William Brereton at Middlewich, in December 1643. Nantwich was besieged in January 1644, but was relieved by the united forces of Sir Thomas Fairfax and Sir William Brereton, who defeated Lord Byron and compelled him to retreat with the remains of his forces to Chester. Prince Rupert took Stockport without resistance on the 25th of May; but the Royalists were defeated after a severe battle at Castlehead, near Malpas, on the 25th of August. Next year, on the advance of the king to Chester with a large force, the Parliament abandoned all their garrisons, except Tarvin and Nantwich, and on the 27th of September the battle of Rowton and Hoolehead was fought near Chester, in which the Royalists were defeated; an event which led to the surrender of the garrison of Chester, in February 1646, and the subjugation of the whole county to the Parliament.

In August 1659, Sir George Booth appeared in Cheshire at the head of an army of upwards of 3000 men. The army of the Parliament, under General Lambert, met them at Winnington Bridge, near North-

wich, on the 16th of August, and soon defeated them. Booth himself was taken at Newport Pagnell, and sent to the Tower; and Chester, which had been held by Colonel Croxton, surrendered immediately on the approach of the victorious army.

The Roman roads in the county are found in detached parts: one road, called the Watling-street, was probably more ancient than the Roman times. This road enters Cheshire from the north by the ford over the Mersey at Stratford: in this part the marks of the elevated crest, peculiar to the military roads of the Romans, are still visible. A little south-west of Bucklow Hill the roads seem to have divided, the Roman road continuing towards Kinderton, and the British road pursuing its old direction by Northwich over Delamere Forest, and by Chester to the coast of Caernarvonshire. The Roman road from Manchester to Kinderton crosses the ford of the Mersey, and proceeds to the village of Cross-street. In crossing the adjoining moss it is known by the name of Upcast, whence it runs by Dunham Park to a field called the Harbor-field, in the parish of Kinderton, which is the supposed station of Condate. Part of the Via Devana crossed the county from the south-east to Chester.

The castle at Chester was built by William the Conqueror. Beeston Castle, built in 1220, by Randle Blundeville, earl of Chester, is upon the slope and summit of a sandstone rock, which forms on one side an almost perpendicular precipice of great height. The outer court is irregular in form, inclosing an area of about five acres. The walls are prodigiously thick, and have several round towers. A deep ditch, sunk in the solid rock, surrounds the keep, which was entered by a drawbridge, opposite two circular watch-towers, still remaining. The approach within the great gateway between these towers is by rugged steps cut in the natural rock. This castle has been in ruins since the civil war of Charles I., when it was dismantled. Of Halton Castle few traces now remain; of Aldford Castle the foundations only are traceable; Shocklach Castle has left only some earthworks and a high mount now visible; Shotwick Castle appears from the sketch of it in the British Museum to have had a pentagonal wall, with several circular towers inclosing a lofty square tower. There are numerous ancient mansions. Smith, in his 'Treatise on Cheshire,' calls this county "the mother and the nurse of the gentility of England." Little Morton Hall, in the parish of Astbury, is the most remarkable ancient mansion in the county. It has large and handsome bay windows. The materials of the house are timber and plaster. Bramhall Hall, the ancient seat of the Davenports, about 2 miles south-west from Stockport, resembles Little Morton. Saughton Grange, near Chester, was one of the castellated residences of the Abbot of St. Werburg. Doddington Hall, the ancient seat of the Delves family, is near the road from Nantwich to London. The modern, large, and sumptuous fabric was erected in 1780 by Samuel Wyatt. It stands in a spacious park, and overlooks a fine sheet of water. Poole Hall, in the parish of Eastham, was built in the middle of the 16th century, and is one of the most venerable specimens of domestic architecture in this county. The style of the architecture is similar to that of all the ancient Cheshire mansions, rising into pointed gables, with numerous large bay windows, and having the approach through a line of stables and cow-houses. Brereton Hall, which is in the style of Esher Place in Surrey, was built by Sir William Brereton, and the foundation stone is said to have been laid by Queen Elizabeth herself. The site is on a rising ground near the river Croke. Among the rich decorations of the interior is a curious painting of Queen Elizabeth in full costume, with chains of jewels hanging down to her waist, and with hair extremely red. Dutton Hall stands on the ridge of a steep declivity overlooking the Weaver. It is surrounded by a broad and deep moat. The great hall is 40 feet by 20 feet, and the whole edifice is a very sumptuous specimen of the domestic architecture of the 16th century. Crewe Hall, the seat of Lord Crewe, is an equally fine specimen of the 17th century, having been completed in 1636. It is a quadrangular building of red brick, with battlements and large projecting bay windows. The sculptured oak ornaments of the interior are curious, as well as the painted glass window of the chapel. There are many portraits by Lely and others of that time. The seat of Lord Combermere was an ancient Cistercian abbey; it is beautifully situated on the margin of the large mere so called. The original edifice has been almost wholly renewed in the pointed gothic style. Dunham Massey, the seat of the Earl of Stamford and Warrington, was rebuilt in 1730. It is a very spacious quadrangular building of brick, surrounded with a fine park of lofty old oaks, and is interesting for a curious gallery of paintings by Holbein, Vanduyke, Lely, and other old masters. Cholmondeley Castle, the seat of the Marquis of Cholmondeley, is in the township of Cholmondeley, in Broxton hundred. The present magnificent edifice was built in 1804, on the site of the ancient castle. The architecture is gothic; and in approaching the eminence on which it stands, it has the appearance of a Norman fortress. The apartments are adorned with some rare and beautiful paintings. Eaton Hall, the seat of the Marquis of Westminster, possesses great architectural grandeur, and resembles Cholmondeley Castle, being in the pointed gothic style. The surrounding park and pleasure-grounds are laid out with much picturesque effect. Ancient crosses occur at the boundary of Lyme Park, at Sandbach, at Oulton, and at Lymm. The crosses at Sandbach are referred by Lysons to a period not long subsequent to the introduction of Christianity into England. The sword of Hugh Lupus, the first Norman earl of Chester, is preserved in the British Museum.

Cheshire is both a manufacturing and an agricultural county. But it has for many years been steadily becoming more strictly a manufacturing county. In 1851 the county possessed 12 savings banks, at Bowdon and Altringham, Chester, Congleton, Frodsham, Knutsford, Macclesfield, Nantwich, Northwich, Runcorn, Sandbach, Stockport, and Wallasey. The total amount owing to depositors on the 20th of November 1851 was 683,120*l.* 8*s.*

CESHUNT. [HERTFORDSHIRE.]

CHESTER, the capital of Cheshire, an episcopal city, municipal and parliamentary borough and port, and the seat of a Poor-Law Union, is situated on the river Dee, in 53° 11' N. lat., 2° 54' W. long.; distant 183 miles N.W. from London by road, and 178½ miles by the North Western railway via Trent Valley. The population of the city of Chester was 27,756 in 1851. The city is governed by 10 aldermen, and 30 councillors, of whom one is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry and diocese of Chester. Chester Poor-Law Union, which is co-extensive with the city, contains an area of 3010 acres.

Chester was unquestionably an important Roman station. It appears to have been the Deva of the 'Itinerary' of Antoninus. The plan of the city and the arrangement of the streets, as well as its name, bear testimony to its Roman origin. The fortifications of the city appear to be on a Roman basis. A hypocaust which was found in a tolerably perfect state, is still preserved in the city. Remains of Roman masonry have been discovered; and Chester has produced innumerable coins, fibulæ, inscribed tiles, inscribed stones, and altars, the usual vestiges of the Romans. In 1653 a votive altar to Jupiter Tanarus was dug up, which had been raised by an officer of the 20th Legion called the Victorious. According to the 'Itinerary' of Antoninus, the 20th Legion, the 'Legio vicesima valens victrix,' had its station somewhere on the Deva or Dee, and there can be little doubt that Chester was the place. The Welsh name of Chester, Caer Leon Gawr, signifies the city of the 'Great Legion.' Chester was evidently the most considerable place in a large tract of country in the Roman times, and so continued when the Romans had withdrawn their forces. The possession of it was an object of importance to the Saxons and to the remains of the Britons. The two nations seem to have possessed it by turns, and it was certainly one of the last places which yielded to the Saxon power. It was taken by Eghert in 830. From that period to the Conquest, 1066, Chester is often mentioned in the annals of the Saxon sovereignty. Edgar the Saxon monarch is related by the Chroniclers to have received the homage of six kings at Chester in 972: William of Malmesbury says that sitting at the prow of a boat in triumph he was rowed by them on the Dee. They were no doubt the petty kings or chiefs which were so numerous in Saxon times. The situation of Chester as a frontier fortress against Wales necessarily gave it importance; but it was also of consequence as a place of security when the coast was menaced with invasion by the Danes and Northmen. In 875 when a descent by the Danes was apprehended, the body of St. Werburgh, a Saxon saint, daughter of Wulphere king of Mercia, which had been preserved as a sacred relic, was removed for security to Chester. From this time St. Werburgh became the tutelary saint of Chester; a religious community was founded, in whose church her relics were sumptuously enshrined. For six centuries and a half the house was one of the wealthiest of the monastic establishments of England. At the dissolution its annual revenues exceeded 1000*l.*

Chester had in the Saxon times a peculiar local government, and peculiar municipal customs. It had its trade by sea and its home trade, it had also associations of members of particular trades, which trade associations have flourished longer at Chester than in most other places. The Bishop of Lichfield was in remote times sometimes called Bishop of Chester.

William created his nephew, Hugh surnamed Lupus, Earl of Chester, granting him at the same time sovereign jurisdiction over the county. Cheshire thus became what is called a county Palatine, having courts peculiar to itself and the custody of its own records. The earls of Chester resided in the castle at Chester, and held therein their courts and parliaments, in which sat the superiors of the religious houses of the county, together with the eight great subinfeudatories, among whom Earl Hugh had distributed the greater portion of his territory. The succeeding earls of his family, of whom there were six, maintained the same state. The series terminated in the reign of Henry III., and from that time the earldom of Chester has been in the crown, or in the hands of members of the royal house. The title is now possessed by the eldest son of the sovereign. Most of the large tenures created by the Conqueror reverted sooner or later to the crown by forfeiture or marriage. Chester has often received visits from the sovereign, and has been occasionally the scene of interesting public events. It has had a series of charters, by which valuable privileges were granted or confirmed, from the earls of Chester, and from the kings Edward I. and III., Richard II., and Henry VII. As early as 1242 there was a mayor, who presided over a guild merchant or mercatorial. Chester was in those times a place of considerable trade.

Besides the monastery of St. Werburgh, there was here a religious

community of women; the Black, the White, and the Gray friars had each an establishment in Chester: a college of the Holy Cross is mentioned, and hospitals of St. Anne and of St. John the Baptist, of which the latter escaped suppression at the Reformation, and continues to this day. Chester had, during this period, among its inhabitants, some whose names are connected with the early literature of England; Higden, the most celebrated of them, who lived in the reign of Edward III., is supposed to be the author of a set of mysteries, or religious dramas, which were exhibited by the several trades in Chester from time to time, and of which copies have descended to the present day.

In the 34th of Henry VIII., writs were first issued to Chester to send members to Parliament. The church of St. Werburgh was suppressed along with the other monasteries; but its revenues were not, as in most other cases, wholly confiscated. Chester was erected into an episcopal see, and the revenues of the monastery were appropriated to the support of the chapter. The church became the cathedral of the new see. The diocese assigned to the bishop was the whole county of Chester, which had previously been under the superintendence of the Bishop of Lichfield, and the county of Lancaster, with the archdeaconry of Richmond, part of the ancient diocese of York. From the period of the Reformation, the only striking event in the history of Chester is the protracted siege it endured in the civil war. Charles I. was for a time in the city, and is said to have witnessed the defeat of his army on Rowton Heath from one of the towers on the walls. The history of the commerce of Chester is a history of its steady decline coincident with the rise of that of Liverpool.

Chester is in many respects one of the most interesting cities in England, especially to the antiquary. It consists of two great streets intersecting at right angles, with others diverging regularly from them, very much it is thought according to the plan of a Roman camp. The city is one of the very few places in England which have maintained in a tolerable state of completeness the walls which were erected for their defence in remote ages; at no other place are they so entire as at Chester. Though no longer useful for defence, they afford an agreeable promenade, with pleasant views, at various points, of the surrounding country; they are nearly two miles in circuit. To a stranger the most striking objects in Chester are the walls and the rows. The rows are a species of wide footpath, raised above the level of the street, at the height of the first story of a house, and covered over head by the second story of the house; as though, in fact, the front and partition walls of the first stories were taken away, and the rooms converted into connected walks with shops at the back. The two great intersecting streets are, for the most part, constructed on this plan. A large number of the houses are the quaint half-timbered houses with ornamented gables of the 16th century; and they, with the rows, render the streets of Chester perhaps the most picturesque of any English city.

Chester cathedral does not rank among the finer of the cathedrals of this country. The church of the abbey of St. Werburgh was altered to fit it for the cathedral of the new see, but the Reformation is believed to have put a stop to the works before they were fully completed. It is in the perpendicular style. It is constructed of the soft red-sandstone of the district, and has become externally much weather-worn. Some parts have been repaired and partly restored of late years. The cathedral consists of a nave with side aisles; a choir and lady-chapel at the east end; and on the north a cloister, chapter-house, and school-room. The extreme length of the edifice is 375 feet, the breadth 200 feet. The nave is 120 feet long and 41 feet broad. The tower is 127 feet high. The chapter-house, which is rectangular, is much older than the cathedral, being in the early English style of the early part of the 13th century. The interior is very beautiful. There are nine parish churches in Chester. Of these St. John's, partly in ruins, is the most interesting for its architecture. It is Norman, and was formerly collegiate. St. Peter's has been recently enlarged and the older parts restored. Christ church was erected about fifteen years back. The Wesleyan, Primitive, and New Connexion Methodists, Presbyterians, Independents, Baptists, Quakers, and Roman Catholics have places of worship. The Grammar school of Chester, founded in the time of Henry VIII., and called the King's School, is attached to the cathedral, and is under the direction of the dean and chapter; it is free to 24 foundation boys, and has an income from endowment of 62*l.* a year, with 5 exhibitions. The number of scholars in 1852 was 43. There are also the Marquis of Westminster's school for 400 or 450 boys and girls, a Diocesan school, and several National and Infant schools. A Diocesan Training college for educating teachers for National schools provides accommodation for 70 students to be trained as schoolmasters, and for 50 in the Commercial, Mechanical, and Agricultural school attached to the college; the number of students in residence in July 1852 was 44. In 1700 a Blue-Coat school was founded for boys, and in 1750 another for girls.

Chester has numerous charities and benevolent institutions. Among others an infirmary, founded in 1761, supported by subscriptions and the interest of about 20,000*l.* in the funds; a house of industry; a house of refuge; public baths and washhouses; a mechanics institute, with a museum, which is kept in one of the towers on the walls; a public library; and a savings bank.

Of the castle built by Hugh Lupus scarcely a vestige remains. The

present castle is modern; it was erected from the designs of Mr. T. Harrison. It is used as the shire-hall, the county jail, and military barracks. It is of great extent, and presents an imposing appearance. The shire-hall is a noble room. The county lunatic asylum is situated in the Bath-road. Near the castle the Dee is crossed by a very handsome bridge of a single arch. The span of the arch is 200 feet, being the largest stone arch which has been constructed. The architect was Mr. Harrison. The Chester and Holyhead railway crosses the Dee at Chester by an iron-girder bridge of rather peculiar construction.

The number and tonnage of vessels registered as belonging to the port of Chester on December 31st, 1852, were as follows:—Sailing vessels, under 50 tons, 57, tonnage 2092; above 50 tons, 60, tonnage 3899; steam vessels, under 50 tons, 5, tonnage 167; above 50 tons, 2, tonnage 342. The number and tonnage of vessels which entered and cleared at the port of Chester during the year 1852 were as follows:—Coasting trade, inwards, 1132 vessels, 56,297 tons; outwards, 2110 vessels, 94,450 tons; colonial trade, inwards, 9 vessels, 2323 tons; foreign trade, inwards, 10 vessels, 1045 tons; outwards, 11 vessels, 1143 tons.

Ship-building is carried on in Chester to some extent; also rope and sail making. Chemical-works, soap-works, a shot manufactory, and several extensive tanyards, afford considerable employment. Fringo, whips, thread, and tobacco are manufactured. In the neighbourhood stone-quarries are successfully worked. The obstructions to the navigation of the Dee form the chief hindrance to the commerce of Chester. The Ellesmere Canal affords ready water communication with Liverpool and the towns in its course, and in the course of its connected canals. Chester has become the centre of an extensive railway system, which affords facilities of communication with all parts of the kingdom. The railway station at Chester is a very fine one. Markets are held at Chester on Wednesday and Saturday; fairs on the last Thursday in February, July 5th, and October 10th. The July and October fairs continue for about a fortnight for the sale of goods of every kind. Fairs for the sale of cheese are held monthly.

Chester has always been the residence of many wealthy families, and has at all times been celebrated for its amusements. In early times the Chester mysteries and processions rivalled those of Coventry. It was one of the first places noted for its horse-racing. The Race-dee is the oldest and also the most convenient race-course belonging to any English city. It lies just beneath the wall, in a spot where the whole running-ground is under the eye of the spectator. The Chester races retain their ancient fame. Chester has also its theatre, assembly-rooms, and other places of amusement. In the vicinity are many good mansions. Eaton Hall, the seat of the Marquis of Westminster, is the most famous; it lies within a rich park about three miles from Chester on the Shrewsbury road.

The diocese of Chester is in the province of York. The diocese extends over the whole of Cheshire and parts of Lancashire, Cumberland, and Westmoreland, and comprises 436 benefices. It is divided into two archdeaconries, Chester and Liverpool: part of the archdeaconry of Richmond is in the diocese of Chester, but it is to be transferred to that of Carlisle. The chapter consists of the dean, the archdeacons, 4 canons, 4 honorary and 4 minor canons, and a chancellor. The income of the bishop is fixed at 4500*l.* a year.

(Ormerod, *Cheshire*; King, *Vale Royal*; Lysons, *Magna Britannia*; *Chester Guides*; *Parliamentary Papers*; *Communication from Chester*.)

CHESTER-LE-STREET, Durham, a village and the seat of a Poor-Law Union, in the parish of Chester-le-Street and chiefly in the middle division of Chester ward, is situated on the high north road, in 54° 51' N. lat., 1° 34' W. long., 6 miles N. from Durham, and 264 miles N. by W. from London. Fence Houses station of the York and Newcastle railway, which is 3 miles from Chester-le-Street, is 249½ miles from London via York. The population of the township of Chester-le-Street in 1851 was 2580. The living is a perpetual curacy in the archdeaconry and diocese of Durham. Chester-le-Street Poor-Law Union contains 20 parishes and townships, with an area of 31,066 acres, and a population in 1851 of 18,336.

By the Saxons Chester-le-Street was called Concestre or Cunocestre, from the name of the brook Cone which flows past the village. In the year 882 it was made the seat of a bishopric, which was removed hither from Lindisfarne; it retained its episcopal rank till 995, when the Danes, invading the country, drove away the bishop and his clergy. The bishop afterwards fixed his seat at Durham. The village is lighted with gas. The principal street extends about a mile along the north road; another more irregular line of houses runs along the brook at right angles to the main street. The parish church, dedicated to St. Mary and St. Cuthbert, is a fine old gothic structure, consisting of a nave with side aisles, a chancel, and a tower at the western end, surmounted with an elegant spire. The north aisle contains a continuous series of monuments of the Lumley family. There are places of worship for Primitive Methodists and Independents; National and Infant schools; a mechanics institution; a parochial library; and a savings bank.

The neighbouring coal-mines, an extensive iron and brass foundry, a steam-engine factory, iron-works, fire-brick manufactories, and coru and paper mills, afford employment to many of the inhabitants. Numerous wealthy families reside in the vicinity.

Lumley Castle, the baronial seat of the Earl of Scarborough, a noble building which retains much of its ancient magnificence, is situated on an elevated spot near the bank of the Wear, about three-quarters of a mile from Chester. Lambton Hall, the seat of the Earl of Durham, about two miles north by east from Chester-le-Street, was built in 1797; the grounds are pleasant, but the building displays many incongruities. Ravensworth Castle, the seat of Lord Ravensworth, is a modern castellated edifice.

(Communication from Chester-le-Street.)

CHESTERFIELD, Derbyshire, a municipal borough, market-town, and the seat of a Poor-Law Union, in the parish of Chesterfield and hundred of Scarsdale, is situated near two rivulets, the Hyper and the Rother, in 53° 13' N. lat., 1° 25' W. long., 132 miles N. by W. from London by road, and 156 miles by the North-Western and Midland railways. The population of the borough in 1851 was 7101. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a vicarage in the archdeaconry of Derby and diocese of Lichfield. Chesterfield Poor-Law Union contains 34 parishes and townships, with an area of 85,732 acres, and a population in 1851 of 45,803.

Chesterfield is conjectured, from its name, to have been a Roman station. The town received various privileges from King John, but was not incorporated till the reign of Elizabeth. The town is moderately well lighted and paved. In addition to the old town-hall there is a municipal-hall of recent erection. The parish church, erected during the 13th century, is a beautiful and spacious edifice. The spire is remarkable from being crooked. The bulging out of a portion of the middle of the spire causes the ball on the summit to deviate from the perpendicular 6 feet towards the south, and 4 feet 4 inches towards the west. The spire is 230 feet high. The interior has been restored. Trinity church is a neat structure built in 1838. There are chapels for Independents, Baptists, and Methodists. A Free Grammar school, founded in the reign of Elizabeth, but closed for many years, was re-opened and a handsome new school-house built in 1846; it has an income from endowment of 140*l.* a year, and had 85 scholars in 1851. The Victoria school is mainly supported by the vicar. There are almshouses, a savings bank, a mechanics institute, and a dispensary. A county court is held in the town. The district around Chesterfield is rich in coal and iron, and a considerable number of persons are employed in the mines. Potter's-clay, brick-clay, building-stone, and roofing-stone are also met with. The manufacture of cotton-wicks, ginghams, checks, cotton and worsted hosiery, and bobbin-net is carried on. The Chesterfield Canal extends from this town to the tideway of the Trent, a distance of 46 miles.

(Woodhead, *Account of the Borough of Chesterfield; Communications from Chesterfield.*)

CHESTERTON, Cambridgeshire, a village and the seat of a Poor-Law Union, in the parish and hundred of Chesterton, is situated on the left bank of the river Cam, in 52° 13' N. lat., 0° 9' E. long.; distant one mile N. by E. from Cambridge, 52 miles N. by E. from London by road, and 59 miles by the Eastern Counties railway. The population of the parish of Chesterton in 1851 was 2816. The living is a vicarage in the archdeaconry and diocese of Ely. Chesterton Poor-Law Union contains 38 parishes and townships, with an area of 72,422 acres, and a population in 1851 of 25,165. The manor of Chesterton was given by Henry I. to the prior and canon of Barnwell. In the village a nunnery formerly existed; the remains of the chapel are now converted into a dairy. The parish church of Chesterton, dedicated to St. Andrew, is a spacious edifice in the perpendicular style. In the village are a Baptist chapel, and National and British schools. The Cambridge county jail, and the Victoria Benefit Societies Asylum are in the parish. During the interval between the Censuses of 1841 and 1851 the number of houses in Chesterton parish rose from 331 to 577, and the number of inhabitants from 1617 to 2816. This has been owing chiefly to the low rents and light taxation which have attracted to it as a place of residence persons engaged in business in Cambridge, of which town indeed Chesterton village is in some respects a suburb. At Arbury in Chesterton parish are the remains of a circular camp of British origin.

CHEVAGNES. [ALLIER.]

CHEW MAGNA. [SOMERSETSHIRE.]

CHIANA, VAL DI, a valley in Tuscany, in the province of Arezzo, running north and south 30 miles in length, from Arezzo to Chiusi, and between two chains of hills, of which the western divides it from the valley of the Ombrone, and the eastern from the Lake Trasymene and the valley of the Tiber. Chiana is the modern name of the ancient *Clanis*, a feeder of the Tiber. The Val di Chiana was formerly a vast marsh, and its air was pestilential; it was drained under the Grand Duke Leopold I., and his son Ferdinand. By this operation above 36 square miles of ground are become now one of the most fertile districts of Tuscany. The waters of the northern and larger part of the valley now run north into the Arno by a stream called *Chiana Toscana*, the drainage of the southern part is collected into another arm called *Chiana Romana*, which flows into the Paglia about five miles above its confluence with the Tiber. Indeed the valley is so nearly a perfect flat, that the waters which flow into it from the hills on each side would flow indifferently in either direction. In ancient times they all flowed south to Clusium (Chiusi), where

the river formed and still forms a lake (Lago di Chiusi), and thence about 30 miles farther to the Tiber. [ARNO; AREZZO.]

CHIARI. [BRESCIA.]

CHIA'VARI. [GENOA.]

CHIAVENNA. [VALETTINA.]

CHICACOLE. [CIRCARS, NORTHERN.]

CHICHESTER, Sussex, an episcopal city, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, in the rape of Chichester, and western division of the county, is situated in 50° 50' N. lat., 0° 46' W. long., distant 62 miles S.W. by S. from London by road, and 79 miles by the Portsmouth branch of the South Coast railway. The livings are in the archdeaconry and diocese of Chichester. The city is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The population of Chichester in 1851 was 8662. Chichester Poor-Law Union comprises the city and suburbs, with an area of 1680 acres, and a population in 1851 of 15,000.

Chichester stands at the termination of a gentle descent from the South Down hills. The plain in which it is situated extends from the west side of Brighton to Portsmouth harbour, between the South Downs and the sea, and attains at Chichester its greatest width. The city within the walls is divided by two principal streets running north and south, and east and west, which intersect each other near the centre of the town. Beyond the walls the suburbs are prolonged in the direction of the principal streets. A small rivulet called the Lavant, which is occasionally dry in summer, bounds the city on the east and south sides.

Chichester occupies the site of the Roman station *Regnum*. The walls, which are nearly a mile and a half in circuit, were probably first erected by the Romans. The present walls are supposed to have been re-constructed with the materials of the Roman walls.

The word Chichester appears to be a contraction of 'Cissancester,' the city or castle of Cissa, an Anglo-Saxon chief, who according to the Chroiclers repaired and partly rebuilt it, after it had been destroyed in a siege. At the Norman survey Chichester had 238 houses, which were given to Roger de Moutgomery, who was created the first Earl of Chichester. This nobleman is believed to have succeeded in removing the seat of the bishopric of Sussex from Selsea to Chichester, which was one cause of the early prosperity of the place. The earliest charter extant is one by Stephen. In the beginning of the reign of King John, there were three Mints established in Chichester, two belonging to the king, and one to the bishop. In December 1642 the Royalists who held the city surrendered to the parliamentary forces. The fortifications were demolished by order of the Parliament in 1648.

A cathedral, built mostly of wood, was founded here in 1108. The present cathedral, a cruciform edifice erected during the 13th century, exhibits some specimens of Norman design, and also some examples of the first pointed style, when the Petworth or Sussex marble came into fashion. The spire, which is about a century later in date than the body of the building, is finely proportioned. The extreme length of the cathedral from east to west is 407 feet; from north to south 150 feet; the transept is 129 feet long, and 34 feet wide; the nave and aisles are 97 feet wide; and the tower and spire 300 feet high. The building is remarkable for having double side aisles. In the cathedral are nine monuments by Flaxman, one of them to the memory of William Collins, the poet, who was a native of Chichester. It also contains several ancient monuments. One of the modern monuments is a statue by Carew of the late Mr. Huskisson, who was for some time member for this city. Near the north-west angle of the cathedral is a bell-tower 120 feet high, with massive walls, called Ryman's Tower. The palace of the bishop of Chichester is within the city. There is a neat antique chapel attached to the palace, which was repaired by Bishop Maltby. Something has been done during the last 20 years in the way of restoring various portions of the cathedral buildings.

The parochial churches in Chichester are generally small, and some of them are poor in appearance. In 1836 the sub-deanery was divided, and a handsome gothic church, dedicated to St. Paul, and capable of accommodating 1000 persons, was erected without the walls. Before this was built, St. John's proprietary chapel furnished the chief accommodation for public worship in connection with the Established Church. The Independents, Wesleyan and Primitive Methodists, Baptists, Quakers, Unitarians, and other bodies have places of worship. There are in the city National, British, and Infant schools. There is a Blue-Coat school, founded in 1702, in which 28 boys are boarded and educated; and such of the boys as conduct themselves well receive on leaving the school a sum of money to enable them to set up in business, or otherwise to promote their interests. The revenue of this foundation is above 1300*l.* per annum. The Prebendal Grammar school was re-founded by Bishop Story about the close of the 15th century, but the school is believed to be coeval with the cathedral. It has an income of 20*l.* a year, and had 18 scholars in 1852. A Diocesan Theological college, founded by Bishop Otter in 1839, is under the care of a Principal and a Vice-Principal. Bishop Otter's Training college was originally founded by the bishop about 1841; in 1850 a new and handsome building was erected as a memorial of the founder, and bearing his name. Provision is made

for 24 students. The number in residence in July 1852 was 16. A model school is attached to the Training college.

The guildhall, which is appropriated to the transaction of town and county business, was formerly a chapel belonging to an ancient monastery of Gray friars. The council chamber or town-house contains, besides the required business rooms, a commodious and elegant assembly-room. The market-house is neat and commodious. The market-cross, an octagonal building in the centre of the city, was erected by Bishop Story, who held the see between 1478-1502. It is of large size and pleasing proportions, and is one of the very finest and most elaborately ornamented market-crosses remaining in England. The infirmary, opened in 1827, is a fine building to the north of the city, surrounded with grounds for the use of the patients. Its erection is to be ascribed to the exertions of Dr. Forbes. A wing was recently added for fever wards at the expense of Charles Dixon, Esq., of Stansted Park. St. Mary's hospital is an ancient foundation for the support of old and infirm persons who have been reduced to poverty. Chichester possesses a literary and scientific institute, with a museum. There is also a savings bank. Quarter sessions and a county court are held in the city.

Chichester is well built, lighted, watered, and drained; the principal streets are wide, and contain many good houses. There is communication with the sea at Chichester harbour by means of a short canal, which joins the Arundel Canal as it passes to the south of the city. This canal is chiefly used for the conveyance of coals. The number and tonnage of vessels registered as belonging to the port of Chichester on 31st December 1852 were—Under 50 tons 27, tonnage 584; above 50 tons 11, tonnage 1222. The entries and clearances at the port during 1852 were as follows:—Coasting trade, inwards 294, tonnage 17,594; outwards 151, tonnage 5139; foreign trade, inwards 4, tonnage 210; outwards 1, tonnage 47. Chichester possesses no manufactures. The market held on alternate Wednesdays for cattle, sheep, horses, and pigs, is one of the largest held within the precincts of any town in England. The weekly market on Saturday is chiefly for corn. Fairs are held on St. George's day, Whit-Monday, St. James's day, Michaelmas day, and October 21st. Large quantities of corn are sent from Chichester to London and the west of England. There are several extensive malting establishments in the city. Tanning and brewing are carried on.

The see of Chichester was originally founded at Selsea, in the 7th century, and removed to Chichester in 1071. The diocese includes the entire county of Sussex, and comprises 311 benefices: there are two archdeacons, Chichester and Lewes. The chapter consists of the dean, four canons, the archdeacons, precentor, chancellor, with non-resident and minor canons. The income of the bishop is 4200*l.* a year. (Horsfield, *Sussex*; Dallaway, *Sussex*; Hay, *Chichester*; *Communication from Chichester*.)

CHIETI. [ABRUZZO.]

CHIEVELY. [BERKSHIRE.]

CHIGWELL. [ESSEX.]

CHIHUAHUA. [MEXICO.]

CHILI, or CHILE (Republic of), South America, lies along the shores of the Pacific, between 25° and 42° S. lat.; but the archipelago of Chilöe, which also belongs to it, extends about two degrees farther south. The republic of Chili claims the whole coast to the Strait of Magalhaens, and the islands as far as Cape Horn, together with a portion of Patagonia, as belonging to its territories; but as no settlements have been formed in these countries, we shall limit our description to the tract between 25° and 42° S. lat., which extends from the chain of the Andes, forming its eastern boundary (between 69° and 71° W. long.), to the shores of the Pacific Ocean (between 70° and 74° W. long.) and the island of Chilöe.

Chili within the above limits is bounded E. by the Argentine Confederation, from which it is divided by the Andes; N. by the desert of Atacama, which belongs to Bolivia; W. by the Pacific Ocean; and S. it is separated from the island of Chilöe by the Strait of Chacao, and bounded by the Bay of Ancud.

Area, Coast-line, &c.—The republic of Chili extends from north to south about 1175 miles; its breadth varies between 100 and 200 miles; its area, including Chilöe, is about 180,000 square miles. The area of the country, as claimed by the republic, is of course very much larger—probably not less than twice as large. According to the last official census (1843), the population was 1,080,000. By very recent estimates the population, including that of the new province of Arauco, amounts to 1,133,802, thus distributed among the several provinces:—

Atacama	23,165
Coquimbo	85,849
Aconcagua	91,674
Santiago	207,434
Colchagua	173,073
Valparaiso	75,962
Talca	71,381
Maule	118,309
Nuble	89,955
Concepcion	109,526
Valdivia	23,098
Arauco	14,000
Chilöe	48,876
Total	1,133,802

The coast from its southern extremity by the island of Chilöe, bears generally north-north-east, and more or less parallel with the Andes, to the northern termination of the republic at Point Talta. The archipelago of Chilöe consists of a number of wild rocky islands and islets, of which only one, Chilöe, is of any importance; many of the smaller islands however afford supplies of water and provisions to vessels navigating this coast. Chilöe possesses three or four good harbours; San Carlos, the principal, is said by Captain Fitzroy to be an excellent harbour, while Castro appears to be little inferior. Several dangerous islets and sandy shoals lie between the northern termination of Chilöe and the broad but shallow and wild Maullin Inlet, rendering this a place to which it is advisable that seamen should give a wide berth. About Godry Point, at the mouth of the inlet, the shore is low: From this point a bold and rocky coast trends north-north-west for 34 miles to Cape Quedal, a lofty and bold promontory, which, like most of the headlands on this part of the coast of South America, has many detached rocks lying close to it. From Cape Quedal to Point Galera the coast bears north-north-east. Behind this point rise the Valdivia Hills (1550 feet), their three peaks forming a conspicuous landmark; they terminate seaward in Point Falsa. Here the shore sweeps round north-east to Gonzales Head, a bluff wooded cliff, behind which is Port Valdivia, the first harbour which offers north from San Carlos. Port Valdivia is a secure and apparently spacious harbour, but the part which affords sheltered anchorage for large ships is somewhat confined.

Eight miles from Gonzales Head is Bonifacio Head, whence the coast bears away north-east to Chancoan Cove, the mouth of the river Mehuin; beyond which it bears northward to Cauten Head, being generally low and sandy, with occasional bluff headlands. Off Cape Tirua is Mocha Island, which is about 7 miles long by 3 miles broad; its surface is hilly, the highest point attaining an elevation of 1250 feet, and it appears to be very fertile. The passage between it and the mainland is open, and perfectly free from danger. From Cape Tirua to Tucapel Point, about 40 miles, the coast is wild, unsheltered, and very dangerous; a short distance south of Tucapel Point is Molguilla Point, on which her Majesty's ship Challenger was wrecked in 1835. Beyond Tucapel Point is Tucapel Head, which, with Millon Point, protects the cove into which the Leibu River opens, and which affords shelter for small vessels. Carnero Bay is merely an open bight, unfit for shipping. Off Arauco Bay lies the low and dangerous island of Santa Maria. The wide bay of Arauco affords one or two sheltered spots, as Luco Bay, where shipping finds tolerably secure anchorage in all seasons, and there is good though exposed anchorage throughout the bay itself. At the northern extremity of Arauco Bay is the river Biobio, which is inaccessible to shipping on account of sandbanks and of the south-west swell. The modern town of Concepcion is a short distance up this river. Old Concepcion, or Peuco, lies at the southern extremity of Concepcion Bay, some miles farther north. This bay is said by Captain Fitzroy to be "the finest port on this coast, being 6 miles long and 4 miles wide, with anchorage ground everywhere, abundant space, and all well sheltered." Farther north is Coluimbo Bay, which affords safe anchorage for coasting vessels, and "has always been the scene of smuggling transactions." Beyond this the coast continues in the same generally north-east direction for 40 miles to Cape Carranza. A few miles farther north is Cape Humas, which marks the mouth of the river Maule, about a mile above which, on the left bank, is the little town of Constitucion, which would perhaps rise into some commercial importance, being near the outlet, and the natural port of a remarkably rich and fertile country, did not a bar at the mouth of the river render it inaccessible to vessels of any size. Thence the coast continues still nearly north, and occasionally broken by a projecting headland, as Points Topocalma, Toro, &c., and affording a few sheltered coves, as San Antonio, Quintay, &c., to Point Curamarilla, from which the land bears north-east for seven miles to Los Angeles Point, the southern extremity of Valparaiso Bay, at the southern end of which lies the town of Valparaiso, at the base of hills from 1200 to 1400 feet high. [VALPARAISO.]

About 360 miles W. from the coast at Valparaiso, lies the island of Juan Fernandez, or Masatierra ('more landward'), as it is called by the Spaniards: it is about 18 miles long by 6 miles wide. Its northern half is an elevated mass of trap and basalt rocks furrowed with pleasant valleys, and mostly covered with wood; the southern half, which is only slightly raised above the sea, is rocky and barren. On its northern shore, and about three miles from its eastern extremity, is Cumberland Bay, which affords safe anchorage for vessels of any size. Goats in a wild state are found here; on the rocky shores are seals and sea-lions; fish, especially cod, are plentiful along the coast. The island is very subject to earthquakes. In 1848 there were only eight inhabitants on the island. It was on this island that Alexander Selkirk was left and lived alone for more than four years. His adventures are commonly though incorrectly said to have supplied De Foe with materials for his 'Robinson Crusoe.' About 92 miles W. from Juan Fernandez is the smaller island of Masafuera ('more seaward'), a mass of precipitous rocks rising to the height of 3000 feet. It is generally covered with trees, has no convenient landing-place, and no inhabitants. Both these islands belong to Chili.

Returning to the coast of Chili and continuing our course north-

ward, we soon reach Quintero Bay, another spacious and tolerably sheltered harbour. A little farther north are the dangerous Quintero Rocks, east of which is Horcon Head, the southern headland of Horcon Bay, off which during nine months in the year there is secure anchorage in from 10 to 15 fathoms. The coast now bears slightly to the west for about 25 miles, to a low rocky point called Lengua de Vaca, which forms the southern side of Tougooy Bay, once frequented by American whalers. About 14 miles farther is the much-frequented Coquimbo Bay, and immediately south of it is the small land-locked harbour called Herradura Coquimbo. Proceeding northward, the coast continues to be broken into numerous coves and small bays, among others are Tortoralillo, Chungunga, Huasco, and Herradura de Carrisal ports, while many small rocky islands and reefs lie off the shore. From Cape Leonos the trend of the coast is north-north-east. The spacious bay of Salado is rendered dangerous for shipping by the presence of numerous rocks, some suken and others visible. Copiapó, the next harbour of any magnitude, is also unsafe, owing to dangerous shoals and want of shelter. Off it lies the singular island, Isla Grande. Port Ynglis affords anchorage for small vessels, but Port Caldera to the north of it is a much finer harbour. A pier was erected here two or three years back, and a railway formed in connection with it several miles inland, and it appears probable that this port will concentrate in itself much of the traffic of the rich agricultural and mining district of Atacama, which has hitherto been carried to Copiapó. Several of the small ports recently named, and others not noticed, are used occasionally for the shipment of a cargo of copper ore. A few miles farther north is another very good harbour, Port Flamenco, as yet however very little used except by the native fishermen. No other harbour of any consequence occurs before Point Taital, the boundary between Chili and Bolivia, is reached. The rise and fall of the tide along the coast of Chili is about five or six feet. ('Admiralty Charts' and 'Sailing Directions for South America.')

Surface, Hydrography, &c.—The Andes, which from the Strait of Magalhaens as far north as the Bay of Ancud press close on the shores of the Pacific, appear to turn east at the northern extremity of that bay, but soon resume their northern direction, in which with some slight bends to the east and west, they continue along the boundary-line of Chili. The Chilean Andes, as they are here termed, will be found sufficiently described under ANDES and ARGENTINE CONFEDERATION. Several of the peaks of the Chilean Andes rise above the line of perpetual snow, which in these latitudes is found at about 14,000 feet above the sea. The summits which are covered with perpetual snow are the Peak of Aconcagua (south of 32°), the highest volcano in the world, being 23,200 feet above the sea, the Peak of Tupungato (south of 33°), the Volcano Penqueñes (near 34°), the Peak of Descabezado (north of 36°), and the Volcano of Antuco (north of 37°). The mean height of the whole range seems to be lower south of 35° than north of it, though the summits in the whole range seem to attain nearly the same elevation. This portion of the Andes contains many volcanoes. They are extremely numerous to the south of 35°, where about twenty are known to exist, and it is supposed that many are still unknown. Between 35° and 30° only a few occur, and at great distances from one another. Still farther north no volcano is known to exist in the Andes between that of Coquimbo (south of 30°), and that of Atacama (south of 21°).

Several mountain passes traverse this range. The most frequented is that of Uspallata, which passes over the range between the peaks of Aconcagua and Tupungato, traverses the valley of Uspallata, and unites Santiago de Chili with Mendoza in La Plata. Its highest point, called La Cumhre, is 12,454 feet above the sea. The Pass of the Portillo traverses the Andes south of the Peak of Tupungato, passing through the northern part of the valley of Tunyan. Its highest point is on the eastern range, where it rises to 14,365 feet above the sea. The Pass del Planchon traverses the range between the Volcano of Peteroa and the Peak of Descabezado, and is less elevated than the others, reaching only about 11,000 feet; vegetation extends to its summit. The Pass of Antuco, which crosses the range near the foot of the volcano of that name, probably does not rise above 12,000 feet. As it traverses the country of the independent Indians, who occupy the Pampas of La Plata, it is not much used. Besides these passes there are others over the Andes, but all of them are nearly if not quite impracticable for mules in winter (from June to September).

The districts of Chili north of the Rio Chuapa (31° 30' S. lat.) resemble the coast of Peru, and the whole of that country may be considered as the western declivity of the Andes. Near the high range the country is still between 6000 and 8000 feet above the sea, and it lowers gradually to the west, till it terminates near the sea in an extensive plain, about twenty miles in breadth, and from 60 to 80 feet above the sea. The country between this plain and the chain of the Andes is very uneven, exhibiting numerous ridges of low hills, which in some parts, especially near the Andes, and near the plain along the shores, run parallel to the great chain and the Pacific; but in the intermediate country they continually change their direction. The surface presents either bare rocks, or is covered with sand, and nearly without vegetation, except a few stunted shrubs, which generally occur in the narrow glens and ravines, with which it is sparingly intersected. A few rivers rising in the Andes run in deep beds

through this country, but most of them have only water in the spring (September till December), when the snow is melting in the upper region of the Andes, and they are dry during eight or nine months of the year. Only three rivers, the Copiapó, Guasco, and Chuapa, have water all the year round. On their banks are the few cultivated spots, which are irrigated by water drawn from the rivers. But the greater part of the small level tracts along the watercourses are unfit for cultivation, being covered with incrustations of salt, which in some places are five or six inches thick, and occupy the whole surface, covering even the low grasses. The few spots which are cultivated produce only maize, potatoes, a small quantity of wheat, and considerable quantities of fruits. Few countries of equal extent possess greater metallic wealth, especially gold, silver, and copper, but the extreme sterility of the country prevents the working of these mines, except when they are very rich. In climate these districts resemble Peru. It never rains, but sometimes a pretty strong dew falls in the morning, which refreshes the plants. This extreme dryness of the air is accompanied with a very moderate degree of heat, the thermometer in summer rarely attaining more than 70°; and in winter the temperature is sometimes so low that the morning dew is changed into snow. This general description applies only to the country north of 30°, south of which the cultivable spots are more extensive and more numerous, and the country is annually refreshed by a few showers of rain.

From the snow-capped peak of Aconcagua a mountain ridge runs directly west, and terminates at a short distance from the sea. It is called Cuesta (ridge) de los Angeles, and attains a considerable height, which however greatly decreases as it proceeds westward. Another ridge, branching off from the Andes at the Peak of Tupungato, runs first north-west, and is called Cuesta de la Daehsa: it then turns west, and may be said to terminate at the Campana de Quillota, a mountain which rises to about 2500 feet above the sea, from which it is about 12 miles distant. A much lower ridge extends farther west, terminating not far from the shore and the mouth of the Rio de Aconcagua. The country inclosed by the Cuesta de los Angeles, and those of La Daehsa and Chacahuco, is drained by the *Rio de Aconcagua*, which rises on the north-west declivity of the Peak of Tupungato, and runs more than one-third of its course in a narrow and elevated glen, nearly parallel to the chain of the Andes in a north-north-west direction. It then gradually turns west, but the valley through which it flows is still narrow, till it has terminated another third of its course, when it enters the valley or plain of Aconcagua, a beautiful level tract, extending from east-south-east to west-north-west 15 miles, with a breadth of 13 miles where widest. This plain is about 2600 feet above the sea, but as the river has water enough to irrigate the whole, it is well cultivated, and perhaps the most populous portion of Chili. At its western extremity it lies nearly contiguous to the valley of Putuendo, which is smaller, but also fertile and well cultivated, and extends northward to the Cuesta de los Angeles. After the junction of the Rio de Aconcagua with the Rio Putuendo, the mountains again approach its bank, but soon retreat a little farther; and hence to the mouth of the river extends the valley of Quillota, which is not much inferior in fertility to the others, and is about three or four miles wide.

South of the Cuesta de Chacahuco the level country begins to occupy a much larger portion of the surface. The plain of Santiago, beginning at the foot of the range, extends south to the banks of the Rio Maypú. Towards the north it is from 6 to 8 miles wide, but farther south it grows wider, and on the bank of the Maypú, from east to west, it is about 20 miles. Its soil is stony and dry, and it can only be cultivated where it is irrigated. Cultivation accordingly exists only in the neighbourhood of the rivers, and of the canal by which the water of the Maypú has been brought upon it. The country between the plain and the Andes is filled by mountains of various heights, with steep declivities, and nearly without vegetation: the valleys intersecting them are narrow, and covered with an immense number of greater or smaller stones, which have fallen down from the adjacent mountains. The country between the plain of Santiago and the Pacific is traversed by some ranges of hills, which rise to no great height above the adjacent plains, and are southern offsets from the Cuesta de Chacahuco. The plains between them are pretty level, and of moderate extent: the soil is dry and stony, without water and trees.

The *Rio Maypú* has its sources in the Andes, between the Peak of Tupungato and that of Cauquenes, and one-third of its course lies between the high offsets of the Andes in narrow valleys. Towards the plain of Santiago its valley widens. When the river has entered the plain, the canal of Maypú conducts a portion of its waters to the centre of the plain, while the river, continuing its western course, traverses its southern portion. After its junction with the Rio de Colina, which traverses the plain of Santiago, but has water only in the rainy season, the Maypú enters the valley of Melipilli, from 4 to 6 miles wide, which contains large tracts of well-cultivated land. The whole course of the Maypú is about 160 miles. It has a sand-bar at its mouth.

The country south of the Rio Maypú has a different character. Towards the Andes it is covered with the high lateral branches of that range, which inclose narrow and elevated valleys. But about

two-thirds of the country rise in gentle undulations, and contain comparatively few steep and high hills. Here also the rains are by no means abundant, nor do they last for any length of time; agriculture therefore cannot be carried on without irrigation, and the tracts of ground under cultivation are not extensive. No trees of large size are found in Chili north of the Rio Cachapual, but their number increases farther south, till on the banks of the Rio Maule the forests of high timber-trees become very extensive. The *Rio Maule* rises in the Andes at the foot of the Peak of Descabezado, near 36° S., and runs first nearly due west. When it has arrived at the more level country it turns north-west, and flowing in a diagonal line, falls into the sea about 34° 40'. It is the most northern of the navigable rivers of Chili. At high tides vessels, not drawing more than 6 feet water, may enter its mouth, and proceed some small distance up it. Flat river-barges may ascend at any season for 20 miles and upwards. The country along its banks is remarkably fertile, and there are extensive forests of timber-trees. The country between the Rio Maule and the Rio Biobio is even better adapted to agriculture; but since the expulsion of the Spaniards it has been nearly deserted, on account of the frequent incursions of the neighbouring Indian tribes. This tract contains much more level ground than any other portion of Chili. The Andes here terminate by a steep descent, and without offsets; and at their foot begins, in the northern districts, an undulating country, intersected with small plains. In the southern districts the level country begins immediately at the foot of the range, and extends to a considerable distance from it. The Travesia (heath) of Yumbel, a plain 60 miles long, and nearly as wide, between the towns of Yumbel and Tucapel, is covered with sand and small pieces of volcanic matter; it is without trees, water, and vegetation, except at a few spots. Pöppig thinks it probable that it was once covered with water, and formed a lake. A chain of low hills divides it on the south from the plain of the Isla de Laxa, which is nearly as large, and contains only a few low hills. This plain, which is covered with grass, is of great fertility. The country between this plain and the sea is covered with high but gently-sloping hills, which are partly clothed with wood and partly bare and sterile. Along the rivers, especially the Biobio, the soil is very fertile. The *Rio Biobio* rises in the Andes near 38°, and runs in a west-north-west direction to the Pacific, which it enters north of 37° S. lat., after a course of about 160 miles. In its upper course it is deep and rapid. It becomes navigable for canoes and rafts at Nascimento, 40 miles from its mouth, which Captain B. Hall found to be 2 miles wide, though too shallow for large vessels.

The country south of the Biobio, though included in the territories of the republic, is for the most part in possession of the independent tribes called Araucanas. [ARAUCANA.] This country, so far as it is known, is nearly covered with high trees, which frequently form impenetrable forests. The surface seems to be nearly a level up to the foot of the Andes, with the exception of a range of hills running north and south, and the soil very fertile, as may be inferred from the great number of warriors whom the Indians can send into the field. The *Rio Callacalla* (also named Rio de Valdivia) is by far the deepest of the rivers of Chili: 60-gun ships can enter its mouth without great danger; but it is not known how far it is navigable.

Geology, Mineralogy, &c.—The geological character of Chili has already been noticed under ANDES. The higher parts of the Chilean mountains appear to consist mostly of schistose rocks, while the lower chains are granitic. Everywhere are traces of igneous agency. Sienites, basaltic and felspathic porphyrites, of rich red and brown tints, trachytes, and other plutonic rocks abound. Hornblende and mica-schists, clay-slates, and other metamorphic rocks occur everywhere. Quartz occurs very generally in connection with metallic veins. The carboniferous strata are richest in the district around Concepcion. Limestone rocks of various qualities occur in numerous places; excellent statuary marble is obtained in Copiapó. Gypsum abounds. Lava, tufa, obsidian, &c., are found in beds of considerable thickness on the slopes of the volcanoes.

Probably no country is more subject to earthquakes than Chili; they occur however much more frequently along the coast than in the interior. In the northern districts slight shocks are felt almost every day, and occasionally several times in a day. Sometimes they destroy the towns and lay waste a great extent of country. In 1819 the town of Copiapó was levelled to the ground, and in 1822 the damage done in Valparaiso and the country about it was not much less. In 1835 the town of Concepcion was entirely destroyed; and in 1837 Valdivia was ruined. In the earthquake of 1822 the rocks inclosing the harbour of Quintero, which is some miles north of the mouth of the Rio Aconcagua, were raised 4 or 5 feet above their former level. In that of 1835 the coast about Concepcion and elsewhere was in like manner raised several feet, but it appears to have subsequently gradually subsided nearly to its former level.

Gold dust is found in the sand of nearly all the rivers which come down from the Andes, as in the Rio de Aconcagua, Rio Maule, and Biobio. Some gold mines occur in the northern districts, where they are worked, but the produce is inconsiderable. Others are said to exist in the southern provinces. The total quantity of gold annually obtained is about 25,000 ounces. Silver is more abundant, but the ore is not generally very rich. The average quantity of silver obtained annually is about 152,000 ounces. The richest mines are in the vicinity

of Copiapó. The copper mines are very numerous in the northern districts, especially about Illapel, Coquimbo, Copiapó, and Guasco; copper is also found farther south in the Andes, but is not worked. The copper of Copiapó is most valued. The quantity of copper exported has of late years been about 100,000 cwt. A small portion comes to Europe, but by far the larger part goes to India and the United States. Ores of lead, tin, zinc, iron, antimony, manganese, arsenic, &c., are said to exist. Sulphur is obtained of remarkable purity.

The coal formation extends under a considerable part of the southern provinces. The coal obtained about Concepcion is the best: it forms an article of some importance in the trade of Valparaiso. Salt does not exist in sufficient quantity. A good deal is collected in the lakes of Bucalemu, south of the mouth of the Rio Maypú, in which the salt-water of the sea is subjected to evaporation. A great quantity of salt is imported from Peru and Patagonia.

Climate, &c.—The climate of Chili varies much in the different districts; but it appears to be almost everywhere healthy. The climate of the central portion of Chili may be compared in some degree with that of Italy. The greatest heat occurs in the months of January and February, at which time the thermometer on the coast frequently rises to 85° during the day, and 70° to 75° during the night. The hottest part of the day is before ten o'clock in the morning, about which time wind rises in the south, which often blows with great violence. In the interior, even in the elevated valley of Aconcagua, the thermometer frequently rises to 90° and 95° in the shade; and as the southern wind is not strong here, the days are sultry, but at sunset a delightful breeze springs up, which cools the air. The months of March and April are much more temperate, especially in the interior; and at the end of April the rains generally set in, and occur up to August, and then the Andes are covered with snow, which generally lies for four or five months on the higher parts of the range. Snow and also some ice occur in the elevated valleys, but it soon melts, and the atmosphere is only chilly while the rain is falling. Snow never occurs along the sea. The number of rainy days in the northern districts is commonly fourteen, and seldom more than twenty throughout the year. This rain, which is very heavy, seldom falls for more than three days continuously. In the southern districts, where the number of rainy days is much greater, being on an average forty, the rain sometimes continues ten days without intermission. After the rainy season, in September, the spring begins, which is frequently more chilly than the winter itself, and ice is sometimes observed even on the coast. Summer begins towards the commencement of November, and then the sky, which during the spring is covered with clouds, is entirely free from them. The heat gradually increases, and in the northern districts vegetation begins to die away in December, but in the southern districts the country is always clothed with verdure, as the plants are occasionally refreshed by rain, and the dews are frequent and heavy. The mean temperature at the mouth of the Rio Aconcagua in July and August is 70°, and at Talcahuana, near Concepcion, one or two degrees less.

Chili is subject to strong periodical gales. In the beginning of the rainy season (May and June) the north and north-western winds prevail, and frequently blow with great violence. As all the harbours of this coast are open to that quarter, vessels abandon them, and weather the storm in the open sea. Between 25° and 35° S. the wind during eight or nine months blows from the south or south-east, from a little before noon till about sunset, but occasionally till midnight, and frequently with great force, especially in summer and autumn. At the same time a current, of about half a mile an hour, usually runs along the coast to the north, both which circumstances favour navigation northward, but the return to the south is rendered tedious and difficult. Easterly winds are rare, except in September, when they suddenly lower the thermometer, and in February and March. They often blow with such force as to throw down the strongest trees.

Agriculture, &c.—Although much improvement has taken place of late years the cultivation of the soil is in a very backward state. The stimulus which has been given by the great demands made by the Californian and Australian markets has done much to bring about a better state of things; and the government has anxiously encouraged the immigration of European, and especially of German, agriculturists, many of whom have settled here. The soil is in many parts very fertile, and some spots are now well cultivated. Very large quantities of grain, flour, and vegetables are exported, principally to California and Australia, but also to the harbours along the western coast of South America.

Agriculture is almost limited to the productions of Europe. Maize is grown everywhere, but not to a great amount. Wheat is the staple; it is raised all over the country, and gives in many places very abundant crops, especially south of the Rio Maule. Barley is grown in the southern provinces to some extent, but very little north of the Rio Maule: oats only on a few estates. Leguminous vegetables are grown abundantly, especially different kinds of beans, and supply an article of exportation. Hemp is raised in the country north of the Rio Maypú; it grows to an extraordinary height and of superior quality. Hemp is grown in no other country on the west coast of South America. Intertropical plants do not succeed; for though the heat in the northern district is great the extreme dryness of the air

is unfavourable to the growth of plants which require a long time in coming to maturity. The sugar-cane was tried some years ago, but it has been abandoned.

Vegetables are now largely cultivated. Potatoes are grown in great abundance in the northern districts. Capsicum is raised in the valley of Aconcagua, and forms a considerable article in the internal commerce of the country. The quinoa (*Chenopodium Quinoa*) is peculiar to Chili. In the southern provinces it is raised in abundance: it somewhat resembles millet, and a pleasant beverage is made of it. Melons and water-melons, as well as pumpkins, succeed very well in the northern provinces, where they are raised in great quantities and attain a surprising size.

Figs, grapes, pomegranates, oranges, and peaches succeed best in the most northern districts, whence they are exported to the other parts of the state. Wine is made at different places, but not with any great success. The best is made near Concepcion. The olive-tree succeeds well, but the oil is bad for want of a proper method of preparing it. Extensive forests of wild apple and pear-trees occur along the foot of the Andes in the southern provinces. The fruits are hardly eatable, but cider is made of them. The forests, which cover so considerable a portion of the southern provinces, contain many fine timber-trees, which form one of the more important articles of export. In the Andes south of the Volcano of Antuco many valleys are covered with forests of the *Araucaria*, whose fruits contain a great number of nuts twice as large as an almond, which are very palatable, and constitute the principal food of the Indian tribe of the Pehuenches.

Cattle are very abundant north of the Rio Maule, the declivities of the mountains and high hills affording copious pasture for four or five months, and some low tracts which are sown with lucerne, for the remainder of the year. Single proprietors sometimes possess from 10,000 to 20,000 head of cattle. Live stock, jerked beef, tallow, and hides are large articles of export. Cheese is made on the banks of the Rio Maule and sent to Peru: butter is made in the neighbourhood of the larger towns. Horses, though less numerous than formerly, are still bred in considerable numbers: they are of a middling size and strong, and are in much request for exportation. Mules and asses are also largely bred; they are said to be superior to any other for carrying burdens over the passes of the Andes. Sheep are not numerous, and their wool is bad. Goats are more plentiful. Swine are found in abundance in the archipelago of Chiloe, whence hams are exported: on the continent they are less numerous, and their flesh is not of good flavour. Pork is salted in the harbours as provisions for ships. The island of Mocha, between Concepcion and Valdivia, is overrun with wild horses and pigs, both of which are used as fresh stock by the whaling and sealing ships in the Pacific.

Commerce, &c.—Chili is probably the only American state formerly subject to Spain whose commerce has increased since the separation from the mother country. The importations, according to a rough estimate, have averaged during the last five or six years about 2,000,000*l.*, and the exportations, including the transit commerce, about 2,500,000*l.* The foreign trade is mostly carried on through VALPARAISO, under which title it will be further noticed. The larger part of the imports are from Great Britain: they consist chiefly of cotton and woollen goods, iron, hardware, earthenware, &c. The United States have the next largest share in the import trade; the goods sent consist chiefly of tobacco, sugar, oil, soap, candles, and rough manufactured articles, besides tea from China, and silks &c. from the East Indies. France sends a large quantity of wine, brandy, silks, paper, perfumery, and fancy goods. Germany sends linens, iron-ware, glass, &c. Coffee, cotton, rice, salt, maté, spirits, sugar, dyes, &c. are imported from various ports in Central and South America.

The articles of export, besides the bullion sent to Europe and the United States, are grain and vegetables to California and Australia, and various parts of South America; hides and copper to England and the United States; hides to France, Germany, and Belgium; copper to China and the East Indies; and the various European and Indian goods received at Valparaiso and sent to the principal ports of South America—this transit-trade constituting in fact a most important part of the commerce of the republic.

The manufactures of Chili are chiefly of the ordinary articles of domestic consumption, as hempen cloths, bats, ponchos, earthenware, cordage, leather, soap, tallow, spirits, &c., and coarse iron and copper utensils.

The coins, weights, and measures used in Chili are the same as those of Spain.

Divisions, Towns, &c.—Chili is divided into 13 provinces, which are subdivided into 52 departments. These provinces, beginning from the north, are as follows:—

1. Atacama comprehends the most northern and sterile portion of the republic. It exports gold, silver, copper, and dried fruits. The principal town and port is Copiapó; but Port Caldera is attracting to itself much of the export trade of this rich mining district. The population of the province is 25,165.

2. Coquimbo extends southward from Atacama to the Rio Chuapa. In general character it much resembles Atacama, but is somewhat more fertile and populous. The copper-mines of this province are the

richest in Chili; there are also gold- and silver-mines. The exports are the same as from Atacama, with the addition of some chinchilla skins. Coquimbo town, near the bay of the same name, is the capital and port. The population of the province is 85,349.

3. Aconcagua contains the valley of the Rio Aconcagua and the countries north of it to the Rio Chuapa. It exports cattle, grain, and fruits, and has some rich mines of gold and copper. The capital is S. Felipe, or Villa Vieja de Aconcagua. This province has been already fully described. [ACONCAGUA.] The population is 91,674.

4. Santiago comprehends the plains along the foot of the Andes on both sides of the Rio Maypú, and part of the hilly and in some places mountainous country between the plains and the Pacific. It contains few mines, and their produce is small. Its wealth consists in wheat and cattle. It contains Santiago, the capital of the republic. The population is 207,434.

5. Valparaiso is a small province comprehending the country around the harbour of the same name, and is surrounded by the provinces of Santiago and Colchagua. Large quantities of grain and vegetables are raised for exportation. The capital, VALPARAISO, is the most frequented harbour in the republic. The population of the province is 75,962.

6. Colchagua extends between the rivers Cachapoal and Maule, and comprehends a country partly level and partly hilly. It is of great fertility, and produces corn in abundance; cattle are also very numerous. In this province the immense forests begin which cover so considerable a portion of the south; farther north there are no forests. The capital, San Fernando, is a considerable town, and is situated in a very fertile country. The population of the province is 173,073.

7. Talca is an inland province, which has been formed out of the provinces of Colchagua and Maule. It is for the most part mountainous, and is covered with vast forests. Cattle are raised largely. A good deal of copper is found. The population of the province is 71,381.

8. Maule extends from the Rio Maule to the Rio Itata. It produces corn, wine, and tobacco. It is perhaps the most fertile part of Chili, and consists mostly of an undulating country and some small plains. Cattle constitutes the principal wealth of the inhabitants. The chief town is Villa de Cauquenes, a small place situated in a well-cultivated plain. The population of the province is 118,309.

9. Nuble lies to the east of Maule, and comprehends the mountainous country between the Andes and that province. A large part of it is covered with lofty forest-trees. Copper abounds in some places. The inhabitants are however chiefly dependent on grazing. The population is 89,955.

10. Concepcion lies between the rivers Itata and Biobio, and comprehends the sandy plain of Yumbel and the fertile plain of Isla de Laxa, and in part the hilly country extending between the plains and the sea. It is less fertile than Maule, a great part of its surface being occupied by the Travesia de Yumbel and the sandy hills between it and the sea; but the remainder is very fertile, especially the plain of Laxa. Corn and timber are the principal exports. Coal of good quality is obtained, and carried for sale and export to Valparaiso. The capital is Concepcion. The population of the province is 109,526.

11. Valdivia comprehends the countries between the Rio Biobio and the newly-formed province of Arauco; but by far the greater part of this tract is occupied by Indian tribes. Except the town of Valdivia the European settlements are for the most part limited to a small number of fortifications along the banks of the Biobio, among which Nacimiento is the most important. Timber and a little corn are exported. The capital is Valdivia. The population of the province is 23,098.

12. Arauco is a new province, comprehending the southern part of the old province of Valdivia. Nearly the whole of this country is still in the possession of the Araucanians, the most warlike and perhaps the most civilised of the Indian tribes. [ARAUCANA.] The population of the province is estimated at about 14,000. Fort Arauco, on Arauco Bay, one of the most important of the Chilean stations, is described by Captain Fitzroy as merely a small square fort. Maulin Fort, near the western entrance of the Strait of Chacao, is the most southern European settlement on the mainland of America.

13. Chiloe (pronounced Chiloe) comprehends the island of Chiloe and the smaller islands in the Gulf of Ancud, which together constitute the *Archipelago of Chiloe*. The island of Chiloe is the most northern of that series of larger and smaller islands which skirt the western coast of South America from Cape Horn northward. It is divided from the continent by a wide strait called the Gulf of Ancud, and at its northern extremity by the much narrower strait termed by mariners the Chacao Narrows. It extends from north to south about 120 miles, and from east to west 60 miles, where widest; but its eastern coast being deeply indented the average width probably does not exceed 40 miles. The whole island is a mass of rock, which in no part rises to a greater height than 2600 feet, and is covered with earth and clothed with wood, chiefly consisting of a species of bastard cedar, very durable, and affording excellent timber, which is largely exported. In the island itself it is used for building vessels. The eastern coast, which is much indented, has many excellent harbours, among which the best are San Carlos, Chacao, Dalcahue, and Castro, in all of which

vessels of any size may anchor with the greatest safety. San Carlos is said by Captain Fitzroy to be an excellent harbour. On the west coast is the Lagoon of Cucao, which is upwards of 20 miles in length, and connected with the sea. Though frost and snow are hardly known the climate of the island is chilly. The air is so damp that fogs occur almost daily during the rainy season, which lasts ten months; yet the island is considered to be healthy. The domestic animals are cattle, horses, sheep, and swine. Some hides are exported, and about 10,000 hams annually, of excellent quality. These, with about 250,000 planks, and occasionally grain and potatoes, constitute the exports. The soil being of excellent quality produces rich crops of wheat and barley and great quantities of potatoes. A good deal of butter is made. Fish, as well as oysters and other shell-fish, are very abundant, and in some parts are the chief food of the inhabitants. The interior of the country is little known, the inhabitants all living along the sea-shore, or only at a little distance from it. The northern and eastern coasts are settled by Europeans, but at the southern extremity only Indians in small numbers are found. The people are in appearance more like northern Europeans than Spaniards, being athletic and robust, and having a fair complexion and light flaxen hair. The principal towns are *San Carlos*, on the Strait of Chacao, a small town with about 2000 inhabitants, and *Castro*, which contains two dilapidated churches, and a small and poor population. The most remarkable of the numerous smaller islands of the archipelago are *Quiuchao*, *Lemuy*, *Calbuco*, and *Llancha*. On *Lemuy* very good ponchos are made from the wool of the country. The population of the province is 48,876.

The capital of Chili is *SANTIAGO*; the chief port and centre of commerce is *VALPARAISO*; both of these will be described under their respective titles. The few other towns of any size or consequence have mostly been enumerated in speaking of the provinces; what further notice seems necessary we add here. Most of the towns of Chili, as mentioned under *ACONCAGUA* (vol. i. col. 56), are built on a regular plan, and are similar in their general appearance: the churches and other public buildings, and the principal shops, occupy the sides of a central plaza, the area of which serves by day as a market-place, and in the evening as the public promenade; while the main streets diverge from the plaza at regular intervals, and are of uniform width. The houses are generally of a single story.

Concepcion, the capital of the province of the same name, and the seat of a bishopric, stands on the right bank of the Biobio, about 8 miles from the Bay of Concepcion: population about 7000. The town was built after the destruction of the old city of Penco by an earthquake in 1763. Concepcion itself, after enduring many shocks of more or less violence, was entirely overthrown by a similar visitation in 1835. It was a well-built town, and contained many fine buildings, among others a massive cathedral, which, like the more fragile structures, was reduced to a mere ruin. The city has not yet recovered from the effects of so serious a calamity, but it appears to be making steady progress. It has little trade and no manufactures. Ships generally lie off the *Port of Talcahuano*, at the head of Concepcion Bay, a poor town of about 1000 inhabitants. Concepcion Bay is 6 miles long and 4 miles wide, affords ample secure and well-sheltered anchorage, and is said to be the finest port on this coast. *Constitution* is a small town on the left bank of the Rio Maule, about a mile from its embouchure. As the port of an exceedingly rich agricultural and mining district, and on the line of the best pass across the Andes, *Constitution* appears destined to rise into considerable importance. At present a sand-bar prevents vessels of much burden ascending to the town; but there appears to be no insuperable engineering difficulty in the way of its removal, if the inhabitants possessed sufficient capital and enterprise. *Copiapó*, population about 4000, on the right bank of the river of the same name, is the principal port of the mining district of Atacama, but appears likely to give place to the superior facilities of the neighbouring harbour of Caldera. The town suffered very severely from an earthquake in 1819 and again in 1822, and on some subsequent occasions. Copper smelting is carried on in the vicinity. *Coquimbo*, population about 8000, the capital of the province of Coquimbo, was founded in 1544 by Valdivia, who named it *Sereua*; it stands near the mouth of the Chuapa, about 7 miles from Coquimbo Bay. The town is regularly laid out with houses of one story, having gardens attached, but has few public buildings of any mark. The district abounds in mines of gold, silver, copper, and iron. There is no import trade. A good deal of copper and copper-ore is exported. The port is a mere collection of hovels. *Huasco*, is the small port-town of a mining district in the province of Coquimbo, of some local consequence, but not requiring further notice here; it stands at the mouth of the Huasco River. *Osorno* (40° 20' S. lat.) is one of the most southern towns in the republic. *Petorca*. [*ACONCAGUA*.] *Rancagua*, near the southern boundary of Santiago, is a place of some importance. *San Felipe de Aconcagua*. [*ACONCAGUA*.] *San Fernando*, the capital of *Colechagua*, stands near the base of the Andes, and is a tolerably large and flourishing town, and the centre of a rich and fertile district. *Talca*, the capital of the province of the same name, stands near the right bank of the Rio Maule in the upper part of its course, and is also a town of considerable note. The district abounds in forests of fine timber. *Valdivia*, the capital of the province of the same name,

stands on the left bank and at the estuary of the Calacalla, at the head of the Port of Valdivia (39° 49' S. lat., 73° 18' W. long.): population about 2000. Owing to a bar at the mouth of the Calacalla, only vessels of light burden can ascend to the town. Although the district is extremely fertile the town has little trade. The exports are chiefly of planks and staves. The town, which consists of a number of scattered wooden houses, surrounded by a forest of apple-trees, bears a poor and neglected aspect; the many costly fortifications, erected by the Spaniards with a view to rendering the harbour impregnable, have been suffered to fall into decay.

Inhabitants.—The population of Chili, north of the Rio Biobio, is almost entirely composed of descendants of Europeans. There are no Indians north of the Biobio, except in the valleys of the Andes south of 34° S. lat. Negroes are few in number. The Indians who inhabit the country south of the Biobio are known by the name of *Araucanians*, and have obtained some celebrity by the high degree of civilization attributed to them by Molina. [*ARAUCANA*.] They appear to consist of several tribes, who speak different dialects of the same language, and are divided by the Chilenos into 'Indios Costinos,' or Indians inhabiting the coast, and into 'Moluchos,' who inhabit the extensive wooded plains stretching along the foot of the Andes, and have resisted all attempts to conquer them. These nations derive their principal subsistence from agriculture, cultivating maize, potatoes, beans, and some other articles. In the valleys of the Andes between 34° and 37° S. lat., are the *Pehuenches*, who seem rather to be addicted to a wandering life. All these tribes still enjoy virtual independence.

History, Government, Finances, &c.—When Francisco Pizarro had overthrown the empire of the Incas in Peru, he sent Almagro to subjugate Chili. With great loss of men, Almagro passed over the Andes and through the desert of Atacama, and entered the northern provinces without resistance, these districts having previously been dependent on the Peruvian empire. But farther south he met the more warlike tribes, and made no great progress. His successor, Valdivia, advanced to the Biobio, and founded the town of Santiago in 1541. For more than 200 years the Spaniards tried to establish their authority in the south, but without permanent success; and in 1771 they were obliged to abandon that country, with the exception of Valdivia, Osorno, and a few small fortresses on the banks of the Biobio.

The first disturbances tending to a separation from the Spanish dominion occurred in 1810. Chili declared itself independent Sept. 18, 1810, but the strife so far from being ended went on increasing till the Chilenos were defeated in 1814 at Rancagua, by the Spanish general Osorio. In 1817 San Martin entered Chili with an army from La Plata, and liberated the country by the battles of Chacabuco (12th February, 1817) and Maypú (5th April, 1818). Since the establishment of the constitution, which was proclaimed in 1830, there have been frequent conflicts between political parties, but the country has on the whole been more peaceable than most of the other South American states, and not less successful.

By the constitution the government received a republican form, with a central legislature and executive. The executive power is in the hands of a president, elected every five years; and a council of state consisting of the ministry, two members of the court of justice, an ecclesiastical dignitary, a general, two ex-ministers, &c. The legislature consists of a Congress composed of a senate of 20 members retaining their functions for nine years, and a House of Representatives elected triennially, to which a deputy is sent for every 20,000 of the population. The judiciary consists of a supreme court of appeal, three other courts of appeal, and inferior courts.

The army consisted in 1852 of 2661 men, besides the militia, which numbered 66,241. The navy consisted of 7 vessels carrying 83 guns.

The revenue of the republic from 1825 to 1832 averaged about 1,700,000 Spanish dollars, and the expenditure exceeded the receipts. In 1851, according to the report presented to Congress 20th August, 1852, the revenue amounted to 4,427,906 dollars (968,604*l.*), the expenditure in 1851 was 4,712,147 dollars (1,030,782*l.*); but this excess of expenditure was covered by the excess of revenue in the preceding year. The amount of foreign debt (chiefly English) was 1,493,000*l.*; of home debt 467,835*l.*

(Molina; Miers; Meyen; Pöppig; Schmidtmeier; Sutcliffe; Gerstaecker; Fitzroy and King; Darwin, &c.)

CHILKEAH. [*BAREILLY*.]

CHILÔE ISLAND. [*CHILL*.]

CHIMAY. [*HAINAULT*.]

CHIMBORAZO. [*ANDES*, vol. i. col. 355.]

CHINA is an extensive country in Eastern Asia, constituting the principal portion of the Chinese empire. It is situated on the borders of the Pacific, and extends from 20° N. lat., (or, if the island of Hainan is included, from 18°) to 41° N. lat., and if the tract of land projecting on the north-west towards the centre of Asia be added, to 46° N. lat. Its eastern extremity, where it borders on Corea, is cut by 124° E. long., and its western, where it borders on the Birman empire, by 93° E. long.; but if the projecting tract be added, it reaches to 85° E. long. Its greatest length, from the harbour of Amoy, opposite the island of Formosa, taken in a north-western

direction to the farthest extremity of the projecting tract, can hardly fall short of 2000 miles. If however this latter tract is excluded, the length of China from the peninsula opposite the island of Hainan to the Great Wall due north of Peking is about 1400 miles; its breadth varies between 900 and 1300 miles. The area of China is about 1,300,000 square miles, or more than eleven times as large as that of the British Islands. The north-western projecting tract is not included in the calculation. According to a state census made in 1812, the population was then 360,279,897, but it would not be safe to regard this as anything like an accurate enumeration; by a state census taken in 1825, the population was only 352,866,012, and this, though not to be regarded in the same light as a European census, is perhaps not greatly in excess.

China is surrounded by countries dependent upon it, except at its south-western and southern side, where it borders on the Birman empire, the kingdom of Siam, and that of Cochin China. On the west of it extend Tibet and the country of Kho-kho-nor, or Ching-hai. The projecting tract is mostly surrounded by Eastern Turkistan, lately called Grand Tartaria, and by Mongolia. Mongolia occupies also the greatest part of its northern boundary, except in the extreme east, where it is bounded by Manchuria, or Ching-king, and by Corea. Its eastern side is washed by the Pacific, which forms a deep gulf between China and Corea, called the Hoang-hai, or Yellow Sea; it assumes the name of Tung-hai, or Eastern Sea, between Corea and the island of Formosa, and that of Nan-hai, or Southern Sea, or more generally China Sea, between Formosa and Hainan, while the strait between Formosa and the mainland is known as Formosa Channel.

Coast-line, Surface.—The coast of China being about 2500 miles, there is only one mile of coast for every 520 square miles. Where China borders on Corea its coast is high and bold, and full of rocky islets. This coast continues on both sides of the peninsula of Leao-tung, or about 240 miles. It is followed by a sandy coast, which in most places is so low that it cannot be seen at a short distance from the shore: this coast extends from the innermost corner of the Bay of Leao-tung for about 360 miles to the neighbourhood of the Straits of Meao-toa, which form the entrance of the Bay of Petcheli. The coast of the peninsula of Chan-tung is rocky, and commonly high, but not high, except in a few places. It extends from the Straits of Meao-toa to Cape Macartney, and hence to 35° N. lat., about 350 miles. The shores, as far as the Chusau Islands (30° 30' N. lat.), are low and sandy, indeed in many places very swampy, and extend from 420 to 450 miles. From the Chusan Islands to the Bay of Canton the coast is rocky, bold, and high, except in the recesses of the numerous bays and harbours. At some places it rises to a considerable height, and is besides lined with numerous cliffs and rocky islets, in all its extent of about 800 miles. The western shores of the Bay of Canton, for about 30 miles, are formed by a great number of low sandy islands. From the Bay of Canton to the peninsula of Lui-tcheou, about 120 miles, the coast is again rocky and bold, but it does not appear to be high. The shores of the peninsula itself are about 100 miles long, sandy, flat, and low; the remainder of the coast of China is washed by the Gulf of Tonkin (about 100 miles), along which are numerous small islands.

The whole surface of China may be divided into the mountainous country, the hilly country, and the great plain. The mountainous country comprehends more than half of the whole, and the meridian of 112° may be considered its eastern boundary, but to the north of the Hoang-ho it extends as far as 114°. All this immense tract of country is covered by mountains and valleys. The mountains are commonly too steep and rugged to admit much cultivation, but a great part of them is covered with high trees. Towards the north they are mostly bare, but contain immense beds of coal. The valleys are often narrow, but being watered by numerous streams, their fertile soil maintains a numerous population. This general description however applies properly, in all its extent, only to the districts north of the Tapa-ling and south of the Nan-ling, for in those between these two ranges the mountains are less steep, and their sides are commonly cultivated to a considerable height. The valleys too are much wider, and the level land sometimes extends to plains of considerable width, as for instance the plain of Tching-tu-foo, which is perhaps 20 miles in every direction.

The western boundary of China extends to the mountain chains which constitute the eastern edge of the high table-land of Eastern Asia [ASIA; BAYAN KHARA]; but only the most eastern of these ranges lies within the boundary of China. It may be considered as beginning in the most southern end of the Yang-tse-kiang, between 101° and 103° E. long., and as extending hence in a north-north-east direction, and terminating in the great northern bend of the Hoang-ho, between 107° and 111° E. long. This mountain range, which is called Siue-ling (Snow-range), or Yung-ling, contains a considerable number of snow-capped summits. The snowy mountains are numerous between 30° and 36° N. lat., and more especially between 32° and 34°. But even south of the great southern bend of the Yang-tse-kiang, and at a short distance from its banks, are some snow-covered summits, whence Ritter rightly concludes, that the river breaks through the southern portion of the range. The four mountain chains which traverse China from west to east, may be considered as offsets of this range. South of the snowy mountains, which are situated on the

south of the great bend of the Yang-tse-kiang, is the hilly table-land of Yun-nan. It is of considerable extent, and at a great elevation above the sea. From the eastern edge of this table-land two mountain ranges branch off, the Yu-ling and the Nan-ling. The Yu-ling, the most southern of these ranges, branches off from the table-land in 24° N. lat., and 102° E. long., and runs nearly east to the neighbourhood of the Bay of Canton, dividing the river Ta-si-kiang from the sea. It does not seem to approach the shores of the sea in any point, nor to rise to a great height. The Nan-ling (or Southern Range), which constitutes the most extensive mountain system in China, branches off from the northern edge of the table-land of Yun-nan, where the snowy mountains are situated (26° N. lat. and 103° E. long.), and runs eastward, passing about 150 miles to the north of Canton as far as 116° E. long.; it then inclines to the north-east, in which direction it continues with a slight bend to the west to its termination at the sea near the harbour of Ning-po, opposite the islands of Chusan. Several summits of this range rise above the snow-line, west of 110° E. long., where also it extends to a great width. An aboriginal nation, the Miaotsee, have maintained their independence in its fastnesses. A lateral range, which separates the Yang-tse-kiang from its tributary the Yuen-kiang, and extends north-east to the centre of China, is also said to contain some summits which rise above the snow-line. East of 110° no snow-capped mountains occur, though some rise to a great elevation; but even here the range preserves its steep and rugged character. Its numerous branches, running towards the Formosa Strait and the Tung-hai, are also steep and craggy, but those extending northward are of inconsiderable elevation. Three mountain passes are known to traverse the Nan-ling. The most frequented is to the north of Canton, where the range is called Meiling (the Chain of the wild Plum-trees, according to Klaproth), and hence the pass is called Meiling pass. By this pass goods are transported from Canton into the interior of China. Goods are brought in boats on the river Pe-kiang to the town of Nan-yong-foo. Between this town and that of Nan-gan-foo is the pass where goods are carried on the backs of men, for about 24 miles over rocky mountains. This is the only place, between Canton and Peking, where no water communication exists; for at Nan-gan-foo the goods are again shipped and descend the Kan-kiang and afterwards the Yang-tse-kiang till they come to the Great Canal. The elevation of the Meiling mountain-pass is estimated by Staunton to be 8000 feet above the sea. The second pass which is known occurs near 28° N. lat., and 118° E. long., between Kien-ning-foo on the east and Kian-tchang-foo on the west of the range, and though the mountains are very steep and rugged it is much frequented; 18,000 porters are said to be continually employed for the transport of goods. The third road, which is a little farther north, connects the town of Kien-ning-foo with the town of Kintcheou-foo, which lies on the west of the range. Though difficult to pass it is much used.

The two other mountain ranges, the Tapa-ling and the Pe-ling, are immediately connected with the Yun-ling, the Tapa-ling branching off south of 33° N. lat. and Pe-ling about 35°. The Tapa-ling runs south of east nearly in a straight line, and terminates near 112° E. long. north-east of the town of Koi-tcheou-foo. It divides the valley of the Han-kiang from that of the Yang-tse-kiang, and rises to a great height; several of its summits exceed the snow-line, as for instance the Kiauku-shan, with which it terminates. The Pe-ling, which runs nearly parallel to the Tapa-ling, separates the valley of the Han-kiang from that of the Hoai-ho, or Wei-ho, an affluent of the Hoang-ho, and consequently the two great river-systems of China from one another. It continues in its eastern direction to 113° E. long., and this portion of the range is high, rugged, and steep. At 113° it declines to the south-east, diminishing considerably in elevation and ruggedness. Having attained 32° N. lat. it turns again to the east, and soon subsides into a chain of hills, which terminates on the western shores of the lake Tsiao-hoo, a considerable distance east of Nanking. The western part of this range contains several snowy mountains, though fewer than the Tapa-ling. The obstacles opposed by these two chains to the communication between the provinces which they traverse have been overcome by an artificial road said to be 420 lie, or nearly 150 miles long, and which, through the mountain district, is conducted over deep clefts by long bridges, and often by deep cuttings through high mountains.

These ranges traverse that part of China which lies south of the Hoang-ho. But even the western, and greater, portion of the countries north of that river is almost entirely covered with high and rugged mountains. These mountains belong partly to the northern portion of the Yun-ling, which joins the Hoang-ho at its great bend, and partly are ramifications of the Inshan, a range which extends round the bend of the river on the west and north, and whose offsets enter China between that bend and the town of Peking in several ridges.

Among the mountainous districts must be included the tract of land which lies between the Nan-ling and the sea; but with the exception of the immediate neighbourhood of the range it rather resembles the countries between the Nan-ling and Tapa-ling than those farther north, its valleys being generally wide and sometimes expanding into plains, as for instance the plain of Canton. A considerable portion of the sides of the mountains is also fit for cultivation. If this tract is added to the other mountainous country, it may be said that

rather more than two-thirds of the surface of China are of this character.

The hilly country lies to the east of 112° E. long., and between this meridian and the eastern part of the Nan-ling, and extends north to the banks of the Yang-tse-kiang. The hills, though in many places steep, generally rise with a gentle ascent; and as they do not attain a great elevation, their sides are cultivated and planted with rice on the terrace system. Their tops are covered with forest-trees, generally of the pine kind, which are carefully planted. The levels between the hills are sometimes narrowed into valleys; in other places they expand into plains. They have generally abundance of water in their rivers, and there are some lakes, of which the largest are the Tung-ting near the confluence of the Yuen-kiang with the Yang-tse-kiang, and the Po-yang, not far from the mouth of the Kan-kiang. The greatest portion of the surface is in a very high state of cultivation.

The great plain occupies the north-eastern part of China. It extends in length 700 miles from the Great Wall, north of Peking, to the confluence of the rivers Yang-tse-kiang and Kan-kiang (80° N. lat.). The Yang-tse-kiang may be considered as its southern boundary as far down as Ngan-king, whence to the sea it is formed by a line drawn from Ngan-king to the sea through Hang-tcheou-foo. The western boundary-line may be marked by a line drawn from King-tcheou-foo, a town situated on the Yang-tse-kiang, to Hoai-king-foo on the Hoang-ho, and hence to the Great Wall, about 50 miles north-west of Peking. The breadth of the plain is various. North of 35° N. lat., where it partly extends to the shores of the Hoang-hai and partly borders on the western side of the mountain range of Chang-tung, which occupies the peninsula of that name, its width varies between 150 and 250 miles. This portion of the plain probably covers an area of 70,000 square miles. Between 35° and 34° N. lat. the plain enlarges, and in the parallel of the Hoang-ho it extends more than 300 miles east and west. It grows still wider to the south, and reaches nearly 500 miles inland in the parallel of the embouchure of the Yang-tse-kiang. The whole plain, containing 210,000 square miles, is seven times as large as that of Lombardy, with which it may in many respects be compared.

The northern part of the plain has a dry sandy soil, impregnated in many parts with saline matter and destitute of trees, but it produces millet and wheat in abundance. South of 35° N. lat. the whole tract along the coast is very low and swampy, being partly covered with numerous lakes and lagunes, and intersected by numerous water-courses both artificial and natural. It produces a great quantity of rice. Farther inland the soil is more firm and dry and of great fertility, which is increased by the abundance of water drawn from the rivers and small lakes. It produces rice, cotton, wheat, and tobacco. The southern districts bordering on the banks of the Yang-tse-kiang differ from the other in not being a flat level, but having a surface slightly undulating, on which even a range of hills rises, as the eastern prolongation of the Pe-ling. It is not however less fertile than the other districts. Among its most valuable branches of agriculture is tea, which is extensively cultivated on these low hills (between 30° and 32° N. lat.).

The eastern portion of this plain is traversed by the Great or Imperial Canal, which begins on the south at the town of Hang-tcheou-foo (80° N. lat.), and extends to the town of Lin-tchin-tcheou, where it falls into the river Eu-ho, or Ou-i-ho. Its length exceeds 500 miles in a straight line, but its actual length is nearly 700 miles. Some portions of it have been made merely for the purpose of internal navigation, but in others the design of draining and irrigating the adjacent country has been connected with it; hence it differs widely from all the canals made in Europe. Its breadth is considerably greater, and its waters are in few places altogether without a current. At a few points it is cut through rocks; it often traverses lakes and swamps of considerable extent, running on an artificial elevation sometimes twenty feet above the surface of the country. Its flood-gates, bridges, the vessels which navigate it, and the number of towns and villages lining its banks, excite the admiration of all travellers. By this canal, and the navigable rivers Yang-tse-kiang and Kan-kiang on the south, and the rivers Eu-ho and Pei-ho in the north, goods may be transported by water from the foot of the Mei-king Pass to the town of Tong-tcheou-foo, a few miles distant from Peking. That portion of the canal which lies south of the Hoang-ho was made in the 7th century, or soon after; but the more northern part in the 18th century by Kúblai Khan and his successors, when the Tartar dynasty had removed the imperial residence from Nanking to Peking.

The fertility of its soil and the advantages resulting from the internal navigation afforded by the Great Canal and its numerous branches, have rendered this plain the most populous spot on the earth: its inhabitants, according to the native census, amount to 170 millions, or about two-thirds of the whole population of Europe. To protect this rich plain the Great Wall was erected, which incloses China on the northern boundary, and extends over mountains and through valleys, and is continued by bridges across rivers for about 1400 miles. This great work was constructed rather more than 2000 years since, or about 200 years before the Christian era, by the first universal monarch of China as a defence against the nomadic tribes of Tartars, who have never ceased to infect the country to the south as long as it has been subject to a separate dominion. The main sub-

stance of the wall is earth or rubbish, retained on each side by a thick casing of stone and brick, and terraced by a platform of square tiles. It bounds the whole north of China, extending along the frontiers of three provinces, a distance of nearly 19 degrees of longitude. From its eastern extremity there is an extensive stockade of wooden piles inclosing the country of Mougden, and which in some European maps has been erroneously represented as a continuation of the solid barrier. The total height of the wall varies from 15 to 30 feet, on a basis of stone projecting 2 feet under the brickwork, and about the same in height. The thickness of the whole wall at the base is 25 feet, diminishing to 20 and in places to 15 feet at the platform. The towers are 40 feet square at the base, diminishing to 30 feet at the top, and about 37 feet in height. The thinness of the parapet of the wall, being only 18 inches, justifies the conclusion that it was not intended to resist cannon; and it appears certain that the use of firearms is comparatively modern in China, however ancient the invention of gunpowder.

Numerous rivers drain and water China, but by far the greater number flow into the HOANG-HO and YANG-TSE-KIANG, which are among the greatest rivers of the globe. Among the rivers which do not belong to the systems of those two great rivers two require notice here, the Pei-ho and the Ta-si-kiang. The Pei-ho, or White River, rises on the mountains north-west of Peking, near the Great Wall, and flows in a south-eastern direction to the town of Tong-tcheou-foo, a few miles east of Peking, where it becomes navigable for large river-boats. Continuing in the same direction, it unites with the Eu-ho, a much larger river than the Pei-ho itself, which rises near the banks of the Hoang-ho, and running in a north-east direction is connected with the Great Canal at the town of Lin-tchin-tcheou: the remainder of its course may be considered as the continuation of the canal. The tides come up nearly to the place where the Eu-ho meets the Pei-ho, a distance of more than 80 miles. Hence to the sea the Pei-ho runs nearly due east, and at its mouth has a bar which at low tides has only two or three feet of water upon it; but at high tides, which here rise five or six feet, the bar does not prevent the flat-bottomed Chinese junks from entering the river. There is perhaps hardly another river in the world which is navigated by so many vessels as the Pei-ho. The Ta-si-kiang, or the River of Canton, rises east of the town of Yun-nán (103° E. long.), and runs the first half of its course in a narrow valley between high mountains, and the other half in a wide, fertile, and well-cultivated one; towards its mouth it drains the plain of Canton, and receives the Pe-kiang. The general direction of its course is from west to east, and it is navigated to a considerable distance.

In the interior are numerous lakes, of which the largest is the Tonting-hou (113° E. long.), which is above 200 miles in circuit; it receives the waters of a vast number of small rivers, and discharges itself into the Yang-tse-kiang. The Pho-yang-hou (116° E. long.) is also of very large dimensions, and is much admired for the beauty of the surrounding scenery; it also discharges its superfluous waters into the Yang-tse-kiang. The Tay-hou (120° E. long.), the Kan-yew-hou (119° E. long.), the Hong-tse-hou, near the junction of the Grand Canal with the Hoang-ho, are also large and celebrated lakes. All the lakes are well stored with fish.

Mineralogy, &c.—Of the geological character of a country of such vast extent, and of which so small a portion has been explored by men of science as China, it would be manifestly useless to pretend to give any account. It is however certain that the range of rocks embraces most of the primitive and metamorphic series, and yields a valuable variety of building stones and slates. The porcelain clays are of great excellence.

The variety of surface through the wide extent of the empire affords a rich fund of minerals and metals. There can exist no doubt of the abundant supply of coal throughout China, nor of its general use, which we find from Marco Polo was known to the Chinese before its adoption in Europe. Lime they possess in all its combinations. Limestone of good quality is abundant, and lime-kilns are very numerous. The dark gray marble used at Canton is coarse, and unsusceptible of a fine polish; the shops contain large quantities of striated gypsum or alabaster. At the head of minerals the Chinese place their famous yu-stone, which is nephrite, or jade. As the country abounds in the primitive rocks, it is consequently rich in metals. Gold is obtained in the native state from the sands of the rivers in Yun-nán, near the frontiers of the Birmese country, well known for its richness in that metal; in Yun-nán also silver-mines are worked. Iron is obtained in many parts of the empire. Ordinary copper comes from Yun-nán and Kuei-chow, and an abundance of malachite, or green copper-ore is obtained near the great lake in Hoo-kiang. The famous pè-tung, or white copper, which takes a polish not unlike silver, comes from Yun-nán: a considerable quantity of quicksilver is obtained in Kuei-chow; and there is a rich mine of tutagen, or zinc, in Hoo-pé. Arsenic, orpiment, cobalt, &c. are found. Rock-salt and salt obtained by the evaporation of sea-water are articles of great traffic. Rubies, amethysts, sapphires, beryls, topazes, crystals, and lapis-lazuli are met with in some parts.

Climate.—In regard to the climate of China, a distinguishing feature is the unusual excess in which heat and cold prevail in some parts of the empire at opposite seasons of the year; as well as the low average of the thermometer in comparison with the latitude.

Although Peking is nearly a degree to the south of Naples, the latitude of the former place being $39^{\circ} 54'$, of the latter $40^{\circ} 50'$, the mean temperature of Peking is only 54° of Fahrenheit, while that of Naples is 63° . But as the thermometer at the Chinese capital sinks much lower during the winter than at Naples, so in summer it rises somewhat higher. The rivers are said to be frozen for three or four months together, from December to March; while, during the embassy in September 1816, a heat of between 90° and 100° was experienced in the shade. It is well known that Naples and other countries in the extreme south of Europe are strangers to such a degree of long-continued cold, and are not often visited by such heats. Europe, observes Humboldt, may be considered altogether as the western part of a great continent, and therefore subject to all the influence which causes the western sides of continents to be warmer than the eastern; and at the same time more temperate, or less subject to excesses of both heat and cold, but principally the latter. The mean annual temperature of Canton and Macao, which lie nearly under the tropic, is what commonly prevails in the 30th parallel; and it is surprising to contrast their meteorological averages with those of Calcutta, which stands very nearly in the same latitude. The total fall of rain varies greatly from one year to another; the average annual quantity is about 70 inches, but it has been known to reach 90 inches and upwards. Vegetation is checked in the interval from November to February, not less by the dryness than by the coldness of the atmosphere: the three winter months being known sometimes to elapse with scarcely a drop of rain. The north-east monsoon, which commences at Canton and in the adjacent seas to the southward and eastward in September, blows strongest from December to February, and begins to yield to the opposite monsoon in March or April. About that period the southerly winds come charged with the moisture which they have acquired in their passage over the sea through warm latitudes; and this moisture is suddenly condensed into thick fogs as it comes in contact with the coast of China, which has been cooled down to a low temperature by the long-continued northerly winds. The latent heat given out by the rapid distillation of this steam into fluid, produces the sudden advance of temperature which takes place about March; and its effect is immediately perceptible in the stimulus given, by this union of warmth with moisture, to vegetation of all kinds. With the progressive increase of heat and evaporation commence those rains which tend so greatly to mitigate the effects of the sun's rays in tropical climates. In the month of May the fall of rain has been known to exceed 20 inches, being more than one-fourth of all the year, and this keeps down the temperature to the moderate average of about 75° , while in Calcutta there is no portion of the year more dreaded than May. At length the increasing altitude of the sun, which becomes just vertical at Canton about the solstice, and the accumulated heat of the earth, bring on the burning months of July, August, and September, which are the most oppressive and exhausting of the whole year. The extreme rarefaction of the atmosphere now begins to operate as one of the causes tending to the production of those terrible hurricanes, or rushes of wind, called typhoons, which are justly dreaded by the inhabitants of the south of China; but which chiefly devastate the coasts of Hainan, and do not extend much to the north of Canton. They seldom last 48 hours, and their usual duration is less than 24 hours.

Botany, Agriculture, &c.—At the head of Chinese botany may properly be placed the tea-plant. The specimens from the black and green tea countries differ slightly in the leaf, the northern variety, *Thea viridis*, from which the finer green tea is usually made, being a thinner leaf, rather lighter in colour, and longer in shape than the other; but Mr. Fortune has shown, what indeed the Chinese themselves acknowledge, that either black or green tea may be prepared from any tea-plant. At Canton green and black teas are made from the *Thea Bohea*, at the pleasure of the manufacturer. The *Camellia* bears the same name in China with the tea-shrub, and possesses most of its botanical characters; they in fact constitute two genera very closely allied: great skill is displayed by Chinese gardeners in their culture. The *Laurus Camphora*, one of the most remarkable productions of China as well as Japan, is a fine timber-tree, growing in the southern provinces to the height of 50 feet. The hemp-palm is a very handsome tree, and is peculiarly valuable to the northern Chinese, who use its large, brown, hair-like bracts for making ropes and cables, and numerous other useful articles. But far more valuable is a kind of bamboo, the stems of which are sometimes a foot in circumference, quite straight and smooth, and from 30 to 50 feet in height; every part of which is applied to some useful purpose, while the variety of services it renders is according to Mr. Fortune almost inconceivable. One of the handsomest trees which have been found in China is the Funeral cypress, which has a nearly straight stem about 60 feet high, and weeping willow-like branches, with slender and graceful leaves, somewhat resembling those of the arbutus. From the seeds of the *Dryandra cordata* the Chinese extract a varnish for boats, and for the coarser implements of domestic use; the fine japan varnish however is obtained from the tsü-shoo, or lacker-shrubs, a species of *Rhus*, from which the varnish distils like gum. The Chinese procure their tallow from the *Croton sebiferum*, the seed of which, as soon as it is ripe, opens and divides into three

parts, discovering as many kernels within the capsule, each attached by a separate foot-stalk, and covered with the vegetable grease of a snowy whiteness. The plant from which the pithy substance vulgarly called 'rice-paper' is prepared, seems to be a leguminous species growing in marshes, and found in some parts of India. The square pieces purchased in China are obtained from the stem, which, not being above an inch or two in diameter, is cut in a circular manner, and the cylinder in this way rolled out and flattened. The *Smilax*, or China root of commerce, commonly known as a sudorific, may be seen growing near Canton. That valuable medicine rhuaharb is cultivated to the northward, in the cold and mountainous province of Shen-si. The ginseng is very generally used as a tonic, and is very largely cultivated. The Chinese cassia, an inferior cinnamon, is grown in Quang-ai, and largely exported in European ships.

Among the most remarkable fruits of China are three distinct species of orange, as different as one sort of fruit can be from another of the same genus. The first is the 'China orange' of Europe; the second is of a pale yellow colour, but very sweet, and with a highly aromatic rind; the third, and perhaps best sort, has a deep crimson rind when ripe, quite detached from the fruit, the lobes of which are almost loose, and surrounded with a kind of network of fibres. Another description of *Citrus*, of the lemon kind, by the exercise of some horticultural ingenuity, is made to run entirely into rind, the whole terminating at the head in long narrow processes like fingers, whence it has obtained the appellation of Fö-show, 'the hand of Fö.' Among the peculiar fruits of China, the lichi has been naturalised in Bengal. Another of the dimocarpus sort, called loong-yen, or 'dragon's-eye,' is much smaller, and has a smoother skin. The loquat is a fine fruit (when well ripened) of the *Mespilus* kind. The wampee, as it is called at Canton, has been compared to the gooseberry, which it resembles only in size; its fruit, which grows in bunches on a good-sized tree, has a yellow skin, inclosing a rather acid pulp that surrounds two or three seeds of a green colour. At the head of cultivated flowers the Chinese place the *Nelumbium*, in consideration of both its heauty and utility. The seeds, in form and size like an acorn without its cup, resemble nuts in flavour: the roots are sliced and eaten as fruit. Another highly esteemed flower is the *Olea fragrans*, allied to the olive of Europe, and remarkable for the fine scent of its blossoms. The famous mow-tán, or tree-peony, flourishes only in the north of the empire. The chrysanthemum is much and very successfully cultivated, and highly valued for the variety and richness of its colours. The choo-lán (*Chloranthus inconspicuus*) is used in scenting the tea that bears its name. The azalea is also a favourite garden plant. Weigelas, gardenias, roses, viburnums, and a very great number of brilliant flowers are carefully raised in the numerous gardens and nurseries, which are required to supply the universal love of the Chinese for flowers.

Agriculture is pursued with the greatest industry. Everywhere the land is diligently cultivated, but both the implements and the methods of agriculture are in a backward state. Irrigation is however well attended to wherever it is needed, and due attention is given to manuring the land; every substance fit for manure, whether solid or liquid, being carefully husbanded. The farms are generally small. All kinds of grain are cultivated, but rice is the principal crop; and so well is its culture managed that the rice of China is said to be brought to greater perfection than that of any other country. Over a great part of China two crops of rice are obtained annually; and sometimes three crops of rice, or two crops of rice and one of vegetables are obtained. Most of the ordinary vegetables are raised in considerable quantities, the Chinese generally being great eaters of vegetables; potatoes however are only grown largely in Macao. Tobacco, cotton, and sugar are also raised to a considerable extent. In the silk districts vast quantities of mulberry-trees are grown for feeding the silk-worms. Mr. Fortune states that in the Hang-tcheou district alone, "going in a straight direction through the country, during the space of two days, in which time he must have travelled upwards of a hundred miles, he saw little else than mulberry-trees, evidently carefully cultivated, and in the highest state of health, producing fine, large, and glossy leaves." The Chinese plant the culture of which is of most importance to foreigners, and second only to rice with the Chinese themselves, is however undoubtedly the tea-shrub, the growth of which is very widely spread. Mr. Fortune, who under the patronage of the East India Company travelled through the tea-districts, says that he has "met with it in cultivation in China, from Canton in the south up to 31° N. lat.; and Mr. Reeves says it is found in the province of Chang-tung, near the city of Tang-chow-foo, in latitude $36^{\circ} 30'$ N. The principal tea-districts of China however, and those which supply the greater portion of the teas exported to Europe and America, lie between 25° and 31° N. lat., and the best districts are those between 27° and 31° ." ('Tea Districts of China,' p. 272). Nothing can well exceed the patient attention bestowed, both on the cultivation of the shrub and the preparation of the leaf; but for the methods employed we must refer the reader to the work just quoted, to Ball's 'Cultivation and Manufacture of Tea,' and to the article THEA, in ENGLISH Cyc., NAT. HIST. DIV. The wonderful quantity of tea annually grown and manufactured may be readily conceived, when it is stated that tea is the universal beverage throughout China, being taken

many times during the day; and that above 100 millions of pounds are annually exported: Mr. Traversa indeed estimates ('A few Words on the Tea Duties,' 1853) the total amount of the dried leaf produced annually in China at no less than 2240 millions of pounds weight.

No good land is reserved for pasture in China. Cattle and horses are turned out on waste or unprofitable land. The raising food for cattle is no part of a Chinese farmer's occupation. Agriculturists are exclusively employed in raising food for man. Few cattle are kept. The cows are small and of inferior value. The Chinese generally have an inveterate prejudice against the use of butter and cheese; dairy farming is consequently unknown. The sheep are of the large-tailed kind, but much smaller than English sheep. The goats are all straight-horned. Pigs are perhaps the most valuable of the animals bred for food. The greatest care is taken with them; the breed is small but very excellent, and the flesh is pronounced by Europeans to be of unusual delicacy of flavour: the breed has been freely introduced into our farmyards. Puppies and several other animals unknown to the European kitchen are, as is well known, among the most highly prized of the animals specially reared for the Chinese table.

The Chinese horses are not numerous, and of a poor and stunted breed, being very ill fed and kept. Few things excited more the surprise and admiration of the Chinese, in their visits to Hong Kong after it had become an established English settlement, than the size and strength of the English horses. Asses and mules are employed in carrying loads, buffaloes in drawing the plough, but of neither is the race good or the numbers large. The mules are however better than the horses, and are said to bear a higher price, as being capable of more labour on less food. The demand for beasts of draught or burden is greatly lessened by the circumstance that throughout the empire loads are carried by the very skilful porters called 'coolies,' and the canal boats dragged along by men who are trained to the work, while the price of their labour is so low as to render the competition of animals generally unprofitable.

The wild animals, like the vegetables of China, belong principally to the temperate zone; since the low average of the thermometer (which as far south as Canton is little above 70°) and the cold winters are unfriendly to the existence of numerous tropical tribes which are found in corresponding latitudes of India. The larger and more ferocious descriptions of carnivorous quadrupeds are not common in a country so well peopled and cultivated. In the forests of Yü-nán, to the south-west, the Bengal tiger is said to exist, and the animal is well known to the Chinese; but at Canton, so nearly in the latitude of Calcutta, it is quite a stranger. Lions are almost a fabulous animal with them. The woods of the south abound in a small but fierce description of wild cat, which is fattened in cages for the table. The domestic dog of China is uniformly one variety, about the size of a moderate spaniel, of a pale yellow and occasionally a black colour, and a coarse bristly hair on the back; sharp upright ears, and peaked head, not unlike a fox's, with a tail curled over the rump. Bears are common in the hilly wooded parts of Shan-si, west of Peking. Of the common ruminant animals, the Chinese possess several varieties of deer, particularly a spotted kind kept about their residences. Gerbillon describes a species of antelope abounding on the borders of Mongol Tartary, but called by the Chinese huáng-yáng, 'yellow goat.' The buffalo used in ploughing is very small, with a skin of slate-colour, thinly covered with hairs. Dromedaries are much used as beasts of burden between Peking and Tartary; but in China Proper the reasons which cause human labour to supplant every other have prevented their being adopted. The wild boar may be found in the half-reclaimed countries on the western borders, but not in Central China, nor on the east coast, where tillage and population have reached their present height. Of the other wild pachydermatous tribes, the elephant is not at present an inhabitant of China, unless it be in Yün-nán, nor is he used for purposes of either peace or war. The one-horned rhinoceros is found in the forests of the extreme west and south. Of rodent animals, the common rat attains to an unusual size, and is well known to be eaten by the lowest orders of the Chinese. Dr. Gray has described a girline animal discovered by Mr. Reeves, being nearly allied to the bamboo rat of Sumatra, as a new genus.

The ornithology of China is distinguished by some splendid varieties of gallinaceous birds, as the gold and silver pheasants and Reeve's pheasant, the longest tail-feathers of which approach the extraordinary dimensions of six feet. Another description is called the medallion pheasant, from a beautiful membrane of resplendent feathers which is displayed or contracted according as the animal is affected. China abounds in wild fowl of all kinds, and particularly in immense flocks of geese, observable during winter near Canton. The yuen-yang, a teal of splendid plumage, has been called the 'mandarin-duck,' and is remarkable for the attachment between the male and female: it may now be considered as naturalised in England. The fishing cormorant, employed on the shallow lakes of the country in capturing fish, has been described as a brown pelican with white throat; body whitish beneath, spotted with brown; tail rounded; irides blue, and bill yellow. Among the miscellaneous birds of China may be enumerated quails which are often trained to fight; the

common ringdove, of which great numbers breed in the woods about Canton; and the peculiar crow of the country, marked with white about the neck.

Of reptiles, it is remarkable that the largest kinds of saurians, as the crocodile and alligator, are unknown even as far south as Canton, probably in consequence of the vast population and traffic that exist on the rivers. Great numbers of the small lizard tribes are visible during the hot months, some of them infesting trees and shrubs, while others inhabit holes in rocks or old walls. Several fresh-water tortoises have been sent home, and some new genera of batrachians, or the frog kind, have been described. Notwithstanding its situation under the tropic, Canton is little infested by the venomous kinds of serpents; the species most dreaded is a smallish slender snake, between two and three feet in length, called by the Chinese 'the black and white,' from being surrounded from head to tail with alternate rings of those colours.

Of fishes, a large collection of Chinese specimens has been lodged by Mr. Reeves in the British Museum. The golden carp is one of the most distinguished kinds, and has long been bred in Europe from the original specimens which were carried by the Dutch first to Java and thence to Holland. Of edible sea-fish the best kinds near Canton are a sort of rock-cod and a flat-fish called tsang-yu by the Chinese, and pomfret by Europeans. Soles are good and plentiful, but the fish most valued by native epicures is the sturgeon.

Fishing both by sea and on the rivers is most diligently practised. It is the opinion of Sir J. F. Davis that "in no other country besides is so much food derived from the waters." The fish are mostly salted, and consumed with rice.

Among insects, the locust commits great ravages occasionally in particular districts, and rewards are given for its destruction. Some of the most poisonous tribes, as scorpions, are not met with at Canton; but the centipede, which the Chinese call by exactly the same name of pè-to (hundred feet) is common. A monstrous spider has been seen inhabiting trees, and attaining to a size and strength that enable it to devour small birds entangled in its webs. Dr. Abel notices the *Scarabeus molossus*, the *Cerambyx farinosus*, and the mole-cricketer of a large size. On a mountain lying eastward of Canton, called Lo-fow-shan, there are butterflies of a gigantic size and very brilliant colours, a selection of which is sent annually to Peking. The pè-là-shoo, or wax-tree, affords nourishment to an insect which is supposed to belong to the *Coccus* tribe.

Political Divisions.—China is now politically divided into eighteen provinces, of which seven extend entirely or partly over the great plain, two comprehend the hilly districts, two others the mountainous country along the sea, and the others the mountainous country in the interior.

1. Pe-te-he-li extends over the most northern and less fertile portion of the plain, but is well cultivated, and produces, besides vegetables for the supply of the capital, large quantities of millet and wheat. In it is situated PEKING, the capital of the whole empire; the capital of the province is *Pao-tung-foo*, a very large and populous town, in which the governor resides.

2. Chang-tung comprehends a part of the plain and the peninsula of Chang-tung, on which an isolated mountain range rises to a moderate height. It produces wheat, millet, and cotton. Its capital is *Tsi-nan-foo*, a large and populous town. *Lin-tchin-tcheou*, at the confluence of the canal with the river Eu-ho, is the depository of the goods which are carried from the southern provinces to Peking, and a very large place.

3. Kiang-nan, which with the following province once formed that of Kiang-nan, comprehends the low and swampy country on both sides of the Great Canal. It chiefly produces rice and pulse, and has extensive fisheries. Besides the capital, NANKING, it contains many large towns on the banks of the canal, among which the most remarkable are *Yang-tcheou-foo*, which is at a short distance from the Yang-tse-kiang, and carries on an active trade; and *Su-tcheou-foo*, which to an extensive commerce unites great industry in manufacturing silk and cotton goods. Its principal port is SUANG-HAI, a town apparently destined to rival Canton as an entrepôt of commerce.

4. Ngan-hoel, or An-hoi, on both sides of the Yang-tse-kiang, produces, besides grain and rice, some silk. In its south-eastern districts are extensive plantations of tea, and also some mines of gold, silver, and copper. The capital is *Ngan-king-foo*, on the Yang-tse-kiang.

5. Ho-nan is chiefly in the plain, but its western districts are traversed by the Pe-ling mountain range and its branches. It is rich in grain and cotton, and is supposed to contain some mines. In its south-eastern districts tea is cultivated. The capital, *Khai-fong-foo*, is not far from the banks of the Hoang-ho; but the most populous town appears to be *Ho-nan-foo*, on a river which falls into the Hoang-ho, in a richly-cultivated valley.

6. Ho-pè comprehends part of the undulating portion of the plain, and the wide valleys of the Han-kiang and Yang-tse-kiang, with some mountainous districts. It lies in the centre of China, and formerly constituted with the more southern province of Hoo-nau one province called Hou-quang. Its fertility is very great: its products are grain, cotton, silk, and tea, which are cultivated on its north-eastern border. Its capital, *Wu-tchang-foo*, situated on the Yang-tse-kiang, opposite its junction with the Han-kiang, is one of the largest

of the inland towns of China, and carries on an extensive commerce. *King-tcheou-foo*, farther to the west, likewise on the banks of the Yang-tse-kiang, has also a very extensive trade.

7. Che-kiang comprehends the south-eastern corner of the plain and the northern portion of the mountainous country extending along the sea. It produces more green tea than other provinces, and also silk, rice, grain, and pulse in great abundance. Its capital is *Hang-tcheou-foo*, on the banks of the Tsien-tong-kiang, at the southern termination of the Great Canal, in a very pleasant situation. The city is surrounded by strong walls, said to be 8 miles in circumference, and adjoining it are very extensive suburbs. It is the residence of a great many mandarins of high rank and superior government officers; contains numerous rich temples and public buildings; and its shops are well stored with valuable goods, and "everything," says Mr. Fortune, who passed through the city, "which met the eye stamped Hang-tcheou-foo as a place of wealth and luxury." According to Staunton its population was thought to be not much less than that of Peking, and the missionaries estimated it at one million. None of the houses exceed two stories in height: the streets are well paved. It has extensive manufactures of silk and cotton goods, especially in flowered and embroidered satins, and a very active commerce, as well by means of the canal as by the river, which is navigable for large vessels up to the town. The principal port of this province is *Ning-po*.

8. Kiang-si extends over the eastern portion of the hilly country along the western side of the Nan-ling range, and in its well-cultivated valleys and plain produces grain, rice, silk, cotton, indigo, and sugar. It has some plantations of tea. The capital, *Nan-tchang-foo*, on the Kan-kiang, not far from the place where it falls into the lake Poyang, is a large town, and carries on a great trade. In the hilly country, which hogs at some distance from the lake of Poyang on the east, is the borough of *King-te-ching*, which is said to contain 1,000,000 inhabitants, who are occupied exclusively in the fabrication of china-ware, which is here made in the greatest perfection. The number of furnaces is said to amount to 500. *Kan-tcheou-foo*, on the Kan-kiang, not far from its source and the Mei-ling Pass, is a large town, in which Indian ink and varnish are made on an extensive scale.

9. Hoo-nan, or the southern part of the ancient province of Hou-quang, contains the remainder of the hilly country. Its productions are like those of Kiang-si. It is said to be rich in minerals. The capital, *Tchang-cha-foo*, on the Heng-kiang, is a large commercial town. *Yo-tcheou-foo*, on the channel connecting the large lake of Tung-ting with the Yang-tse-kiang, also carries on a very active trade.

10. Fo-kian, or Fochan, extends over the mountainous country on the shores of the sea opposite the island of Formosa. Some of the summits of the Nan-ling range here rise to a great height, but do not attain the perpetual snow-line. The higher parts of some of the mountain ridges are bare, others are covered with trees; but in its extensive and fine valleys all the commercial productions of China are met with except perhaps varnish. Its plantations of tea are extensive, and the greatest quantity of black tea is grown here. The inhabitants of this province are noted for their industry, and still more for their spirit of enterprise and their love of emigration. The capital is *Fu-tcheou-foo*, on the river Ming-ho, over which a bridge is built of 33 arches of fine white stone. The largest Chinese vessels can come up almost to the wall of the city, the maritime commerce of which is very considerable, and its population greater than that of Canton. *Tsuen-tcheou-foo*, between Fu-tcheou-foo and Amoy, is likewise a large town. A great number of vessels sail hence to the neighbouring countries. It has a bridge built over an arm of the sea on 300 piers of black stone. Here is also the harbour of AMOY.

11. Quang-tun, Kiang-tong, or Canton, extends over the whole southern coast from 117° E. long. to the very boundary of Cochin China, and is likewise mountainous, but its mountains are not so high as those in Fo-kian. It has a great number of fine and wide valleys, and the plain about Canton is of considerable extent: it produces all the commercial commodities of China except tea and varnish. It has several harbours, some of which may become of importance when China is really opened to Europeans and Americans. The capital of the province is CANTON. *Fochan*, lying about 20 miles south-west from Canton, is said to contain a population of 1,000,000, and to have numerous manufactures of silk, cotton, china-ware, and colours.

12. Quang-si, extending on both sides of the Ta-si-kiang, is covered with mountains; the valleys, which are generally narrow, occupy a small portion of its surface. The mountains belonging to the Nan-ling range, inclosing the northern side of the province, rise to a great height, and some summits above the perpetual snow-line. The forests on the declivities of the hills are extensive. Its productions are rice, silk, and timber, and it is supposed to contain gold and other metals. A mountainous district towards the northern boundary of this province is inhabited by the Tchang-Colas, an aboriginal and independent tribe, differing from the Chinese in language and manners. The capital of the province, *Kuei-ling-foo*, lies in a narrow but fine valley.

13. Kuei-tcheou, to the north of Quang-si, is one of the most mountainous provinces of China, being traversed in all its length by the highest portion of the Nan-ling range, several summits of which are always covered with snow. In these mountains live the Seng Miao-tsee, an aboriginal tribe, who differ in language and manners from the

Chinese, and often make war on them. Many fortresses have been erected in the narrow parts of the valleys to stop their incursions. The productions of the province are timber and metals, gold, silver, &c., but especially copper and quicksilver. The capital is *Kuei-yang-foo*, a comparatively small town, its circuit being little more than two miles.

14. Yun-nan, the most south-western province, bordering on Cochin China, Siam, and the Birman empire, forms an extensive but uneven table-land, studded here and there with high mountains, especially towards the north, where there are several snow-capped summits. The mountains towards the south, on the boundary-line of the Birman empire and Siam, are inhabited by a tribe of mountaineers called Lolos, or Lowas, who are only nominally dependent on the Chinese. Its commercial wealth consists of the produce of its mines, gold, silver, copper, &c.; and of its forests, which contain timber-trees and several kinds of rare wood. The capital, *Yun-nan-foo*, situated on the least mountainous part of the table-land, is a considerable place, and carries on an active trade with the Birman empire. A much-frequented road, running mostly on the banks of the Yang-tse-kiang, connects this town with the interior provinces of China; and another passes hence west to *Yang-tchang-foo*, another considerable town perhaps larger than Yun-nan. From this place the road continues to the Irawaddi River, and to Bhammo in the Birman empire. A considerable trade is carried on by this route. [BIRMA.]

15. Se-tchu-an, the largest of the provinces, is nearly everywhere inclosed by high mountain chains, and its interior is traversed by lower ranges. Its valleys are commonly wide, and often expand into plains. The soil is rich, and produces every kind of grain as well as rice and sugar in abundance; but its commercial riches consist principally of silk, timber, and different kinds of metals. Its capital, *Tching-too-foo*, situated on an island formed by the Min-kiang in an extensive and richly-cultivated plain, is a place of considerable trade, and very populous. *Koci-tcheou-foo*, on the banks of the Yang-tse-kiang, is one of the most commercial places in the interior of China, and very populous.

16. Shen-si is more covered with rugged mountains than Se-tchu-an, and contains a much smaller portion of cultivable land; yet the wide valleys through which the Hoai-ho and Han-kiang run are very fertile, and produce abundance of wheat, millet, and pulse, but little rice. The capital is *Si-ngan-foo* on the Hoai-ho, once the metropolis of the whole empire, a town so large that it is compared with Peking itself; it is strongly fortified, and carries on a considerable trade.

17. Shan-si is still more mountainous than Shen-si; it has one wide and fertile valley along the banks of the Fen-ho, or Fien-ho, which is well cultivated and studded with villages and towns. It exports wheat, millet, raisins, iron, and coal. The capital is *Tai-yuen-foo*, a large place, with considerable manufactures in silk and carpets, and some trade. *Tai-tong-foo* is one of the principal fortified places near the Great Wall.

18. Kan-si, the most north-western province of China, consists of the western portion of Shen-si, to which has been added a comparatively narrow tract of land which extends far westward to the centre of Asia. This tract has been added with the view of separating the warlike and wandering tribes which inhabit the table-lands to the north and west of China from one another, and of preventing their incursions into China. The eastern part of this province is studded with high and many snow-capped mountains, and the western part extends over the stony and sandy deserts of Central Asia; the whole is a poor country, and thinly inhabited. The capital is *Lan-tcheou*, a small place on the banks of the Hoang-ho, which however carries on a brisk trade with the tribes inhabiting the table-lands to the north and west of it.

To these eighteen provinces may be added the province of Leao-tong, or Mougden, which extends along the northern shores of the Hoang-hai, or Yellow Sea. It constituted formerly a part of Manchuria, but after the present dynasty had ascended the throne of China this portion was separated from it, and considered as the domain of the imperial family. It is divided from China by the eastern extremity of the Great Wall, and from Mongolia by a stockade of wooden piles which extends to the mountains which separate it from Corea. This country is covered with high mountains except on the banks of the Leao-ho, where there is a plain of considerable extent, and pretty well cultivated. Here is the capital, *Mougden* or *Mukden*, now called *Fung-thian-foo*, a place of moderate extent, in which are the tombs of the Manchow dynasty. Towards the boundary of Corea is *Fon-hoan*, traversed by the only road which connects Corea with China, and on which some trade is carried on.

Inhabitants.—In their physical characteristics, the Chinese have been recognised as superior to many other Asiatics. A finer shaped and more powerful race of men hardly exists than the coolies, or porters, of Canton; and as sailors, they are found stronger and more efficient than natives of India. Though the Chinese are allied to the Mongols in the general cast of their features, the harsher points of the Mongols are in the Chinese softened down considerably: in the thickness of the lips the Chinese in some degree approaches, but by no means equals, the Negro, nor is that feature at all so prominent; the nose is flattened, and the nostril expanded in the Chinese, but not to the same extent as in the African: there is the same lank, black, and shining hair in the case of the Chinese as in that of the North

American Indians; the same obliquity of the eyes and eyebrows, turned upwards at the outer extremities, and a corresponding thinness and tufty growth of beard. The Chinese too are distinguished by a nearly total absence of hair from the surface of the body. In the smallness of the hands and feet, and of the bones of the body, compared with Europeans, they resemble the generality of Asiatics. The features of the people in the South have perhaps less of the harsh angularity of the Tartar countenance than at Peking. Among those who are not exposed to the climate the complexion is fully as fair as that of the Portuguese; but the sun has a powerful effect on their skins. Up to the age of twenty, or a little more, they are often very good looking; but soon after that time the prominent cheek-bones generally give a harshness to the features as the roundness of youth wears off. With the progress of age the old men in most cases become very ugly, and the old women, if possible, still more so.

The moral character of the Chinese people is a compound of bad and good traits, which, as usual, may be traced to the influence of their political and social system. Industry, tranquillity, and content are unusually prevalent in the hulk of the population. Notwithstanding his power is absolute, the emperor himself always endeavours to prove that his conduct is based in reason and benevolence, the truth of the argument being of course a distinct affair. The advantageous features of their character, as mildness, docility, industry, peaceableness, subordination, and respect for the aged, are accompanied by the vices of insincerity and falsehood, with their consequences, mutual distrust and jealousy. Lying and deceit, being generally the refuge of the weak and timid, have always been held among us as disgraceful vices, while the Chinese, at any time, do not attach the same degree of disgrace to deceit, and least of all when it is practised towards a European. It would however be as unreasonable to infer the character of the whole nation from the unfavourable aspect in which it appears at Canton, a trading sea-port, as to form an estimate of our national character in England from an experience equally limited and disadvantageous.

Arts, &c.—Whatever may be the actual antiquity of the Chinese people, no doubt seems now to exist of their having been the authors of what are justly considered in Europe as three of the most important inventions or discoveries of modern times: the art of printing, the composition of gunpowder, and the magnetic compass. To these may be added two very remarkable manufactures, of which they were unquestionably the first inventors, those of silk and of porcelain. There cannot be the least doubt of the art of printing having been practised in China during the 10th century of our era. The precise mode in which they operate is certainly different from ours, but the main principle, that of multiplying and cheapening books, by saving the time and labour of transcription, is altogether the same. The invention of powder, as compounded of 'sulphur, saltpetre, and willow-charcoal,' is carried back by the Chinese to a very remote date; but its particular application to fire-arms seems to have been European. The Chinese name has no reference whatever to guns, and simply implies 'fire-drug,' which seems to show that the composition was applied by them merely to fire-works (in which they excel at present) and other harmless or useful purposes, long before their unwelcome spirit could have suggested the use of guns to themselves, or they could have borrowed the notion from Europe. With regard to the compass, the attractive power of the loadstone had been known to them from remote antiquity, but its property of communicating polarity to iron is for the first time explicitly noticed in a Chinese dictionary finished in A.D. 121. Under the head of 'Loadstone' appears this definition: "A stone with which a direction can be given to the needle." The same word (chin) is used by them to express the magnetic and the common working-needle, as among ourselves. Père Gaubil, in his 'History of the Tang Dynasty,' states that he found, in a work written one hundred years later than the above, the use of the compass distinctly recorded. It is curious to contrast inventions of such high utility and importance with the very small progress which the Chinese have made in the sciences, as astronomy, geography, and mathematics, for which they were not ashamed to be indebted to the European missionaries. With regard to the fine arts, or those which minister rather to the pleasures than to the wants of mankind, it becomes necessary to make some allowances for the peculiarities of national taste. The arts of drawing and painting do not rank so high among the Chinese as among ourselves in Europe, and having therefore met with less encouragement they may be expected to have made less progress. In drawings where perspective is not very strictly required, as in representations of birds, insects, fruits, and flowers, they are eminently successful, and nothing can exceed the splendour and variety of their colours. In regard to the Chinese music, their instruments are mostly tuned in unison, and they have little or no idea of accompaniment. They have certain characters to express the name of every note in their very limited scale, and these they use in writing down their airs. Their instruments are numerous, consisting of different species of lutes and guitars; flutes and other wind-instruments; a harmonious of wires, touched with two slender slips of bamboo; bells and pieces of sonorous metal; drums; and a sort of clarinet which emits as nearly as possible the tones of the Scottish bagpipe.

Literature and Language.—The antiquity of Chinese literature is

proportionate to that of their language, and has been of course greatly promoted and increased by the early invention of the art of printing, which they have now possessed for 900 years. Specimens of this literature in various departments have been afforded to Europe by the labours of Staunton, Davis, Morrison, Klaproth, and Rémusat, who followed up the earlier investigations of the Jesuits at Peking, and have enabled us to form a judgment regarding the merits of compositions which for a long period were considered to be inaccessible, from the difficulties of the language in which they were written. In legislation we possess a translation of the penal code of the empire; in politics and morals, the sacred books of Confucius and his followers; and in philology and belles-lettres we have a copious and well-executed dictionary of the language; several translations or abstracts of histories; the dramas of the 'Heir in Old Age,' the 'Sorrows of Hsü,' 'Le Cercle de Craie,' an elaborate treatise concerning their poetry; and the excellent novel or romance of the 'Fortunate Union.' The mastery which has thus been obtained of the language of China by several Europeans, among whom our own countrymen hold a conspicuous place, seems to prove that the rumoured difficulties attendant on its acquisition, from the alleged number and variety of the characters, are the mere exaggerations of ignorance. We may close this notice with giving some account of so singular and original a language from Davis's work on China.

It appears that the theory of a universal medium for the communication of ideas, as conceived by Bishop Wilkins, has been realised by the Chinese. While the letters of our alphabet are mere symbols of sounds, the Chinese characters or written words are symbols of ideas, and alike intelligible to the people of Cochln China, Japan, Loo-Choo, and Corea, with those of China itself; in the same way as the Arabic numerals are common to all Europe, while the sounds which they represent in one country would convey no meaning to the inhabitants of any other. It is in this manner too that the universality of the Chinese language extends only to the written character, and that the natives of the two extremities of the empire, who read the same books, and understand each other perfectly on paper, are all but mutually unintelligible in speech. The roots, or original characters of the Chinese, are only 214 in number, and might indeed be reduced to a much smaller amount by a little dissection and analysis. These are combined with each other to form other words, or express other ideas, very much in the same way that the individual Arabic numerals are combined to express the infinite varieties of numbers. By a species of analogy they may be called the alphabet of the language; with the difference that exists between an alphabet of ideas and an alphabet of sounds. These roots serve, like our alphabet, for the arrangement of the words in the large Chinese dictionary, a national work compiled by the most learned persons in the empire more than a century since, by order of the enlightened monarch K'ang-hy. Much consideration is attached by the Chinese to the graphic beauty of their written characters. The two most usual forms of their characters are the printed and the written, besides which there are the seal, or engraved form, and one or two others. The printed form (analogous to our Roman type) lays claim only to clearness and accuracy; but the written combines correctness with elegance. It may suffice to observe generally, that the grammar of the language is extremely limited. In the absence of all inflexion, of which their characters are utterly incapable, the relation of words to each other in a sentence can only be marked by their position. The verb, for instance, must always precede its object, and follow its agent. The cases of nouns and pronouns are determined by prepositions, as *tsung t'chien*, 'from heaven.' The collocation of words in a sentence must of course be a matter of more consequence in Chinese than in those languages where the relations of different words to each other are marked by the distinctions of number, gender, case, and person, as shown by declension and conjugation. The 'Notitia Linguæ Sinicæ' of the Jesuit Prémare is perhaps the best Chinese grammar ever written. Mr. Meadows's 'Desultory Notes on China' should also be consulted by the student.

Commerce, Manufactures, &c.—The character of the productions and trade of China has been noticed in our account of the several provinces; the foreign trade generally is noticed under CANTON, and will be further noticed under SHANG-HAI; and the English trade under HONO KONO. The principal article of export is tea, with which China supplies almost every part of the world. The total quantity annually exported now considerably exceeds, as already mentioned, 100 millions of pounds. Of this the quantity brought into Great Britain in 1853, was 70,735,532 lbs.; and about 10 millions of pounds went to the British colonies and East Indian presidencies. In the same year above 20 millions of pounds were exported to the United States; 7 millions to Russia, and 3 or 4 millions to all other countries. Raw silk-threads and silk piece-goods are the next most important articles of export. About 20,000 bales of raw silk are annually exported to England. The value of the silk-ware exported is about one-fourth that of the tea. Nankeens are exported somewhat largely to India. Sugar, sugar-candy, cassia, fancy-lacquered goods, articles made in ivory, mother-of-pearl, tortoise-shell &c., are also among the exports. The treasure reported is considerably more in amount than the value of the tea exported.

The imports of manufactured articles are comparatively small. Cotton and woollen goods, hardware, clocks, &c., are among the

leading articles. Raw materials meet with a much readier sale; of these raw cotton is by far the most important, the value of the cotton imported exceeding half the value of the tea exported; but the substance for which the demand has far outstripped that of all others is opium. For this drug all ranks and classes appear to have an engrossing and unappeasable desire, and its supply, notwithstanding the most determined efforts of the government to suppress its use, has become of the first commercial importance. The value of the opium imported into China by the English, exceeds that of the tea exported from the empire. It is to pay for the opium imported that the large amount of bullion is annually sent out of China. In 1852 treasure to the amount of 1,265,592*l.* was remitted through Hong Kong to India by the Peninsular and Oriental Company's steamers alone, to pay for opium brought from India, and sold to the Chinese along the coast. The import of opium, as already intimated, was until lately strictly prohibited, and it was in endeavouring to enforce the prohibition that the disastrous war with England was brought about. Since that war the importation has gone on steadily increasing, and the import was legalised by the emperor of China, for the purpose of revenue, on the 5th of January, 1853.

Large as is the foreign commerce of China, it is of very inferior importance to its internal trade. Even in tea, the great foreign staple, the home consumption is, if recent estimates are at all to be depended upon, upwards of twenty times that of the foreign market. But the real home staple commodities are rice and salt. Rice is in universal use among the vast population, and its culture, transit, and sale afford the means of support to an immense number of persons. Salt is a government monopoly; its production is on an enormous scale. The kinds used are rock-salt, that obtained from salt-springs, and that prepared in large square fields or salterns in marshes adjacent to the sea. Mr. Barrow counted in the vicinity of Tien-tsing 222 stacks or hills of salt, which he computed to contain 600 millions of pounds, besides which there were numerous other hills incomplete.

In manufactures, while adhering tenaciously to their old methods, the Chinese display remarkable skill and ingenuity. The superiority of their porcelain, a Chinese invention, was maintained for many centuries, and even now it can scarcely be said to be surpassed though it may be equalled in quality, however it may be in design and artistic embellishment, by that of Europe. Paper is another article of Chinese invention, and the fine silky Chinese paper is still preferred for some purposes of art to any European imitations of it. In metal the Chinese are also skilful workmen. Their silks and other textile manufactures are of excellent quality, though unable to compete in the market with the machine-made goods of Europe. In preparing lackered goods, ivory carvings, and other minutely finished fancy articles for the eastern market, they display the most admirable patience and ingenuity, however grotesque their productions often are as works of art. For almost all the ordinary domestic utensils, agricultural and mechanical implements, articles of wearing apparel, household furniture, and the various matters requisite for comfort or luxury, the Chinese are at present independent of foreign manufacturers. As European goods become better known they will doubtless become more generally adopted; at the same time it is highly probable that the Chinese mechanics, from their remarkable imitative talent and the readiness with which they acquire an insight into new methods of working, will soon be able to produce similar goods at such prices as will enable them to maintain their standing in the home market.

The weights, measures, and money of China are noticed under CANTON.

The history of the intercourse with England belongs essentially to the commerce of China, and not to its general history. We therefore give it here.

The first attempt of the English to open a trade with China was in 1596, when three ships, bearing letters from Queen Elizabeth, were freighted for that purpose, but they were lost on the voyage out; and no further attempt appears to have been made till 1637, when four merchant-ships from England arrived in Macao Roads. In a few days they sailed up to the Bocca Tigris, which is considered the mouth of the Canton River; but in the meantime the Portuguese, already established at Macao and trading with the Chinese, had misrepresented the purposes of the English, who, having communicated with the mandarins, were directed to wait, and told that their wishes should be attended to. A few days afterwards they were, without warning, fired upon from the fort. Incensed by this act of treachery, they sailed up the river as far as Canton, stormed the castle, and carried off the guns. A further communication then took place with the mandarins, who laid the blame on the Portuguese. Cargoes were supplied by the Chinese, and the guns were restored, and the English ships sailed quietly away. Little or no commercial intercourse took place for some years afterwards. The East India Company established by degrees small commercial agencies at Amoy, at Ning-po, and on the islands of Chusan and Formosa; but the trade, owing to the exactions of the mandarins, proved so troublesome and unprofitable, that the Company deemed it expedient to withdraw their agents from those places, and managed to establish a trade at Canton, which continued to advance but slowly and with many interruptions in consequence of the high duties and the

exactions to which it was subjected. Only one ship was sent to Canton in 1734, and during the whole of 1736 the total number of European ships which took in cargoes at Canton was only ten, of which four were English, two French, two Dutch, one Swedish, and one Danish.

The exactions and insulting assumption of superiority on the part of the Chinese authorities, as well as disputes with the French and Portuguese, led occasionally to outrage and tumult; but the trade at Canton continued to advance, till at length the attention of the British government was drawn to its growing importance, and in 1788 Lord Cathcart was appointed ambassador to China; he died however on his passage out, and the frigate in which he had sailed returned to England. In 1792 Lord Macartney sailed from England in a 64-gun ship as ambassador to the Chinese emperor at Peking, accompanied by Dr. Staunton, afterwards Sir George Staunton, as secretary of legation, chiefly in order to obtain leave to trade at Ning-po, Tien-tsing, Chusan, and other places besides Canton. The embassy was unsuccessful, and the emperor, in his communication to the king of England, stated that British commerce was to be limited to the port of Canton.

After the mission of Lord Macartney the general condition of the English at Canton was considerably improved; the conduct of the mandarins became less imperious; the exactions fewer and less annoying; and though some of the heaviest burdens on the trade still continued, the commercial progress of the English was tolerably quiet and rarely interrupted.

Interruptions however of some importance occurred in 1808, and again in 1814. In 1816 Lord Amherst was sent on an embassy, and though his mission was unsuccessful, it was followed by a longer interval of freedom from Chinese annoyance than had ever before been experienced. From 1816 to 1829 only a single stoppage of British trade took place, except a short interruption in 1822, arising out of an unprovoked attack by the Chinese on some of the crew of the *Topaze* frigate, who were taking in water at the island of Lintin.

The exclusive trade of the East India Company with China terminated in April 1834, and several private ships soon afterwards quitted Canton with cargoes of tea for the British Islands. The new Act empowered the British government to appoint three superintendents, with certain powers over the private traders, to reside at Canton, but the Chinese refused to receive them as the official notification did not assume the form of a petition, and Lord Napier, the chief superintendent, was ordered to withdraw from Canton to Macao. The order was not complied with; and in September the British trade was entirely suspended by direction of the viceroy, the residence of Lord Napier surrounded by soldiers, and his supplies of provisions cut off. His lordship then applied for the assistance of two British ships, the *Imogene* and *Andromache*, which sailed through the Bocca Tigris, silencing the batteries as they passed, and anchored at Whampoa. Negotiations were then entered into, but in vain; and in order no longer to interrupt the trade of the port, Lord Napier withdrew to Macao, where, on October 11 of the same year he died.

With the exception of a few disputes arising out of the smuggling transactions in opium, and the constantly-recurring inquiry that all applications to the Chinese officials should assume the character of a petition, matters went on much as usual till 1838, when fresh disturbances broke out in consequence of the smuggling of opium. Preparations were made on December 12th to strangle a Chinese opium-smuggler in the square immediately in front of the factories at Canton, which the Europeans resisted, and a riot and contest with the Chinese ensued. Captain Elliot, who had returned to Canton as superintendent, on the 18th published a notice, requiring all British-owned vessels trading in opium to leave the river within three days. The Chinese authorities however were not conciliated; on Feb. 26, 1839, a Chinese opium-smuggler was strangled in front of the factories, in spite of the opposition of the Europeans; in consequence of which all the foreign flags were struck, and remonstrances sent to the viceroy, to which no answer was returned.

On March 10, Lin Tsh Sew arrived at Canton as high commissioner from the Imperial court, and immediately commenced a series of measures which rendered a war between China and Great Britain unavoidable. In consequence of Captain Elliot's order (which in fact he had no authority to make or any power to enforce) the opium-vessels had left the river, but this was not enough for Commissioner Lin, who issued an order commanding all opium in British ships, whether in the Canton River or on the coast of China, to be given up to his officers that it might be destroyed. On the 19th the foreign residents were forbidden to leave China. Captain Elliot joined his countrymen in the factories, which were now surrounded by Chinese soldiers, and from which the means of subsistence were cut off: passports were refused; and the surrender of all the opium on board the ships was demanded of him. Under these circumstances of intimidation 20,283 chests were delivered to the officers of Commissioner Lin, and the burning and destruction commenced on June 3, and occupied 20 days. In July Captain Elliot having applied for a naval force, gave notice to the British merchants that all trade was to be suspended, and that tea, the produce of China, would not be admitted into the ports of Great Britain or India. In August the *Volage*

frigate arrived, and Canton was declared in a state of blockade. In October the *Hyacinth* joined the *Volage*, and the two frigates were attacked by twenty-nine war-junks, which were beaten off with great loss. In January 1840, an imperial edict directed all trade with Great Britain to cease for ever; the fortifications of Canton were repaired and strengthened; and repeated attacks were made on the British ships, which were constantly receiving additions, the command being taken by Rear-Admiral Elliot in the *Melville*, 74. A small force having been left in the Canton River to maintain the blockade, the fleet sailed northward along the coast of China. On July 2, 1840, a boat sent into Amoy from the *Blonde*, 44 guns, and bearing a flag of truce, was fired upon. The *Blonde* having poured in her broadsides with terrific effect on the batteries and war-junks, sailed away and rejoined the fleet. Ting-hai, the capital of the island of Chusan, was taken in July, after a slight resistance; and on July 10, in consequence of the refusal of the authorities at Ning-po to receive a letter from Lord Palmerston to be transmitted to the Emperor of China at Peking, a blockade was announced of the east coast of China, from Ning-po to the mouth of the Yang-tse-kiang, the most commercial part of the whole seaboard of China.

At the end of July 1840, the entire British force, including the squadron which had sailed to the north together with the fleet assembled in the Canton River, comprised three 74-gun ships, two of 44 guns, three of 28 guns, five of 20 guns, two of 18 guns, one of 10 guns, a large troop-ship, four armed steamers, and twenty-seven transports, having on board three regiments of soldiers, a body of Bengal volunteers, and a corps of Madras sappers and miners.

On the 11th of August, 1840, the Madagascar steamer, with Captain Elliot on board, entered the Peiho, which flows past Peking on the south and falls into the Gulf of Pe-tche-li, where the rest of the fleet arrived a few days afterwards. Lord Palmerston's communication was now received, and forwarded to the emperor at Peking, and a conference took place near the town of Tien-tsing between Captain Elliot and Keshen, the governor of the province. Some unavailing negotiations took place, until in consequence of the violation of the truce, the forts of Chuenpee and Tae-cok-tow were stormed and carried. These are the lowest forts in ascending the Canton River. On the same day the Chinese squadron of war-junks collected in Anson's Bay, under Admiral Kwan, was destroyed, and eighty guns taken. On the following morning, a boat bearing a flag of truce was sent off to the flag-ship by Admiral Kwan, with a communication to Captain Elliot. Negotiations again commenced, the fleet retired to Chuenpee, and on the 20th of January 1841, Captain Elliot announced that a treaty of peace had been concluded with Keshen, by which the island of Hong Kong was to be ceded to the British, six millions of dollars were to be paid as indemnity, and trade was to be resumed at Canton within ten days.

The forts at Chuenpee were then given up, and the British took formal possession of Hong Kong on January 26. No proclamation however was issued for opening the trade at Canton, and there were rumours of warlike preparations going on up the river. Captain Elliot waited till February 10; he then went up to Canton, and fresh negotiations commenced; but on the 20th Keshen published an edict which he had received from the emperor, rejecting the treaty concluded with the British, who then made immediate preparations for resuming hostilities. All the Bogue forts were taken, and their defenders killed or dispersed. The fleet proceeded up the river on February 27, and found other defences prepared a little below the island of Whampoa, consisting of mud forts, war-junks, and a great raft across the river, very solid and strongly constructed. All these defences were destroyed, and nothing remained but to attack Canton. Sir Hugh Gough arrived from Madras, and assumed the chief command of all the land forces.

On March 18 the forts and all the other defences of Canton were taken, the war-junks and armed boats all dispersed or destroyed, and the city lay at the mercy of the British. Nothing further was done on the 19th, and on the 20th a suspension of hostilities was agreed upon between Captain Elliot and the new imperial commissioner, Yang-Fang. Again a negotiation was entered into, but while it was carried on, a plot was laid for destroying the fleet. On the night of May 20, the sentries discovered several dark-looking masses dropping down the river; these proved to be fire-rafts, consisting of boats chained together in twos and threes so as to hang across the bows of a ship while the combustibles were burning. They were set on fire by those who had the charge of them, when the *Nemesis* and boats immediately dashed among them, and towed them out of the way of the ships. Many of them drifted on shore, and set fire to the suburbs of the town, while masses of fire were seen floating down the river on all sides.

On May 25 the heights which command the city of Canton were carried by the British troops, when a flag of truce was displayed, and on the 27th the Chinese authorities agreed to pay six millions of dollars for the ransom of the city. Hostilities were consequently suspended, five millions of dollars were paid, and security given for the other million. The British forces then withdrew from Canton; early in June all the ships of war and transports were again at Hong Kong, and in July the Canton trade was re-opened.

In August 1841, Sir Henry Pottinger arrived in Macao Roads, as

sole plenipotentiary and chief superintendent of trade in China. A large naval force was placed at his disposal, by which the large towns of Amoy, Ting-hai, Chin-hai, Ning-po, Shang-hai, and several other places were taken possession of; and in July 1842, a portion of the fleet ascended the Yang-tse-kiang in order to attack Nanking. At daylight on August 14 the attack was ordered to be made, which the commissioners were informed nothing could suspend except the production of a document bearing the emperor's signature, and authorising them to treat definitively of peace. After midnight, and just three hours before the attack was to have commenced, the required document was produced, a cessation of hostilities ensued, and on August 29, 1842, the treaty of peace was signed by Sir Henry Pottinger on the part of Great Britain, and by Keyiung, Elephoo, and Neukien, on the part of the Emperor of China. The emperor's entire assent to the treaty was received on September 15.

The most important provisions of the treaty of 1842 are as follows:—British subjects are allowed to reside at the ports of Canton, Amoy, Foo-chow, Ning-po, and Shang-hai, and a consul is to be appointed to reside at each of the five ports. The island of Hong Kong is ceded in perpetuity to Great Britain. The Emperor of China agrees to pay twenty-one millions of dollars. The company of Hong merchants are dissolved, and British merchants are permitted to carry on their mercantile transactions with any persons whatever. All British subjects, whether natives of Europe or India, who may be in confinement in any part of China, to be unconditionally released. Tables of tariff to be established at each of the five ports. Correspondence between the officers of both governments to be on terms of equality.

A supplementary treaty was signed at Hoomuu-chae, October 8, 1843, to which is attached the tariff of export and import duties which are to be paid at the five ports. The principal articles relate chiefly to commercial arrangements, to the arrest and punishment of offences committed by British and Chinese subjects, and to the stationing of a British cruiser at each of the five ports, for the enforcement of good order among the crews of the merchant vessels, and to support the authority of the British consuls. From this period the intercourse has always been peaceful and uninterrupted.

Government.—The government of China is in principle an absolute despotism, and the succession depends on the will and nomination of the reigning emperor. The authority of a father over his family is well known to be the exemplar or type of political rule in the country. It is the object of the first of the 'Four Books' of Confucius to inculcate that from the knowledge and government of oneself must proceed the proper economy and government of a family; and from the government of a family that of a province and of a kingdom. The emperor is called the father of the empire; the viceroy the father of the province over which he presides; and the mandarin, or magistrate, of the city which he governs; and the father of every family is the absolute ruler of his own household. "There is nothing more remarkable," observes Sir J. F. Davis, "in their ritual and in their criminal code than the exact parallel which is studiously kept up between the relations in which every person stands to his own parent and to the emperor. For similar offences against both he suffers similar punishments; and at the death of both he mourns the same time and goes the same period unshaven; and both possess nearly the same power over his person." The emperor is head of the state religion, and, as high-priest of the empire, can alone, with his immediate representatives, sacrifice in the government temples. No hierarchy is maintained at the public expense, nor any priesthood attached to the Confucian or state religion, as the sovereign and his great officers perform that part. The two separate religious orders of Fo (Buddha) and Taou, which are only tolerated and not maintained by the government, derive support entirely from their own funds, or from voluntary private contributions.

With respect to the machinery of civil government, the emperor's principal ministers form the 'interior council chamber,' and the chief counsellors are four in number, two Tartars and two Chinese; the former always taking precedence. Below these are a number of assessors, who form the chief council of state. The body whence these chief ministers are generally selected is the *Han-liu*, a sort of imperial college, or National Institute. The details of government business are distributed among six boards or tribunals, namely, 1. The board of civil appointment, which takes cognisance of the conduct and administration of all civil officers; 2. The board of revenues, which regulates all fiscal matters; 3. The board of rites and ceremonies; 4. The military board; 5. The supreme tribunal of criminal jurisdiction; 6. The board of public works. A very peculiar feature of the government is observable in the *Too-chi-yuen*, or office of censors, the members of which are generally styled *Yushe*. There are two presidents, a Tartar and a Chinese, and the members consist in all of about forty or fifty, several of whom are sent to various parts of the empire as Imperial Inspectors, or perhaps, more properly speaking, spies. By the ancient custom of the empire they are privileged to present any remonstrance to the sovereign without danger of losing their lives; but they are frequently degraded if their advice is unwelcome. The provinces are placed under the principal charge, either singly, of a Foo-yuen, or governor; or two provinces together are made subject to a *Taoung-to*, or general governor, who has a Foo-yuen under him for each single province. Canton and its adjoining

provinces are together subject to the Tsoong-to, commonly called by Europeans the Viceroy.

In each separate province there is a chief criminal judge and a treasurer, the latter having usually cognisance of civil suits, but his special business is the charge of the territorial revenue. With this he first of all defrays the civil and military expenses of his province, and whatever surplus remains is remitted by him to Peking. The subordinate cities and districts of each province in the three ranks of Foo, Chow, and Hien, are under the charge of their respective magistrates, who take their rank and titles from the cities they govern. The total number of civil magistrates throughout China is estimated at 14,000. At Canton the amount and importance of the European trade has given rise to the special appointment of the Haekuán, or commissioner of customs, called by Europeans Hoppo, who ranks as third in the province, but has no territorial jurisdiction beyond the trade. No individual in China can hold a magistracy in his own province; and each public officer is changed about once in three years, to prevent growing connexions with those under his government. A son, a brother, or any other very near relation, cannot hold office under a corresponding relative. The various degrees of civil and military offices are partly distinguished by the colour of the ball which they wear at the apex or point of their conical caps. These are red, light blue, dark blue, crystal, white-stone, and gilt. Each ball is accompanied by its corresponding badge, which is a piece of silk embroidery, about a foot square, with the representation of a bird, or other device, on the breast and back of the ceremonial habit; together with a collar or necklace of very large beads, down to the waist.

The whole amount of military throughout the empire, including the militia of each district, has been estimated at 700,000, of which the largest portion are fixed to their native districts, and cultivate the land, or follow some other pursuit. The whole are under the direction of the military tribunal, or board, at Peking. The trusty Tartar troops are ranged under the eight standards, each of them comprising 10,000 men, and making a total of 80,000 for a standing army. Very few mounted soldiers were seen by either of our embassies, and whatever may be their actual amount, they are said to be nearly all Tartars. A great difference seems to exist between the pay of Tartars and Chinese. One of the former, being a foot-soldier, receives about fivepence a day, with an allowance of rice; one of the latter only fourpence a day, without the rice. The principal arms of the cavalry are bows and arrows, the bow being of elastic wood and horn combined, with a string of silk. Their swords are generally ill made, and their matchlocks are considered by them as inferior weapons to the bow and arrow. Some are provided with shields, composed of rattans turned spirally round a centre. In the recent war with England it was made very evident that where there was (as often was the case with the Tartar troops) the greatest bravery, they were utterly inefficient against European soldiers.

The residence of the emperor and his court for some hundreds of years past has been removed from Nanking to Peking, a city whose population has been stated at double that of London; but various reasons conduce to render this altogether improbable. Notwithstanding the great extent of the area inclosed within its walls, there are so many open spaces of great extent, that it is difficult, taking the lowness of the one-storied buildings into consideration, to imagine how such an immense number can exist within its precincts. A large portion of the northern or Tartarian city is occupied by the inclosure which contains the palace and pleasure grounds of the emperor; the remainder is studded over at intervals with official or religious buildings, all of them surrounded by large open courts; and the Chinese city to the south has some very extensive spaces occupied by immensely-spreading public buildings, with grounds attached. There are besides large sheets of water, and gardens devoted to the growth of vegetables for the city. The streets of Canton and of most of the cities are extremely narrow, admitting only three or four foot passengers abreast; but the principal thoroughfares of Peking, connecting its different gates, are fully one hundred feet in width.

Revenues.—The revenues of China are derived principally from a land-tax, and the monopoly of salt, to which are to be added something for customs and transit-duties; and a considerable sum from the recently imposed duty on the importation of opium. At the Manchow conquest a capitation or poll-tax was imposed, but this was soon taken off again; and the second emperor of the dynasty ordained that the land-tax, which under the Chinese had been taken from the cultivators, should ever after be taken from the land-owners. The subject of the Chinese revenues seems never before to have been very clearly understood. From the produce of taxation in each province, the treasurer of that province deducts the civil and military expenses, and all outlays, whether for public works or otherwise, remitting the surplus to Peking either in money or kind. This surplus has been the only point clearly ascertained, and it has been very erroneously mistaken for the gross amount of the revenue. The difficulty of ascertaining the real expense that attends the administration of the empire arises from a considerable portion of the taxes being levied in commodities instead of money, as grain, salt, silks, and stores of different sorts. A portion of the allowances of public

servants, especially at Peking, as well as of the stipends of imperial relatives, is paid in the shape of rations and supplies. Du Halde states the total revenue of this empire, including the provinces, at "about 200 millions of tasis (or upwards of 60 millions sterling), of which only 12 millions sterling are transmitted to Peking;" and more recently obtained information appears to confirm his statement.

Laws.—We possess a translation of the Tartar-Chinese penal code, from Sir George Staunton, and this specimen of legislation presents a very advantageous comparison with other Asiatic systems. If we estimate Chinese legislation by its result, we shall find it (as Sir George Staunton observes) wholly inconsistent with the hypothesis of a very bad government, or a very vicious state of society. Mr. Ellis, who had long been in Persia and India, pronounced China "superior to the other countries of Asia, both in the art of government and the general aspect of society;" and adds, "that the laws are more generally known, and more equally administered; that those examples of oppression, accompanied with infliction of barbarous punishment, which offend the eyes and distress the feelings of the most hurried traveller in other Asiatic countries, are scarcely to be met with in China; that the proportion which the middling orders bear to the other classes of the community appeared to be considerable; that, compared with Turkey, Persia, and other parts of India, an impression was produced highly favourable to the comparative situation of the lower orders." It is a popular maxim with the Chinese, that to violate the law is the same crime in the emperor as in a subject. "This plainly intimates (observes Sir J. F. Davis) that there are certain sanctions which the people in general look upon as superior to the will of the sovereign himself: these are contained in their sacred books, whose principle is literally, 'salus populi suprema lex' and however much this principle may at times be violated under the pressure of a foreign Tartar dominion, it nevertheless continues to be recognised, and must doubtless exercise more or less influence on the conduct of the government."

History.—Without attempting to deny to the historical records of the Chinese empire a very high degree of antiquity, it is now pretty generally admitted, on the testimony of the most respectable native historians, that this point has been considerably exaggerated. The persons styled Fohy, Shin-noong, and their immediate successors, must be ranged rather under the head of mythology than of history; resembling those demi-gods and heroes of Grecian fable who rescued mankind from primeval barbarism. The fabulous part of Chinese history commences with Puán-koo, who is represented in a dress of leaves, and concerning whom everything is wild and obscure. He is said to have been followed by a number of persons with fanciful names, who in the style of the Hindoo chronology reigned for thousands of years until the appearance of Fohy, who is said to have invented the arts of music and numbers, and taught his subjects to live in a civilised state. At length came Yao and Shun, who are stated to have been the patterns of all Chinese emperors. To the age of Shun they refer their tradition of an extensive flooding of the lands, which by some has been identified with the Mosaic deluge. It was for his merit in draining the country, or drawing off the waters of the great inundation, in which he was employed eight years, that 'Yu the Great' was chosen by Shun for his successor. He commenced the period called Hea, upwards of 2100 years before Christ; and the whole of the long space of time included under Hea and Shang is full of the marvellous, until Woo-wong was called upon to depose a tyrannical emperor, the last of the Shang, about 1100 years before Christ. With him began the period of Chow, which may be considered as the commencement of authentic history, and during which Confucius himself lived. Though it might be going too far to condemn all that precedes that period as absolutely fabulous, it is still so much mixed up with fable as hardly to deserve the name of history.

The race of Chow filled the long period of 800 years, during which China appears to have been divided into a number of petty independent states engaged in perpetual disputes with each other. The king of Tsín had long been growing powerful at the expense of the other states; he fought against six nations, and at length compelled them all to acknowledge his authority. The chief government began now to assume the aspect of an empire which comprehended that half of modern China lying to the north of the great river Kiang, but which was doomed after this lapse of some centuries to be split again into several parts. The first emperor of the Tsín dynasty rendered himself famous by the erection of the Great Wall which has now stood for 2000 years, as well as by ordering all the books of the learned (including the writings of Confucius) to be cast into the flames.

About the year B.C. 201 the race of Tsín was succeeded by that of Hân, which filled one of the most celebrated periods of Chinese history. It was now that the Tartars became the cause of endless disquiet to their more civilised and peaceful neighbours, who were frequently obliged to buy them off with tribute. The period of the Jan-kuo, or 'Three States,' into which the country was divided towards the close of Hân, about A.D. 184, is a favourite subject of the historical plays and romances of the Chinese. The leader of one of these 'Three States' having at length obtained the sovereignty, established the

capital in his own country Honán, and commenced a new dynasty. In consequence of the distractions which had arisen from women and eunuchs interfering in affairs of government during the period of the 'Three States,' a kind of salique law was passed that "queens should not reign nor assist in public matters;" and accordingly we meet with no female sovereigns in their history.

On the conclusion of this race of monarchs in 416 China became divided into two principal kingdoms, Nanking being the capital of the southern one and Honán of the northern. For about 200 years afterwards five successive races (Woo-tae) rapidly followed each other, and the salutary rule of hereditary succession being constantly violated by the strongest, the whole history of the interval is a mere record of contests and crimes. At length in 585 the north and south of modern China were united for the first time in one empire, the capital of which was fixed at Honán. The last of the five contending races was soon after deposed by Ly-yuen, who in 622 founded the dynasty of Táng. There is reason to believe that certain Christians of the Nestorian Church first came to China about this time. It is recorded that foreigners arrived having fair hair and blue eyes. According to the Jesuits, whom Du Halde has quoted, a stone monument was found by them in Shen-si with the cross, an abstract of the Christian law, and the names of seventy-two preachers in Syriac characters bearing the date of 640. The dynasty of Táng was put an end to by a powerful leader in the year 897, and the whole country was thrown into a state of war and confusion, with several aspirants to the sovereignty. This period, which lasted about fifty-three years, is principally distinguished by the incursions of the Tartar people at the eastern extremity of the Great Wall, who being encouraged by the unsettled and divided state of the country gave great trouble by their inroads. After a succession of civil wars Tae-tsoo, the first emperor of the Soong dynasty, was raised to the throne by the military leaders, 950. The art of printing having been just previously invented (about 500 years before it was known to us), the multiplication of books became a principal cause of the literary character of the age of Soong. The Chinese however being much less warlike than learned, the eastern Tartars advanced apace; they took possession of a part of northern China, and threatened the whole country. They were destined soon to be checked, not by the Chinese, but by the Mongols, who inhabited the countries which extend from the north-western provinces of China to Tibet and Samarcand. They had already conquered India, and being now called in against the Kiu or Eastern Tartars, they soon subdued both them and the enervated Chinese, whom they had been invited to protect. The Mongols might be said to be masters of the northern part of modern China from the middle of the 13th century. Kublai Khan, finding himself possessed of the provinces bordering on the Wall with Peking for his capital, sent his army against the last sovereign of the Soong dynasty, then a child. Little or no resistance was offered to the Mongols, who exercised great cruelty on the vanquished. The remains of the Chinese court betook themselves to the sea near Canton, and perished with the emperor, 1281. Notwithstanding the great qualities of Kublai Khan, which were calculated to lay the foundation of a permanent dominion, his successors of the Yuan race, as they are called, by their rapid degeneracy caused the empire to pass out of the hands of the Mongol race in a little more than eighty years' time. Enervated by the climate and vices of the south they quickly lost the courage and hardihood which had put the country in possession of their ancestors; and Shun-ty, the ninth emperor in succession, was compelled to resign the empire to a Chinese. The new sovereign who commenced the native dynasty of Ming, 1366, selected Nanking as his capital, erecting Peking into a principality for one of his younger sons, Yoong-lo. When this prince succeeded as third emperor of his family the capital was finally transferred (1408) to Peking; a principal reason perhaps being the necessity of keeping in check the Eastern Tartars, who had been joined by some of the refugees among the expelled Mongols. From this union sprang the Manchows, who were destined at length to expel the Chinese dynasty and establish a permanent Tartar dominion. In the year 1618 Wan-lié, the thirteenth emperor of the Chinese dynasty, being on the throne, a war commenced with these Manchows; and the empire passed in 1644 to Shunchy, the first of the Ta-tsing race, of whom the seventh emperor is now reigning. Such is the brief summary of the principal revolutions in the history of this ancient empire, which for nearly two centuries past has been governed by a foreign race, who had the sagacity to adopt the political and social system of a nation which so greatly outnumbered themselves.

Within the last few years the long-continued quiet of the empire has been twice rudely disturbed; first by the war with England, of which we have already spoken, and since that by the insurrection which is still raging, and which threatens to overturn the reigning dynasty. Of the real nature of this rebellion we are at present in ignorance. Early in 1851 rumours were spread of a revolutionary movement having broken out in the southern province of Quang-si. At first it was little heeded; but when month after month passed away and it remained unrepressed, its progress attracted great attention, and the Imperial government watched the movement with much anxiety. The insurgents continued to increase in number and daring; while the Imperialists appeared to offer but a feeble resistance. Town after town fell into their hands, and in March 1852 they took the

important city of Nanking. In May of the following year the port-town of Amoy was taken, which has however been since re-taken. In September 1853 Shang-hai, the next commercial city to Canton, was captured. The insurgents have continued to gain ground, meeting in remarkably few instances with any decided reverse. By the latest intelligence received (in February, 1854) it appears that the main army is within 50 or 60 miles of Peking, and a very large part of China is more or less in the hands of the rebels. As we said before, it is difficult to arrive at any certain knowledge of the real character of the movement beyond that of its being intended to overthrow the reigning Manchow, and as it appears to restore the Ming dynasty. By many it is believed to have a religious origin, and to be mainly or equally directed to the overthrow of the existing state worship. There can be no doubt that a decidedly religious zeal of some kind pervades the camp of the insurgents, and that a good deal of religious mystory is thrown over the proceedings of the leaders. But that it is of a Christian and even Protestant character, as many affirm, it is very difficult to believe. The most probable explanation of the great success of the movement is that it was set a-going by certain secret societies, the existence of which has long been known to Europeans, and the branches and ramifications of which have been for many years past stretching throughout every part of the empire and gaining over members from all grades of Chin-se society. This will account both for the slight opposition offered by the Chinese authorities and the ready acquiescence of the general population; while the watchwords and religious solemnities of which so much has been said may be parts of the original system of the secret societies.

As before the arrival of the Europeans China was frequently divided into two or three states, the northern portion of it was called by the adjacent nations of Central Asia 'Cathay,' and under this name it became known to the Russians and Mongols, whilst the inhabitants of India called the southern part 'Chin,' under which name the Portuguese and other Europeans became acquainted with it. In the 17th century, and not before, it was ascertained that Cathay was China, and that the great tow of Cambalú was identical with Peking.

(Du Halde; Staunton; Lindsay; Ritter; Davis, *China*; Gutzlaff, *China Opened*; Hall, *Narrative of Voyages and Services of the 'Nemesis'*; Meadows, *Desultory Notes on the Government and People of China*; Fortune, *Tea Districts of China*; Callery and Yvan, *Insurrection in China*; *Parliamentary Papers*, &c.)

CHINCHAS, a group of three islands in the Bay of Pisco, on the coast of Peru, lie between 13° and 14° S. lat., 76° and 77° W. long. They are naturally bare rocks, without a sign of vegetation of any sort, but they have obtained great celebrity for the vast quantities of guano with which they are covered. The islands lie nearly north and south, and are separated by channels from one mile to two miles broad. In their general formation they are all alike. On the eastern side they present a perpendicular wall of rock, from the edge of which the guano slopes towards the centre of each island, where a pinnacle of rock rises above the surface; from this point there is a gentle slope to the western shore, the guano continuing to within a few feet of the water. Each of the islands is about two miles round; and each presents the appearance of a flattened cone, the rocky inequalities of the original surface having been filled up and covered with the guano, the cuttings of which vary in depth from a hundred feet to a few inches. Round the base of the islands little rocky peninsulas jut out, in which the washing of the sea has formed many caverns, the resort of sea-lions. Whales also are frequently seen gamboling about the islands. The middle island has been moderately worked, but the greatest quantity of guano has been taken from the north island: the south island is still untouched. The quantity of guano on the three islands has been estimated at 250 millions of tons. Guano is also found on the Battista Islands, and upon San Gallen Island, which lie immediately south of the Chinchas, but only in small quantities. It is also found on the Lobos Islands, off the north-west coast of Peru, and at various points along the coast of South America; but what is obtained from the Chiucha Islands is prized above all other deposits on account of its extreme dryness, as rain never falls upon these islands. The steepness of the cliffs that form the shore and the great depth of water (seven fathoms close in) afford great facilities for loading ships.

Guano was used as a manure in the time of the Incas, and the Spaniards learned its use from the Peruvians. The name is a corruption of the Spanish 'huano,' itself a corruption of the Peruvian 'huanu,' signifying excrement. The substance has been deposited in the course of ages by countless flocks of sea-birds—pelicans, gannets, mews, mutton-birds, divers, gulls, penguins, and others, which still frequent the islands, but not in such numbers as formerly, the great concourse of ships engaged in the guano traffic having driven many of them away. The guano deposits are regularly stratified, the lower strata are solidified by the weight of the upper, and are of a dark red colour, which becomes gradually lighter towards the surface. Under the sun-baked crust of the surface the birds scratch deep oblique holes, in which they lay their eggs, one or two in each hole, so that the upper layer of guano is completely honey-combed by the birds. In addition to the excrement of birds, guano contains decomposed egg-shells, and the bones and remains of fish brought by the old birds to their young.

A ship having taken in by her boats enough guano to ballast her

approaches to a point of the coast where the remainder of the cargo is shot down the cliff into the hold of the vessel. This is managed as follows:—A deep inclosure capable of containing four or five hundred tons of guano is formed on the top of the cliff with stakes firmly hound together by strong iron chains; it is made wide and open at the upper end, and gradually slopes down to a point on the extreme edge of the precipice, where a small opening is left fitted with a canvass shute or pipe, which extends down the rock to the deck of the ship. Through this shute the guano is poured in a continuous stream at the rate of about 350 tons a-day; three days are generally sufficient for loading the largest ship. The inclosure is filled during the night by Indians, who sleep or smoke all day. On the north island about 200 men, and on the middle about 80, usually reside, the numbers varying with the demand for guano. They are almost all Indians; they live in wretched huts, wear but little clothing, earn plenty of money, and seem happy in their way, though everything about them, food and all, is impregnated with guano.

The chief countries engaged in the guano traffic are Great Britain and the United States. The quantity imported into Great Britain in 1852 was 129,839 tons, which was much less than for some previous years. The privilege of loading vessels is obtained from the Peruvian government at a rate of about 4*l.* sterling per ton. There are frequently nearly 100 vessels waiting to load; and some Peruvian vessels of war are constantly stationed off the islands.

CHINGLEPUT, a tract of country forming part of the grants obtained by the East India Company in 1750 and 1763 from the Nabob of Arcot, and known in the annals of the Indian government as the Company's Jaghira. This tract is bounded N. by Nellore district; W. by the districts of northern and southern Arcot; S. by the southern division of Arcot; and E. by the Bay of Bengal; it therefore forms part of the province of the Carnatic, and is included in the presidency of Madras. The soil of the Chingleput district is generally bad; detached rocks of granite are continually met with in the fields, and interfere with the processes of cultivation. The district was invaded by Hyder Ali in 1763 and 1780; in the latter of these invasions the country was so ravaged that many parts were wholly depopulated. In 1794 the district was formed into a collectorate under Mr. Place, and a gradual improvement was effected. The principal towns in the district, Chingleput and Conjevanri, are described under CARNATIC.

CHIOS (Khio, Scio), an island in the *Ægean* Sea near the west coast of Asia Minor, opposite the peninsula on which Erythræ stood, and which now separates the gulfs of Smyrna and Scala Nuova. Chios lies at the entrance of the Gulf of Smyrna, and is separated from the mainland by a channel (the Strait of Scio) about 5 miles wide. Its greatest length from north to south is about 32 miles, and its greatest breadth, which is across its northern part, about 18 miles; but a little south of the central part of the island the breadth is only about 8 miles. The circuit is about 110 miles and the area 400 square miles. The island is mountainous, especially in the northern part, the principal summit of which, called Mount Pelinæus, consists of a long line of bare rocks. Strabo reckoned 400 stadia from the northern extremity of Chios to the nearest point of Lesbos, but the distance between the nearest points of the two islands does not exceed 30 miles. The point indicated by 38° 30' N. lat., 26° 0' E. long., is in the island of Chios.

The oldest settlers, according to tradition once current in the island, were Pelasgi from Thessaly. Chios was afterwards one of the twelve Ionian states; the population that settled there was not pure Ionian, but mixed. (Strab. 633; Herod. i. 142.) The dialect of the inhabitants is said by Herodotus to have been the same as that of the people of Erythræ. In the great sea-fight between the Ionian Greeks and the Persians off Miletus (B.C. 494), which resulted in the entire defeat of the Greeks, the people of Chios furnished 100 ships, and fought bravely. After the battle the Persians took possession of the island: the cities and temples were burnt, and all the handsome young females carried off. (Herod. vi. 3, 32.)

After the close of the Persian war, B.C. 480, the island passed successively under the dominions of the Athenians, the Macedonians, the Romans, and the Byzantines. The Genoese took it in 1346, and it was governed for a long time by the Genoese family of Giustiniani. Solyman the Great took it in 1566. In 1694 it was taken by the Venetians, but was soon after retaken by the Turks, by whom it was treated with especial favour, being allotted as a kind of dowry to the Sultana mother, who sent her officers to collect the mastic gum, which is collected in great abundance from the lentiscus in the south of the island, and which constitutes a valuable commodity, being much used at Constantinople, and especially by the ladies of the seraglio, for chewing. Under the protection of the Sultana, the people of Chios were safe from the vexations of the pashas and other arbitrary chiefs; they had their own magistrates, and lived in comparative freedom and security. The island accordingly prospered, and Tournefort and other travellers agree in representing it as a garden inhabited by a happy people. Its inhabitants amounted to more than 100,000, of whom nearly 30,000 lived at *Khio* (sometimes also called *Kastro*), the capital, a handsome town built in the Italian style, with a castle raised by the Genoese, on the east coast of the island. *Khio* is at the foot of Pelinæus, and occupies the site of the ancient town of Chios. It

had a college with 14 professors, in which between 400 and 500 youths of the various Greek islands received their education; a printing-office, and a good library. The establishment was supported by contributions of the Chiote merchants, many of whom were wealthy, and carried on an extensive commerce with Italy and other countries.

When the Greek insurrection broke out, the Chiotes, a peaceful race, and far from the theatre of war, remained quiet, until a party of turbulent Samiotes and other Greeks from Candia, half partisans, half pirates, landed upon the island in 1822, and excited or rather obliged the people to join the insurrection. The sequel is well known. The capitan pasha came with a large force, the Samiotes escaped by sea, the poor Chiotes made hardly any resistance, but were slaughtered by thousands, their wives and children were carried away and sold as slaves, and the town of Khio was hurst. In the town and the villages of the island in 1823 there were only about 15,000 Greeks, who had escaped from the slaughter and had returned under the assurance of protection of the new pasha.

The island is recovering from this terrible chastisement. It is naturally one of the most beautiful of the Greek islands; its surface presents varied and charming scenery; and its products are abundant and valuable, comprising besides mastic, wine of excellent quality, silk, wool, figs, lemons, oranges and other fruits, and cheese. The corn grown on the island does not suffice for the consumption. There is a marble quarry near the town of Khio.

The principal towns of the island in ancient times were Chios, Delphinium, Bolissus, Phana, which had a good port and a temple of Apollo, and Leuconium. Cardamyle, where the Athenians landed to attack the people of Chios (Thucyd. viii. 24), is now Khardamli, on the north-east coast of the island. Ion, the dramatic writer, the historian Theopompus, and the sophist Theocritus, were natives of this island. Chios was one of the places that claimed to be the birth-place of Homer, and the natives still show a spot on the north coast which they call Homer's School.

CHIPPENHAM, Wiltshire, a municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish and hundred of Chippenham and northern division of the county, is built principally in a valley on the left bank of the Bristol or North Wilts Avon, in 51° 27' N. lat., 2° 6' W. long.; distant 10 miles N.W. by N. from Devizes, 94 miles W. by S. from London by road, and 93½ miles by the Great Western railway. The population of the municipal borough of Chippenham in 1851 was 1707; that of the parliamentary borough was 6283. The borough is governed by four aldermen and twelve councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a vicarage, with the rectory of Tytherton Lucas annexed, in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Chippenham Poor-Law Union contains 29 parishes and townships, with an area of 56,371 acres, and a population in 1851 of 21,407.

Chippenham received its first charter of incorporation from Queen Mary, but there can be little doubt that it was an important town prior to the Conquest. The taking of the town by the Danes about the year 880 is said to have been the cause of the retreat of Alfred the Great to the Isle of Athelney in Somersetshire. The name of the town occurs several times in Anglo-Saxon history, and is thought to have been derived from the Saxon term for market; the market at this place was from a very early period an important one. Chippenham sent representatives to Parliament as early as the time of Edward I. At Chippenham the Avon is crossed by a handsome stone bridge of 21 arches, which has been widened and improved, and is kept in repair and lighted with gas, from the proceeds of landed property given to the borough by Queen Mary on its incorporation. Near the stone bridge is a wooden bridge for foot passengers only. The town consists chiefly of one street, more than half a mile in length, which runs eastward from the bridge, and forms a part of the coach road. The streets are well paved and are lighted with gas. In the High-street the houses are generally built of freestone or of brick. The market-house, in the High-street, erected by Joseph Neeld, Esq., one of the members for the borough, is a spacious and handsome structure; it has been recently greatly enlarged at the expense of Mr. Neeld. In the upper part of it is the new hall, a commodious room used for public meetings. The parish church, a venerable gothic structure, is in the centre of the town; it is partly of the decorated and partly of the perpendicular style. It has been recently repewed. The Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship. The Free school in Chippenham is for the education of twelve poor boys, and is managed by the charity trustees. There are National and British schools, and a literary and scientific institution.

From its position on a leading high road, and the importance of its fairs and markets, Chippenham has generally secured a good share of traffic. The river Avon is not navigable till it reaches the city of Bath, but a branch of the Wilts and Berks Canal is brought to Chippenham, and by it a considerable trade is still carried on, chiefly in coals. A branch line of railway connects Chippenham with the neighbouring towns of Melksham, Trowbridge, and Westbury. Broad-cloths and kerseymeres were at one time woven to a great extent in Chippenham, but the general introduction of superior and costly

machinery into this branch of manufacture has quite changed the character of the trade throughout the West of England. The quality of the fabric however still maintains its reputation. A small silk manufactory, a tan-yard, a corn-mill, two iron-foundries, and several brick-fields and malt-houses give considerable employment. The weekly market at Chippenham is held on Friday. There is a monthly market for cattle and cheese. There are four hiring markets for servants; several wool fairs; and an annual cattle show in December. The cheese markets and cattle shows are among the most extensive in the west of England. Four annual fairs are held May 17th, June 22nd, October 29th, and December 11th for the sale of cattle, sheep, and horses. Chippenham possesses a savings bank. A county court and petty sessions are held in the town.

Some mineral springs have been found in the vicinity of Chippenham. The ancient abbey of Stanley and Lacock are within three miles of Chippenham; the former has been converted into a farm-house, but the latter has been preserved, and is now the family seat of the Talbot. The ancient forest of Chippenham and Pewsham has been long disafforested.

(Hoare, *Wiltshire*; Britton, *Wiltshire*; Correspondent at Chippenham.)

CHIPPING NORTON, Oxfordshire, a municipal borough, market-town, and the seat of a Poor-Law Union, in the parish of Chipping Norton and hundred of Chadlington, is situated near the head of the river Evenlode, in 51° 56' N. lat., 1° 33' W. long., distant 19½ miles N.W. from Oxford, 73 miles N.W. by W. from London. The population of the borough in 1851 was 2932. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a vicarage with the curacy of Over Norton attached, in the archdeaconry and diocese of Oxford. Chipping Norton Poor-Law Union contains 33 parishes and townships, with an area of 75,071 acres, and a population in 1851 of 17,338.

Chipping Norton is a town of considerable antiquity, but it possesses little historical interest. It is situated on elevated ground. The town is lighted by gas. The principal street, which is in the higher part of the town, is the most modern, and contains the best houses. The parish church, a large and beautiful gothic edifice, consists of a nave, which has an old carved oak roof, side aisles, and a chancel. At the west end is an embattled tower. There are places of worship for Methodists, Baptists, and Quakers. The Free Grammar school, founded in 1547, has an income from endowment of about 17l. a year with a house, and had 49 scholars in 1850, of whom 4 were free. There are National and British schools. A new town-hall has been recently erected. The manufacture of woollen goods is carried on. Druggets, horse-cloths, and a stout cloth for trousers are made. Worsteds shawls are woven in large quantities. Chipping Norton market is an important one for agricultural produce. The market-day is Wednesday. There are nine fairs or great markets for cattle in the course of the year. A county court is held. To the north of the church is the elevated site of the keep of the old castle.

(Communication from *Chipping Norton*.)

CHIPPING SODBURY, Gloucestershire, a market-town and the seat of a Poor-Law Union, in the parish of Chipping Sodbury and hundred of Grumbald's Ash, is situated in 51° 32' N. lat., 2° 23' W. long.; distant 27 miles S.S.W. from Gloucester, and 108 miles W. from London by road; Yate station, on the Bristol and Gloucester line, which is one mile and a half from Chipping Sodbury, is 123½ miles from London by the Great Western railway. The population of the parish of Chipping Sodbury in 1851 was 1195. The town is governed by a bailiff and 12 burgesses. The living is a perpetual curacy in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Chipping Sodbury Poor-Law Union contains 23 parishes and townships, with an area of 61,398 acres, and a population in 1851 of 18,523.

The manor of Chipping Sodbury was given by William the Conqueror to one of his relatives. The borough had a charter in the time of Charles I. The town, which is situated at the foot of a hill, consists of several streets; the principal street, which is on the high road, is wide and handsome. It was paved a few years back, the cost being defrayed by the inhabitants. The front of the town-hall has been recently rebuilt by the corporation. The church, an ancient and commodious edifice, has a lofty tower. The Baptists, Quakers, and Roman Catholics have places of worship. The town possesses an Endowed Grammar school and a National school; also some valuable charities. The population is chiefly agricultural. Smelting is carried on. In the neighbourhood are lime-kilns, stone-quarries, and coal-pits. The market-day is Thursday. There is a large monthly market for cheese, cattle, corn, &c. Fairs are held on May 23rd and June 24th. On a range of hills about three miles from Chipping Sodbury are the remains of a Roman encampment. Immediately contiguous to the camp is Little Sodbury Manor House, distinguished as the place in which Tyndale commenced his translation of the New Testament.

(Communication from *Chipping Sodbury*.)

CHIRK. [DENBIGHSHIRE.]

CHIRNSIDE. [BERKSHIRE.]

CHISLEHURST. [KENT.]

CHISWICK. [MIDDLESEX.]

CHITTAGONG, a district in the south-east part of the province of Bengal, bounded N. by Tipperah district, E. by the Birman empire, S. by the province of Aracan, and W. by the Bay of Bengal. This district lies between 21° and 23° N. lat., and between 91° and 93° E. long.; its length from north to south is about 120 miles, and its greatest breadth 50 miles, but the eastern boundary has not been accurately defined, and the average breadth is supposed to be not greater than 25 miles. The country is watered by numerous streams, half of which flow towards the Bay of Bengal, and the rest into the Irawaddi. The most considerable of these streams is the Kamaphuli, or Chittagong River, which at its mouth forms a secure harbour, but so embayed, that during the continuance of the south-west monsoon it is generally difficult for vessels to put to sea. The channel of this river at the capital, Islamabad, is about a mile broad; but a little higher up its width does not exceed 200 yards, although the tide continues to flow strongly up the river. The source of this river is in Ava, whence it flows south-west to the district of Chittagong, which it enters by the Mugh Mountains, where many waterfalls occur. In the valley of the Kamaphuli are some rich tracts of land, cultivated by Bengalees, which yield plantains, ginger, betel-leaf, sugar-cane, cotton, indigo, and tobacco. Between the hills are several well-watered plains and valleys, of small extent, which are cultivated partly by Hindoos of Bengal, and partly by Mughs of Aracan, who migrated into the district upon the conquest of their country by the Birmanes in 1783. The majority of the Mughs who thus settled in Chittagong are traders and mechanics, only a small proportion having become cultivators. Exclusive of the Mugh settlers, the inhabitants of Chittagong do not exceed a million. The Mohammedan inhabitants exceed the Hindoos in number in the proportion of three to two.

CHOASPES, or KIRKHAM RIVER. [BAHDAD, PASHALIC OF.]

CHOCZIM, or KHOTIN. [BESSARABIA.]

CHOLLET. [MAINE-ET-LOIRE.]

CHOLULA, a town in Mexico, in the state of Puebla, stands in 19° 2' 6" N. lat., 98° 15' W. long. It is situated on the table-land of Anahuac, at an elevation of 6912 feet above the level of the sea. Cholula is a considerable place, being inhabited by 16,000 souls, but its manufacturing industry is limited to the fabrication of coarse cotton goods. In the country about it are numerous and extensive plantations of maguay, from which plant the natives extract the beverage called pulque. Close to the town stands the largest of the Mexican teocalli, or pyramids. [AMERICA, *Antiquities*, vol. I. col. 309.] The platform on its top has an area of somewhat more than 50,000 square feet, and in the midst of it is built a church, dedicated to Nuestra Señora de los Remedios, in which mass is read every morning by a priest of the Indian race. The prospect from this platform over the adjacent plain, as far as the great mountain masses of Popocatepetl and Pico de Orizaba is very grand and striking. At the time of the invasion of Cortez, Cholula had 20,000 houses, and in the suburbs were as many. Above 400 towers of temples rose above the town.

CHORGES. [ALPES, HAUTES.]

CHORLEY, Lancashire, a market-town and the seat of a Poor-Law Union, in the parish of Chorley and hundred of Leyland, is situated in 53° 39' N. lat., 2° 37' W. long.; distant 32 miles S. by E. from Lancaster, 208 miles N.W. by N. from London by road, and 211 miles by the North-Western railway, and the Manchester and Preston branch of the Lancashire and Yorkshire railway. The population of the town of Chorley in 1851 was 8907. The government of the town is vested in a constable and visiting magistrates. The living is a rectory in the archdeaconry and diocese of Manchester. Chorley Poor-Law Union contains 26 parishes and townships, with an area of 37,903 acres, and a population in 1851 of 37,701.

Chorley is situated on a hill in the centre of the county, on the great west road from London to the North, near the course of a small stream called the Chor. Chorley was erected into an independent parish in 1793. The parish church is an ancient structure, supposed to be of Norman origin. The tower, which is embattled and has pinnacles, is a later erection. St. George's church, an elegant modern structure, built by the parliamentary commissioners, was opened in 1825. The Independents, Wesleyan and Primitive Methodists, Baptists, Unitarians, and Roman Catholics have places of worship. The Grammar school, adjoining to the churchyard, has an income from endowment of 10l. 15s. a year, and had 32 scholars in 1851. There are National and Infant schools, Independent, Methodist, and Roman Catholic day schools; a dispensary, and a savings bank. Six almshouses, built in 1692, are for aged women and widows.

Chorley is a thriving manufacturing town: its streets are tolerably well laid out, lighted with gas, and supplied with water. The chief articles of manufacture are calicoes, muslins, and ginghams. Cotton-factories, print-works, weaving-sheds, bleaching-works, a paper-mill, coal-mines, stone-quarries, and a patent brick and draining-tile manufactory afford employment to many of the inhabitants. Four miles from Chorley, lead and carbonate of barytes are found. The Leeds and Liverpool Canal, and the Lancashire and Yorkshire railway afford facilities for the carriage of goods. A county court is held in Chorley. The town-hall is a neat stone building, erected in 1802, at the cost of the late John Hollinshed, Esq. The under part of the building

is used as a market-house. The market-day is Tuesday. Fairs are held on March 26th and May 5th for horned cattle; on October 21st for horses, and on September 4th, 5th, and 6th for woollen-cloth, hardware, and pedlery. In the vicinity is a mineral spa, with various descriptions of baths. The grounds are laid out as gardens and public walks.

(Robinson, *Description of the Parish of Chorley; Communication from Chorley.*)

CHORLTON. [MANCHESTER.]

CHOUMLA. [SHUMLA.]

CHOWBENT. [LANCASHIRE.]

CHRISTCHURCH, Hampshire, a market-town, parliamentary borough, sea-port, and the seat of a Poor-Law Union, in the parish and hundred of Christchurch, and the western division of the county, is situated within the angle formed by the confluence of the rivers Avon and Stour, in 50° 44' N. lat., 1° 45' W. long., distant 24 miles S.W. by W. from Southampton, and 101 miles S.W. from London by road. Christchurch-road station on the Southampton and Dorchester branch of the South-Western railway, which is 7 miles from Christchurch, is 100 miles from London. The population of the old borough of Christchurch in 1851 was 1877, that of the parliamentary borough was 7475. The borough is governed by a mayor and burgesses, but the judicial affairs are in the hands of the county magistrates. Christchurch returns one member to the Imperial Parliament. The living is a vicarage with the curacy of Holdenhurst annexed, in the archdeaconry and diocese of Winchester. Christchurch Poor-Law Union contains three parishes and townships, with an area of 35,988 acres, and a population in 1851 of 8477.

The name of the borough, properly Christchurch Twyneham, is derived from a church and priory founded here by the West Saxons in the reign of Edward the Confessor. The priory was refounded and the church built in the reign of William Rufus, by Flambard, bishop of Durham. Henry VIII. assigned the church of the priory to the inhabitants of Christchurch for their parish church. It is a very spacious and remarkable edifice, having much the character of a cathedral. It consists of a nave with aisles, choir with aisle, and a lady chapel, transepts with chapel attached, a massive square tower at the western end, and a capacious northern porch-house. The extreme length of the church is 311 feet; the nave is 118 feet long, with the aisles 58 feet wide, and to the summit of vaulting 53 feet high; the tower is 120 feet high. The nave is of Norman date and style, with a clerestory of early decorated; the choir is perpendicular. The nave has a double row of massive Norman pillars, which support semicircular arches with the characteristic Norman carvings. In the chancel is a magnificent stone altar-screen, having the genealogy of Christ elaborately sculptured upon it. The most interesting of the mortuary chapels attached to the church is that erected during her life by Margaret Plantagenet, countess of Salisbury, who was beheaded by order of Henry VIII. in 1541. It is an exceedingly good specimen of the florid perpendicular style, with a richly carved roof of fan tracery. Among the many monuments in the church is one to Viscountess Fitzharris, by Flaxman; there is also one by Chantry. At various times during the present century the church has been repaired, and to a great extent restored. Of the other priory buildings the only portion left is the lodge a little to the south of the church. The Independent chapel is a spacious building, and has attached to it extensive school-rooms. The Wesleyan Methodists have a new and commodious chapel. In Christchurch are a Free Grammar school, National, British, and Infant schools, and several endowed charities. A county court is held monthly.

The principal manufacture in Christchurch is that of fuzec chains for watches and clocks. The making of these chains employs about 500 persons, chiefly women and children; the chains are supplied to the watch and clock-makers of London, Birmingham, and Liverpool. The salmon fishery is prosecuted to some extent in the rivers Avon and Stour. A shifting sand-bar prevents the approach of vessels drawing more than six feet of water, and these can only enter at high tide. At Christchurch harbour high water occurs twice every tide. Good anchorage in six fathoms water is found in the bay, east of the harbour, about two miles from the town. Some fragments of the keep and other parts of the castle are still standing close to the north side of the churchyard. Roman and British remains have been found in and near the town. On the site of the ancient priory is a house which in 1817 was the temporary residence of Louis Philippe, the late king of the French. Near Christchurch is the remarkable promontory of Hengistbury Head.

(Ferrey and Brayley, *Antiquities of the Priory of Christchurch; Communication from Christchurch.*)

CHRISTIANIA, the capital of Norway, is situated in 59° 55' N. lat., 10° 50' E. long., at the northern extremity of the Christiania Fjord [AGGERHUUS], into which the river Agger falls close to the town. In 1810 the population hardly reached 10,000; in 1826 it was 20,581; in 1845 it was 31,703. Except towards the bay the town is inclosed by high hills and mountains, which on the north are about five miles distant, but on the other sides approach much nearer the town. The streets are wide, straight, and well paved; the pavement however inclines from each side to the centre of the street, which is thus converted into a common sewer. The houses have rarely more

than two stories; most of them are built of bricks, and very few of them have any pretensions to architectural beauty. The best street is that leading to the new palace, which is finely situated—its chief merit above the mean-looking old palace in the centre of the town. Christiania has four suburbs, which in parts are not paved. Among the public edifices are the new palace already mentioned, the Storting hall, or legislative palace, the military academy, and the cathedral; but the churches generally have no architectural interest whatever. Norway, by its union with Sweden, obtained an independent legislative government, which has its seat in this town. The university, which was founded in 1811, and for which a new building has been recently erected, is attended by about 800 students. It possesses a library of 130,000 volumes, astronomical and magnetic observatories, a botanic garden, a museum, a picture gallery, and other institutions. The sum of 33,000 dollars is annually allowed for its maintenance. The museum of the university contains collections in zoology, mineralogy, &c., and a variety of northern antiquities, consisting of gold and silver ornaments; rude bronze idols; weapons in flint, bronze, silver, and gold, &c. Like the universities of Germany it is rather a school for public officers than intended to form men of science and learning; some of the lectures are intended as a preparatory course for young men who are designed to be practical miners. There are besides a military academy and several other schools, an art-union, two theatres, a national bank and exchange, military and lunatic asylums, a Freemasons' hall (a large structure in which there is a ball-room capable of containing 1000 persons), and also a society for promoting the prosperity of the country. Manufacturing industry has not made much progress; the chief products are woollen cloth, iron utensils, tobacco, paper, &c.; cotton factories and iron works however are on the increase. There are several distilleries and breweries, and the town has an extensive trade in deals, planks, wood, fish, and other northern produce. In one of its suburbs, called Opslo, alum is made to a considerable extent.

The castle of Aggerhuus is situated on an eminence to the south of the town; its ramparts, which command the town and the entrance to the harbour, are laid out in walks. In the castle are preserved the regalia of Norway and the national archives. On the western side of the keep two brass guns, splendidly decorated with bas-reliefs, are mounted; they were cast in 1620, and are said to have been taken during the Thirty Years' war by the Swedes, from whom they were subsequently captured by the Norwegians. The castle it is said was built in 1302; it was last besieged by Charles XII. in 1716. Part of it is used as a prison for galley-slaves.

In the environs are the hotuatical gardens, situated about a mile from the town on the Trondhjem road, tastefully laid out, and exceedingly rich in arctic plants, both native and exotic; the cemetery; and near it the Columus of Liberty, erected to commemorate the commencement of the Norwegian constitution, April 11, 1814. Splendid views of the town and bay of Christiania from the Frognerasen, a hill 1500 feet high, and from the opposite hill of Egeberg, which rises about 400 feet above the old town of Opslo.

Opslo was founded in 1058 by King Harald Haardrade, and rose to be the third city in Norway. Upon the union of Norway with Denmark, Opslo became the capital of the former. Christopher III. and Christian II. were crowned in Opslo in the cathedral of St. Halvard, which also witnessed the marriage of James I. to Anne of Denmark in 1589. With the exception of the bishop's palace and a few houses, Opslo was entirely destroyed by fire in 1624. The new city then built was named Christiania after Christian IV., who happened at the time to be in Norway.

Steamers ply regularly between Christiania and Copenhagen, Kiel, Christiansand, &c. A railway is in course of construction from Christiania to Lake Mjosen, which will open up some of the most fertile parts of Norway. In the open season the town of Christiania is said to have the healthiest and most equable climate in Europe: the mean summer temperature is 60° Fahr.; in winter the average temperature is 23° Fahr.

(Forbes, *Norway and its Glaciers*: Edinburgh, 1853.)

CHRISTIANSAND, a province of Norway, comprehends the most southern part of that kingdom, and extends from Cape Lindesnaes (the Naze), or from 58° to a little north of 60° N. lat. It is comprised between 5° and 10° E. long. Its length from south to north is 150 miles, and its average breadth is about 100 miles. The area is about 14,100 square miles; the population amounts to about 250,000.

Cape Lindesnaes is considered as the southern extremity of the Norrska Fjellen mountain chain, which traverses Norway from south to north as far as 62° N. lat., and then turns east-north-east till it joins the Kiölen range at 63° N. lat. This range begins with Cape Lindesnaes, but does not attain the perpetual snow-line south of 59°; so that those parts of it which are called Heck Field and Bygle do not rise 4000 feet above the sea, which in this parallel is the line of perpetual congelation. But north of 59°, the Iocle Field, Hougle Field, Gute Field, and Hardanger Field rise somewhat above it. The highest summit of the Hougle Field is 4668 feet. The highest mountain however, the Gousta Fell, is not in the principal range, but east of it: the elevation of this mountain is 5535 feet above the sea. From these mountain masses, which occupy more than half its surface, the province slopes gradually towards the sea, forming everywhere a rocky,

bold, and frequently a high shore, which on the east and south is slightly indented, but on the west forms a bay of considerable extent, the Bukke Fiord. Two of its branches run many miles into the mountains, and terminate at the foot of the high range. The northern and larger is called Narstrand Fiord, and the southern Lyse Fiord. The latter may be considered as separating the mountains from the hilly country which extends southward to Cape Lindesnae.

The north-eastern part of Christiansand, about the Gousta Fell, is a very high country, called Tellemarken, and inhabited by a poor but hardy and enterprising race of men. The numerous clefts are filled with water, which rushes down in rapids and cataracts with incredible velocity. The waterfall of the Rinkan Foss is 450 feet high. These waters nuite in three streams, which fall into the lake of Nord Soeu, from which issues a powerful and rapid stream, the Skeen-Elf, or Brevig-Elf. The southern districts of the province are mostly wide and fertile valleys, with a warmer climate than could be expected in such a high latitude. Agriculture is duly attended to in the low grounds, and the hills are covered with forests of oak, pine, fir, and birch. These forests are the principal wealth of the country; they supply materials for the building of the numerous boats employed in fishing, and are also an article of export in the shape of planks and deals. The fishery is not important, except that of lobsters, which are perhaps nowhere found in such immense numbers as along the southern coast between Helleund (east of Christiansand), and Lister Fiord (north-west of Lindesnae). The London market is supplied with lobsters principally from these fisheries. The chief rivers are the Nid-Elf, which runs about 80 miles, and the Torridals-Elf, which has a length of about 100 miles; both are too rapid to be navigated. The sea along the south and the south-east coast is dotted with innumerable rocks and islets.

Besides the capital, CHRISTIANSAND, which forms the subject of the next article, the following places may be noticed:—*Arendal*, north-east of Christiansand, is a small hut pretty town built on rocks projecting into the channel formed by the Tronnuö and other islands near the mouth of the Nid-Elf. Its streets are formed partly by wooden bridges and partly by canals. Its harbour, which is safe but not large, is formed by the island of Troumöö; ships lie close to the houses, so great is the depth of water. The church is built of wood. A broad quay, facing the south-east, runs along the principal street. Deals and planks are exported, and in its neighbourhood some iron-mines are worked. There are tobacco factories, distilleries, and ship-building yards. The population, which consists chiefly of traders and fishermen, is about 3500. *Flekkeford*, on the west coast near the head of Lal Fiord, has 3000 inhabitants and a considerable trade. The harbour is good, but the channel of the Lal Fiord is narrow. *Mandal*, between Christiansand and Cape Lindesnae, at the mouth of the Mandals-Elf, has a safe harbour, to which vessels resort when damaged in the dangerous navigation of this sea. It exports salmon, both salt and dried, and has about 3000 inhabitants. *Stavanger*, on an arm of the Bukke Fiord, called the Tunge Fiord, has a spacious and safe harbour, and about 8000 inhabitants, who are chiefly supported by the herring fishery. The annual take of herrings for curing averages 300,000 barrels. The town, which is one of the most ancient in Norway, is built on a large promontory which commands fine views of the fiord with its numerous islands and bays and the mountains on the mainland to eastward. Stavanger gave title to a bishop before the foundation of Christiansand; it still retains its cathedral, which, with the exception of that of Trondhjem, is the finest specimen of gothic architecture in Norway. The harbour of Stavanger is well sheltered by an island in front of the town. Steamers between Christiansand and the north-west coast of Norway put into Stavanger.

The province is divided into the bailiwicks of Nedenais, Mandals, and Stavanger, which respectively comprise the eastern, southern, and western districts.

CHRISTIANSAND, capital of the stift or province of Christiansand in Norway, and the residence of the stift-amtmand (high bailiff of the province) and of a bishop, is situated on the Topdals Fiord on the northern coast of the Skagerack, opposite to the peninsula of Jutland, in 55° 10' N. lat., 5° 20' E. long., and has about 12,000 inhabitants. It stands on an extensive bay, where the Torridals-Elf enters the sea; its harbour is safe, and affords a secure shelter for vessels that navigate the Baltic along this rocky coast. The town, which was founded in 1641 by Christian IV., has long broad streets laid out with the utmost regularity, and covered in the middle with deep sand. The houses, though chiefly of wood, are very neat and pleasant, and separated from one another by gardens. The cathedral is built of gray stone, and in architectural pretensions ranks next to those of Trondhjem and Stavanger. There is a branch national bank and a grammar school in the town. The town and the entrance of the harbour are defended by a fortress erected on the Isle of Odderö. The principal branch of industry is ship-building, this place being situated in the only district of Norway where oak grows, and hence most of the vessels belonging to the merchants of Christiania and Drammen are built here. It exports lobsters, logs, and deals to England. Lobster fishing affords occupation to numbers of the population. Steamers ply regularly to Christiania and Trondhjem. In the graveyard of Oddernoës church, which is a little north of the town, and

is reached by a handsome bridge thrown across the river, are several ancient tombstones; among others one marked with a Runic inscription is supposed to be above 800 years old. About three miles above the town the Torridals-Elf makes a fine fall, called Ilefoss.

CHRISTIANSTAD, a fortified town in South Sweden, in 56° 1' N. lat., 14° 5' E. long., is the capital of Christianstads Län. [SWEDEN.] It is built on a peninsula in the Helge Lake, which is formed by the river Helge An, and has a population of 4500. The streets are straight and wide, and the houses mostly built of wood. The harbour of the town is *Ahus*, a small place about 10 miles from it at the mouth of the river Helge An in the Baltic. The town was founded by Christian IV. of Denmark. A canal was begun in order to form a convenient water-communication with the harbour, but as its commerce was, and is still, very limited, this work has gone to decay. Some woolen and linen goods are made here, and good gloves. It has been recently proposed to lay down a railway through Christianstad from the Skelder Wik, an inlet of the Kattegat on the west of the Län to Ahus, in order to relieve the commerce of South Sweden from the Sound dues.

CHRISTIANSTAD. [TRONDHJEM.] CHRISTOPHER'S, ST., or ST. KITT'S, one of the Caribbean Islands, was discovered in November 1493, by Columbus, who was so delighted with its appearance that he gave it his own Christian name. At this time it was well peopled by the Caribs, by whom it was called Lianniga, or the Fertile Island. It was never colonised by the Spaniards, but was the first of the British settlements in the West Indies. A party under Mr. Thomas Warner took possession of it in 1623, and four years afterwards it was shared with some French settlers. After various severe contentions the island was wholly ceded to the English, in whose possession it remained till 1782, when it was taken by the French, but restored at the peace of 1783. In 1805 it was again ravaged by the French, who however did not retain possession. St. Kitt's contains about 44,000 acres, nearly half of which is unfit for cultivation. The other part is almost entirely occupied with plantations of sugar-cane, leaving only a small portion for cotton, indigo, pasturage, and provisions. The centre of the island is occupied by rugged barren mountains, which contain some hot springs. The highest point, called Mount Misery, 3711 feet above the sea, is an exhausted volcano, the crater of which is still apparent. The soil of the plain is chiefly a dark gray loam. The island is divided into nine parishes, and contains four towns—BASSETERRZ, the capital, Sandy Point, Old Road, and Deep Bay. St. Kitt's is governed by a lieutenant-governor, and sends 10 members to the House of Assembly of the Leeward Islands, at Antigua, of which government it forms a part. The revenue in 1851 amounted to 19,665*l.* 5*s.* 2*d.*, the expenditure to 14,672*l.* 7*s.* 6*d.* The year 1851 was considered a very prosperous year in consequence of the abundance of the harvest. The sugar exported in 1851 amounted to 7270 hogsheads, being 2562 hogsheads more than was exported in 1850. The value of the imports for 1851 was 112,748*l.* 3*s.* 2*d.*, being an increase over those of 1850 of 20,229*l.* 10*s.* 6*d.* The climate, though hot, is considered healthy, but the island is subject to violent hurricanes. It lies north-west and south-east, 17 miles in length and 6 miles in breadth, and is separated from Nevis by a strait only a mile and a half wide. The plantations in the island are almost all in the hands of non-resident cultivators, a system which is found to be prejudicial both to the interests of the proprietors and the prosperity of the island. The education of the people is conducted by the Established Church, the Wesleyan Methodists, and the Moravians. In 1851 the attendance of children at Church schools was 796, at Wesleyan schools 850, at Moravian schools 835. (*Parliamentary Papers.*)

CHRUDIM, a town in Bohemia, 62 miles E.S.E. from Prague, stands on the right bank of the Chrudinka, a feeder of the Elbe, and not far from the Parlubitz station on the Prague and Vienna railway, in 48° 46' N. lat., 15° 50' E. long., and has above 6000 inhabitants. It is well built, surrounded with walls, and contains a magnificent collegiate church, a capuchin convent, and a high school. The city is a royal appanage, and has its own civil court. The time of the foundation of Chrudim is not known, but it is certain that it was reckoned one of the Bohemian towns in the year 1055.

CHUDLEIGH, Devonshire, a market-town in the parish of Chudleigh and hundred of Exminster, is situated on the road from Exeter to Plymouth, a short distance from the left bank of the river Teign, in 50° 36' N. lat., 3° 36' W. long.; distant 9 miles S. by W. from Exeter, and 184 miles S.W. from London by road. Starcross station of the South Devon railway, which is about 5 miles from Chudleigh, is 202 miles from London. The population of the parish of Chudleigh in 1851 was 2401. The living is a vicarage in the archdeaconry and diocese of Exeter.

The manor of Chudleigh formerly belonged to the bishops of Exeter, who had a palace here. In the time of Edward VI. the manor was alienated; it is now the property of Lord Clifford. The town, which is situated in the midst of much picturesque scenery, consists chiefly of the main street. The houses are rather irregularly built. In 1808 a fire consumed the greater part of the town, the damage having been estimated at 60,000*l.*; a subscription for relief of the poorer sufferers, and to assist in re-building the houses, amounted to

upwards of 20,000. There are four large corn-mills and a tan-yard. Cider is extensively made in the district. The Kingsteignton Canal, 4 miles in length, constructed at the cost of Lord Clifford, and opened in 1843, has been of considerable advantage to the town. The parish church was dedicated by Bishop Bronescombe on the 6th of November 1259; it consists of a chancel, nave, south aisle, north transept, and a tower, in which are six bells, a clock and obimes. The church has been recently restored. The Wesleyan Methodists and Independents have places of worship. There are British and National schools. Pynsent's Free school, founded in 1669, has an income from endowment of 30*l.* a year, and had 33 scholars in 1851; one of the number was a free scholar. A literary society has a library and reading-room. Saturday is the market-day. Fairs are held on Easter Tuesday, on the third Tuesday and Wednesday in June, and on October 2nd, chiefly for cattle. A plot of ground called the Play Park is appropriated as a public pleasure ground. Ugbrooke Park, the seat of Lord Clifford, within half a mile of Chudleigh, is much visited in summer on account of its extensive and picturesque grounds. In the park, which is well wooded, are upwards of 500 head of deer. Chudleigh Rock and its remarkable and capacious cavern are objects of great interest to visitors. From the summit of the rock is obtained an extensive and beautiful prospect. The blue limestone, known as Chudleigh marble, is quarried here in considerable quantities.

(Polwhele, *Devonshire; Route Book of Devon; Handbook of Devon; Communication from Chudleigh.*)

CHUMLEIGH. [DEVONSHIRE.]

CHUNDOWSY. [BAREILLY.]

CHUQUISACA, the capital of Bolivia, in South America, is situated near 19° S. lat., and between 64° and 65° W. long. It stands on a table-land about 9000 feet above the sea-level, between the Pilecomayo and the Guapai, and therefore near the watershed of the La Plata and the Amazonas. The town, which was formerly called *Charcas*, is well built, and has a magnificent cathedral, with large towers rising from each angle. "The towers that rise," says Temple, "over each angle of the cathedral, and the domes and steeples of the numerous churches and convents, give the city an appearance of splendour and extent from a distance; within it is a neat cheerful town." The population is about 26,000. The city was founded by one of Pizarro's officers, on the site of an old Peruvian town called 'Choque Chaka,' or Bridge of Gold, the treasures of the Incas having passed through it on their way to Cuzco. It formerly gave title to an archbishop, whose palace is now the residence of the president of the republic. Among the other public buildings worthy of notice are the Hall of Congress, in which the legislature of the republic meets; the University, established in a former monastery; the College of Arts and Sciences and the Mining School, both established in 1826. The climate of Chuquisaca is delightful, owing no doubt in great part to its elevated site. (General Miller; Temple, *French in Peru, &c.*)

CHUR. [COIRE.]

CHURCH, STATES OF THE. [PAPAL STATES.]

CHURCH-STRETTON, Shropshire, a small market-town and the seat of a Poor-Law Union, in the parish of Church-Stretton and hundred of Munslow, is situated in 52° 32' N. lat., 2° 47' W. long.; distant 13 miles S. by W. from Shrewsbury, and 155 miles N.W. by W. from London by road. The population of the township of Church-Stretton in 1851 was 1676. The living is a rectory in the archdeaconry of Salop and diocese of Hereford. Church-Stretton Poor-Law Union contains 14 parishes and townships, with an area of 44,733 acres, and a population in 1851 of 6210. Church-Stretton is situated on the turnpike road from Ludlow to Shrewsbury, in a narrow valley, bounded S.E. by the Caradoc Hills, the highest of which is 1200 feet above the sea, and W. by the Long Mynd, a range of hills 1674 feet high in the most elevated part. The parish church is a cruciform building with a central tower. Some of the inhabitants are employed in the manufacture of flannel and of coarse linen cloth for packing wool and hops. Sheep are reared in considerable numbers on the hills, and their wool forms an important article in the trade of the town. The situation of the town is healthy, and the soil is good. The market-day is Thursday. Fairs are held on March 10th, May 14th, July 3rd, September 25th, and on the last Thursday in November. On the summit of Caradoc Hill are some remains of an ancient encampment; and in the neighbourhood is an insulated hill, with entrenchments on its summit, called Brocard's Castle.

CHURCHTOWN. [CORK.]

CHUSAN, or as Lord Macartney writes it, the Cheusan Islands, are a group of islands on the eastern coast of China, and forming an appendage to the province of Che-kiang. Their number is very great, and they are dispersed over that part of the sea where 30° N. lat. cuts 121° E. long. Staunton states that between the Queen's Islands and Chusan Harbour, through a space of about 60 miles in length and 30 miles in width, the number of islands exceeds 300; but others, apparently not less numerous, lie north of Chusan Island. These numerous islands contain almost as many harbours or places of perfect security for ships of any burden. Most of the islands consist of hills rising with a regular slope and rounded at the top. Though mostly close to each other they are divided by channels of great depth. Some of them have a very inviting aspect, and one of them in par-

ticular, called Poo-too, is described as a perfect paradise. It belongs to a sect of religious men, and contains 400 temples. The principal island, which gives its name to the group, is about 30 miles long, and varies in width from 6 to 8 miles. The surface is diversified by pleasant heights and well-cultivated valleys. The chief harbour is on the southern coast towards the Chinese continent, and only a few miles distant from Kee-to Point, the most eastern cape of China. It is formed by three small islands, which lie about a mile from Chusan, and has four entrances; but these entrances are so completely shut in by the remoter points, that the harbour looks like a lake surrounded by hills, and it has excellent anchorage for vessels. About a mile from this harbour is the capital of the island, Ting-ghae. The intervening space is a plain intersected with rivulets and canals, and cultivated like a garden. The road which traverses it though good is very narrow, in order that as little land as possible may be lost to cultivation. The town is inclosed by walls 30 feet high, which overtop the houses. Along the walls at the distance of every hundred yards are square stone towers. The town is in some degree surrounded as well as intersected by canals, and the bridges thrown over them are steep and ascended by steps, like the Rialto of Venice. The streets, which are narrow, are paved with square flat stones. The houses are low and mostly of one story. The numerous shops contain chiefly articles of clothing, food, and furniture, which are arranged in good taste. Numerous towns and villages are scattered over the island. The productions of the island include rice, wheat, sweet potatoes, chestnuts, walnuts, and tobacco. Tea, silk, and cotton are also produced to some extent. The mean temperature in winter is about 41° Fahr.; in autumn it is about 68°.

The Chusan Islands are of great importance to China in a commercial view, especially for its intercourse with Japan. This commerce is chiefly carried on by the three commercial towns of Ning-po, Hang-tcheou, and Shang-hai, which are situated on the continent opposite to the islands. The junks, by which this commerce is carried on, assemble at the Chusan Islands, and depart thence for Nangasaki. The islands are of importance, as protecting the commerce from the Strait of Formosa on the south, to the peninsula of Shang-tong on the north. If a foreign nation or a piratical chief should get possession of them the whole coast above mentioned would be at their mercy, and the maritime intercourse would be interrupted. In 1840, in consequence of disputes between the British and Chinese governments respecting some commercial transactions at Canton, a British force was sent to the Chusan Islands, which captured them after a slight resistance. The Chinese government then became more disposed to yield, and after some negotiations a truce was agreed upon near Tientsing, between the Chinese imperial commissioner and the British plenipotentiaries, who left Chusan for Cantou on the 15th of November 1840. On the 24th of February 1841 the British troops were compelled to abandon the Chusan Islands on account of their unhealthiness. The Chinese refusing to fulfil the conditions of the treaty of Tientsing, the Chusan Islands were again captured in 1842, after a vigorous defence, and the British army advanced towards Nanking. Upon this the peace of 1842 was agreed to, by which Chusan was restored to the Chinese, and the island of Hong Kong ceded to the British in perpetuity. [CHINA; HONG KONG.]

CILICIA, an ancient division of Asia Minor, was bounded N. by the Taurus, which separated it from Cappadocia and Lycaonia; S. by the Mediterranean Sea; E. by the Amanus range, which separated it from Syria; and W. by Pamphylia. According to Herodotus (v. 52), the Euphrates was the boundary of Cilicia and Armenia. Cilicia anciently comprised two divisions, the names of which were derived from their physical character. The western and mountainous part was called the Rough Cilicia (*Τραχεία*), and the eastern part the Plain Cilicia (*Πεδία, campestris*). Many attempts have been made by ancient and modern writers to account for the name Cilicia; the Greeks derived it from Cilix, son of Agenor, who was said to have colonised this country. (Herod. vii. 91.) The inhabitants were formerly called Hypachæi, according to Herodotus (vii. 91). Level Cilicia is described by Xenophon as a large, beautiful, well-watered plain, abounding in all kinds of forest-trees and vines. It yielded sesame, panic, saffron, millet, wheat, and barley, which with rice, sugar, and cotton are still cultivated there. The date-palm is indigenous. Mountainous Cilicia was famous for a fine breed of horses; and the annual tribute of the Cilicians to Darius consisted of 360 white horses and 500 talents of silver. (Herod. iii. 90.) It also contained much timber, and cedar especially was abundant there.

The first town in Mountainous Cilicia on leaving Pamphylia was Coracesium, according to Strabo (pp. 667, *d.*, 670, *a.*, Casaubon). The modern name is Alaya; it is a strong natural fortress situated on a high and almost insulated rock. Coracesium held out against Antiochus. (Livy, xxxiii. 20; Beaufort's 'Karamania'.)

The next town of importance was Selinus, situated on a steep hill. The emperor Trajan died there, and the town was afterwards called Trajanopolis: the modern name is Selinty. Cape Anemurium (now Anamour) is the most southern point of Asia Minor; and probably from this circumstance derived its name, which means 'windy point.' The small town and port of Celenderis (now Chelindreh) lies between Anemurium and Selucia, the modern Selefkeh. The ruins of the

ancient Seloucia are many miles from the shore, on the west side of the river Calycadnus (Gök-Su), which now at any rate flows into the sea a few miles east of Cape Zephyrium. (Beaufort, p. 226.) A coast-range separates the valley of the Gök-Su (the most extensive level in Mountainous Cilicia) from the sea; on the north it is screened by the Taurus. The general course of the river is eastward to Selefkeh, below which it enters the sea. The shore presents a line of noble promontories and white marble cliffs rising perpendicularly from the sea. This rocky character diminishes a few miles west of Selefkeh, where the highlands begin to recede from the coast. Many rare kinds of animals and birds are found on the coast, and almost every district is said to have some peculiar to itself. (Beaufort, p. 209.) In the time of Cicero, Cilicia was famous for panthers.

There is no town of much importance between Selefkeh and the river Latnius (now Lamas), which was the boundary of Mountainous Cilicia. (Strabo, p. 671, c.) Here the rocks and cliffs cease, and are succeeded by a gravelly beach and broad plains, which extend to the mountains. The plain of Cilicia was drained by three large rivers—the Cydnus (now the river of Tersus); the Sarus (now the Sihuu); and the Pyramus (now the Jihuu)—all of which were navigable to a considerable distance from the sea, but small boats can now with difficulty cross the bars formed by alluvial deposits at their mouths. The Cydnus passes through the celebrated Cilician Gates. The Sarus at Adana is above 300 feet wide. Adana or Adanah is still a place of some trade; it gives name to a pashalic, and is surrounded by a fertile tract of well-cultivated gardens. The Jihuu is 490 feet wide half a mile above its mouth; on its eastern bank, and near its mouth, in ancient times stood Mallus. The river breaks through the Taurus by a frightful chasm well described by Strabo (p. 536); in its lower course it now divides into several arms, and forms a delta. [ANATOLIA.] The principal towns in Level Cilicia were Soli, Tarsus or Tarsi, and Issus or Iesi. (Xenoph. 'Anab.' i. 2, 23, 26.) Soli was afterwards called Pompeiopolis, because Pompey settled the remains of the pirates there. This town was the birthplace of Chryseippus and of the poets Philemon and Aratus. (Strabo, p. 671, d.)

Tarsus, anciently one of the most celebrated cities in Asia Minor, still bears a respectable rank: its modern name is Tersooa. Tarsus was the birthplace of the apostle Paul, and a school for the study of philosophy and the arts. It stood in a plain on the banks of the Cydnus. The water of the Cydnus, as of the other rivers along this coast which carry down the melted snow from the ridges of Taurus, is extremely cold; injudicious bathing in it proved fatal to Frederick Barbarossa, and nearly so to Alexander the Great. The Cydnus has undergone a great change from the deposits carried down from the mountains: formerly it received large ships of war; now none but the smallest boats can enter it. (Beaufort, p. 265.) Issus was situated in the eastern part of the plain of Cilicia, at the head of the Issic Gulf, or Gulf of Scanderoon: here Alexander defeated Darius u.c. 333. The Pyramus, between Tarsus and the plain of Issus, has brought down such a quantity of sand and earth that the river has been diverted twenty-three miles from its ancient course: in Strabo's time the Pyramus entered the sea a little to the east of Cape Megarus (Karadash); now the mouth is not much west of Aegæe (Ayas). Strabo (book xii. p. 536, a) says that it passes under ground for a great distance, and bursts forth again through a cleft of Mount Taurus: he was well aware of the immense deposits which were brought down by the stream. Cilicia included the level strip of land along the eastern shore of the Issic Gulf. [AMANUS.]

The origin of the Cilicians is uncertain; they were probably a Phœnician colony. (Herod. vii. 91.) Their character in historical periods did not stand very high, and in this respect they were commonly classed with the Cappadocians. They were the only nation within the Itals except the Lycians whom Croesus did not reduce. (Herod. i. 23.) Our earliest information represents them as governed by kings; and when Cilicia became one of the Persian satrapies it evidently continued to be governed by native kings, subject of course to the Persian empire. The name of one of the Cilician kings, Syennesis, is familiar to the reader of Xenophon's 'Anabasis' (i. 2), and he was not the first of his name. Herodotus (i. 74) mentions one as contemporary with Alyattes; and Æschylus ('Pers.' 323, Diudorf) has immortalised the bravery of another who joined Xerxes in his expedition against Greece.

Cilicia became a Macedonian province on the downfall of the Persian empire; Seleucus and his descendants, after the death of Alexander, held the sovereignty till Pompey reduced the level country to a Roman province. Cicero was pro-consul of Cilicia a.u.c. 702; and for his success against those who had fortified themselves in the mountains, and had held out against his predecessor Appius Claudius Pulcher, he was rewarded on his return with a triumph. Till the reign of Vespasian Mountainous Cilicia appears to have been governed by kings who were appointed by the Romans, but after that time it became a province. (Strabo, xiv. pp. 668-676, Casaub.; and Beaufort's 'Karamanli'.)

CINCINNATI, a city, the capital of Hamilton county, in the state of Ohio, is situated on the right bank of the Ohio River, and 20 miles above the mouth of the Great Miami River, in 39° 6' N. lat., 84° 27' W. long.; distant 404 miles from the mouth of the Ohio, and 1447 miles N.E. by N. from New Orleans. The popula-

tion in 1800 was 750; in 1810 it was 2540; in 1830 it was 24,831; in 1840 it was 46,838; in 1850 it had increased to 115,436.

Cincinnati is the largest inland city in the United States, and with respect to the cities of the Union generally, ranks sixth in point of population. It is governed by a mayor, recorder, and municipal town council. It has a separate judiciary, and a commercial court to try causes arising between merchants. The city stands in a beautiful valley about 12 miles in circumference, which is surrounded by hills, and is divided into two nearly equal parts by the river Ohio. The first settlement took place here in December 1788. In laying out the divisions of land appropriated to individuals, one square mile in each township was reserved for school purposes, and one section in each for the support of religious societies. The city was incorporated in 1819. The streets are regularly laid out, and cross each other at right angles, except where they approach the river side. The city is built partly on the first bank of the river, which is about 48 feet above low water-mark, and partly on the second bank, which has a further elevation of about 60 feet. The streets which run east and west from the river are called First, Second, Third streets, &c., according to their order in the series; the streets which run north and south are called Walnut-street, Sycamore-street, &c., after the forest-trees of the district. The streets are in general well paved. The public buildings, many of which are of considerable elegance, include several public halls, the county and city courts, a mercantile exchange, an observatory, a museum, four theatres, and numerous buildings belonging to literary and philosophical institutions. There are in the city about 80 churches, of which a considerable number are spacious and handsome edifices; there are also 3 colleges, 4 medical schools, a law school, a college and several educational seminaries for females, 6 classical schools, and numerous public schools. Cincinnati is the seat of extensive and varied manufactures, including machines of different kinds, carriages, waggons, cutlery, edge-tools, mathematical and optical instruments, pottery, hats, &c. There are numerous foundries, iron rolling-mills, tan-yards, breweries, distilleries, flour-mills, saw-mills, glass-works, ice-packing establishments, soap and candle works, steamboat building-yards, stereotype foundries, wine manufactories, tobacco factories, &c.

The navigation of the Ohio and the numerous canals and railways which communicate with the city afford Cincinnati valuable opportunities of cultivating commercial intercourse with other cities and states in the Union. Its position on the Ohio renders it also an important centre of traffic, which in its further development must add rapidly to the wealth and importance of the city. The Miami Canal and the Ohio division of the Wabash and Erie Canal, form a line of communication about 251 miles in length between the Ohio and Lake Erie. The Little Miami railway to Cleveland traverses a distance of 255 miles; the Cincinnati, Hamilton, and Dayton railway, with its connected railway to Sandusky, 218 miles; and numerous other lines, completed or in progress, render Cincinnati the centre of the railway system of the Western States. There is communication by electric telegraph between this city and every large city from Maine to Florida, and from the Atlantic to beyond the Mississippi. The traffic on the river is carried on chiefly by steamers, plying to Pittsburg and New Orleans. The number of steam-vessels which arrived in the port during the year ending August 31st 1850 was 3698; the departures were 3298. The amount of shipping owned in the Cincinnati district in 1850 was 17,181 tons, all of which except vessels amounting to 275 tons burden were navigated by steam power. There are upwards of 50 newspapers and periodicals published in Cincinnati, of which 8 are published daily. Near the city are two beautiful suburban villages, Mount Auburn and Walnut Hills, occupying elevated sites, and chiefly used as places of residence by Cincinnati merchants. The New School Presbyterians have an important theological institution at Walnut Hills, called the Lane Seminary, from the name of its earliest benefactors, who were merchants in New Orleans. There are numerous vineyards in the neighbourhood of the city.

(Cotton, *Statistical Gazetteer of the United States of America*, 1853.)

CINCO VILLAS. [ARAGON.]

CINTRA. [ESTREMADURA, PORTUGUESE.]

CLOTAT, LA. [BOUCHES-DU-RHÔNE.]

CIRCARS, NORTHERN, a large maritime province, lying between 15° and 20° N. lat., and between 80° and 86° E. long., extends along the western side of the Bay of Bengal, from the Chilka Lake on the north to the river Gondegama on the south. It has thus the district of Cuttack for its northern, and the Carnatic province for its southern boundary; on the east it has the Bay of Bengal, along a line of coast extending 470 miles; and on the west are Orissa, Gaudwana, the dominions of the Raja of Berar and of the Nizam, and the ceded Balaghaut districts. The average breadth of the province is about 80 miles, and its area about 33,000 square miles. A continued range of mountains, impassable by carriages and difficult for horsemen, extends along the whole western frontier, from the Chilka Lake on the north to the bank of the Godavery on the south. South of that river the province is separated from the Nizam's territory by a detached range of small hills. The province is watered by several small rivers, which rise among the hills forming the western frontier, and flow into the Bay of Bengal; it receives likewise the

waters of the Godavery and Kistna rivers, whose mouths are within the province.

The Circars are politically divided into seven districts: Chicacole, Coudapilly, Ellore, Ganjam, Guntoor, Rajamundry, and Vizagapatam. The climate of these districts exhibits a general uniformity. About the middle of June the westerly wind sets in, accompanied by moderate showers, until the end of August, when the harvest of the small grains is secured. From the beginning of September to the end of the following month the rain is more abundant; the wind is generally violent as November approaches, and then changes to the north-east, when the rice-harvest, which constitutes the main dependence of the inhabitants through the greater part of the province, is housed. The season is then fair and pleasant, and at the vernal equinox the maize harvest commences. The season between the end of March and the setting in of the rains in the middle of June is hot, but the temperature is somewhat moderated by the sea breeze during the day. The soil toward the south is better than in the north. Fruits and garden vegetables are scarce. Sugar, cotton, and tobacco are produced, and of the tobacco some is exported. The forests upon the hills to the west contain abundance of teak-wood of large growth. At the principal mouths of the Godavery ship-building is carried on, and vessels of 500 tons burden have been constructed. From the nature of the country a great part of the trade is prosecuted in coasting vessels. The aggregate burden of these vessels exceeds 50,000 tons.

The district of Chicacole forms the largest portion of the recently created electorate of Ganjam, including its capital. Exclusive of mountain streams, which are numerous during the rainy season, Chicacole is watered by four rivers, the mouths of which are at the towns of Chicacole, Calingapatam, Bimlipatam, and Vizagapatam. There are few extensive plains in this district. The town of *Chicacole*, the Mohammedan name of which is Maphus Bunder, is in 15° 15' N. lat., and 84° E. long. It is irregularly built on the rising ground which forms the north bank of the Chicacole River. This river rises in the mountains of Gundwana, and joins the sea three miles below the town, where it is about 1750 feet broad. The centre of the town contains barracks, which are little used, and there are numerous mosques, the principal of which, a building of stone, erected in the year 1051 of the Hegira (A.D. 1641) is held to be of considerable sanctity. Coudapilly district, called by the Mohammedans Mustaphanaghur, is separated from Ellore and Rajamundry by the salt-water river Ooputair. This river is navigable by boats to the Colair Lake, the surplus waters of which it carries off to the sea; this it reaches after a winding course between Samaldang and Gollapollam. The town of *Coudapilly*, the capital of the district, stands in 16° 37' N. lat., 80° 33' E. long. This place was formerly a fortress of some strength, but the works are now in ruins. The districts of Ellore and Coudapilly occupy the whole of the territory of the province comprehended between the Kistna and the Godavery. The town of *Ellore*, situated in 16° 43' N. lat., 81° 15' E. long., is the residence of the collector of the Masulipatam district, of which collectorate Ellore district forms a part. The houses, which are one story in height, are built with some regularity. Guntoor district lies between the Kistna and the Godegama. The soil is very fertile. From the want of moisture during a great part of the year the cultivation of rice is little attended to, but the most luxuriant harvests of maize are raised. *Guntoor*, the chief town, is situated in 16° 17' N. lat., 80° 32' E. long. It is extensive, but irregularly built; the walls of the houses are of mud, and the roofs of many are thatched. It contains a great number of trees, and is divided into two portions by a large reservoir. The district of Rajamundry lies on both sides of the Godavery river, but principally on the left side. The soil is fertile, particularly the island of Nagarum, a triangular space, comprehending an area of 500 square miles, which is formed by two great branches into which the Godavery divides, 35 miles from the sea. Besides the two greater branches of the river by which it is inclosed, this island is intersected by five lesser branches, and the means of irrigation thus afforded, together with the slimy mould brought down by the greatest river of the Deccan, render the soil highly productive. The forests produce an abundance of teak timber, and in the plains sugar, rice, ginger, turmeric, and various leguminous plants are raised. Cotton is also generally cultivated. The capital *Rajamundry* is on the left bank of the Godavery, about 5 miles from its mouth, in 16° 59' N. lat., 81° 53' E. long. The town is long, but narrow, extending along an elevated bank adjoining the river. During the dry season the Godavery is here a clear blue stream, exhibiting many islands and shoals, and the banks on both sides are from 20 to 30 feet high, but in the rainy season the stream is a mile broad and very deep. Vizagapatam district, which lies to the north of Rajamundry, is mountainous; a lofty ridge runs parallel to the sea-shore, and frequently within a very short distance of it, through nearly its whole extent; to the westward of this ridge is another chain; the intermediate space is a narrow and well-cultivated valley. The town of *Vizagapatam* lies on the coast in 17° 42' N. lat., 83° 24' E. long., near to a promontory called the 'Dolpbin's Nose,' a mountain about 1500 feet high. The town contains a considerable number of well-built houses; but the situation being unhealthy, the place has been

almost wholly deserted by Europeans, who have retired to the village of Waltier, about 3½ miles from the town, with which it communicates by an excellent road. There is a Hindoo temple of great fame and antiquity at Semacittum, near Vizagapatam.

The Northern Circars were among the earliest of the territorial possessions of the East India Company. They were granted in August 1765 by the Mogul Shah Allum, "by way of free gift, without the least participation of any person whatever in the same." In November of the following year, this grant was recognised by the Nizam or Subahdar of the Deccan. The district of Guntoor was at the date of the grant held as a jaghire for life by Bazaulet Jung, the Nizam's brother, by an agreement with whom the Company rented that district, and it did not come into their actual possession until the death of Bazaulet Jung in 1788. For the whole province the Company paid to the Nizam an annual 'pesbush' or tribute of seven lacs of rupees (70,000*l.*), which was redeemed in 1823 by the payment of about 1,200,000*l.*, in virtue of which the Circars are now held in full sovereignty by the British. The natives are represented as being superior both in appearance and in private character to the natives of Bengal. The province is settled on the zamindary system, and the old zamindars are said to be a remarkably fine and noble race of men: as regards the cultivators of the soil, they are very much on the footing of the Scottish chieftains of former days, the attachment between the two classes being continued through succeeding generations. With the exception of a few Mohammedans settled in the towns, the population of the Northern Circars is wholly Hindoo. They are composed of two nations, the Telinga and the Oaria, or Orissa, who speak and write different dialects, and have distinguishing customs and rites, although both adhere to the fundamental doctrines and discipline of the Hindoo faith, and give undisputed pre-eminence to the Brahmins. The people have lived from time immemorial under the simple form of village government, and have preserved unaltered the names and limits of each of their villages, with its establishment of officers and servants, undisturbed by the changes which have transferred the sovereignty of the land from one set of rulers to another. Different clusters of Haneec villages have been formed into zamindari, which have been put up to public auction, the purchasers being entitled to hereditary possession upon payment of the revenue fixed in perpetuity upon the entire lands of the zamindary. The revenue collected in the Northern Circars is said by Major Rennell to have amounted in 1753 to about 43 lacs of rupees (430,000*l.*) per annum. By a statement furnished by the East India Company in 1832, it appears that the revenue had then been augmented to 76,65,018 rupees (766,800*l.*), an augmentation of nearly 80*l.* per cent.

(Rennell, *Memoir of a Map of Hindustan*; Mill, *History of British India*; *Parliamentary Papers*.)

CIRCASSIA, or the country of the Circassians or Tscherkesses, is situated along the northern declivity of the Caucasus, and is now understood to comprehend the whole of this tract from the shores of the Black Sea to the vicinity of those of the Caspian, so that not only those portions which were formerly called the Great and Little Kabardia, but also Techechnia, the country, of the Midszeges or Tebetchenes, who live towards the shores of the Caspian Sea, between the Terek and the Kuma, are included in it. [CAUCASUS.] The rivers Terek and Kuban, as far as their courses lie east and west, are considered as constituting the northern boundary; and the highest part of the Caucasian chain forms the southern. The greater part of this country has been in some degree subjected to the sway of Russia, and forms the province of Higher Caucasia, to which is assigned by Russian official documents an area of 41,410 square miles, with a population of 402,300 in 1846.

The greater part of this country is a succession of mountain ridges, which branch off from the northern side of the Caucasus, and terminate near the rivers Terek and Kuban, and of valleys which lie between them. The mountain ridges lower gradually, but with abrupt declivities as they proceed northward, and are commonly covered with wood in their lower portions. The highest of these collateral branches is that which detaches itself from Mount Elbruz [CAUCASUS], runs north between 42° and 43° E. long., and terminates abruptly near 44° N. lat. in Mount Bechtan, which is 4320 feet high. This range is nearly destitute of trees, and contains a great number of warm and other springs, which are much visited. Between the mountains are many extensive and well-watered valleys, which are very fertile: they contain numerous narrow passes, which render the access to them very difficult to an invading enemy, and tend to foster those predatory habits for which the inhabitants are notorious, and which render them the scourge of travellers and of their neighbours in the plain. The Russians, though nominally masters of the country, are not able to prevent their hostile excursions. Their generals and other officers have often been made prisoners, and have obtained their liberty only by paying large ransoms. To protect the adjacent plains, the Russian government has established a line of small fortifications along the banks of the Terek, Kuma, and Kuban. The Tcherné-Goré, or Black Mountains, which form the northern and lower part of the Caucasian chain, and are so called from their being densely covered with foliage, which contrasts strongly with the snow-clad crest of the eastern part of the chain, are rent and broken into numerous chasms and ridges; on the western side, between Anapa and Sudjuk-

Kalé, forming inaccessible gorges and defiles. All this region is untraversed by a single road, and some of the tribes here have been able to maintain their independence against the Russians.

There are no towns in Circassia, the habits of the people being opposed to the concentration of a great number of houses or of people on one spot. They live in small villages, the site of which is frequently changed. They cultivate the fertile soil of their valleys, which yield grain of excellent quality; millet and barley are the favourite grains, but wheat and rye, with vegetables and tobacco, are also raised. Agricultural operations are performed by the aid of oxen; mules and asses are the beasts of burden. The vine is cultivated on the sunny slopes, and good wine is made; but it is spoiled by being kept in pitched skins. Every family possesses several hives of bees: honey is consumed in vast quantities, and mead is a favourite beverage. The country abounds with every description of timber, which is left to decay for want of means of transit. The Turks used before the Russian occupation of the country to ship considerable quantities of oak, valona, and box for Constantinople. The rearing of cattle is more attended to than agriculture, as the mountain-plateaus afford excellent and abundant pastures, and the banks of the numerous brooks are fringed with luxuriant meadows. Their horses are of a fine breed, and equally strong, swift, and beautiful; the people are proud of them, and, like the Bedouins, preserve the genealogies of their breed: they are used only for the saddle. The sheep, which are of the broad-tailed kind, are also much esteemed. Cattle are small. Milk, with millet, forms the principal food of the inhabitants, and they make of it an inebriating beverage called 'kumisa'. As they are Mohammedans they do not rear swine. Hunting is followed by the chiefs as a diversion. Salt, gunpowder, fire-arms, calico, and woollen cloths are the chief imports.

The Circassians, or Tcherkeases, are the most numerous of the different nations that inhabit this country. They occupy the lower part of the mountains and valleys from the river Soudsha or Sunja on the east to near the shores of the Black Sea. They consist of eleven tribes, independent of one another, and governed by their own hereditary princes and hereditary nobility. Their internal government resembles the feudal system. As the eastern portion of their country is called Kabardah, they have been sometimes called Kabardians; it is certain that the Kabardians and Circassians belong to the same stock and speak the same language. Kabardah being of easy access to the Russians, has been subjected to them for a considerable time. The Terek divides it into Great and Little Kabardah. To the east of the river Sunja live the Midzeges, also called Kistes and Tchetchenes, who differ entirely from the Circassians in language, but not much in character, being, if possible, still greater robbers. West of them are some smaller tribes, but the most western portion of the Caucasus is inhabited by the Abasians, who are less addicted to war than the Circassians, and more willingly submit to the Russians. [CAUCASUS.] Many Tartars and Cossaks are settled in Circassia. The traffic in female slaves has long been carried on between the Circassians and Turks; it was checked for a while by the Russians, but by a treaty between them and the Circassians in 1845, the traffic was re-established. About 1000 young girls are sold yearly by their parents, and carried to the Constantinople market.

(Pallas; Reineggs; *The Caucasus*, by Ivan Golovin; Spencer, *Travels in Western Caucasus*.)

CIRENCESTER, Gloucestershire, colloquially called Cicester, an ancient market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Cirencester and hundred of Crowthorne and Minty, is situated on the river Churn, in 51° 43' N. lat., 1° 58' W. long.; distant 17 miles S.E. from Gloucester, 83 miles W.N.W. from London by road, and 95 miles by the Great Western railway. The town is governed by two constables and fourteen wardens, who are elected annually; and returns two members to the Imperial Parliament. The population of the borough in 1851 was 6096. The living is a vicarage in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Cirencester Poor-Law Union contains 39 parishes and townships, with an area of 86,170 acres, and a population in 1851 of 21,328.

Cirencester occupies a portion of the site of an important Roman military station. By Ptolemy it is called Corinium; by Richard of Cirencester, Corinun; and by Antoninus, Durocornovium. Three Roman roads met here: the Fosseway, the Ermine-street, and the Icknield Way. It is said that the walls of the town were 2 miles in circumference. The Roman remains which have at various times been discovered at Cirencester are of uncommon extent, variety, and interest. From the character of the villas which have been traced Corinium appears to have been the residence of a wealthy people. Hypocausts of elaborate construction, tessellated pavements, some of them of very superior design and execution, statuettes, pottery, fibulae, bracelets, beads, and other personal ornaments, coins, statara (a sort of steel-yards), weights, &c. have been found, as well as sepulchral inscriptions of much historical value. Some very important discoveries were made in the latter part of the year 1849, which, as well as the other antiquities found here, are fully described in the work of Professor Buckman referred to at the end of this article.

During the Heptarchy, Cirencester was successively included in the kingdoms of Wessex and of Mercia. In 879 it was stormed and

taken by the Danes, and was the seat of a great council held by Canute. It was again stormed and completely dismantled in the civil war between Henry III. and the barons. A magnificent abbey for black canons was built in 1117 by Henry I., on the foundation of a college for prebendaries, which was established by the Saxons long before the Conquest. The revenue of this abbey at the dissolution was 1051*l.* 7*s.* 1*d.*; its mitred abbot had a seat in Parliament.

Cirencester parish church is a fine old structure, partly of the 13th and partly of the 15th centuries. The building is especially interesting on account of its magnificent porch-house and mortuary chapel. Its embattled tower contains a peal of twelve bells. In the interior are several interesting monuments. A new church, dedicated to St. John the Baptist, has been recently erected. The Independents, Baptists, Wesleyan Methodists, Quakers, and Unitarians have places of worship. The Free Grammar school, founded in 1750, has an income of 28*l.* a year, and had 42 scholars in 1852. There are an Endowed parochial school, three hospitable supported from endowments, almshouses, a savings bank, a museum, a public library, and a dispensary. A county court is held. An agricultural college of a complete and important character was established at Cirencester in 1846.

Cirencester is not a place of much trade; its appearance is that of a very respectable and opulent country town. The town is paved and lighted, and well supplied with water. The market days are Monday and Friday. Fairs are held on Easter Tuesday, on July 18th, on the Monday before and after Michaelmas, and on November 8th, chiefly for agricultural stock and produce. In the vicinity is the handsome mansion of Oakley Park, the seat of Earl Bathurst. Oakley Park and woods are celebrated both on account of their picturesque character and of the frequent mention of them in the letters of Pope, Swift, and their correspondents.

(Atkyns, *Gloucestershire*; Rudder, *Cirencester*; Lysons, *Reliquiæ Britannico-Romane*; Professor Buckman and C. H. Newmarch, *Illustrations of the Remains of Roman Art in Cirencester*; *Communication from Cirencester*.)

CITEAUX. [CÔTE-D'OR.]

CITTA VECCHIA. [MALTA.]

CIUDAD REAL. [CASTILLA LA NUEVA.]

CIUDAD RODRIGO. [LEON.]

CIVITÀ-DI-PENNE. [ABRUZZO.]

CIVITÀ-DUCALE. [ABRUZZO.]

CIVITÀ-SAN-ANGELO. [ABRUZZO.]

CIVITA VECCHIA, a town and sea-port in the Papal States, the capital of the Delegation of Civita Vecchia, and the port of Rome, is situated on the Mediterranean, 40 miles N.W. from Rome, and has a population of about 7000. Its harbour is formed by two piers, or moles, of marble blocks, first raised by Trajan and afterwards restored under the popes. At the entrance between the extremities of the two moles is another mole, or breakwater, formed of large pieces of rock thrown into the sea, under the reign of the same emperor. On the southern extremity of the breakwater is the lighthouse, which stands in 42° 4' 6" N. lat.; 11° 45' E. long. Pliny the Younger ('Epist.' 31) describes the manner in which the breakwater and the piers were made. There is from 14 to 18 feet depth of water in the harbour, which is the only safe one on the south coast of the Papal States; it is frequented by about 1000 vessels of various sizes, most of them coasting vessels, in the course of the year. There is a lazaretto for ships coming from infected countries. There are docks also, and a prison for galley-slaves. The lighthouse and the citadel were built after designs by Michael Angelo. The present town of Civita Vecchia was built by Pope Leo IV., and is regularly fortified. The massive architecture of the buildings round the harbour gives the place an imposing appearance from the sea. The streets are regular and the houses well built. The town has a cleanly and bustling appearance. The air, although not very good in summer, is not altogether unwholesome, but the country around is subject to the malaria, and has a desolate appearance like the rest of the lowlands on this coast. Several lines of steamers plying between Marseille, Genoa, Leghorn, and Naples put into the harbour, and many thousand travellers land here during the year. A large quantity of the produce of the Pontifical States is brought here for export, including wheat, alum, cheese, skins, bark, staves, &c. The imports consist of woven goods, chiefly from England, salt provisions, wine, colonial produce, salt, drugs, and haberdashery.

Trajan had a villa here, called *Centum Cellæ*, around which and the port a town of the same name sprung up, and gradually became of considerable importance, as the harbour at the mouth of the Tiber became choked up with sand. *Centum Cellæ* was of importance also as a fortress. It was captured by Belisarius, afterwards by Totila, but soon recovered by Narces; and it continued to flourish till A.D. 812, when the Saracens utterly destroyed it. The inhabitants who escaped founded a new settlement in the interior, and the site of the ancient city began to be spoken of as *Civita Vecchia* (Old City), a name which it has retained ever since. Besides the substructions of Trajan's mole there are remains of an aqueduct and numerous fragments of Roman buildings. Since the insurrection of 1849 the French have garrisoned the citadel of Civita Vecchia.

The Delegation of Civita Vecchia has an area of 373 square miles, and had a population of 24,312 in 1843. It is inclosed from north-west to north-east by the Delegation of Viterbo; south-east by the

Comarca di Roma; and south-west by the Mediterranean. The western part of the surface is generally level, low, and dotted with small lakes. The eastern part is covered with ramifications of the Tuscan Sub-Apennines. The rivers are small, the most important being the Marta, which forms the outlet of the lake of Bolsena, and the Mignone (the ancient Minio), which falls into the sea some miles north of Civita Vecchia. There are large salt-works on the coast at the mouth of the Marta, which retains its ancient name. The mountains in the north-eastern districts of the delegation contain rich alum mines; the mineral is refined at the government works at Tolfa in the interior. The Delegation of Civita Vecchia was included in ancient Etruria; it forms part of the Patrimony of St. Peter.

CIVITAS AURELIA AQUENSIS. [BADEN-BADEN.]

CIVITELLA-DI-TRONTO. [ABRUZZO.]

CLACKMANNAN. [CLACKMANNANSHIRE.]

CLACKMANNANSHIRE, a county in the eastern part of Scotland, bounded S. and S.W. by the river Forth, N. and W. by Perthshire, E. and S.E. by Perthshire and Fifeshire, lies between 56° 5' and 56° 14' N. lat., 3° 33' and 3° 56' W. long. In form it is very irregular, but its greatest length from north-west to south-east may be stated at 10 miles, and its greatest breadth from north-east to south-west at 8 miles. This county is the smallest in Scotland. Its area is 29,744 statute acres. The population in 1841 was 19,155; in 1851 it was 22,951.

Coast-line.—The river Forth, which rises in Stirlingshire, is the southern boundary of the county. It is navigable above Stirling. The only port in the county is ALLOA, though there are several creeks along the Firth of Forth, which are frequented by fishermen. At Clackmannan Pow there are good piers and a small harbour; there is also a small harbour at Kennet Pans.

Surface and Geology.—The surface of the county in the southern part consists of level alluvial tracts, which are very productive. Towards the northern extremity the land rises gradually into the Ochill Hills, which traverse the county from south-west to north-east. The bases and sides of the Ochills supply good pasturage. The woodlands cover upwards of 500 acres, and at least 2000 acres are laid out in plantations. The low grounds have a fine fertile soil; the subsoil of part being clay. The elevated land has a substratum generally of gravel, with a surface of good loam. On the high grounds the soil is thin, and on the hills there is a considerable extent of moss. In the vale of the Devon there are some pieces of black moss on both banks of the stream, but these are rapidly disappearing. Bencleuch, the loftiest of the Ochills, is 2400 feet high. The King's Seat, Dollar Hill, and the Wisp, in the north-east part of the county, do not exceed 1900 feet. From these hills streams descend through romantic glens, and at Dollar, Alva (in Stirlingshire), and Tillicoultry, supply water for the shawl and blanket mills and fulling works of these thriving villages.

The Ochills are composed of trap rocks of various kinds. The great mass is of the amygdaloid rock and clinkstone porphyry of a light colour. Greenstone is also found in considerable quantity. In the whole range many veins of copper and lead are found. From the face of the Ochills southward the rocks are of the coal formation, consisting of sandstone, shale of a dark colour, fire-clay, ironstone, and limestone. Above the coal formation are both old and recent alluvial clays, the recent being the deposit from the Forth and its tributary streams washing down the old alluvial clay. The old alluvial clay consists of clay, sand, gravel, and boulders intimately mixed, impervious to water and the most sterile of compounds. The recent alluvial deposit is of blue, soft mud or silt in the lower part, and stroug clay at the surface.

Hydrography.—The Devon or North Devon rises in Perthshire, and traverses the northern part of the county from east to west, along the base of the Ochills, till, turning southward, after a short course in that direction, it falls into the Forth at Cambus, a village two miles W. from Alloa. It receives in its winding course, through the rich and beautiful vale of Devon, several tributary mountain streams, the larger being those of Dollar, Tillicoultry, and Alva. The South or Black Devon has its source in Fifeshire, and flows westward through the southern part of the county in a direction nearly parallel to the North Devon, falling into the Forth opposite Clackmannan. In summer it is a small stream, its waters being principally collected in dams, for the mills on its banks.

Communications.—The communications of the county with the east coast and the sea are through the ports of Alloa and Kincardine. An excellent road traverses the county east and west. By the Stirling station of the Scottish Central railway, the county has railway communication with the south and north-east of Scotland; and a short branch connects Alloa with the Falkirk station of the Edinburgh and Glasgow railway. The Stirling and Dunfermline railway traverses the southern part of the county, and connects it with the Scottish Central railway, with Fifeshire, and with the eastern coast.

Climate.—The prevailing winds are from the south-west; they bring rain, but are accompanied by a mild temperature. The least frequent winds are from the east and north-east, which blow for a short time in spring, the weather being then dry and cold. Considerably less rain falls in the southern part of the county than in the vicinity of the Ochills, while the low grounds, protected from the

north winds by the hills, have the atmosphere kept clear, and heat and cold alike moderated by the exposure of the coast to the Firth of Forth and the German Ocean.

Agriculture.—Upwards of three-fourths of the land in the county is under cultivation. In the low grounds the land is cropped in a regular system of rotation, the hills being devoted exclusively to pasturage. Agriculture may be said to be in a state of continual improvement: great attention is paid to manuring; draining is almost universal, frequently with tiles, but chiefly with stoue. The lands are also well fenced with stone walls or hedges; where hedges are used they are always neatly trimmed. The blackfaced, or a mixture betwixt the blackfaced and Leicester breeds of sheep, are bred on the hills. The Teeswater breed of cattle is reared also, though a preference is given to Ayrshire and short-horned cattle. Leases are generally for 19 years, sometimes at fixed money rents, though in many cases at specific quantities of grain rents, or at rents dependent on the fiars prices of the county. There are several fairs held in the county, but none of any general importance.

Industry.—In the parish of Alloa are distilleries, breweries, manufactures of yarns, plaidings, shawls, tartans, druggets, and blankets, corn and flour mills, a glass-works, a foundry, a brick and tile work and pottery, and a tan work. There are salmon fishings in the Forth. Woollen shawls and tartans are made at Tillicoultry. Small quarries of sandstone and limestone are wrought in various parts of the county. The extensive coal-fields in Alloa and Clackmannan parishes, which form that part of the county lying on the banks of the Forth, supply large quantities of coal for exportation. The iron manufacture carried on at Devon ironworks, on the banks of the Devon stream, is important. Small railways connect these works with Alloa harbour and Clackmannan Pow, and they possess ready communication with all the great markets by the Stirling and Dunfermline line of railway.

Divisions, Towns, &c.—The county contains four parishes, the largest being Alloa, to which is united the ancient parish of Tullibody, of which Alloa itself was once a chaplainry. There is a chapel of ease at Sauchie near Clackmannan, and occasional service at Tullibody. The Free Church has 6 congregations, the United Presbyterians have 4, the Episcopalians 1, and there are in the county a few other congregations of Dissenters. The county is within the synod of Perth and Stirling. Clackmannanshire, along with the county of Kinross, sends one member to the Imperial Parliament. Its constituency was 1149 in 1853.

The most important place in the county is ALLOA.

Clackmannan, the county town, is 2 miles E. from Alloa, about 29 miles N.W. from Edinburgh. It is situated on elevated ground rising from the plain or shore of the Forth. The population of the town, with which is included the villages of Kennet and Newtonshaw, was 1535 in 1853. The only public buildings are the parish church and county hall. The courts of the county are held at Alloa.

The following villages may be mentioned:—*Dollar*, at the foot of the Ochills: population, 1079. There are hatching works and woollen manufactures. The Dollar Institution is an academy founded in 1818 by Mr. John Mac Nab of London, who directed a large fortune made by his own exertions to be applied to educational purposes in his native parish. The ancient and modern languages and the ordinary branches of education are taught. The income from endowment is about 2000*l.* a year. The number of scholars in 1852 was 350. There are several villas in the neighbourhood. *Tillicoultry* is at the foot of the Ochills: population, 3217. The inhabitants are chiefly employed in the manufacture of shawls, tartans, and serge. There are also fulling-mills. *Tullibody*, a village about 2 miles W. from Alloa: population about 700. It contains an ancient chapel, built by David I. *Cambus*, a village at the confluence of the Devon and the Forth: population about 300. There are schools at all these places; the county possessing of parochial, endowed, and private schools perhaps a greater proportion than any other shire in Scotland.

History, Antiquities, &c.—Clackmannanshire was the seat of the Bruces for many generations, and an old tower in Clackmannan parish is said to have been built by King Robert Bruce. Sauchie Tower, in the same parish, is the ruin of a castle once the property of the earls of Cathcart. Schaw Park (Lord Mansfield's) and Kennet (the mansion of Bruce of Keunet) are the modern residences in this parish. In Dollar parish are the ruins of the very fine old feudal stronghold called Gloome Castle, or Castle Campbell, burned by the Marquis of Montrose in 1645. It occupies a romantic situation, on the top of a steep and nearly precipitous hill, near the village of Dollar. The keep is still in fine preservation. Roman sepulchral vases and stone coffins of an earlier period have been found in the county. Lord Abercromby has a seat at Tullibody, which is said to have been the scene of the battle in which Kenneth, king of Scots (A.D. 834), destroyed the Picts. The ancient chapel of Tullibody dates from 1149.

In 1851 there was one savings bank in the county, at Clackmannan. The amount owing to depositors on November 20th 1851 was 2015*l.* 2*s.* 9*d.*

CLAGENFURTH. [KLAGENFURT.]

CLAIRVAUX, a small town in France, in the department of Aube, is situated between wooded hills on the left bank of the river Aube and about a mile or two from the confines of Haute-Marne. It

is of no importance in itself, but it retains the name of one of the most celebrated Benedictine abbeys in Europe.

The abbey of Clairvaux was founded in A.D. 1114 by St. Bernard, at the head of a few monks from the abbey of Cîteaux, the chief establishment of the Cistercians. Hugues, count of Champagne, was its first benefactor, who endowed it with the valley of Clairval (Clara Vallis), originally called the valley d'Absinthe (of Wormwood), and the woody region around it. The foundation was increased subsequently by Thibaut, count of Champagne; and the kings of France, the counts of Flanders, and many of the nobility of France added largely by their gifts to the revenues of the abbey. After the community had lived at Clairvaux for seventeen years it was found necessary in consequence of the increasing numbers of those who joined the order to enlarge the buildings; and at the death of St. Bernard in 1153 there were 700 monks in the abbey.

The monks were not idle. The rule under which they lived was eminently calculated to make them industrious and useful; and civilization owes the Benedictines of Clairvaux much. If in after times the revenues of Clairvaux became enormously, or as some would say scandalously wealthy, this was owing not so much to rich gifts from royal and noble benefactors, as to the wise regulations of the sagacious founder, who infused into his followers and bequeathed to his successors the spirit of useful labour. In fact the abbey of Clairvaux was an immense industrial establishment. Timber was felled and saw-mills set at work; hydraulic works, drainage, and irrigation were practically studied; oil-mills, corn-mills, fulling-mills, and tan-yards were established; wool was spun, cloth woven, metals were forged, and farms tilled by the monks of Clairvaux. Each of these trades and occupations was under the direction of a prefect styled 'master of the forests,' 'master of the forges,' &c. Whatever products were not required for the consumption of the abbey were sold at the fairs of Châtillon-sur-Seine, Bar-sur-Aube, &c., and the proceeds added to the resources of the community. Such energetic management could not fail to make Clairvaux wealthy; accordingly we find that in the 17th century it possessed nearly 50 villages and a vast number of farms, above 1500 acres of meadow land, extensive vineyards, about 60,000 acres of forests, 4 metal forges and foundries, &c., and the gross annual income from all sources was valued at 600,000 livres, about 24,000*l.* Not less than 537 religious houses in France and different parts of Europe were affiliated to Clairvaux. To give a notion of the size of this vast monastery it will be enough to add that an arbitration about a wager which is given in the archives of the Aube proves that in 1633 the circuit of the abbey walls exceeded that of the neighbouring town of Chaumont by 693 feet.

At the same time that all the above mentioned utilitarian processes were carried on Clairvaux was a nursery of learning. Pope Eugene III., fifteen cardinals, and a large number of archbishops, bishops, and statesmen were at different periods inmates of the abbey. The poor were fed, and travellers, rich and poor, entertained.

When religious houses were suppressed in France there were still 40 choir monks and 20 lay brothers in Clairvaux. The revenue of the abbey then amounted to 66,000 livres, besides 700 sétiers of corn (each equal to 4·4 bushels), and 700 muids of wine (each equal to 70·8 gallons). Within the precincts of the abbey, which were then about a mile and a quarter in circuit, were magnificent cloisters, several churches, and a vast cellar, in which was a vat containing 800 muids of wine (about a year's income of that sort of produce). The abbey buildings were greatly injured at the revolution; they were subsequently sold, and a glass-factory was established within the walls. They were re-purchased by the state in 1808 and converted into a mendicity house, which the government of the restoration transformed into a central house of detention for the departments of Ain, Ardennes, Aube, Côte-d'Or, Jura, Marne, Haute-Marne, Meurthe, Meuse, Moselle, Nièvre, Saône-et-Loire, and Yonne. The buildings are remarkable chiefly for their solidity and extent. The refectory has been converted into a chapel; it resembles the nave of a church, has a vaulted roof 27 feet high, and wainscotted walls, on which are several rudely-executed figures ascribed to the handiwork of the monks; this chapel can hold with ease 2000 prisoners. Across the middle of the hall that served (and still serves) for a laundry, a living stream three yards broad runs between inclined flagstones. The prisoners detained at Clairvaux are made to work as carpenters, tailors, shoe-makers, rope-makers, &c., or they are engaged in the manufacture of cotton, woollen, hempen, and linen tissues.

(Merlin, *Observations Historiques sur la Maison de Clairvaux dans les Mémoires de Trévoux*, Aout 1739; Hermand, *La Bibliothèque de Clairvaux*; *Dictionnaire de la France*.)

CLAMECY. [NIEVRE.]

CLAPHAM. [SURREY.]

CLARE. [SUFFOLK.]

CLARE, a maritime county in the province of Munster, Ireland, is bounded N. by Galway Bay and the county of Galway, E. and S. by the river and estuary of the Shannon, which separates it from the counties of Tipperary, Limerick, and Kerry, and W. by the Atlantic Ocean. It lies between 52° 32' and 53° 7' N. lat., 8° 25' and 9° 58' W. long.; the greatest length north-east and south-west is 87½ miles; the greatest breadth north-west and south-east is 33 miles; the area is 768,265 acres, of which in 1851 there were 161,555 acres under

crops, 377,002 acres in grass, 8562 in plantations, 5173 fallow and uncropped arable land, and 212,972 acres estimated extent of bog, waste land, and water. The population in 1851 was 212,428.

Surface, Hydrography, Communications.—The portion of the county lying between the Shannon and the Galway boundary is, to the extent of about 150 square miles, occupied by the mountain group of Slieve Baughta. This group stretches into the adjoining county, and contains three principal connected lakes: Lough Teroig, on the boundary of Clare and Galway; Lough Graney, farther south in the centre of the group; and Lough O'Grady, between Lough Graney and that expansion of the Shannon called Lough Derg on the east, into which the waters of the district discharge themselves by the Scariff River at the village and creek of Scariff. Southward from the Slieve Baughta group extends the mountainous tract of Slieve Barnagh, which runs with little interruption from Scariff on the north to Bunnatt on the south, where the waters of Lough Bredy, Lough Doon, Lough Cloonlea, and several other lakes lying along the western border of the range discharge themselves by the Ougarnee River into the Shannon. The chief drain of the eastern part of this district is the Blackwater, which falls into the Shannon a little above Limerick. The highest points of the Slieve Baughta and Slieve Barnagh range are 1812 and 1746 feet respectively. West of these groups, and occupying the central district of Clare, there is a comparatively level country stretching north and south, the waters of which, collected from Loughs Inchiquin, Tedane, Inchicronane, Dromore, Ballyally, and several others, unite about the centre of the county and form the Fergus, a fine navigable river, which augmented by the Claren at Ennis, the county town, flows due south by Clare, and after forming a large estuary with numerous islands and excellent anchorages, unites with the Shannon about eight miles west of Bunnatt. The junction of these rivers forms a very noble expanse of water. The remainder of the county, from the shore of Galway Bay on the north to Clonderalough on the south and thence westward to the ocean, is occupied by highlands, the waters from which flow chiefly into the Atlantic by the Dunbeg and Ennistymon rivers. Of these heights the principal is Callan Mountain, 1282 feet, rising westward from Ennis over Milltown, a small town situated about midway on the western line of the coast. Clare has a much greater extent of coast-line than any other county in Ireland. From Scariff on the Shannon to Curraurue on Galway Bay the whole length of coast-line is 280 English miles, of which about 140 miles lie along the Shannon and 80 miles on the coast of the Atlantic. The Atlantic coast, from Black Head on the north to Loop Head on the south, a direct line of nearly 60 English miles, has only two harbours, and these not capable of sheltering vessels of more than 50 to 100 tons. With the exception of the small bays or fishing stations of Kilkee, Dunbeg, Milltown, and Lisacor, the whole coast towards the Atlantic is iron-bound. The cliffs in some places are remarkable for their great elevation and perpendicular section towards the sea. At Moher, on the north of Lisacor Bay, the cliff-line for a distance of five miles is nearly perpendicular, and has an average elevation of 400 feet: at one point it attains the height of 587 feet. The strata are horizontal and variously coloured, and in many places they overhang. These cliffs are exposed to the full force of the Atlantic, the waves of which during a gale break against them with extraordinary violence. Numerous islands and detached stacks of rock worn into fantastic forms mark the devastating effects of these storms, which have disconnected them from the mainland.

The shore of the Shannon commencing from Loop Head has numerous creeks which might be rendered useful either as asylum-harbours or stations of trade, but at present there is no security for vessels of heavy tonnage in hard weather nearer to Loop Head than the anchorages of the Fergus. At Carrigaholt, a small village immediately under Loop, is a fishing pier; and at Kilrush, formerly a very prosperous place about halfway between Carrigaholt and the Fergus, is a pier with a quay; but the roadstead is exposed to southerly winds.

Eastward from Kilrush the Shannon, which at its entrance is ten English miles in width, begins to contract; but after sweeping in a comparatively narrow and very deep channel—100 to 120 feet in mid-channel—round the peninsula of Clonderalough, between which and the shore of Limerick is the Race of Tarbert, it expands again to a width of several miles at its confluence with the Fergus, about ten miles farther inland. The entrance of the Fergus lies between Inismurry Island on the west and Rinna Point on the east. The estuary is here five miles wide. Towards the western side it is encumbered by islands, of which there are eight considerable ones covering about four square miles. These islands contract the ship-channel to a breadth of about three-quarters of a mile. The channel is safe for vessels drawing 16 feet of water, and on the mud-banks at either side a ship may at all times ground with safety. From the Shannon to Clare the river is called the Lower Fergus, and from Clare to Ennis the Upper Fergus. The Upper Fergus is a deep and quiet piece of water more like a large canal than a river. It is separated from the Lower Fergus by a ledge of rock on which the abutments of the bridge of Clare are built. This natural dam keeps the upper part of the river constantly full and navigable to Ennis, the county town, three miles distant. Several drainage works have been recently executed by government with a view to facilitate the navigation of the river and to improve the land on its banks.

Eight miles east from Rinana Point is the mouth of the Ougarnee River, up which the tide flows to Six-Mile Bridge; but the vicinity of Limerick renders its navigable capabilities of little importance. One suburb of Limerick lies in the county of Clare. In this county are also the chief lines of canal by which the Shannon navigation is continued from Limerick to Killaloe. Within the last twelve years great improvements have been effected in the roads of the county under the direction and with the aid of the commissioners of public works.

Geology, Mineralogy, &c.—The geological constitution of the surface is simple. The Slieve Baughta Mountains consist of a nucleus of clay-slate, supporting flanks of sandstone, intruded through a break in the surrounding limestone plain, in the same manner as the Slieve Bloom Range on the opposite bank of the Shannon. The limestone which insulates this mountainous district spreads westward over the more level basin of the Fergus, and rises into very rugged elevations towards the Galway boundary on the north-west. Beyond the basin of the Fergus commences an extensive clay-slate and trap formation, which stretches westward from the limestone-field to the waters of the Atlantic, to which it presents the precipitous escarpments of the coast-line. The whole of this coast abounds in phenomena of the greatest interest.

Beds of ironstone and strata of coal occur upon Mount Callan; a seam of coal three feet thick appears in the face of the rock a little above high-water mark over Liscanor Bay, near Ennistymond; and again near Mutton Island, both inland and on the shore of Malbay; another seam appears in the bed of a river near Carrigaholt, as also at Fieragh Bay, Lemaduff, and Longhill Ferry. Iron-ore is found at several places, and in considerable quantities on the Malbay coast; on the banks of the Ardsallas, a feeder of the Fergus flowing from the east; on the shore of Liscanor Bay adjacent to the coal tract, between Corrofin and Ennis in the centre of the county; and in several other places. Lead-mines are worked at Kilbricken. Rich lead-ore abounds in the limestone district, particularly in the mountainous parts of the barony of Burren in the north of the county. Copper pyrites is plentiful in the same barony. Manganese is found at Ennistymond, Carrigaholt, Cross, and other places on the sea-coast. Chalybeate waters abound in the district westward from the sources of the Fergus. Very fine black marble has been raised at Craggliath, near Ennis; it takes a high polish, and is free from spots. On the shore of Lough Graney is found a hard crystalline sand much used for scythe-boards, which are greatly superior to those brought from England. The coast from Kilrush to Carrigaholt abounds with excellent slate and flag quarries. There are also quarries of flag of a good quality at Ennistymond. The Broadford slates from the Slieve Bernagh district are considered nearly equal to the best Welsh; an inferior kind is obtained from the slate-quarries at Killaloe.

Soil, Climate, &c.—The characters of the different soils correspond to the characteristic geological division. In the schistose and trachyte districts the soil is cold and moory; in the calcareous region warm and friable, though light; on the borders of the different tracts, especially of the slaty and calcareous, deep and loamy. In some districts there are detached spots of very remarkable richness. These are usually situated along the banks of the large rivers, and are liable to periodical inundations. They are called corcachs or corcasses, a word nearly synonymous with the English provincial term bottoms. The corcass lands lie chiefly along the Shaanon and Fergus from Limerick westward, in some places extending inland to a considerable distance. Another species of rich grazing land of frequent occurrence here as well as in Galway, is the turlugh, or periodical lake, an accumulation of water-either forced upward by subterranean channels, or formed by surface waters which have no outlet. These floods lie in the turlugh during the winter, and leave it prepared for the most abundant vegetation in the spring. The whole of this calcareous tract abounds with subterraneous communications through which the water passes from lake to lake, as at the sources of the Fergus, or rises to the surface and forms temporary pools and turlughs. The barony of Burren, which comprises the north-western portion of the limestone field of Clare, is a very remarkable district. Here the bare limestone rock rises to the surface in all directions, so as to give the whole district the appearance of being covered with a white cement. The country is everywhere very rugged and hilly, and the worst supplied with water of any in Ireland. The only supply of water in the interior is by turlughs. One of these at Kilcorney, a place remote from any river, is fed by a periodical stream issuing each winter from a cave in the vicinity. Notwithstanding its sterile appearance, this country is far from being unproductive. In the crevices of the limestone rock sprouts a very sweet and nutritious grass, particularly well suited for fattening sheep. Yarrow, white clover, trefoil, cinquefoil, virga aurea, juniper, and yew, grow spontaneously and in abundance, although in patches. The supply of fuel is scanty, there being little or no bog; yet from the numerous remains of castles in all parts of the barony it is evident that it must have been thickly inhabited during its possession by the old Irish. The present inhabitants of the coast procure their supply of turf in boats from the opposite shores of Galway. In all other parts of the county there is abundance of fuel, particularly towards the south-west, where a tract of bog, containing 14,950 Irish, or about 24,000 English acres, extends from the Shannon at Kilrush to the

shores of the Atlantic at Moore Bay and Dunbeg. There is no limestone in this part of the county, but an inexhaustible supply of sand can be had at Dunbeg. Although the county is very bare of trees, the bogs abound in timber. The mode of finding bog timber as practised here is rather remarkable. It is observed that the dew does not lie on the part of the bog immediately above a tree, as it does elsewhere. The position of a piece of timber is thus easily ascertained before the dews rise in the morning.

The climate is healthy. The county is in general much exposed, particularly to violent gales from the Atlantic. Frost and snow seldom continue long. In the sheltered portions of the eastern district, the climate is moist and very mild. The fishing industry of the county is now almost extinct.

History, Antiquities, &c.—Clare constituted a portion of the ancient territory of Thomond or North Munster. An English force, under Robert Fitz-Stephen, was admitted by Douell, the petty sovereign, in A.D. 1171. The English retained the fortresses of Bunnraty and Clare, and a considerable territory, until the death of Richard de Clare, in 1317; from which period until the submission of Murragh O'Brien in 1543, this part of Thomond was entirely in the hands of the native families. In 1565 the county was made shire-ground by Sir Henry Sidney, and included in the province of Connaught. From Connaught it was again transferred to Munster, on the petition of the second earl of Thomond, in 1601. Large allotments were made in Clare for the satisfaction of adventurers and soldiers by the English Parliament in 1653; but it was not until after the forfeitures consequent on the revolution of 1688 that a permanent proprietary was established. The rebellion of 1793 scarcely extended to this county.

During the present century Clare was for a time remarkable for agrarian disturbances, now happily at an end. The Clare election of 1823, in which a Roman Catholic was returned to the Imperial Parliament previous to the removal of the civil disabilities affecting that part of the population, forms an important epoch in Irish history.

There are round towers at Scattery Island, off Kilrush (120 feet high, a known landmark in the navigation of the Shaanon), at Drumcliff in the barony of Islands, at Dysert and Kilnaboy in the barony of Inchiquin, and at Innis Cailtree, an island in the creek of Scariff, on Lough Derg: the abbey of Ennis, which the famous Turlogh O'Briain enriched in 1306 with bells, crosses, rich embroidery, and painted glass windows ('Annals of Innisfalleu and Cathereim Toirdelbach'), is still standing. The abbey of Quin, in the barony of Bunnraty, about five miles east of Ennis, is a noble pile of black marble, for the building of which, in the 13th century, Comea More Macnamara, the founder, is said to have been created a prince by the pope. The ruins on the islands of Innis Scattery and Innis Cailtree are also of great interest to the antiquary. Cromlechs are numerous, and the tomb of Conan on Mount Callen, with its Ogham inscription, is still the subject of inquiry and dispute.

Divisions, Towns, &c.—Clare is divided into the baronies of Burren on the north, Corcomroe on the north-west, Ibrickan on the west, Moyarta on the south-west, Clonderalough on the south, Inchiquin in the north centre, Islands in the south centre, Bunnraty, Upper and Lower, on the south-east and east, and Tulla, Upper and Lower.

ENNIS, the county town, and the seat of a Poor-Law Union; BALLYVAGHAN, CORROFIN, ENNISTYMON, KILLADYSERT, KILRUSH, SCARIFF, TULLA, which are likewise the seats of Poor-Law Unions, and KILLALOE, which gives title to a bishopric, will be found described under their respective titles. The following minor places we notice here, with the populations in 1851:—

Broadford, population 342, about 8 miles W. from Killaloe, is pleasantly situated near Lough Douu. In the neighbourhood are several fine mansions. There is here a station of the county constabulary force. Petty sessions are held, and there are fairs on June 21st, and November 21st. There is a dispensary of the Ennistymon Union. *Carrigaholt*, population 320, a fishing village at the head of Carrigaholt Bay, about 9 miles W. by S. from Kilrush, possesses a Roman Catholic chapel. There is here a dispensary of the Kilrush Union. The fishery carried on is of some importance, and large quantities of turf are sent to Limerick. The pier and harbour are not adapted to afford anchorage or security to large vessels. *Clare*, population 892, besides the inmates of an auxiliary workhouse 939, in all 1831; is situated on the river Fergus, about 2 miles S. by E. from Ennis. The old castle has been converted into a barrack. A stone bridge crosses the river here. This town which was once the county town is now of very little importance. Fairs are held in May, August, and November. *Kilfeuna*, population 387, besides 510 in the auxiliary workhouse, is situated about 14 miles N.W. from Ennis. The parish church is a respectable building, with a massive square tower. Kilfeuna was the seat of a bishop as early as 1265. It is now united with the sees of Killaloe, Clonfert, and Kilmacduagh. [KILLALOE.] In the 'Ulster Annals' it is stated that the abbey and town were burned by Murtogh O'Brien in 1055. A fragment of the old abbey still remains; near it are several ancient crosses. The land around the village is fertile and well cultivated. *Kilkee*, population 1869, a small watering place situated on a small creek of Malbay, about 8 miles W.N.W. from Kilrush, is much resorted to by sea-

bathing visitors from Limerick and other places. Kilkee possesses a small harbour, and is a station whence fishing operations are to some extent carried on. *Lahinch* or *Lahinch*, population 999, besides 610 in the workhouse, situated at the head of Liscaunor Bay, about 2 miles S.W. from Ennistymon, is visited in summer for sea-bathing, for which the neighbouring strand is well adapted. Near the village are the ruins of Moy Castle, also the natural curiosities called the Puffing-Holes and the Dropping-well. *Liscaunor*, population 429, is situated on the north side of Liscaunor Bay, about 4 miles W. from Ennistymon. It possesses a small pier and harbour affording valuable shelter to vessels of small burden, the rocky character of the coast for some distance giving few opportunities of such a refuge. A fishing trade of some importance is carried on here. *Milltown-Malbay*, population 1452, besides 1050 inmates of workhouses, is situated on the road between Ennistymon and Kilkee, about 8 miles S.W. by S. from Ennistymon, and at the head of a cove of Malbay. It is favourably situated for sea-bathing, and has on that account risen into comparative importance. Petty sessions are held. There is a dispensary of the Ennistymon Union. Seven fairs are held during the year. *Newmarket-on-Fergus*, population 1111, a small market-town, about 7 miles S.E. by S. from Ennis, possesses a good local trade. Five fairs are held in the year. Petty sessions are held, and the town is a station of the constabulary force. In the vicinity are several interesting relics of antiquity. *O'Brien's Bridge*, population 401, situated on the right bank of the Shannon, opposite the village of Montpellier, county Limerick, with which it is connected by the bridge from which the village takes its designation. The rapids which at this place made the navigation of the Shannon very difficult, have been deepened, and the span of several of the arches of the bridge has been enlarged. The bridge, which has stood for several centuries, has in its original construction been strongly built of rubble-stone, though rather roughly put together. Fairs are held on July 25th and November 7th. *Quin*, population 284, situated about 3 miles E. from Clare, is remarkable as containing the remains of Quin abbey, one of the best preserved old monastic buildings in Ireland. It was erected at the commencement of the 15th century. The square tower, the cloisters, and the aisles, are worthy of attention. *Six-Mile Bridge*, population 762, about 11 miles S.E. from Ennis, was formerly of some importance, but has now little to attract observation. Quarter and petty sessions are held here. Besides an Episcopal church, there are two chapels for Roman Catholics, a court-house, a market-house, and a dispensary. An annual fair is held on December 5th.

Of the 164,555 acres under cultivation in the county of Clare in 1851, which were comprised in 18,419 holdings, 9293 acres were under wheat, 42,128 oats, 21,080 barley, bere, and rye, 7326 peas and beans, 23,625 potatoes, 11,733 turnips, 2469 mangel-wurzel, carrots, parsnips, and cabbage, 313 vetches, rape, and other green crops, 1014 flax, and 45,074 meadow and clover. In 1851 on 19,018 holdings, of which 1519 were under 1 acre each, there were 13,087 horses, 8032 mules and asses, 1963 head of cattle, 85,512 sheep, 42,314 pigs, 10,983 goats, 238,734 head of poultry; of which the total value was estimated at 984,785*l*. The chief trade in the county is in corn and provisions. Sheep and cattle of excellent quality are reared in the county. Coarse linen and hosiery are made for home use.

Divisions for Ecclesiastical and Legal Purposes.—The county includes the diocese of Kilfenora, now united with that of Killaloe, the greater part of Killaloe and a portion of Limerick dioceses. The county returns three members to Parliament, two for the county, and one for the borough of Ennis. The assize town is ENNIS. Quarter sessions are held in rotation at Ennis, Ennistymon, Killaloe, Kilrush, Six-Mile Bridge, and Tulla. The county infirmary is at Ennis; there are fever hospitals at Ennis and Kilrush; the district lunatic asylum, to which Clare county may send 18 patients, is at Limerick. The Poor-Law Unions in which the county is comprised are those of Ballyvaghan; Corrofin; Ennis; Ennistymon; part of Gort; Killadysert; Kilrush; part of Limerick; part of Scariff; and Tulla. The county is within the military district of Limerick. The head-quarters of the constabulary establishment, comprising 9 districts and 56 stations, and including 421 men, including officers, are at Ennis. In December 1851 there were 130 National schools in operation in the county, attended by 17,283 children, of whom 8916 were males and 8318 females.

(*Ordnance Survey Map; Statistical Survey of the County of Clare; Thom, Irish Almanac; Parliamentary Reports; MSS. in British Museum, and Library of Royal Irish Academy.*)

CLARE ISLAND. [MAYO, County of; ACNILL.]

CLARE, or CLAREMORRIS, county of Mayo, Ireland, a post and market-town, and the seat of a Poor-Law Union, in the parish of Killooleman and barony of Claremorris, is pleasantly situated in 53° 43' N. lat., 8° 57' W. long.; distant 20 miles S.E. from Castlebar by road. Claremorris is a clean well-built place, and possesses an extensive retail trade. It contains a parish church, a Roman Catholic chapel, a dispensary, and a Union workhouse. Quarter sessions are held in the town, and petty sessions on the second Thursday of every month. Fairs are held on May 24th, June 22nd, September 27th, and November 23rd. Adjoining the town is Claremount, the seat of James Browne, Esq., and in the neighbourhood is the extensive demesne of Castle Margaret, the seat of Lord Oranmore. Claremorris Poor-Law Union

comprises 19 electoral divisions, with an area of 110,788 acres, and a population in 1851 of 32,666.

CLAUDE, ST. [JENA, Department of.]

CLAUSENBURG, properly *Klausenburg* (Klusch, Kolosvár), a royal free town and capital of the principality of Transylvania, in Austria, is situated in about 46° 47' N. lat., 23° 32' E. long.; 72 miles N.N.W. from Hermannstadt, and has about 22,000 inhabitants. The town (it is said) was founded by the Romans, who gave it the name of Claudia, whence its Latin designation *Claudiopolis*. In 1178 the town was enlarged by a colony of Saxons, who from its locality called it *Clausenburg*, from the old word 'Klaus', which signifies a 'mountain defile.' The citadel, which is built on a hill, was not erected till 1721, since which date commodious barracks have been made in it. *Clausenburg* is situated on the river Szamos, in the midst of a romantic valley, surrounded with mountains, and laid out in fields, gardens, and vineyards. It is defended by lofty walls and towers, and is divided into the inner town (consisting of an older and more modern quarter), and six suburbs; the former though of small extent has a very pleasing appearance. It has some handsome streets and houses, and a large market-place, 500 paces long and 360 broad. There are six Roman Catholic churches, the most striking of which is the cathedral, erected in pursuance of a vow by King Sigismund in 1399; it is 94 paces long and 34 broad, and contains some fine monuments. The Calvinists, Lutherans, Greek Catholics, and Unitarians have places of worship in the town.

Clausenburg contains an academical lyceum, with a public library attached; a Roman Catholic gymnasium; Reformed and Unitarian colleges; a Roman Catholic seminary; several convents; a normal school; an orphan asylum, two hospitals, and various other charitable institutions. There is a large national theatre, and several public gardens are laid out around the town. Among the other buildings is the old castle, which is now in ruins, the town-hall in the market-place, and numerous palaces belonging to the nobility.

Clausenburg is the seat of the government of Transylvania, of Protestant and Unitarian consistories, of a board of education and other public departments. Being a free town all its civil and other affairs are conducted by its own judges and magistrates. The population is composed of Hungarians, Saxons, Armenians, Greeks, and Jews. The manufactures, which are inconsiderable, are chiefly woollens, earthenware, and paper. *Clausenburg* is the birth-place of Matthias Corvinus, king of Hungary.

CLAUSTHAL, the largest and most important of the mining towns of the Harz, is situated upon two bleak and naked eminences, 25 miles N.E. from Göttingen, 48 miles S.E. from Hanover, and has about 10,000 inhabitants, including the town of *Zellerfeld*, which is separated from it only by a rivulet called *Zellerbach*. It is the seat of administration for the mining districts of *Hauver*, and stands at an elevation of 1170 feet above the sea. The streets are straight and broad, and planted in general with chestnuts and lime-trees, but are very badly paved. The houses are mostly constructed of wood. The town contains two churches, an orphan asylum, a mint, a mining academy, to which a seminary for teaching forest economy is attached, with collections in mineralogy, models of mines and mining machinery, &c.; a gymnasium, manufactories of ironware, yarns, woollens, camlets, &c. In the immediate vicinity are the richest mines of the Upper Harz, which yield silver, copper, lead, and litharge, and give employment to above 2000 workmen. In the mine called *Georg-Wilhelm* is one of the deepest shafts in the Harz, reaching (it is said) to a depth of 2000 feet below the level of the Baltic. In the *Silber-segen* mine, which is entered by a shaft 176 fathoms deep, there is a subterranean canal, 2339 fathoms long, by which the ore is conveyed from some of the shafts. All the mines are drained by a tunnel cut through the mountain, 6 miles in length, and emerging at the little town of *Grund*. The machinery for working the mines, forges, tilt-hammers, and stamping-mills, is put in motion chiefly by water-power, and all the rain-fall of the neighbourhood is collected into reservoirs, of which there are more than 50, to supply the works of *Clausthal* and *Zellerfeld*.

CLAYS. [NORFOLK.]

CLEOBURY-MORTIMER, Shropshire, a market-town and the seat of a Poor-Law Union, in the parish of Cleobury-Mortimer and hundred of Stottesden, is situated on the little river *Rea*, in 52° 22' N. lat., 2° 28' W. long.; distant 30 miles S.S.E. from Shrewsbury, and 137 miles N.W. by W. from Loudon. The population of the parish in 1851 was 1738. The living is a vicarage in the arch-deaconry of Salop and diocese of Hereford. Cleobury-Mortimer Poor-Law Union contains 17 parishes and townships, with an area of 51,900 acres, and a population in 1851 of 8553.

Cleobury-Mortimer is so called from having once belonged to the family of Mortimer. A castle erected here by *Hugh de Montgomery*, was destroyed in the time of *Henry II*. There is little trade carried on. The town is lighted with gas. The church is a fine old building in the early English style, with some Norman work about the tower. The chancel is spacious, and the chancel arch very fine. The Wesleyan Methodists and Roman Catholics have places of worship. The Free school, founded in 1714 by *Sir Bacon Child*, has an annual income of 500*l*., and contains about 100 boys and 80 girls. In the vicinity of the town is a paper manufactory. Coal mines employ

some of the inhabitants. The market-day is Wednesday, and fairs are held on April 21st, Trinity Monday, and October 27th, for cattle sheep, and pigs. A county court is held in Cleobury.

(Communication from Cleobury-Mortimer.)

CLERMONT-FERRAND, the capital of Basse-Auvergne and of the department of Puy-de-Dôme, in France; the seat of a provincial university, of an academy of sciences, literature, and art, of an endowed college, of a secondary school of medicine, and a departmental school of midwifery, of a consultative chamber of manufactures and an exchange; stands at the entrance of a vast semicircular plain, hemmed in except towards the east by a line of hills clothed with woods and vineyards, behind which springs up the majestic peak of the Puy-de-Dôme. To eastward the view extends for several miles over the beautiful district of the Linnagne. The town is built close to a mountain torrent, which rises in the Puy-de-Dôme, and flows into the Allier; it stands at a distance of 237 miles S. by E. from Paris, in 45° 46' N. lat., 3° 5' E. long., and has 30,563 inhabitants, without including the suburb of Montferrand, which numbers about 5000 inhabitants.

In approaching the town from Paris the traveller passes through the suburb of Montferrand, which is united to Clermont by a noble avenue, 2 miles long, perfectly straight, and bordered with willows and walnut-trees. Clermont itself, built on an eminence, forms when viewed at a little distance, a noble termination to this avenue, and inspires the traveller with a notion of beauty which the interior of the town does not realise. It is not well laid out; the streets are narrow, and the houses, though not ill-built, yet present, from the dark colour of the lava which is the chief building material, a sombre appearance. The town is separated from the faubourgs by a line of boulevards, which are for the most part planted with trees. The squares are large but irregularly built. The Place-du-Taureau is remarkable for a handsome fountain in the form of an obelisk, dedicated to the memory of General Desaix. This Place and those of Poterne and L'Espagne command most agreeable prospects; that of Delille, or Champieux, is adorned with a gothic fountain, richly sculptured. The Place-d'Armes, or de Jaude, as it is also called, is inclosed mostly by new and well-built houses. In recent times many improvements have been introduced, by widening the streets and laying down smooth pavements instead of the rough pebbles formerly used. The fountains are supplied with water which is conveyed through pipes to the highest part of the town. One of the most remarkable of them is the Château d'Eau, which presents a multitude of sculptured figures, bas-reliefs, jets, and basins, disposed in a pyramidal form, and producing a singular but rich effect.

Of the public buildings the principal is the cathedral. The first cathedral of Clermont was built in the 6th century, by St. Namatius, ninth bishop of Auvergne. According to Gregory of Tours, this structure was 164 feet long and 65 feet wide; it was lighted through 42 windows, entered by 8 doors, and the roof was supported by 70 columns. This church was destroyed by the barbarians, rebuilt and again destroyed. The present cathedral dates from A.D. 1248; it stands in the centre of the city, and though it has never been completely finished, is regarded as one of the finest monuments of gothic architecture in France. The interior is 323 feet long, 140 feet broad, and 108 feet high, from the pavement to the vault of the roof, which is supported by 56 clustered pillars. The pillars of the choir are especially remarkable for their delicacy. The choir is surrounded by chapels. Of the painted windows the splendid roses of the transept are particularly worthy of attention. The whole structure is covered in with lead, and over the aisles are terraces, whence extensive views are obtained over the town and the surrounding country. The dark stone with which the structure is built gives it a severe and imposing aspect, increased by its lofty site. There is no good near view of the exterior, on account of the houses and shops that press close upon it. The church of Notre-Dame-du-Port is curiously decorated and very ancient, many of its parts dating from the time of the original construction in A.D. 863. The other remarkable objects at Clermont are the public library, containing 18,000 volumes, the botanical garden, the endowed college, the museum of natural history, mineralogy, and antiquities, the house in which Pascal was born in the Rue St.-Gènes, the theatre, town-house, court-house, the buildings in which the corn and linen markets are held, the two large hospitals, and the numerous promenades in the town and its environs. In the Place Jaude there is an intermittent fountain, the waters of which are advantageous in fevers and diseases of the digestive organs. In the suburb of St. Alyre, a fountain gives birth to a little stream which deposits such a quantity of calcareous and ferruginous sediment as gradually to raise its bed to a level with the surface of the fountain, when of course the waters would flow in a new channel and with the same result. But to prevent the ground from being covered with these petrifications the bed of the stream is destroyed from time to time. Once only the process was suffered to go on to the last degree, and the result was a level wall 13 feet broad, 262 feet long, and with a height varying with the slope of the ground.

Clermont is the seat of a bishop, whose see comprises the department of Puy-de-Dôme; it is also the head-quarters of the 20th Military Division, which includes the departments of Puy-de-Dôme, Haute-Loire, and Cantal.

Woollen cloth, consisting of piece-dyed goods for the home market and for exportation to the Levant, jewellery, and plated goods are the chief industrial articles; but silk stockings, room-paper, cotton-yarn, painted glass, and various other articles are manufactured. The town has also a large commerce in the linen of Auvergne, corn, hemp, wool, flax, hides, wine, oil, salt, dried and preserved fruits, cattle, cheese, and various other objects of local industry.

Clermont-Ferrand occupies the site of Augustonemetum, which Strabo calls Nemossus, and erroneously places on the Loire. It was afterwards called *Arverni*, from the Celtic nation whose capital it was, and whose name is perpetuated in Auvergne. Julius Cæsar does not mention Nemetum or Augustonemetum; in his time the capital of the Arverni was Gergovia, which he unsuccessfully besieged. An annalist of the time of Pepin mentions the castle of Clarus Mons which defended the ancient town, and from this no doubt the modern name Clermont is derived. The ancient town seems to have occupied the height on which the cathedral stands, and the level ground to the south-east of it; several fragments of marble columns and parts of mosaics have been found on this site. In A.D. 408 the town was sacked by the Vandals, who destroyed all the principal edifices; in 412 it was again taken by the soldiers of Honorius. Euric, the Arian king of the Visigoths, unsuccessfully besieged it in 473, but it fell into his hands with the rest of Auvergne the following year, when he imprisoned Sidonius Apollinaris, bishop of Auvergne, for encouraging the townsfolk in resisting the siege. Thierry, the natural son of Clovis, took Clermont in 507, when all Auvergne was first subjected to the Frankish kings. Childbert having seized upon Clermont in 532, Thierry besieged and took it, destroying the Roman aqueduct, and plundering the inhabitants of all they possessed. The town was ravaged again by Pepin, who made himself master of the castle of Clarus Mons in 761. From the plundering ravages of the Northmen it suffered severely in 853 and 916.

In a council held at Clermont A.D. 1095, the first crusade was resolved on. Pope Urban II. presided. The transactions of this council were numerous and important. In the middle ages, and up to the period of the French revolution, Clermont ranked as the capital of Auvergne. The bishopric of Auvergne was founded about A.D. 250, and the bishop held the first rank among the suffragans of the archbishop of Bourges; and until the erection of the bishopric of St. Flour in 1317 was the only bishop in Auvergne. Since about 1160 the prelates have been styled bishops of Clermont. The diocese at present comprehends the department of Puy-de-Dôme.

Louis le Gros besieged Clermont in the year 1100, in order to compel the townspeople to admit the bishop whom they had expelled. In the intestine commotions and the wars with the English in the 12th and 13th centuries, the town suffered often; in 1220 they were allowed the privilege of defending themselves, of meeting and choosing their own officers, and in lieu of this service were exempted from all taxes. In 1285 the high tribunal of justice was for some reason transferred to Montferrand by Philip the Fair. Clermont was again made the capital of the duchy of Auvergne in 1556, and the first commission of assizes was held there in November of that year. During the wars of the League the inhabitants of Clermont were devoted adherents of the king. From the 28th of September 1665, to the 1st of February following, a commission of assize sat in Clermont to investigate and punish the vexatious oppressions of the Auvergnat nobles.

The environs of Clermont are very interesting on account of abundance of evidence they bear of the volcanic agency that once desolated the region of Auvergne. The gorge in which the village of Royat is built abounds with springs that gush forth from basaltic rocks, and flow in beds hollowed out in what was once a molten torrent of lava. The Puy-de-Dôme and other summits that surround it are easily reached from Clermont.

The plateau of Gergovia, some three miles to the south-east of the town, is considered to be the site of the Gergovia from which Julius Cæsar was obliged to retire in his campaign against Vercingétorix. ('Bell. Gall.' vii.)

(*Dictionnaire de la France.*)

CLERMONT-LODÈVE. [HÉRAULT.]

CLERMONT-OISE. [OISE, Department of.]

CLEVEDON. [SOMERSETSHIRE.]

CLEVELAND. [YORKSHIRE.]

CLEVES (Klève, German), the most north-westerly district of the kingdom of Prussia, and part of the old duchies of Cleves and Guelderland, is the name of a circle in the province of Düsseldorf, in the Prusso-Rhenish provinces. It contains about 185 square miles, and had a population of 45,000 (chiefly Roman Catholics) in 1846. Cleves lies between the Rhine and Holland. The surface is partly of moderate elevation, but for the most part a complete level, and some of it near the Rhine is so low as to be flooded occasionally by the river, from which however it is protected by a high dam. The soil, though very sandy in many parts, has in general been rendered extremely productive by careful cultivation. There are few parts of Germany in which farming is conducted on a better or more profitable system than in Kleve. In the westerly districts lies the extensive Reichswald, or Forest of Cleves: 31,000 acres of this circle are occupied by woods and forests, while of the remainder 58,350 acres are arable

land, and 23,200 acres are in meadows or pastures. The produce is chiefly wheat, rye, barley, oats, buckwheat, tobacco, peas and beans, potatoes, clover-seed, butter, and cheese, of which three last-mentioned articles much is exported. Cattle are fed for the consumption of the manufacturing towns of Düsseldorf and Elberfeld, and large quantities of flax and seeds are grown for exportation to Holland and England. The district is almost exclusively agricultural, but there are some manufactures of cotton-yarn, woollens, silks, cottons, linens, cutlery, fine leather, &c.

The capital is *Cleves*, formerly also the chief town of the duchy of Cleves, which is pleasantly situated in 51° 47' 40" N. lat., 6° 7' E. long., 48 miles N.W. from Düsseldorf, on the Kermisdahl, about a mile from the banks of the Rhine, with which it communicates by the Spoy Canal. It is walled, well built in the Dutch style, and divided into upper and lower towns; the upper town being built on three hills the streets are steep and irregular. Formerly it was fortified, and was considered a place of strength until the middle of the 16th century. It contains a Catholic cathedral built in 1346, with two towers; three Protestant churches; a synagogue; and a royal palace called the Schwanenburg, the tower of which, built by the Duke of Cleves in 1439, is extremely massive, and being on the highest point of the hill on which the palace stands forms a stately ornament to the town. The palace is now used partly for government offices and partly for a prison. Anne of Cleves, one of Henry VIII.'s ill-fated wives, was born in it. There are extensive gardens round the palace, which contains a valuable collection of Roman antiquities found in the town and its environs. Cleves possesses a high-school, three hospitals, a house of industry, house of correction, &c. The population is about 8000. The manufactures consist of yarns, cotton goods, silks, woollens, flannels, stockings, linens, tobacco, brass-ware, &c. There are three squares or open spaces, and in the vicinity a park of about 700 acres, and a chalybeate spring surrounded by handsome grounds, which was opened in 1742. The place is much frequented by visitors in summer.

The old duchy of Cleves extended along both banks of the Rhine. After the Franks had driven the Romans from this territory it was governed for a long time by counts. Otho I. united Cleves to the German empire, but it was still ruled by counts as a fief of the empire. Adolphe II, count of Lamarek, having married Mary, daughter of Thierry VIII, last count of Cleves, inherited the county, and having obtained the investiture of it from the emperor Sigismund, assumed the title of Duke of Cleves in 1439. On the death of the Duke Johann Wilhelm in 1609 the duchy fell to Sigismund, elector of Brandenburg, who had married Anne, niece of the last duke. The house of Brandenburg held the duchy till 1794, when the French seized it. Napoleon I. united the portion of the duchy that lay along the right bank of the Rhine to the grand duchy of Berg in 1806. These territories were restored in 1815 to Prussia, which formed them into a province called for a time Cleve-Berg, or Juliers-Cleve-Berg, from a part of the duchy of Juliers having been united with them. All these duchies are now merged in the Prussian province of the Rhine. [RHEIN-PROVINZ.]

CLIFDEN, county of Galway, Ireland, in the parish of Omev and barony of Ballinabinch, a sea-port and post-town, and seat of a Poor-Law Union, is situated in 53° 30' N. lat., 9° 58' W. long., distant 47 miles W.N.W. from Galway, and 178 miles W. from Dublin. The population in 1851 was 1602 in the town, 11 in the bridewell, and 639 in the workhouse. Clifden Poor-Law Union comprises 19 electoral divisions, with an area of 192,938 acres, and a population in 1851 of 25,389.

Clifden is situated at the head of an inlet of Ardbear Haven, one of the numerous deep indentations of the western coast of Connemara. It stands on the elevated banks of the Owenglen River, a rapid stream descending from the neighbouring mountain group of the Twelve Pins, or Bins, which form a grand background to the picturesquely-situated town. Clifden owes its origin to the enterprise of the late Mr. Darcy, who about 1812 erected the first buildings here. It consisted only of a single two-story slated house and a few thatched cabins until 1822, when the new lines of road from the interior being opened by the government, a place for the storage and shipment of produce was required to accommodate the increasing agriculture of the district. Mr. Darcy offering building leases in perpetuity a town sprung up with extraordinary rapidity. In 1835 the revenue was 7000*l.* The potatoe blight and consequent famine of 1846 and the succeeding years with other causes, reduced the town to a very helpless condition. The town was sold in the Encumbered Estates Court along with the rest of the Darcy estates. There are in Clifden a handsome church in the gothic style, a school-house, a large Roman Catholic chapel, a dispensary and fever hospital, and barracks for military and constabulary. Quarter sessions for the county of Galway are held in rotation. Vessels of 200 tons can come up to the pier; and in Ardbear harbour, outside the inlet of Clifden, is a safe anchorage for vessels of any tonnage. Clifden Castle, the seat of the former proprietor, is finely situated on the northern shore of Ardbear harbour, about a mile west of the town. The mansion is castellated, and presents an imposing and picturesque appearance. A late eminent traveller remarks that the scenery here is more Swiss in character than anything he had seen in Ireland.

(Lewis, *Topographical Dictionary*; Inglis, *Ireland in 1834*; *Map of the Darcy Estate in the Court for Sale of Encumbered Estates in Ireland*.)

CLIFTON, Gloucestershire, a suburb, and generally reckoned as forming a part of the city of Bristol, and the seat of a Poor-Law Union, in the parish of Clifton and hundred of Barton Regis. The population of the parish of Clifton in 1851 was 17,634. The living is a perpetual curacy, with the curacy of Dowry annexed, in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Clifton Poor-Law Union contains 12 parishes and townships, with an area of 37,189 acres, and a population in 1851 of 77,950.

Clifton owed its early prosperity to the Hotwells, which made it a favourite resort as a watering place. It is now much used as a place of residence by the merchants of Bristol. Its name is derived from its situation on the precipitous heights overhanging the river Avon. From these heights are obtained extensive views over rich and picturesque scenery. Clifton parish church, erected in 1822, will accommodate 1700 persons; there are four other churches in Clifton belonging to the Established Church, and a large Roman Catholic Cathedral. The Independents, Baptists, and Wesleyan Methodists have places of worship. Schools are attached to most of the churches and chapels. For a further notice of Clifton, see BRISTOL.

CLITHEROE, Lancashire, a market and manufacturing town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Whalley and hundred of Blackburn, lies in the valley of the river Ribble, 216 miles N.N.W. from London by road, 225 miles by railway via Bolton and Manchester, and 26 miles S.E. from Lancaster by road; in 53° 52' N. lat., and 2° 3' W. long. The population of the municipal borough in 1851 was 7244; of the parliamentary borough 11,480. The borough is governed by a municipal corporation, consisting of 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. For sanitary purposes the borough is governed by a Local Board of Health. The living is a perpetual curacy in the rectory of Whalley. Clitheroe Poor-Law Union contains 34 parishes and townships, with an area of 129,990 acres, and a population in 1851 of 22,367.

The town is pleasantly situated upon a low outlying hill of mountain limestone. The main street runs along the ridge of the hill, which is crowned at its southern extremity by the ruins of the old castle of Clitheroe, and is terminated at its northern extremity by the parish church of St. Mary Magdalene. The suburbs of Waterloo and Salford are built on the low lands near Mearley Brook, east of the town; while on the west side a road runs through the suburb of Bawdlands to the detached village and factory of Low Moor, by the side of the Ribble. The name, acutely spelt Clitheraw, is descriptive of its situation, a 'hill by the waters.' The family of De Lacy, who came over with the Conqueror, built the castle, which consisted of a keep, with a tower and arched gateway, merely as a fortress. Within the walls by which the castle was inclosed was a chapel dedicated to St. Michael, which was destroyed when the fortress was dismantled in 1640. The Honor of Clitheroe was, for nearly three centuries, a part of the possessions of the duchy of Lancaster, till Charles II. granted it to General Monk, duke of Albemarle, from whom it has descended to the present proprietor, the Duke of Buccleuch.

The church of Clitheroe is an ancient structure, with a fine Norman arch between the nave and the choir; it is dedicated to St. Michael. Besides the parish church, there is a district church of St. James, built in 1837. The Roman Catholics, Independents, and Wesleyan Methodists have places of worship. Contiguous to the churchyard is a Grammar school, founded and endowed by Philip and Mary in 1554, at the recommendation of Bishop Bridgman, who drew up the statutes. The annual income from endowment is about 450*l.* The number of scholars in 1852 was 25. There are National and Infant schools, a mechanics institution, and a savings bank.

Clitheroe was a borough by prescription as early as the 11th century; but its existing corporate arrangements were settled by the Municipal Corporation Act of 1835.

Extensive print-works and cotton manufactories have been recently established at Clitheroe, which, along with the lime-kilns, provide ample employment. The neighbourhood abounds with limestone, for which there is a great demand, as it can now be conveyed by water to any part of the kingdom. The chief establishment in the town is the celebrated print-works of Messrs. Thomson at Primrose Lodge, on the south-west margin of the town. A dam has been thrown across the valley of Mearley Brook, to form a reservoir for working the great water-wheel of these works. Attached to the works is a farm of 80 acres, supplied with manure by means of sewage refuse, which would otherwise contaminate the streams. There are four cotton factories at Clitheroe. Nearly one third of the total population of Clitheroe, adults and children, are employed at the five large establishments. The market is on Tuesday: and on every alternate Tuesday there is a large cattle-market. Fairs for horses, cattle, and pedlery are held on March 24th, August 1st, the fourth Friday after September 29th, and December 7th. On the west of Clitheroe is the celebrated eminence, Pendle Hill, the summit of which is 1803 feet above the sea.

(Whitaker, *History of the Original Parish of Whalley and Honor of Clitheroe*; Paines, *Lancashire*; *Communication from Clitheroe*.)

CLOGHEEN, county of Tipperary, Ireland, in the parish of Shanrahan and barony of West Iffa and Offa, a post-town and the head of a Poor-Law Union, is situated in 52° 17' N. lat., 7° 57' W. long., distant 14 miles W.S.W. from Clonmel, 119 miles S.S.W. from Dublin, on the road from Clonmel to Fermoy, and 18 miles E.N.E. from Fermoy. The population in 1851 was 1562, besides 1322 in the workhouse and other public institutions. Clogheen Poor-Law Union comprises 14 electoral divisions, with an area of 118,427 acres, and a population in 1851 of 33,952.

Clogheen is a well-built cheerful town, situated on the southern verge of the great valley included between the parallel ranges of the Galtee Mountains on the north, and the Knockmeleadow Mountains on the south. This vale lying at a low elevation and possessing a rich limestone soil, produces abundant crops of wheat, the grinding of which constitutes the principal branch of industry in Clogheen. The Tar, an affluent of the Suir, furnishes an abundant water-power. Here are a bridewell and sessions house, in which quarter sessions are held, a barrack for two troops of horse, a fever hospital, and a dispensary. At Skeheenarinky, about six miles west by north from Clogheen, are the remarkable caverns in the limestone rock, generally known as the 'Caves of Mitchellstown.' They consist of a series of natural vaults and galleries extending about 800 feet in length by 570 feet in breadth, and exhibiting a surprising and beautiful variety of crystalline concretions. The depression of the lowest chamber beneath the level of the entrance is 50 feet.

(Fraser, *Handbook for Ireland*; Lewis, *Topographical Dictionary*.)

CLOGHER, county of Tyrone, Ireland, in the parish and barony of Clogher, an ancient episcopal see and post-town, and the seat of a Poor-Law Union, is situated on the road from Enniskillen to Aughnacloy and Dungannon, 98 miles N.N.W. from Dublin. The population in 1851 was 553 in the town, exclusive of 442 in the workhouse. Clogher Poor-Law Union comprises 18 electoral divisions, with an area of 101,679 acres, and a population in 1851 of 31,388.

The town of Clogher is situated on the Launy, a feeder of the Blackwater, and consists principally of one straggling street. The cathedral, which also serves as the parish church, is a plain cruciform building; the bishop's palace stands in a handsome demesne of 500 acres, adjoining the town. The diocese embraces the greater part of the county of Fermanagh, and the whole of Monaghan, and extends into portions of Donegal, Tyrone, and Louth. It contains 45 parishes, constituting an equal number of benefices, being the only diocese in Ireland in which these divisions coincide. The chapter consists of dean, precentor, chancellor, archdeacon, and five prebendaries. The see is held by the Archbishop of Armagh.

Saint Patrick is said to have been the first bishop of Clogher, where Jocelyn reports that he founded a see before the erection of the church of Armagh in A.D. 444. Maccartin, the disciple of Patrick, built a cell and monastery here before his death in 506. The church was rebuilt in 1041, in 1295, and again, a century later, by bishop Arthur MacCamel, the former building having been destroyed by fire, together with the cell of Maccartin, the Monastery of the Virgin, two chapels, and 32 other houses, including the episcopal court. The first Protestant advanced to this see was Miles Magrath, in 1570: he was afterwards Archbishop of Cashel, to which he was translated in the same year in consequence of the impoverished state of Clogher about this time. The see was afterwards greatly enriched by a grant of the revenues of the abbey of Clogher, annexed to this bishopric by King James I. Among the names of the more recent bishops of Clogher are those of Spottiswood, Lesly, Boyle, and Dr. Sterne, the munificent founder of the University Printing-house in Dublin.

(Ware, *Bishops*; *Reports of Commissioners*.)

CLONAKILTLY, or CLOGHNAKILTLY, county of Cork, Ireland, in the parish of Kilgariff and barony of East Carberry, a post-town and the seat of a Poor-Law Union, and formerly a parliamentary borough, is situated on a channel about a mile from the harbour of Clonakilty, in 51° 37' N. lat., 8° 53' W. long., distant 196 miles S.W. from Dublin. In 1851 the population was 3300. Clonakilty Poor-Law Union includes 20 electoral divisions, with an area of 80,455 acres, and a population in 1851 of 31,473.

The principal part of the present town has been built since the year 1790, about which time a marked improvement took place in trade of all kinds. The erection of quays and extensive stores created an independent market, and made this port the point of export of heavy goods for the surrounding country. About the same time it became the most frequented linen and yarn market in that district. The linen trade has since been abandoned. An export of corn to Cork and import of coals are the principal branches of traffic. The public buildings are a church, a Roman Catholic chapel, a barrack, a court-house, a linen-hall now disused, and a county bridewell.

(*Reports of Commissioners*; *Statistical Survey of the County of Cork*; Fraser, *Handbook for Ireland*.)

CLONDALKIN. [DUBLIN COUNTY.]

CLONES, county of Monaghan, Ireland, in the parish of Clewes and barony of Dartry, a post-town and the seat of a Poor-Law Union, is situated in 54° 7' N. lat., 7° 15' W. long., distant 86 miles N.N.W. from Dublin, and 12½ miles S.W. from Monaghan. The population in 1851 was 2333, besides 510 in the workhouse and other public institutions. Clones Poor-Law Union comprises 16 electoral

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divisions, with an area of 73,506 acres, and a population in 1851 of 28,183.

Clones is situated on the high road from Monaghan to Belturbet. The town is substantially built for the most part of stone, and has a comfortable and thriving appearance. The market-place is a triangular space having the market-house in the centre. An ancient sculptured stone cross of that kind peculiar to Ireland, in which the arms of the cross are inclosed in a circle, stands on the summit of a flight of steps in the market-place. In or near the town are places of worship for Episcopalian, Roman Catholics, Presbyterians, and Wesleyan Methodists; a sessions court-house; a bridewell; an infirmary; and a fever hospital. There is a considerable trade in linens and in agricultural produce. Here are extensive corn-mills and a brewery. Clones is rich in antiquities. On the south side of the town, on the road leading to Cootehill, are the ruins of an ancient monastery alleged to have been founded early in the 5th century, including a round tower. The Ulster Canal passes near the town. Quarter and petty sessions are held here.

(Lewis, *Topographical Dictionary*; Thom, *Irish Almanac*.)

CLONFERT. [GALWAY; KILLALOE.]

CLONMACNOIS, or CLUANMACNOIS. [KING'S COUNTY.]

CLONMEL, counties of Tipperary and Waterford, Ireland, a post and assize town, a municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of St. Mary of Cloumel, chiefly in the barony of Iffa and Offa East and south riding of the county of Tipperary, and partly in the barony of Upperthird and county of Waterford, is situated on the river Suir, 104 miles S.W. by S. from Dublin, 52° 13' N. lat., 7° 43' W. long. The population in 1851 was 12,367 on the Tipperary side of the river and 151 on the Waterford side, besides 2818 persons in the workhouse and other public institutions. Clonmel is governed by a corporation consisting of a mayor, free burgesses, and a commonalty; and returns one member to the Imperial Parliament. Clonmel Poor-Law Union comprises 14 electoral divisions, with an area of 86,811 acres, and a population in 1851 of 36,650.

Clonmel is built principally on the northern or Tipperary side of the Suir, and on an island formed by that river, with a small suburb on the southern or Waterford bank. There are five bridges, two of which connect Moore's Island with both banks of the river, and two are carried over Long Island, which is about three furlongs in length by one furlong wide. The fifth bridge crosses the whole breadth of the river. Long Island is entirely built over. The town contains several good streets, the main street extending parallel to the river for upwards of a mile in a series of divisions known by different names. Several short and narrow streets lead southward to the river, three of them conducting to the bridges. The streets which diverge from the main street towards the north are more numerous and of higher pretension than those leading to the river. The material employed in building is limestone, which abounds in the vicinity. The streets are paved and lighted with gas. The parish church of St. Mary is situated north of Main-street. It is an ancient and spacious building with two towers, one of 84 feet surmounted by an octagonal lantern, and has a fine oriel window adorned with gothic tracery and stained glass. A large nunnery stands on the opposite side of the river. There are places of worship for Roman Catholics, Presbyterians, Wesleyan and Primitive Methodists, Quakers, and Unitarians; two convents, and an institution of the Society of Christian Brothers. An Endowed school founded in 1685 has an annual income from endowment of about 600*l.*; the number of scholars in 1851 was 13, of whom 6 were free. In Clonmel are the county lunatic asylum, an infirmary, a fever hospital, a dispensary, the county jail and court-house, house of correction and town bridewell, barracks, the county club-house, and other buildings. There are a mechanics institute, a savings bank, and a Model school under the National Board of Education.

Clonmel is a place of considerable antiquity. It is said to have been walled by the Danes. Otho de Grandison, who had a grant of Tipperary and a considerable portion of Cork, was the first English possessor. He founded a Franciscan friary here in 1269. From its situation on the frontiers of the pale, Clonmel was a convenient station for assembling on any emergency. On the breaking out of the war in 1641, Clonmel declared for the Roman Catholic cause. It made a good defence against Cromwell, who besieged and finally took it in 1650. Few antiquities remain: a gate-house at one end of the main street is the principal part of the old works standing. The assizes for the south riding of Tipperary are held here, and quarter-sessions in rotation, besides weekly petty sessions. The market-days are Tuesday and Saturday. Fairs are held on May 5th, November 5th, and the first Wednesday in every month. The exports from Clonmel are chiefly corn, cattle, butter, and provisions; of wheat from 200,000 to 300,000 barrels are annually brought into the town. The flour-mills, which are numerous and extensive, are chiefly situated on Suir Island. Clonmel is the depôt of the great posting establishment of Mr. Bianconi. There are several breweries, an extensive distillery, and a cotton manufactory. Barges of from 20 to 50 tons ply on the Suir to Waterford. The northern bank of the Suir, between the two lower bridges, is quayed in. The Waterford and Limerick railway passes through Clonmel. The ruins of the ancient church of St.

Stephen remain at the western and those of the church of St. Nicholas at the eastern end of the town: there are also some remains of the ancient castle. The environs of the town are particularly rich and attractive. The name signifies 'the vale of honey.'

(*Ordnance Survey Map*; Thom, *Irish Almanac*; Fraser, *Handbook for Ireland*.)

CLONTARF. {DUBLIN COUNTY.}

CLOUD, ST., a small town in France on the Paris-Versailles railway, on the left bank of the Seine, is situated in the department of Seine-et-Oise in France, about 5 miles W. from Paris. It is said to have been known in the earlier ages of the Frankish monarchy by the name of Nogent. Chlodwald, one of the three sons of Chlodomère, king of Orleans, retired hither in the 6th century, having embraced a monastic life to avoid the fury of his uncles Childebert and Clotaire, who had (533) murdered his two brothers in order to seize their inheritance. This prince was canonised, and his name, corrupted into St. Cloud, has been given to the town where he passed his life and where he was buried.

St. Cloud is celebrated for its park and palace. Within the limits of the park was formerly a chateau belonging to a Florentine, Jerome de Gondi, in which Henry III. of France took up his quarters during the siege of Paris by his own forces and those of Henry IV., king of Navarre. Here he was killed in 1589 by the monk Jacques Clement. The domain with an adjacent one was purchased by Louis XIV., and given to his brother the Duke of Orleans. The present palace, built by the duke, has engaged the talents of several architects, among whom was Mansard. It was purchased a little before the revolution by Marie Antoinette, who much enlarged it, and rendered it more magnificent. Bonaparte on his return from Egypt (1799) assembled the Council of the Five Hundred in the palace of St. Cloud, and dissolved them by force; and here he was named First Consul. After the Restoration the palace of St. Cloud was the favourite summer residence of the royal family. The memorable ordinauces which were the immediate cause of the revolution of 1830 were dated from St. Cloud. Louis Philippe made the palace of St. Cloud his summer residence, and it is now the usual country residence of the Emperor Napoleon III.

The park of St. Cloud extends from Sèvres to the town of St. Cloud, on a hill which rises above the bank of the Seine. The lower part of the park, along the bank of the river (from which it is separated by a road and towing-path), is occupied by a magnificent plantation of elms and by green lawns; it is the part most frequented by those on foot, as being the nearest to Paris and the most commodious for walking. But the upper part of the park, and the wooded slope of the hill on which it lies, excel the lower part in picturesque beauty. The slope, skillfully planted, is adorned by masses of foliage, by frequent steep declivities, and by pleasant recesses. Down this slope falls the cascade of St. Cloud, the water tumbling from one basin to another carved in the form of shells, and adorned with grotto-work, statues of marble and figures cast in lead; at the bottom of the cascade the 'giant jet' spouts up a column of water to the height of more than a hundred feet. The upper part of the park has spacious lawns and alleys of trees stretching beyond the reach of the eye, but the turf is not so fresh nor are the trees so vigorous as in the lower part. At the edge of the slope a platform called La Balustrade commands an extensive view, including the long meanderings of the Seine, the whole extent of the capital, and a considerable part of the surrounding country. From this platform rises a lofty square tower, from the top of which is a prospect still more extensive. This tower was built by Bonaparte in 1801, and on the top of it is a copy of the Monument of Lyciscrates, or Lantern of Demosthenes. The park was laid out by Le Nôtre. In one of the numerous shady alleys of the Great Park, as the lower part of it is called, is annually held the fair of St. Cloud, which lasts from the 7th to the 15th of September, and is numerously attended by the Parisians. Whilst the fair lasts the water-works play, the palace is thrown open to visitors, and in the evenings the park and the Great Avenue are illuminated.

The chateau of St. Cloud is equally admired for the beauty of its situation and the elegance of its architecture. It has not indeed the vast magnificence of Versailles, but it is as beautiful with less pretension. It consists of a principal front and two wings at right angles, inclosing three sides of a square; the fourth side is formed by a terrace and balustrade, from which there is a view of the park and of the same objects which the platform commands. There are three porticos of the Corinthian order—one in the centre of the principal front and one at the extremity of each wing; the intervals are adorned with statues and reliefs. The most remarkable parts of the interior are the chapel, the orangery, the theatre, the pavilion, the riding school, and the royal offices. The private apartments are richly furnished, and contain a great number of marble statues, porcelain vases, and above two hundred paintings by the most celebrated masters. The gallery was painted by Mignard; in the room called the Salon de Mars, the ceiling of which was painted by the same artist, are four superb marble columns. The chateau was much improved and splendidly furnished by Napoleon I.

CLOYNE, county of Cork, which gave its name to the merged bishopric of Cloyne, is a small port and market-town in the barony of Imokilly, distant 160 miles S.S.W. from Dublin. The population in

1851 was 1713. The chief object of interest here is a round tower, 92 feet in height, surmounted by a modern battlement, the original conical roof having been destroyed by lightning in 1749. East of the round tower, on the opposite side of the street, stands the cathedral, a small heavy building, supposed to have been raised about the end of the 13th century. The episcopal palace adjoins the town; it is a plain mansion, and stands in a handsome demesne. Cloyne is an inconsiderable town, consisting chiefly of one street of mean houses. Being the only market-town in a considerable extent of country, its fairs are usually well attended. Here are an Endowed and a Free school.

The founder of the bishopric was Colman, son of Lenin, the chief bard of Aedh, king of Munster, who died in 604. About 1480 it was united to the see of Cork, and thus continued till 1638, when it was constituted a separate see. By the 3rd and 4th Win. IV., c. 37, sec. 121, Cloyne has become reunited to CORK and ROSS.

(Ware, *Bishops*; Thom, *Irish Almanac*; Croker, *Sketches in the South of Ireland*.)

CLUN, Shropshire, a small market-town and borough, and the seat of a Poor-Law Union, in the parish of Clun and hundred of Pur-low, is situated on the river Clun, in 52° 25' N. lat., 3° 0' W. long., distant 24 miles S.S.W. from Shrewsbury, and 159 miles N.W. by N. from London by road. The population of the township of Clun in 1851 was 984; that of the entire parish, including 14 townships, was 2121. The living is a vicarage with the curacy of Chapel Lawu annexed, in the archdeaconry of Salop and diocese of Hereford. Clun Poor-Law Union contains 19 parishes and townships, with an area of 62,871 acres, and a population in 1851 of 10,118.

The district in which Clun is situated was formerly reckoned as a distinct hundred, called the hundred of Clun, and was reputed part of Wales. Shortly after the Norman Conquest the place gave a title to the celebrated family of Fitz-Alan of Clun, who maintained a castle here. In the time of Elizabeth the castle came by marriage into the possession of the Howards of Norfolk. It subsequently became the property of Lord Clive, and now belongs to his descendants. The dukes of Norfolk still retain the title of Baron of Clun. The ruins of the castle are situated on the banks of the stream. The borough of Clun is a borough by prescription. Besides the parish church there are places of worship for Wesleyan and Primitive Methodists. An hospital, founded in the early part of the 17th century by Henry Howard, earl of Northampton, has an income of about 1200*l.* per annum. In this institution 14 poor men are maintained, having each two or three rooms, a garden, clothing, fuel, and 10*s.* per week. The hospital is a neat quadrangular building with a large garden in front. There is no manufacture in the place. The weekly market, held on Wednesday, is well attended. Fairs for sheep and cattle are held on Whit-Tuesday, on September 23rd, and November 22nd.

CLUNY, a town in France, in the department of Saône-et-Loire, is situated in a narrow valley traversed by the little river Grône, 12 miles N.W. from Mâcon, and has about 4200 inhabitants, including the whole commune.

Until the early part of the 10th century Cluny was a mere village. In 910 Guillaume I., duke of Aquitaine, who had purchased the village, founded here an abbey of the Benedictine order. About 20 years afterwards St. Odon, second abbot of Cluny, introduced a reform into the Benedictine order, which reform spread very widely; and in course of time 2000 religious houses adopted the discipline of Cluny, which alone of the houses that observed the rule retained the rank of an abbey; the others were all simple priories, the abbots laying aside their title and rank. The abbot of Cluny was the recognised superior of the whole order. The abbey was very extensive. When in A.D. 1245 Pope Innocent IV., accompanied by twelve cardinals, a patriarch, three archbishops, the two generals of the Carthusians and Cistercians, and the King of France (St. Louis) and three of his sons, the Queen Mother, Baudouin, count of Flanders and emperor of Constantinople, the Duke of Bourgogne, and six lords, visited the abbey, the whole party, ecclesiastical, royal, and noble, were lodged in the building of the monastery without disarranging the order of the monks, who amounted to four hundred. The abbot had the disposal of a great number of benefices, and of the priories of the different houses of the order. The revenues of the establishment were estimated in 1762 at about 5000*l.* In 1789, a time when conventual property seems to have been valued very highly, the revenues of the abbey were said to amount to 12,000*l.* Of the abbey buildings only the abbot's house, one chapel, and a part of the church towers, escaped destruction. The church of the monastery, one of the largest in the kingdom, built in the form of a cross, with nave, aisles, double transepts, and choir, was totally demolished by the Vandals of the time. It was 656 feet long and 130 feet wide; the greater transept was 213 feet, the less 132 feet in length; the nave was 102 feet and the aisles 60 feet high; the vaulted roof was supported by 60 pillars. The monastery had been three times plundered by the Huguenots: before the last pillage the library contained 1800 manuscripts, and even after this event it was one of the richest in France; but it was dispersed or transferred elsewhere at the revolution. A college is now established in the abbot's house, we believe.

The town of Cluny occupies as much ground as Mâcon, though it is far less populous. It was formerly defended by walls, part of which

remain. There is a stone bridge over the Grône, and before the revolution there was one religious establishment, besides the abbey, and two hospitals, one for the poor and one for the sick. The inhabitants manufacture coarse woollens, paper, tiles, vinegar, shoe and glove leather, cream of tartar, and steelware; they also trade in corn, wine, leather, and wicker-work. The valley affords pasturage, and produces grain and wine: alabaster and jasper are obtained from the neighbouring mountains.

CLUTTON, Somersetshire, a village and the seat of a Poor-Law Union, in the hundred of Chew, is situated in 51° 19' N. lat., 2° 33' W. long.; distant 10 miles S. by E. from Bristol, and 118 miles W. by S. from London. The population of the parish of Clutton in 1851 was 1480. The living is a rectory in the archdeaconry of Bath and diocese of Bath and Wells. Clutton Poor-Law Union contains 29 parishes and townships, with an area of 46,200 acres, and a population in 1851 of 25,224. The village of Clutton is small, and the houses are not built on any regular plan. The parish church is ancient. There are chapels for Wesleyan Methodists and Independents; also National schools. Coal-mines are worked in the vicinity.

CLWYD, a river in North Wales, in the counties of Flint and Denbigh. It rises on the eastern declivity of the Bronbanog hills, a ridge belonging to the Hiraetog hills, and its upper course for a few miles is to the south. It then suddenly turns east-north-east, and continues nearly 8 miles in that direction. About 3 miles above Ruthin it declines to the north, and preserves this course to its mouth. The upper part of its course is through a narrow valley, which presents some very fine views. Below Ruthin it enters the fertile vale of Clwyd, which extends upwards of 15 miles in length, and is a pretty level tract from 5 to 7 miles wide. Being studded with towns, villages, and seats, covered with verdant meadows and luxuriant fields, and inclosed on every side by brown and barren hills, this vale offers by the contrast a very pleasant view. A little below St. Asaph the Clwyd is joined by the Elwy, which traversing a hilly tract brings to it a large mass of water, and the river below this town increases considerably in breadth. It soon afterwards enters the fertile and extensive marsh of Rhuddlan, called Morva Rhuddlan: 3 miles below the town of Rhuddlan it enters the sea through a small estuary opening northward, and forming a port for small coasting vessels. The whole course of the river is about 30 miles; it is navigable for flat-bottomed boats of about 70 tons up to Rhuddlan quay.

CLYDE, a river in Scotland, the third in magnitude, but the most important for its commerce and navigation. Its sources lie between 55° 15' and 55° 28' N. lat., where the highest summits of the mountain range which traverses South Scotland, the Lowthers (3150 feet), the Lead Hills, Queensbury Hill (2259 feet), and the range connecting the latter with Hart Fell (2790 feet), form nearly a semicircle. The rivulets which descend from this range unite in one stream about 55° 27', and form the Clyde. The largest of these streamlets is the Daer; but a smaller stream is called Clyde, before the union. After the junction of these streams, the Clyde continues in the direction of the Daer northward to Robertson, 12 miles lower down: in this part of its course the current is very rapid, and preserves the character of a mountain-stream. North of Robertson, the Tintoe Hills (2310 feet high) direct its course north-east; at Biggar it changes to the north-west and north, but its course soon becomes west-south-west to its confluence with the Douglas Water, thus making a large bend round the Tintoe Hills. The valley through which it flows is wide, and the current is so gentle that in some places it is hardly perceptible. After the junction with the Douglas Water the rapidity of the stream increases, and immediately afterwards the 'Falls of Clyde' change at once the level and the character of the stream. The first of these falls is Bonniton Linn, a cascade about 30 feet high, which is followed by Corra Linn, where three waterfalls occur near one another, each apparently as high as Bonniton Linn. The rocks on both sides narrow the bed of the river so much, that the waters in some places rush down a chasm not more than four feet wide. Corra Linn is two miles above the town of Lanark. Two miles lower down is the fall of Stonebyres, which also consists of three distinct falls, altogether about 70 feet in height. The falls and the scenery near them are extremely picturesque. It is probable that the river in a space of about six miles descends not less than 230 feet, and the valley of the river above the falls may be about 400 feet above the sea. Below the falls, the river, continuing its north-west course, runs in a fine valley to Blantyre and Bothwell, the lands rising in a gentle ascent on both sides. Here and lower down its banks are sometimes hold and richly wooded: sometimes they extend in level plains. At Glasgow the Clyde forms the harbour of the city. From Glasgow to the vicinity of Dumbarton the Clyde runs through a level country. At no great distance from the castle of Dumbarton the Kilpatrick Hills rise on the north, and the Renfrew Hills on the south. Between these ranges the Clyde forms an estuary, which at Dumbarton is upwards of a mile across, and widens in its progress to the west, being at Greenock more than two miles in breadth. To the west of the latter place at Cloch Point it turns abruptly to the south, and reaches the sea by the two straits which lie between the island of Bute, the Cumhræ Islands, and the coast of Ayrshire. The river south of Cloch Point is called the Frith of Clyde, a term which is frequently extended to

that part of the sea which lies between the island of Arran and the coast of Ayrshire. The whole course of the Clyde, from the source of the Daer to the southern extremity of the island of Bute, is about 100 miles.

CNIDUS was a city of Caria on the south-west coast of Asia Minor, at the extremity of a peninsula between the Sinus Ceramicus, or Gulf of Cos, and the Gulf of Syme, and facing the south part of the island of Cos, which is 10 miles west of Cape Crio, or Triopium, near which Cnidus stood. (Leake's 'Asia Minor'; and Beaufort's 'Survey of the Coast of Caramania.') Cnidus is about 25 miles south of Halicarnassus. It was a Dorian colony, like Cos, Halicarnassus, and the other towns which formed the Dorian confederation of the Hexapolis. (Herod. i. 144.) Strabo, describing Cnidus, says, "It has two ports, one of which can be closed, and is intended for triremes; and it has a station for twenty ships. There lies in front of the city an island about seven stadia in circuit, joined by the causeway to the mainland, and making Cnidus in a manner two cities, for a large part of Cnidus is on the island which shelters both harbours." The island is now joined by a narrow isthmus to the mainland, and is called Cape Crio. The remains of two moles which inclosed the south or larger harbour are still visible, as well as those of the city walls, and a multitude of other ruins. Leake says that "there is hardly any ruined Greek city in existence which contains specimens of Greek architecture in so many different branches. There are still to be seen remains of the city walls, of the closed ports, of several temples, Stœæ, artificial terraces for public and private buildings, of three theatres, one of which is 400 feet in diameter, and of a great number of sepulchral monuments." Designs of the most important of these curious remains have been published by the Dilettanti Society. "The site of Cnidus," says Hamilton, "is covered with ruins in every direction, particularly on the north-east side of the harbour. To the south-west are the remains of an ancient quay, supported by cyclopean walls, and in some places cut out of the steep limestone rocks which rise abruptly from the water's edge. The city is inclosed by two walls, one running east and west, the other almost north and south, and united at the summit of the hill to the north-east of the town; the former is partly cyclopean and partly pseudisodometric, but the style improves as it ascends. The northern part of the wall is very perfect, and contains two or three towers in a state of great preservation; it is also the best constructed, being probably of a later date and purely isodometric. . . The walls in the peninsula are also well preserved, containing a round tower of great beauty, at the extremity near the northern harbour." (Hamilton's 'Researches in Asia Minor.')

Strabo (xiv.) speaks of an observatory at Cnidus, and he mentions among the distinguished natives of the place, Eudoxus the mathematician, a contemporary of Plato; Ctesias, physician to Artaxerxes, who wrote on Syrian and Persian history; and the peripatetic Agatharchides, a friend of Julius Caesar. He also says that Lipara, near Sicily, was a colony of Cnidus. He says nothing about the celebrated temple of Venus, said by some to have existed at Cnidus, but Cicero mentions, among the numerous works of art seized by Verres, a marble Veus from Cnidus. ('In Verrem,' iv. 60.)

COBLENZ, a fortified city in the Prussian Rheinland or Rhein-Provinz; capital of the administrative circle of Coblenz, and of the whole province, is situated in 50° 21' N. lat., 7° 30' E. long.; 50 miles S.S.E. from Cologne, 300 miles S.W. from Berlin, and has a population of about 22,000 including the garrison. The city stands in a beautiful situation at the conflux of the Moselle and Rhine, whence the city obtained its ancient name *Confluentes*. The emperor Drusus erected, on the right bank of the Moselle, a castle which subsequently came into the possession of the Frankish monarchs. After the division of the monarchy among the sons of Lewis, in 843, Coblenz fell to the share of Lotharius, and was included in Lothringia, which province was alternately in the possession of the French and Germans till it was finally annexed to the Germanic empire by Henry I. In 1018 the emperor Henry II. gave this city to the Archbishop of Trèves; since which period Coblenz has remained attached to that archbishopric, though no longer among its temporalities. It was the occasional residence of many of the German emperors, and it was here that Conrad of Hohenstaufen was elected emperor in 1150.

Coblenz was anciently fortified with walls and ramparts, traces of which still exist, and this part retained, for many centuries after it had been considerably extended, the name of Old Town. The present fortifications connect the works on the left bank of the Rhine with the citadel of Ehrenbreitstein on the right bank, and render Coblenz the hulward of Prussia and Germany on the side of France. They form a fortified camp capable of containing 100,000 men, and are constructed on the united systems of Caruot and Montalembert. The approach from Cologne and Trèves is commanded by the fort Kaiser Franz, which is erected over the grave of Marceau and Hoche. The roads to Mayence and the Hunsdruck are swept by the cannon of forts Alexander and Constauntine, which also command the town and are erected on the site of the old Chartrouse. The batteries of Ehrenbreitstein and some others erected upon the neighbouring height command the Rhine and the Nassau road.

Coblenz is very irregularly built, with narrow streets and old houses. In what is still denominated 'the Old Court' stood the Roman castle, which became subsequently the palace of the Frankish

monarchs, the German emperors, and the archbishops of Trèves. In this part of the town is the church of St. Castor, built in the fork between the two rivers. It is surmounted by four towers, and dates from A.D. 836. In this church the grandsons of Charlemagne met to divide the empire between them, and within its walls in 1338 Edward III. of England, when he laid claim to the throne of France and sought the assistance of Germany, met the emperor Louis with other princes and several archbishops. In front of the church is the fountain erected by the French in 1812, and bearing an inscription to commemorate the invasion of Russia. Underneath is the addition 'vn et approuvé' made by St. Priest, the Russian commandant of Coblenz in 1814. In the street facing the Moselle bridge are the ancient town-hall and the castle of the Electors of Trèves, built in 1658, and now converted into a factory of japan-ware. Both of these adjoin the bridge: farther on are the Stamm-Haus in which Prince Metternich was born, and the hospital which is under the excellent management of the Sisters of Charity. The 'Clement,' or New Town, which is very handsome, was built by the last electoral prince, Clement Wenceslaus of Metternich. In the new town is the modern palace of the Electors, which has a long and handsome façade towards the Rhine just above the bridge of boats: but the principal front is towards the Great Square in which the military of the garrison are exercised. The French converted the building into barracks; it is now a court-house. In the new town also are the casino or club-house, which is an elegant building with reading-rooms, ball-rooms, and gardens; the former Jesuits' house, now the grammar school, underneath which are vast cellars. Coblenz contains several Roman Catholic and two Protestant churches, and one synagogue: among the former the principal is the collegiate church of St. Castor already mentioned. The collegiate church of St. Florian, said to have been founded by the empress Helena, has been fitted up for Protestant worship. The chapel of the new palace, which is built in a style of noble simplicity and adorned with paintings, has been also fitted up for Protestant worship. The castle yard is planted with trees and decorated with a pyramid 60 feet in height; the castle in the New Town has, since the French revolution, been converted into a hospital and magazines, &c. There are two bridges: one of stone, over the Moselle, 480 paces long, consisting of 14 arches, which was commenced in 1344 by Archbishop Baldwin; the other of wood, built in 1819 across the Rhine to the valley of Ehrenbreitstein, is 455 yards in length, and rests on 33 pontoons. The gymnasium, or grammar school, has a considerable revenue, and a fine library formed out of the remains of the monastic libraries. Among other institutions in the town are a Catholic seminary, house of industry, savings bank, an orphan asylum, and various other charitable institutions. There is also a handsome theatre.

Coblenz is the residence of the governor of the Rhein-Province, the seat of the provincial administration, and of the Protestant consistory of the Rhein-Province. It is the head-quarters of the 8th corps of the Prussian army. It is a free port, and carries on a brisk trade in colonial produce and other articles up and down the Rhine, the Moselle, and the Lahn. The exports consist of wine, mineral waters, corn, iron, volcanic products (from the Eifel in the form of mill-stones, ground lava to form the Dutch subaqueous cement called 'trass'), bark from the Eifel and Hunsdruck forests, building-stones, and potter's clay. The leading articles of manufacture are linen, calico, japan-ware, furniture, and carriages. Many of the inhabitants are engaged in the culture of the vine. Coblenz is said to surpass almost every town on the Rhine in beauty of situation, and the views from the heights of Ehrenbreitstein, Pfaffendorf, and the Karthausenberg are peculiarly beautiful. Steamers ply regularly to Cologne, Mayence, and Trèves. A railway is in course of construction from Cologne to Wiesbaden, which passes a little to the east of Coblenz.

The administrative division or circle of Coblenz has an area of 2320 square miles, and had at the end of 1849 a population of 502,924, consisting chiefly of Catholics and different sects of Protestants, comprised under the name of Evangelicals, the former being to the latter very nearly in the ratio of two to one. [RHEIN-PROVINZ.]

There is a small village named *Coblentz* in the canton of Aargau in Switzerland, situated at the junction of the Aar and the Rhine. Some Roman antiquities have been found here, and there seems no doubt but it is also named from the word 'Confluentes' by which the Romans expressed the junction of two rivers.

COBURG. [CANADA.]

COBURG, the most southern of the small Thuringian duchies, is bounded by the territories of Schwarzburg, Meiningen, Hildburghausen, and Bavaria; it lies between 50° 9' and 50° 24' N. lat., 10° 30' and 11° 13' E. long., including the newly acquired territories of Königsberg and Sonnenfeld. Its area is 222 square miles, and its population at the end of 1852 was 44,456. It is composed of the valley of the Itz, which is bordered on the north by the Thuringian Mountains, and is traversed by the rivers Itz, Rodach, Stejnach, Nasslach, Lanter, and others. The duchy of Gotha, which is inclosed by Saxe-Weimar, Prussia, Hesse-Cassel, and Schwarzburg, and has an area of 647 square miles, with a population of 105,956, is now united to the duchy of Coburg; and the whole constitutes the duchy of Saxe-Coburg-Gotha. Coburg belonged formerly to the counts of Henneberg; it came by marriage to the house of Saxony, whence it passed

into the Ernestine line, and in 1735 to the branch of Saalfeld. The principality of Lichtenberg was added to it in 1816, and the duchy of Gotha (with the exception of some small districts) in 1826, in consequence of that house having become extinct by the death of Duke Frederick IV., when it was made over to the house of Saxe-Coburg-Saalfeld, by virtue of a family compact among the ducal-Saxon branches, in exchange for the duchy of Saalfeld and several other districts. The principality of Lichtenberg, which lies west of the Rhine between the Palatinate, Prussia, and Birkefeld, was ceded to Prussia in 1834.

The majority of the inhabitants are Lutherans: the Catholics enjoy the free exercise of their religion. The government of the united duchies is a constitutional monarchy; the ministry consists of two sections, one for each duchy. The duchies have also separate judicial, administrative, financial, and police establishments, as well as district consistories for the direction of Protestant worship. The right of citizenship is enjoyed by natives only, who are all equal in the eye of the law, without regard to their religious profession. The united duchy of Saxe-Coburg-Gotha is a state of the Germanic Confederation; it has one vote in the full assembly of the Diet, and in conjunction with Saxe-Weimar, Saxe-Meiningen, and Saxe-Altenburg, has the 12th place in the Federative government.

The climate of Coburg is mild, especially in the fruitful valley of the Itz. The agricultural products are timber and fuel, grain, peas, beans, hops, vegetables, &c. Iron, copper, cobalt, coals (but none of them in large quantities), limestone, sandstone, marble, alabaster, gypsum, porcelain earth, &c. are found here. The inhabitants are chiefly occupied in the manufacture of linen, woollens, and cotton, wooden toys, and the rearing of cattle. The articles of export are fatted cattle and grain; besides butter, leather, wool, linen, and other manufactured goods.

Coburg, the capital of the duchy, is situated in a picturesque valley on the banks of the Itz, in 50° 15' N. lat., 10° 50' E. long., and has about 10,000 inhabitants. It is surrounded by walls, and with its long suburbs is divided into nine quarters, which have two market-places. The town is far from being handsome; the houses are small, the streets rough, and in many places overgrown with grass. The ducal palace of Ehrenburg is a very elegant residence, containing a fine banquetting room called the 'Hall of Giants,' from the colossal caryatides which surround its walls; a library of 26,000 volumes; and a collection of natural history, minerals, coins, and prints. The government buildings are constructed in the Italian style. Among the other edifices may be named the town-hall; five churches, of which St. Maurice's contains the ducal vault and some good monuments; the arsenal, orphan asylum, a new theatre, a casino, three hospitals, and a workhouse. The gymnasium, founded in 1605 by Duke John Casimir, hence called 'Casimirianum,' has all the rights and privileges of a university. There are besides two public libraries, a collection of natural history, an observatory, with a normal school attached to it; a society of arts and sciences, &c. The manufactures consist of woollens, cottons, linen, furniture, marquetry, buckles, gold and silver articles, chocolate, tools, &c. There are also several dye-houses, and a considerable trade in wool, cloth, cottons, horse-hair, flour, seeds, &c. There are several pleasure-grounds round the town, as well as many delightful rides and walks—among other places, to the ducal country seat, Rosenau, which was an old baronial castle, and has been restored in the gothic style. Near the town are marble-polishing mills, and iron and copper works. On a lofty hill in the vicinity, which commands a beautiful prospect, is the ancient castle of Coburg, surrounded with a strong wall and five bastions. It contains many interesting remains of antiquity, arms, armour, &c. It was for some time the residence of Luther; the bedstead on which he slept, and the pulpit from which he preached in the old chapel of the castle are still shown. The castle is now partly converted into a prison and house of correction. There are also, in the neighbourhood of Coburg, the picturesque castles of Callenberg and Lauterberg; the latter is in ruins.

The other places worth naming in the duchy are *Rodach*, a town on the river of the same name, with a ducal mansion, a church, and about 1800 inhabitants; *Sonnenfeld*, a market-town of about 600 inhabitants; *Königsberg* on the Nasslach, with a grammar school, and about 800 inhabitants; and *Neudadt*, at the foot of Mount Mupp, with a ducal seat, about 2000 inhabitants, a tobacco-manufactory, hop-grounds, and some trade. [GOTHA.]

COCHIN, a town in Hindustan, on the western coast of the peninsula, in 9° 51' N. lat., 76° 18' E. long., is the place where the first European settlement was formed in the East Indies. In 1503 the Portuguese fleet, under the conduct of Alfonso and Francisco Albuquerque, obtained from the sovereign of Cochin permission to erect a fortress there in recompense for the assistance they had given him in his wars with the Zamorin of Calicut. The country in the neighbourhood being very fertile, the Portuguese carried on an advantageous trade until the town was taken from them by the Dutch in 1663. The trade continued to flourish under the Dutch government. In the beginning of the war between Holland and England, in 1795, Cochin was taken possession of by the British, to whom it was finally ceded in 1814. Since then its trade has considerably diminished. The population is about 30,000.

Cochin is the best port in the presidency of Madras, and the only port for ship-building, and there are no places throughout the whole extent of the western coast which afford shelter to large vessels except Bombay and Cochin. In this part of Hindustan is found a very remarkable system of inland navigation called the Backwater. It is a kind of lake, or lagoon, which extends from Chowgaut (10° 40') on the north to near Trivandrum, the capital of Travancore (8° 30') on the south, a distance of 170 or 180 miles. An artificial continuation northward of this inland water-system is navigable for boats during the rains, from Chowgaut to Cotal, 16 miles south of Tellicherry, a farther distance of about 90 miles. The Backwater runs nearly parallel to the sea, sometimes at the distance of a few hundred yards, at others of 4 or 5 miles. Its breadth varies from 12 and 14 miles to 200 yards; its depth from many fathoms to a few feet. This Backwater receives the rivers which descend from the mountains that lie to the eastward. There are six channels of communication between the Backwater and the sea, but only one is navigable for ships, being that on the southern bank on which the town of Cochin is built. There is a bar at its mouth, but the depth of water on it is 17 or 18 feet at high-water of spring-tides. The anchorage without is good, and the gales during the south-west monsoon rarely blow with such violence as is experienced in this season in the harbour of Bombay. Within the bar the Backwater expands into a fine estuary, 3, 4, and 6 miles wide, at least 12 miles long, and deep enough for the largest vessels. The narrow strip of land between the Backwater and the sea is sandy, but its lower tracts are thickly overgrown with cocoa-nut palms, which yield a great quantity of fruit. The country east of the Backwater is low and level along its banks, and produces rich crops of rice. Farther inland it rises into low hills, partly covered with high forest-trees and partly with grass; but the valleys between them are exceedingly fruitful. Cotton, hemp, oils, pepper, ginger, turmeric, cardamoms, betel-nut, copra (cocoa-nut kernels cut into slices and dried for exportation), ivory, gold-dust, iron, and drugs are extensively produced. Indigo grows spontaneously, and the cane, coffee, clove, nutmegs, pimento, and raw-silk succeed well. The hills are covered with forests, the timber cut from which is floated down the various small rivers which fall into the Backwater, and is then easily conveyed to Cochin. Much timber is sent to Bombay, but hardly any vessels are built at Cochin for European merchants. The Imam of Muskat however has had most of his vessels built there. A few country vessels are annually built. The trade of this place is still considerable. Europeans rarely visit the port; but an active commerce is carried on between it and Bombay in country vessels. The trade with Arabia and the countries surrounding the Persian Gulf is more important. As these countries have no forests, they receive from Cochin all the timber required for repairing their different craft. There is also some commerce carried on with Singapore. In the vicinity of Cochin a number of Catholic and Indian Christians are found, and also many Jews. Cochin is the seat of a Roman Catholic bishop, in whose diocese Ceylon is included. There are also Protestant missionary establishments at Cochin, and several English schools.

COCHIN-CHINA, called also ANAM, is in that part of Eastern Asia which is usually known as India without the Ganges, of which it forms the eastern portion. It extends from 8° 40' to about 23° N. lat., and from 102° to 109° 20' E. long. Its length from north to south is about 980 miles, but in width it varies from 100 to 300 miles. Crawford assigns to it an area of 98,000 square miles; but Berghaus makes its surface about 140,000 square miles. On the W. it borders on the kingdom of Siam, or Shan; on the N.W. on the unknown regions of Laos, or Laetho; and on the N. on the Chinese provinces of Yun-nan, Quang-si, and Quang-tun (Canton). To the east of it extends the sea, called by the Chinese Nan-hai, or the Southern Sea, which here forms an extensive gulf between the northern province of Cochin-China and the island of Hai-nan, called the Gulf of Tonkin. To the south of Cochin-China extends the southern part of the China Sea. The northern part of the coast is rocky, and is fringed by a great number of islands. Among these are a group of small reefs called the Triangles, and the dangerous Macclesfield shoals. Vessels running aground here have to dread not only the heavy swell of the sea, but also the fierce attacks of the marauding Cochin-Chinese, who sail up and down looking out for such windfalls, falling upon and plundering the wreck without mercy. At 21° N. lat., or near the mouth of the river Song-ca, and farther to the south the shores are low, and partly sandy and swampy. For nearly 400 miles along this coast extend the Paracel shoals, which may be described as an overflowed continent, lying just beneath the surface of the water. Between the shoals and the coast is left a narrow navigable passage, which is constantly used by vessels sailing in these seas. Near 17° N. lat. commence a series of capes several hundred feet in elevation, between which large bays run deep into the land. This general character continues to Cape James (10° 17' N. lat.) The coast is lined with numerous small rocky islands and cliffs, but it contains safe and excellent harbours. The remainder of the coast from Cape James to the boundary of Siam is low and mostly swampy, being formed by the alluvial deposits of the river Maekhaun, or Camboja.

Cape James is the southern extremity of an extensive mountain range, which as far as the parallel of Cape Padaran (11° 20' N. lat.) runs north-east and then about due north to 14° N. lat., whence it

continues with a north-north-western course to 16° N. lat. Farther north the range is little known. It occupies perhaps a hundred miles in width, and seems to consist of a number of parallel ridges. The mountains in the range are of considerable height. A road, described as very difficult and dangerous, leads through the mountainous district, forming a communication between the towns of Sai-gun and Phu-yen.

Several short offsets which branch off towards the sea cover the greatest part of the maritime districts between 10° 20' and 17° N. lat.; some of them are 4000 feet above the sea. The range which, in about 17° 30', forms the boundary between Cochin-China and Ton-kin contains a depression, forming a mountain pass, about 6 miles in width, which is shut in by a wall, traversed by an artificial road, which leads from Huè to Kecho. The length of this road is estimated at 400 or 500 miles.

The boundary between Cochin-China and the Chinese province of Quang-si is partly formed by the river Ngannan-kiang, and partly by a mountain range, which seems to be a lateral range of the Yu-ling, a mountain system of Southern China.

The northern part of Cochin-China, which formerly constituted the separate kingdom of Tonkin, comprehends an extensive plain, surrounded, except where it borders on the Gulf of Tonkin (between 19° 30' and 21° N. lat.), by mountains, which increase in height as they recede from the sea. This plain appears to extend above 100 miles in length and width. Being very low, a great portion of it is annually inundated by the river Seng-ca, which fertilises the soil, so that two or three crops of rice are annually cut. It is by far the most fertile and populous part of the country. The valleys which run up far into the mountains are equally fertile: the greatest part of them may easily be irrigated, and the mountains themselves are rich in metals. The Song-ca, or Sang-coy, the principal river of this country, rises in the mountain region of Yun-nau in China, in two branches—the Ho-ti-kiang and Li-sien-kiang—which run nearly parallel in a south-eastern direction till they enter Cochin-China, where they unite, and take the name of Seng-ca (Great River). Before this river enters the sea it divides into numerous branches, two of which are navigable. The whole course of the river is estimated to be about 400 miles in length.

The country east of the mountain range, between 19° 30' and 15° N. lat., consists of an alternation of small plains and intervening mountain ridges. The elevations are in some places covered with forests. Cultivation extends a considerable height up the sides of many of the mountains. Most of the plains are irrigated and well cultivated. The rivers which traverse them have a short course, but are generally navigable for some miles. In some places the plains are traversed by canals.

The country which extends from Cape Avarella to the neighbourhood of Cape James is mountainous. The rocky masses approach so close to the sea as to leave a level tract along the beach only in a few places. In its numerous indentations a few narrow valleys of small extent occasionally appear, mostly inhabited by fishermen. The interior of this part of the country is said to contain much cultivated ground, and to have a numerous population.

That portion of Cochin-China which lies to the west of the mountain range constituted till lately the principal part of the independent kingdom of Camboja, or Cambodia. The southern portion, which is imperfectly known, consists, except near the boundary of Siam, of an immense plain, which appears to be formed of the alluvium of the great river by which it is traversed. The shores and the adjacent country, as far as the tide ascends, are covered with trees and bushes. About 30 miles from the sea the ground begins to be cultivated and is exceedingly fertile. In the interior there are it is said numerous fresh-water lakes and swamps.

Two large rivers traverse this plain. The Sai-gon, or Saung, which runs through its eastern portion, has been navigated by European vessels as far up as the town of Sai-gon, but farther northward its course is not known. Towards its mouth it sends off two or more branches, which join the eastern arm of the great river of Camboja. This river, called by the Birmaus Maekhaun, is said to send off in the upper part of its course various lateral branches which fertilise the country through which they flow, and then reunite with the river. About 150 miles from its mouth is the ancient capital of Camboja, Poutapret, to which European vessels ascended in the 17th century, but this navigation has been discontinued. Some distance below this town the river sends off to the west and south-west numerous arms, which inclose and traverse an extensive delta, that stretches out into the sea with an acute angle. Most of these arms are navigable for large river-barges during the rainy season. To make the navigation continuous through the whole year a canal was made from it in 1820, which joins the principal river some miles south of Panompeng, the modern capital of Camboja. The three principal mouths of the Maekhaun lie on the eastern side of the delta, and are all navigable for vessels of considerable burden up to the capital of the country. The river Maekhaun is supposed to have its source in the Chinese province of Yun-nan; and it has been estimated that its entire course is about 1500 miles. It reaches Camboja through the Laos territory.

The climate of the plain of Camboja resembles that of Bengal. The rainy seasons last from the end of May or the beginning of June to

September. The mountains interrupt the clouds brought by the south-west monsoon, and accordingly the dry season prevails in that period: the north-east monsoon brings rain. The wet season sets in at the end of October and continues until March. In the greatest summer-heat the thermometer never rises above 103°; in the greatest cold it never falls below 57°. In the countries on the shores of the Bay of Tonkin the south-west monsoon brings the rain, and the wet season begins in May and terminates in August. The heat is occasionally very excessive, and the cold in December, January, and February very sharp: the weather is often rendered unpleasant by heavy fogs, as in Lower Bengal. Typhons and hurricanes rage with the utmost fury in the Gulf of Tonkin and on the adjacent coasts. They are commonly accompanied with heavy and incessant rains. The country generally seems to have a very healthy climate for Europeans as well as for natives.

The iron mines of Tonkin are about six days' journey from Cachao, and the gold and silver mines about twelve days' journey, both in a western direction. The mines are worked by Chinese. Cochin-China is said to have tin, which however is not worked. Rice, the principal article of food, is very extensively cultivated in the plains of Tonkin and Camboja. Indian corn, earth nuts (*Arachis hypogaea*), and the *Convolvulus batatas*, are also cultivated. The sugar-cane is extensively cultivated on the coast south of 16°. The true cinnamon (*Laurus Cinnamomum*) is probably indigenous; and though its bark is much thicker than that of Ceylon, it is preferred by the Chinese.

Cotton is cultivated everywhere, and exported to China. Silk is in Tonkin and Cochin-China a general object of attention with the peasantry. Tea, of a coarse kind, grown in the neighbourhood of the capital Hué, is called Hué tea.

The population of Cochin-China has been variously estimated at from about 5 millions to 22 millions, but no reliable statement has been given on this point.

The natives call the eastern part of their country Anam. They belong to the same race as the Chinese and Mongols. Their language is monosyllabic, and the signification of the words is, in a great measure, regulated by their accentuation. But the Anamese language is totally different from the Chinese language. The Chinese characters are only used in printing; for common purposes they use others. The inhabitants of Camboja, who call themselves Kammer, constitute a different nation; they extend on both sides of the river Maekhanh to 15° N. lat. In manners, laws, religion, and state of civilisation, they bear a nearer resemblance to the Siamese than to the inhabitants of Cochin-China Proper.

On the mountain range live two independent nations. The Loye or Loi extend from Cape James at least as far as 15° N. lat. They once extended to the coast, and occupied all Chiampa, or Tsiompa (the district between Cape Avarella and Cape James), but having been expelled from it, they retired into the mountain fastnesses. The Loyes are a large muscular and well-formed tribe, with reddish complexions, slightly flattened noses, and long black hair. A shirt and trowsers with a kind of petticoat, occasionally faced with silk, form their costume. Their language differs essentially both from the Anamese and Cambodian. To the north of 15° N. lat. the interior districts of the mountain range are occupied by another nation, called Moi, which extends over a tract of country lying between Laos and Cochin-China, about 120 miles in length, and from 20 to 30 miles in breadth. The inhabitants of this district are said to be uncivilised but inoffensive. The government of their king, who holds his petty court at Feneri, is very oppressive, and some crime is always sure to be brought home to whoever is guilty of possessing any superior degree of riches. The people generally are in a state of semi-slavery. Their only covering is a cloth wrapped around their middle. The chief productions of this part of the country are a little cotton, indigo, and inferior silk. An extensive fishery is carried on along the coast.

The government of Cochin-China is described as a hereditary military despotism. Its administrative authority is in the hands of six mandarins, and a mandarin of the first or military class is placed over each province. The standing army consists of about 40,000 men, besides the royal guards, and 800 elephants for war service. The naval force includes about 200 gun boats, 100 galleys, and 500 vessels of smaller size. The political division coincides nearly with the historical division of the country. Anam, or the eastern portion, is divided into two provinces—Tonkin the northern, and Cochin-China the southern. The boundary-line between them, at about 19° N. lat., is nearly the same line which separated the ancient kingdom of Tonkin from Cochin-China. That portion of Camboja which has been united to Cochin-China constitutes a province by itself.

1. Tonkin or Tonquin comprehends the most northern portion of Anam, or the plain which extends on both sides of the river Song-ca, and is bounded by the mountain ranges within on all sides. It produces and exports rice, cotton, and silk to a large extent. Its mountains abound in gold, silver, and iron. The capital, Cachao, or Kai-cho, called by the natives also Bakthan, is a large town with 150,000 inhabitants, situated on the banks of the Song-ca, about 80 or 90 miles from the sea. Its commerce, especially with China, is considerable. Hean is on the same river, about 18 miles lower down; the largest junks come up to this place.

2. Cochin-China Proper comprehends the coast from about 19°

N. lat., to the neighbourhood of Cape James. The natives distinguish it by the name of Dong-traoing or Dang-trong (that is, the interior or central country); and they call Tonkin Dang-ngoi (the external country). Its principal products are sugar, silk, cinnamon, cardamoms, pepper, &c. The harbours along this coast are numerous, safe, and spacious; there is a considerable number of small towns. The capital is Hué, the metropolis of the whole country, a populous town with extensive fortifications, erected about 35 years ago after European models. The works are about five miles in circumference. The town of Hué is intersected with canals, which besides affording facilities for conveying merchandise, are used by the inhabitants for bathing in. Every family keeps a covered boat, which is usually adorned with a carved and gilded head. The canals when traversed by these boats, which are painted with vivid colours, present an animated scene. The best and most frequented harbour is Touran or Han; the houses in this town have a neat appearance, and considerable traffic is carried on. The spacious bay contains good anchorage for ships. The hills around the town are low and covered with bushes, interspersed with little rude altars, erected by the fishermen who frequent the bay, on which to offer rice or hurn odoriferous woods as a propitiation or thanksgiving to their deities. The houses in the town are low, built chiefly with bamboo, and thatched with rice-straw or rushes. Both men and women wear long-sleeved gowns reaching to the feet. They wear caps and turbans but no shoes. The feet, and particularly the toes, are much used in working at boat-building and other occupations. To the south of Touran is the town of Kaifo, with from 5000 to 6000 inhabitants, mostly Chinese, who carry on an active trade with China. The large towns of Qui-nhon, Phu-yen, and Nhatrang are not visited by Europeans.

3. Camboja extends over nearly the whole of the ancient kingdom of Camboja, one province of it, Batabang, having been united with Siam about 1809. On this occasion one of the claimants of the throne of Camboja applied to the Cochin-Chinese for help against the Siamese; but before the armies of Siam and Cochin-China met in battle it was agreed to divide the country into two portions. The Siamese retained Batabang province, and the remainder was united to Cochin-China or Anam. The Chinese name of this country is Kan-phu-tche, from which Camboja is derived. As far as this country is known, it is a level, formed by the alluvia of its large rivers, and very fertile and well cultivated. Its principal commercial productions are rice, arca-nuts, betel, spices, gamboge, sandal-wood, sapan-wood, and ivory. There are several iron mines. Elephants and buffaloes are numerous. Deer abound in the forests, and horned cattle in the plains. There are large numbers of hogs, wild and tame; goats, hares, cranes, and all kinds of poultry. Sai-gun, situated on the Sai-gun River, about 50 miles from its mouth, may be considered as its capital, being the seat of the provincial government. Sai-gun consists of one street running along the brow of a hill to preserve it from the annual inundations of the river. Sai-gun is situated near the site of the metropolis of the ancient Thina. It is said that extensive marble ruins have been found to the north-west of the modern city. Two Arabian travellers, who visited Camboja in the 9th century, report that the finest muslins in the world were manufactured there, and that the people wore garments woven so fine that they might be drawn through a moderate sized ring. *Pontaipret*, or *Camboja*, on the Maekhanh, was anciently the capital, and a considerable town when visited by the Dutch in the 17th century. *Panompeng*, or *Calompe*, was at a later period the capital, and is still the residence of the nominal king of Camboja; it is in a populous and well-cultivated country. *Kang-kae*, or *Kiang-kong*, about 2 miles from the mouth of the Kang-kae River, which forms a shallow port, has some commerce with Singapore and the countries inhabited by the Malays. A large part of its exports to Singapore consists of mats.

The Cochin-Chinese have made some progress in most of the arts of civilised life. Barrow says that they excel in naval architecture, and that their row-galleys for pleasure are remarkably fine vessels. They manufacture lacker-ware, coarse cotton and silk cloth, articles of filigree work, earthenware, and vessels of cast-iron. Fire-arms are largely imported from Europe.

Since the establishment of Singapore an intercourse has been established with that colony, carried on chiefly by Chinese merchants. The exports to Singapore in 1844 amounted to 177,806 dollars; the imports from Singapore were 229,413 dollars. The commerce with China is in a great measure limited to the harbours of Cachao, Faifo, and Sal-gun, in Cochin-China, and to Canton, Amoy, Fu-tcheu-foo, and Ning-po, in China. Numerous junks are employed in this traffic. They export from Cochin-China rice, cotton, silk, eagle-wood, and spices; they import tea, the finer kinds of cotton and silk goods, and china; also opium, and English broadcloth. From Singapore are imported iron, fire-arms, opium, catechu, and terra japonica. Some commercial intercourse is also maintained between Faifo and Sai-gun, and Bang-kok, the capital of Siam. The junks engaged in this trade convey to Bang-kok silk, worked and raw, matings for sails, &c., and take in return iron, tobacco, opium, and some European goods. Among the articles exported from Cochin-China are edible birds'-nests and pearls. The king, it is said, monopolises the legal trade, which is carried on by means of several large vessels, sailing between Cochin-China and British India, Batavia, and Canton.

COCKBURN ISLAND. [NORTH POLAR COUNTRIES.]

COCKBURNSPATH. [BERWICKSHIRE.]

COCKENZIE. [HADDINGTONSHIRE.]

COCKERMOUTH, Cumberland, a parliamentary borough, a market-town, and the seat of a Poor-Law Union, in the parish of Brigham, ward of Allerdale above Derwent, and western division of the county; stands at the point of confluence of the rivers Cocker and Derwent, in 54° 40' N. lat., 3° 20' W. long., 25 miles S.W. from Carlisle by road. The population of the borough in 1851 was 7275. The borough sends two members to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry of Richmond and diocese of Chester: this archdeaconry is to be hereafter transferred to the diocese of Carlisle. Cockermouth Poor-Law Union contains 47 parishes and townships, with an area of 106,756 acres, and a population in 1851 of 38,142.

The name of the town is derived from its position on the river Cocker, at the point of its confluence with the Derwent. The Cocker flows from Buttermere-water, and after passing through Crummock-water, divides the town of Cockermouth into two parts which communicate by a stone bridge. The Derwent, after it has received the Cocker, is also crossed by a handsome bridge, erected in 1822, at a cost of 3000*l.* The ruins of the castle (which was formerly the baronial seat of the lords of Allerdale, and is now the property of the Earl of Egremont), stand on the brow of a bold eminence near the confluence of the rivers. The castle was occupied by the parliamentary army during the civil war in 1648, and sustained a month's siege by the royalists. It is now habitable only in a small part. To the north of the town is a tumulus called Foot Hill, and to the west the rampart and ditch of a Roman camp. The town is pleasantly situated in an agricultural district, and has a promenade a mile in length on the banks of the Derwent, but the streets in some parts are narrow and confined. The houses are chiefly built of stone and roofed with slate; considerable improvements have been recently introduced. The town is well supplied with water, and is lighted with gas.

Besides the episcopal church, there are places of worship for Wesleyan and Primitive Methodists, Independents, Quakers, and Roman Catholics. The Free school, founded in 1676, has an income from endowment of about 12*l.* a year, and had 41 scholars in 1851. There are a National school and six other public schools, a parochial public library, a subscription library, a savings bank, and a dispensary. The court-house, or moot-hall, built about 1830, is the chief building for the transaction of public business. A county court is held at Cockermouth, and quarter sessions are alternately held here and at Carlisle. Cotton, linen, woollen fabrics, hats, hosiery, and paper are manufactured; tanning is carried on. In the neighbourhood are extensive coal mines. A market is held on Mondays for corn and cattle; and on Saturdays for provisions. From May to Midsummer cattle shows are held every alternate Wednesday. Fairs for horses and cattle are held on February 18th, and October 10th; and for hiring servants on Whit-Monday and the Monday next Martinmas Day. Cockermouth is connected by a railway of about 8 miles with Workington, whence other railways extend north to Carlisle and south to Furness.

(Lysons, *Magna Britannia*; *Communication from Cockermouth.*)

COEL. [ALIGHUR.]

COETHEN. [ANHALT; KOETHEN.]

COGGESHALL, Essex, sometimes called Great Coggeshall, a market-town situated on the left bank of the river Blackwater, in the parish of Coggeshall and Witham division of Lexden hundred, in 51° 52' N. lat., 0° 41' E. long., distant 15 miles N.E. by N. from Chelmsford, and 44 miles N.E. from London by road. Kelvedon station of the Eastern Counties railway, which is 3 miles from Coggeshall, is 4½ miles from London. The population of the town was 3484 in 1851. The living is a vicarage in the archdeaconry of Colchester and diocese of Rochester.

By some antiquaries Coggeshall has been supposed to occupy the site of the Roman station Cononium. An abbey for Cistercian monks was founded here in 1142 by King Stephen and his queen Maud. At one period the manufacture of woollen cloth was carried on in Coggeshall, and a white baize, called 'Coggeshall whites,' was in considerable repute. The town is situated partly on low ground adjoining the river, and partly on a cluster of hills rising from it. Many of the houses are well built, but the streets are rather irregularly laid out. The town is lighted with gas. The parish church, dedicated to St. Peter, a spacious building in the perpendicular style, erected about 1400, has been recently in part repaired; at the west end is a square tower. The Independents, Baptists, Wesleyan Methodists, and Quakers have places of worship. There are in Coggeshall an Endowed school founded by Sir Robert Hitcham, and connected with Pembroke College, Cambridge; National, British, and Infant schools, a mechanics Institute, and three almshouses. The silk manufacture is now the principal manufacture of the place; the great factory is for silk-throwing; fine velvet is extensively manufactured; satins, French patent silk plush for hats, and patent gelatine are made, and also some worsted at one of the old clothing mills. Some of the females find employment in tambouring lace. Iron-founding, malting, and brewing are carried on. A considerable quantity of garden-seeds is raised here for sale. The market is on Thursday for corn and

provisions; occasionally live stock are sold. A small part of the abbey is still remaining in the hamlet of Little Coggeshall.

(Morant, *Essex*; Wright, *Essex*; *Communication from Coggeshall.*)

COIMBATORE, a province situated in the region of the Eastern Ghaut Mountains, in the south of India, about 11° N. lat.; and bounded N. by Mysore, W. by Malabar, S. by Dindigul, and E. by Salem and Trichinopoly. The length of the province from north to south is 50 miles, and its breadth from east to west about 45 miles. The surface of the country varies exceedingly. Towards the south the level is not more than 400 or 500 feet above the sea, but it gradually rises towards the north, and even in what is considered the low country the level rises to 900 feet above the sea. About 11° 35' N. lat., the mountains called the Eastern Ghauts occur; the Kumbertine Hill, in 11° 35' N. lat., 77° 20' E. long., is reckoned to be 5548 feet above the level of the sea. Some summits of the Nilgherry Mountains, which are in the north-west part of the province, and unite the Eastern and Western Ghauts, are still higher; one of the peaks, called Moorchoorti Bet, is 8800 feet above the sea. The soil is generally dry, but in the south there is some marshy ground. The climate is considered healthy, and in particular the Nilgherry Mountains are resorted to by European residents for the recovery of their health. In these hills the mean temperature in April and May is 65° Fahrenheit. During the cold season the thermometer sometimes sinks to freezing point, when the air is peculiarly clear and elastic. Coimbatore is watered by the rivers Bhavani, Amaravati, and Cavery, the first and second of which fall into the Cavery; the Bhavani, at Bhavani-Kudal, 58 miles N.E. from the town of Coimbatore, in 11° 26' N. lat., 77° 44' E. long., and the Amaravati about 10 miles below the town of Caroor. These rivers are filled by both moussons; by the south-west in June, July, and August, and by the north-east in October, November, and December. During the last 40 years an improved system of administration has tended to develop the productive capabilities of the soil. In 1814-15 the government assessment was considered to be equal to one-third of the gross produce of the soil, and in 1825-26 it did not exceed one-fifth; the price of land during that time was doubled. The population of the province is about 800,000. The principal places in the province, in addition to the capital COIMBATORE, are Animalaya, Aravacourchy, Bhavani-Kudal, Caroor, Daraporam, Errood, Palachy, Satimangalum, and Sivava Samudra. *Animalaya* is on the west side of the small river Alima, in 10° 31' N. lat., 77° 1' E. long. This town is the common thoroughfare between Malabar and the southern part of the Carnatic. A fort stands at a short distance west of the town, and had fallen into decay, when, to provide materials for repairing it, Tippoo pulled down five large temples. The forests in the neighbourhood contain abundance of fine timber. *Aravacourchy*, the seat of Arava, so called from the name of the founder, is situated in 10° 41' N. lat., 77° 54' E. long. The town was destroyed towards the end of Hyder's reign by an English force under Colonel Laing, but it has since been rebuilt. The inhabitants mostly speak the Tamul language. *Bhavani-Kudal*, at the confluence of the Bhavani and Cavery rivers, contains two celebrated temples, one dedicated to Vishnu, and the other to Siva; and is considered a place of great sanctity by the Hindoos. *Caroor*, on the north side of the Amaravati River, in 10° 53' N. lat., 78° 4' E. long., a town of some trade, containing 1000 houses, was formerly a place of great commercial activity. *Daraporam*, or more properly *Dharnapuram*, is a populous town situated in an open country near the Amaravati, in 10° 37' N. lat., 77° 35' E. long. The streets are wide and regularly laid out, and many of the houses are spacious. *Errood* was a very considerable place in Hyder's reign; during the invasion of the country by the English under General Meadows, the town was in a great measure destroyed. It has since been made a military station. *Palachy* is a small but thriving town, situated in a well-cultivated country, in 10° 39' N. lat., 77° 6' E. long. Some coins of Augustus and Tiberius have been dug up in the vicinity. *Satimangalum*, in 11° 31' N. lat., 77° 16' E. long., contains a large fort, and is built in a straggling manner about the plain. There is here a spacious temple dedicated to Vishnu. This place is considered unhealthy, and the air is usually intensely hot. The island of *Sivava Samudra*, formed by the Cavery, is the site of the ancient Hindoo city of Gunga Raja; two cataracts are here formed by the Cavery, one on its northern and the other on its southern arm. The southern gate of the wall by which the ancient city of Gunga Raja was surrounded may still be seen, and a street about a mile in length may be traced. There are besides visible the ruins of several Hindoo temples, in one of which is a colossal statue of Vishnu, but the whole place is choked by jungle, and occupied by banyan and other forest-trees. A considerable quantity of dry grain is raised in Coimbatore province; cotton and sugar are likewise cultivated, and weaving is carried on extensively. Tobacco, salt, nitre, and live stock are among the products of the country. The province was acquired by the British from the Raja of Mysore in 1799.

(Rennell, *Memoir of a Map of Hindustan*; Buchanan, *Journeys through Mysore, Canara, and Malabar*; *Parliamentary Papers.*)

COIMBATORE, the capital of the province, in 10° 52' N. lat., 77° 5' E. long., is a well-built town, containing about 2000 houses, being little more than half the number which it contained under the government of Hyder Ali. His son Tippoo sometimes resided at Coimbatore, where he built a mosque. About two miles from the

town, at a place called Peruru, is a celebrated temple, dedicated to Iwara, and called Mail (high) Chitumbra, to distinguish it from another Chitumbra near Pondicherry. The idol is said to have placed itself here at a very remote period, and about 3000 years ago the temple was built over it by a raja of Madura. This building exhibits a profusion of Hindoo ornaments, but is destitute of elegance, and the figures are not only rude but many of them indecent also. This temple was plundered of its gold and jewels by Tippoo, who excepted it however from the general order which he issued for the destruction of all idolatrous buildings; and although its splendour was then destroyed, the Brahminical worship has always been continued. The town was taken by the English in 1783, but was restored at the peace in the following year. It was again taken by the English in 1790, and retaken by Tippoo's general, but was transferred with the province to the British government in 1799, and has since remained in their possession. The travelling distance from Seringapatam is 122 miles, and from Madras 306 miles.

(Rennell, *Memoir*; Mill, *History of British India*; Buchanan, *Journeys through Mysore, &c.*)

COIMBRA, a city of Portugal, capital of the province of Beira, is situated on the slope of a hill near the north bank of the Mondego, in 40° 12' N. lat., 8° 25' W. long., 115 miles N.N.E. from Lisbon. It is the see of a bishop, suffragan of the archbishop of Braga. The population is about 16,000.

A substantial stone bridge here crosses the Mondego, a river which in summer is very shallow, but in winter and in rainy seasons is wide and rapid, so that it is only occasionally navigable for small craft and boats. The harbour for Coimbra is Figuera, 24 miles distant, at the mouth of the Mondego.

The city was formerly strongly fortified, but now is merely surrounded by old walls flanked by a few towers. The interior is gloomy. The houses are mostly old, and the streets narrow, ill-paved, and dirty. There are several squares, with fountains well supplied with water, which is conducted to the city by an ancient aqueduct supported on twenty arches. The principal public buildings are—the cathedral, 8 parish churches, the University of Coimbra, a large hospital, a poor-house, the convent of Santa Cruz, now occupied as a barracks, and other conventual buildings in and around the city. The University of Coimbra is the only one in Portugal. It occupies the palace which formerly belonged to the kings of Portugal. It was originally founded at Lisbon in 1290, was transferred to Coimbra in 1308, removed again to Lisbon, and finally transferred to Coimbra in 1527. It consists of 18 colleges, attended by about 1400 students, and has a library of 30,000 volumes, occupying three large halls. Theology is taught by 8 professors, canon-law by 9, civil-law by 8, medicine by 6, mathematics by 4, and philosophy by 4. There is a botanical garden, a museum of natural history, a chemical laboratory, and an observatory well furnished with instruments. The university is rich, and the professors well paid. The lectures are mostly gratuitous. The Benedictine convent has a library equal perhaps in number of volumes to that of the university, and containing works of more modern date. The manufactures are chiefly linen and woollen fabrics, earthenware, and combs.

It is doubtful whether the Romans had a town on or near the site of Coimbra. It seems to have been built by the Goths, from whom it passed to the Moors. It was taken by Henri, count of Burgundy, and afterwards count of Portugal, about the year 1100. His son, Alfonso-Henrique, became the first king of Portugal, and Coimbra became the capital of the kingdom, and so continued till about 1500, when the court seems to have been transferred to Lisbon.

The immediate neighbourhood of Coimbra is delightful, and filled with gardens and country-houses. The tract of country between it and Condeixa, south of the Mondego, is styled 'the fruit-basket of Portugal.' The splendid and extensive monastery of Santa Clara is situated with its gardens upon a hill near the south bank of the Mondego. In the same direction, not far from the convent of Santa Clara, is the Quinta das Lagrimas (Villa of Tears), in a romantic sequestered spot, where Donna Inez de Castro is reported to have been murdered. (Cameoena, 'Lusiadas,') North of Coimbra the country is mountainous. The Serra de Busaco, an offset from the Serra de Alcobca, is distant about 15 miles N. by E.

COIRE, in Romansch Coira, in German *Chur*, on the site of the ancient *Curia Rhetorum*, the capital of the Swiss canton of Grisons, is situated in 46° 40' N. lat., 9° 35' E. long., 60 miles S.E. from Zurich, in a valley traversed by the Plessar, which here divides into three arms, and after driving several corn and saw-mills, enters the Rhine about a mile below the town. It stands on uneven ground, is surrounded by walls and ditches, has narrow and crooked streets, and is altogether a dull-looking place. Its position however on the great line of communication between Italy, Switzerland, and Western Germany gives it a considerable share in the transit-trade between those countries. The cathedral church of St. Lucius, part of which dates from the 8th century, and the bishop's palace, a curious antique building, are situated in the highest part of the town, and are the most noteworthy of the public buildings. Behind the palace is a ravine lined with vineyards, beyond which is the Catholic seminary. The other habitations in this quarter of the town are occupied by Catholics; the quarter is inclosed by battlemented walls pierced by two

fortified gates. Among the other edifices are the reformed church of St. Martin, distinguished by its high towers, and the town-house, which contains the public library. Many of the private houses are built in a curious antique fashion. The town has Protestant and Catholic cantonal schools, and some manufactures of zinc plates, edge-tools, and shot. Coira has given title to a bishop since A.D. 452, and the see is perhaps the oldest in Switzerland. A newspaper is published in the town in the Romansch language, a descendant of the Latin.

COLAPOOR, a small dependent Mahratta state, situated within the province of Bejapore, in the region of the Western Ghaut Mountains, being partly below and partly within the Ghauts. The territory of the Colapoor Raja is so intermixed with that of the British, and of other Mahratta chiefs, that it would be difficult to describe its boundaries. The state of Colapoor was founded by Sumbajee, the grandson of Sevajee. In 1728 Sumbajee was confederated with the Nizam, and accompanied his army to Poona; and in 1731 a treaty was concluded between the Peishwa and Sumbajee, by which the country between the Kistna and Warna, and the Toombuddra was to belong to Sumbajee, with half of all conquests south of the Toombuddra. The territory thus assigned to the raja of Colapoor was then partly in the actual possession of the Moguls, and partly of other chiefs called Desyees who had set up for themselves. It was not until the subsequent reign of Madhoo Ras, about the year 1762, that the whole was effectually brought under the raja's power. The Colapoor territory became after this the constant scene of war and turbulence, and a place of refuge for all the plunderers and pirates of neighbouring countries. In 1804 the raja was at war with the Peishwa, and after a long struggle, in which the latter succeeded in capturing the chief places in the state, and in reducing the raja's government nearly to the point of extinction, the British government interfered for the establishment of peace, and procured the restitution of his towns. This occurred in 1812, after which the state of Colapoor enjoyed a long continuance of tranquillity from without. In 1821 the raja was privately assassinated in his palace, and was succeeded by a son of immature age, during whose long minority the country fell into a state of great disorder. The young raja, on taking the government into his own hands, early lost the good esteem of his subjects by his exactions and his degrading vices. In 1825, 1826, and 1827 the raja having committed aggressions in the territories of some Mahratta Jagheerders under the protection of the English, his territory was occupied by British troops, and the powers of government were temporarily placed in the hands of a minister appointed by the governor of Bombay. In each of the years just mentioned a treaty was concluded with the raja, but these treaties were broken by him upon every occasion that presented itself. In 1829 a definitive treaty restricted the raja from keeping up a greater force than 400 horse and 800 foot soldiers; some districts in which he had committed oppressions against the Zamindars were at this time taken from him: British garrisons were placed in the capital and in the fortress of Punnalaghur at the raja's expense, and a chief minister for the future management of his government was to be permanently appointed by, and removable solely at the pleasure of, the English government. The Colapoor territory, including its dependencies, includes an area of 3445 square miles, and a population of about half a million; the revenue of Colapoor is about 55,000*l.* a year; that of its dependencies may be stated thus: Bhowda, 5167*l.*; Inchunkunjee, 7500*l.*; Klagul, 7276*l.*; Vishalagur, 12,314*l.*; and 113 Surinjams or minor dependencies, 63,163*l.* The chief towns are COLAPOOR, the capital, Colgong, Muleapoor, and Parnellah.

COLAPOOR, the capital of the state of Colapoor, is situated in 16° 19' N. lat., 74° 25' E. long., about 120 miles S. from Poona, in a valley between a curved range of hills, by which it is protected on three sides, the fourth side being protected by two hill-forts about 10 miles north-west from the town. These forts stand upon rocks about 300 feet above the level of the valley, which present natural perpendicular ramparts of basalt, from 30 feet to 60 feet high. The two forts are connected together; one of them, called Punnalaghur, covers a space $\frac{3}{4}$ miles in circumference, in which area are several dwellings, lofty trees, gardens, and fine tanks. The works immediately connected with the town of Colapoor are not strong.

COLBERG, or KOLBERG, a town and strong fortress in the Prussian province of Pomerania, is situated about 170 miles N.E. from Berlin, 26 miles W. from Cöslin, in 54° 9' N. lat., 15° 34' E. long., and has about 8000 inhabitants. It stands on the right bank of the Persante, which empties itself into the Baltic about a mile below the town, and at its mouth forms a harbour, which properly consists of two dams, carried out from the banks of the river into the sea, and protected by redoubts. Colberg contains a cathedral, several Lutheran churches, five hospitals, a workhouse, a house of correction, an exchange, a foundation in a nunnery for seven daughters of noble families and for nine of citizens; an orphan asylum, a gymnasium, &c. The inhabitants are engaged in the salmon, haddock, and lumprey fisheries, and in the manufacture of woollen-cloth, anchors, salt, and spirits. Fresh water is supplied to the town from a distance by admirable but very expensive water-works: the water, which is raised by a wheel to the height of 40 feet, is conveyed in pipes to every part of the town.

Colberg was formerly one of the Hanse towns, and till 1812 the seat of a collegiate chapter. The modern fortifications and outworks were commenced in 1773. It was taken after a siege of several weeks by Gustav Adolph in 1630; was besieged by the Russians in 1758, 1760, and 1761, and surrendered to them by capitulation on the 16th December, in the last-mentioned year. The French invested it without success in 1807. It has a considerable trade, both inland and foreign, and a brisk woollen market. Its military strength is greatly increased by the swampy nature of the country around it.

COLCHESTER, Essex, a municipal and parliamentary borough, market-town, and the seat of a Poor-Law Union, is situated in 51° 53' N. lat., 0° 53' E. long.; distant 22 miles N.E. by E. from Chelmsford, 51 miles N.E. by E. from London by road, and 51½ miles by the Eastern Counties railway. The population of the borough in 1851 was 19,443. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Colchester and diocese of Rochester. Colchester Poor-Law Union, which is co-extensive with the parliamentary borough, contains an area of 11,770 acres.

Colchester is generally supposed to be the *Camalodunum* of the Romans. There are few places in England where more Roman antiquities have been found: Morant mentions 'bushels of coins' of Claudius, Vespasian, Titus, Domitian, and their successors. The town walls, the castle, many of the churches, and other ancient buildings are chiefly built of the Roman brick. Numerous vases, urns, and lamps both in bronze and in pottery, rings, bracelets, &c., tessellated pavements, pateræ, and other Roman antiquities have at various times been dug up within the walls and in the neighbourhood. By the Britons it was called *Caer Colon*, and by the Saxons *Colou-Ceaster*, from the Latin 'Castra,' and its situation on the river Colne. Colchester was strongly fortified by Edward the Elder, and was at the time of the Domesday Survey a place of considerable note. In 1189 the town had its first charter from Richard I. Colchester appears to have sent members to Parliament at even an earlier period than London. In the reign of Edward III. the town contributed five ships and 170 marines towards the naval armament raised to blockade Calais. Early in the civil wars the inhabitants of Colchester declared against the Royalists; and in 1648 the town sustained a memorable siege. Having been obliged to surrender to the royal forces, the city was garrisoned by Sir Charles Lucas and Lord Goring. Fairfax soon arrived, and summoned Lord Goring to surrender, on whose refusal he proceeded to storm the city; after seven or eight hours' attack he changed his plans, and began a most rigorous blockade. The Royalists held out for eleven weeks, but the provisions of the place having been consumed, the garrison surrendered at discretion. Sir Charles Lucas, Sir George Lisle, and Sir Bernard Gascoigne were condemned to death, Gascoigne being a foreigner had his sentence remitted.

The ruins of the old castle, St. John's Abbey, St. Botolph's Priory, the Moot Hall, and the churches, form the principal ancient and public buildings of Colchester. Of the walls by which the city was surrounded, which were one mile and three-quarters in circumference, some detached portions exist. The remains of the castle stand upon an eminence and form a parallelogram. The keep is in a good state of preservation, and its walls are 12 feet thick. The building, which is a compound of flintstone and Roman brick, is so hard that repeated attempts to demolish it for the sake of the materials have proved unsuccessful.

St. John's Abbey was founded by Eudo, dapifer or steward to Henry I., for monks of the Benedictine order. A handsome gateway, of the later style of English architecture, is all that now remains of this abbey. In St. Giles's church, adjoining the abbey, is a monument erected to the memory of Sir C. Lucas and Sir George Lisle. St. Botolph's Priory, not far from St. John's, was founded by Eulph in the beginning of the 12th century. The remains of the western front of its stately church are highly interesting. St. Botolph's parish church is a handsome modern erection, of white brick, with a massive unbattled tower. The church of St. James, erected prior to the time of Edward II., has a fine altarpiece representing the Adoration of the Shepherds. St. Peter's church is mentioned in Domesday Book as the only church then in Colchester. St. Leonard's church is a large and commodious structure. There are places of worship for Baptists, Independents, Wesleyan Methodists, and Unitarians. The Free Grammar school, founded in 1584, for which a new school-house has just been built, has an income from endowment of about 190*l.* a year, and had 59 scholars in 1852. With the National school a Charity school has been incorporated, and the united school has an attendance of upwards of 400 children, of whom more than 100 are clothed as well as educated. There are also British, Infant, and Roman Catholic schools. A school endowed by a member of the Society of Friends has a library attached. A library founded by Dr. Samuel Harnett, archbishop of York, is in the care of a literary society which meets once a week in the castle. In Colchester are a literary and philosophical society, with museum, a botanical and horticultural society, a mechanics institute, and numerous religious and benevolent associations.

The town of Colchester is pleasantly situated close to the river

Colne, over which there are three bridges. One of these, at the northern entrance to the town, is an elegant cast-iron structure of three arches, erected at a cost of 1800*l.* The town is lighted with gas, well paved, and plentifully supplied with water. The houses are generally well built. The site is considered healthy: there are good walks and pleasant views in the vicinity. Baize was formerly made in the town to a considerable extent, but this branch of industry has ceased. The silk manufacture is carried on. There are also iron and brass-foundries, machine-works, coach-works, rope and sail-works, breweries, and vinegar and other works. The oyster fishery is here an important branch of industry. The river Colne is navigable to the Hythe, a suburb and the port of Colchester. The subjoined statement shows the extent of the shipping trade of the port for the year 1852:—The number and tonnage of vessels registered as belonging to the port of Colchester on December 31st, 1852, were—sailing vessels under 50 tons 187, tonnage 3950; above 50 tons 65, tonnage 7156; and one steam vessel of 23 tons. The number and tonnage of vessels entered and cleared at the port during 1852 were as follows:—Coasting trade: inwards 657, tonnage 50,231; outwards 305, tonnage 13,866. Colonial and foreign trade: inwards 46, tonnage 2748; outwards 31, tonnage 2308.

Colchester has a plentiful supply of fish. The principal market for corn and cattle is on Saturday; another is held on Wednesday for poultry and fruit. Vegetables are extensively raised on the neighbouring grounds. Several annual fairs are held. A county court, quarter sessions, and meetings of justices are held in Colchester. There is a savings bank in the town.

(Morant, *Essex*; Wright, *Essex*.)

COLCHIS, a country of Asia, extending along the eastern shore of the Euxine Sea, from the town of Trapezus, according to Strabo; or from the Phasis according to Ptolemæus. Pityus was the most southern town in Colchis, and Dioscurias the most northern, the distance between the two, according to Arrian, being about 350 stadia. It was bounded N. by the Caucasus, S. by Armeuia, E. by Iberia, and W. by the Euxine. The name Colchis appears in the early legends of the Greeks as connected with the expedition of the Argonauts, and the story of Jason and Medea.

The chief river of Colchis was the Phasis (now called *Faz* and *Rioni*), which receiving the small streams of the *Glæus* and *Hippus* from the neighbouring mountains flows into the Euxine Sea. Among the most important cities were Pityus, the great mart of the district; Phasis, on the river of the same name, where the Argonauts are said to have landed; *Aea*, on the Phasis; *Cytæ*, or *Cutatisium* (now *Kehitais* or *Kntais*), the traditional birthplace of Medea; and *Diosenrias*, a seaport originally founded by a colony from Miletus, but under the Romans, who rebuilt it on or near the old site, it was called *Sebastopolis*. Colchis was a very fertile district, and abounded in timber (which was well adapted for ship-building), in various kinds of fruits, and in hemp, flax, wax, pitch, and gold-dust. The inhabitants were famed for their linen manufactures, which formed a considerable article of export. The honey, which Strabo (p. 498, *b*) represents as being very bitter, produced violent and even fatal effects on the Greeks who eat of it during the retreat of the Ten Thousand; it deprived them of their senses, disabled them from standing upright, occasioned vomiting, &c., but finally all recovered. (Xenophon, 'Anab.' iv. s. 20.) The richness of the country in silver and gold mines was probably the cause of the Argonautic expedition. The pheasant (*Phasianus avis*) derives its name from its native place, the banks of the Phasis.

The Colchi were originally from Egypt, according to Herodotus (ii. 104), and part of the army with which Scythia invaded Scythia. The facts on which he founds his opinion are—similarity of physical features, of language, and of peculiar customs, such as circumcision. The curled hair and swarthy complexion, on which Herodotus relies in support of his position, seem however no longer to exist in Mingrelia. The Colchians were divided into numerous clans or tribes, settled chiefly along the coast of the Euxine. The *Machelones*, *Henischi*, *Zydretæ*, and *Lazi* lived south of Phasis; north of it were the *Apsidæ*, the *Abasæi* (whose name remains in *Abassia*), the *Samigæ*, and the *Coraxi*; and the *Coli*, *Melauchlæni*, *Gelonæ*, and *Suani* along the Caucasian Mountains to the north and west; and the *Moschi* among the *Moschici Montes*, an offset of the Caucasus to the south-east of Colchis.

Colchis was governed by kings when we first read of it. Helius is mentioned by Diodorus as king before the Argonautic expedition. *Æetes* is mentioned by Strabo (p. 45, *d*) as king at the time of the expedition. Colchis was afterwards divided into several small kingdoms or states (Strabo, 45, *d*), and we hear nothing more of it till the time of Xenophon, who ('Anabasis,' v. 6, 37) speaks of a son or grandson of *Æetes* as reigning over the Phasiani. The Colchi were not then subjects of the Persian empire, but were independent. (Xen., 'Anab.' vii. 8, 25.) They opposed the Greeks in the retreat of the Ten Thousand. Mithridates afterwards subdued Colchis, and the government was administered by prefects, one of whom, *Moaphernes*, was Strabo's uncle. (Strabo, p. 449, *a*.) Under the early emperors the family of *Polemon* (son and successor of *Pharnaces*, son of *Mithridates*) reigned over the Colchians. (Strabo, p. 499, *a*.) Under both the western and eastern empires the Romans occupied the coast by numerous castles and factories, so as to command the valuable trade

of the country. In the 6th century Colchis was commonly called Terra Lazica, from the Lazi, one of the Colchian tribes.

Colchis seems to have comprised the whole of modern Mingrelia, parts of Imeritia and Abassia, and the narrow strip between the mountains and the sea east of Trebizond. In this latter district there is still a numerous and warlike people called Laz, from whom the district is sometimes called Lazistan, and the coast-range, which divides it from the basin of the Choruk-su, the Lazistan Mountains.

[ARMENIA.]

COLDINGHAM. [BERWICKSHIRE.]

COLDSTREAM. [BERWICKSHIRE.]

COLEAH. [ALGÉRIE.]

COLEFORD. [GLOUCESTERSHIRE.]

COLEORTON. [LEICESTERSHIRE.]

COLERAINE, county of Londonderry, Ireland; partly in the parish of Killowen and barony of Coleraine, and partly in the parish of Coleraine and barony of the north-east liberties of Coleraine; a sea-port and post-town, a municipal and parliamentary borough, and the seat of a Poor-Law Union; is distant 145 miles N. from Dublin. The population in 1851 was 5920, exclusive of 342 inmates of the Union workhouse. Coleraine returns one member to the Imperial Parliament. The paving, lighting, &c., of the town are under the care of 21 town commissioners. Coleraine Poor-Law Union comprises 20 electoral divisions, with an area of 112,366 acres, and a population in 1851 of 43,021.

Coleraine is situated on both banks of the river Bann, at a distance of 4 miles from the sea. The principal part of the town is on the right bank, and consists of a central square called the Diamond, with several leading streets diverging from it. The bridge connecting this portion of the town with the suburb of Killowen or Waterside on the left bank of the river is a stone structure of three arches, 298 feet long and 32 feet in breadth, erected at a cost of 14,500*l.* There is a great thoroughfare by this road between the northern parts of the counties of Antrim and Londonderry. The parish churches of Killowen and Coleraine stand in the respective divisions on either side of the river. There are also two Roman Catholic chapels and six meeting-houses of various denominations of Dissenters, an Endowed school, a National Model school, and a savings bank. The old court-house and town-hall stands in the centre of the Diamond. There is a new market-place with a commodious market-house. The town is lighted with gas. Vessels of 200 tons burden can ascend the river to the quay; but the principal maritime trade of Coleraine is conducted from the harbour of Port Rush, 5 miles distant on the coast near the embouchure of the river. At Port Rush is a harbour formed by two piers of 800 feet and 650 feet in length, inclosing an area of 8 acres, with from 15 feet to 20 feet of water at the wharfs. The customs duties of the Coleraine district in 1851 amounted to 6739*l.*: the excise duties amounted to 37,240*l.* The number and tonnage of vessels belonging to the port in 1852 were:—Under 50 tons 11, tonnage 279; above 50 tons 1, tonnage 76. The entries and clearances at the port in the coasting and cross-channel trade in 1852 were:—Sailing vessels, inwards 162, tonnage 7145; outwards 20, tonnage 716: steam vessels, inwards 377, tonnage 104,632; outwards 207, tonnage 57,087. In the foreign and colonial trade there entered 12 vessels of 2379 tons, and cleared 6 vessels of 1223 tons. The principal trade is the manufacture and bleaching of linens and the salmon-fishery. A fine description of linen manufactured here is known as 'Coleraines.' The annual sales of linens are estimated at 600,000*l.* The fisheries (of salmon and eel) are the property of the Irish Society, who farm them out at an annual rent of 1200*l.* Upwards of 300 persons are employed as water-balliffs in the protection of the Bann and its tributaries. Fairs are held on May 12th, July 5th, and November 3rd; markets are held on Monday, Wednesday, Friday, and Saturday. There are tanneries, bleach-grounds, paper-mills, and soap and candle works. Quarter sessions of the peace for the county of Londonderry are held here in rotation; and petty sessions fortnightly. Coleraine in the Presbyterian Church arrangement is the seat of a Presbytery of the General Assembly, consisting of 16 congregations.

Coleraine is remarkable in early Irish history as the place in which Patrick found a Christian bishop already located on his first progress through the northern parts of Ireland. A castle was built here in 1213 by Thomas Mac Uchtred, a Scottish adventurer. One of De Courcy's followers, called De Sendall, also erected a castle very soon after the conquest. The present town stands on the site selected by the Irish Society in 1613. It was at first fortified by an earthen wall with bastions. The place held out against the rebels in 1641. In 1633 the whole customs of the port amounted to only 18*l.* 9*s.* 8*d.* The neighbourhood is rich and well cultivated. A fall of the Bann over a ledge of rock 12 feet high, at the Cutts, about a mile above the town, adds considerably to the picturesque interest of the environs.

COLESHILL. [WARWICKSHIRE.]

COLIGNY. [AIX.]

COLINSBURGH. [FIFE.]

COLL ISLAND. [ARGYLSHIRE.]

COLLIN, properly KOLLIN, a town in Bohemia, is situated on the Elbe, in 49° 59' N. lat., 15° 10' E. long., at a distance of 39 miles by railway E. from Prague, and contains about 6000 inhabitants. Large quantities of garnets, topazes, and carnelians are found in the

vicinity and polished here. In the neighbourhood, between the castle of Chotzemitz and the village of Planian, Marshall Daun, the commander of the Austrian army, gained a decisive victory over Frederick the Great on the 18th of June 1757.

Colliu is a station on the railway from Vienna to Prague. It contains a grammar school, cotton and potash factories, a Capuchin monastery, a church and a town-hall, both in the gothic style, and a castle with grounds and a botanical garden attached to it. The town is well built, surrounded by walls, and finely placed upon an elevated rock, beneath which the Elbe has a considerable fall.

COLLON. [LOUTH.]

COLLONGES. [AIX.]

COLLUMPTON, or CULLOMPTON, Devonshire, a market-town in the parish of Collumpton and hundred of Hayridge, in 50° 51' N. lat., 3° 23' W. long., is situated on the right bank of the river Culin, a tributary of the Exe; distant 10½ miles N.E. by N. from Exeter, 160 miles W.S.W. from London by road, and 181½ miles by the Great Western and South Devon railways. The population in 1851 was 2765. Collumpton is a town of some antiquity. The town is of considerable size; the main street, which forms a portion of the Exeter and Taunton road, is about a mile long. The parish church, a handsome edifice of the 14th century, was carefully restored in 1849. It has a very rich screen. A chapel on the south side erected in 1523 by John Lane, a clothier, is remarkable for the sculpture on the exterior, which represents the implements then used in the making of cloth. The Independents, Baptists, Wesleyan Methodists, and Unitarians have places of worship in the town. There are a National school and a Mental Improvement society. The woollen manufacture, particularly that of serge, is carried on to some extent in Collumpton. The market-day is Saturday; a monthly market recently established is held on the first Saturday of each month; fairs are held in May and November. Petty sessions are held once a month.

COLMAR, the capital of the department of Haut-Rhin, in France, stands on the Lauch and the Fecht, both tributaries of the Ill, a feeder of the Rhine, at a distance of 352 miles E.S.E. from Paris by railway through Strasbourg, 40 miles by railway S. from Strasbourg, 49 miles N.N.W. from Bale, in 48° 4' 41" N. lat., 7° 21' 43" E. long., and has 19,153 inhabitants, including the whole commune. In a straight line the distance from Colmar to Paris is only 250 miles.

The town, which is beautifully situated in a plain near the foot of the Vosges Mountains, has well-built houses, but the streets are ill laid out; they are however kept clean by small streams from the Lauch and the Fecht. It is entered by three gates, those of Briesch, Bale, and Rouffac. The Place-de-la-Cathedrale is the principal square, and in it the weekly market is held. Boulevards planted with trees surround the town, and there are several handsome promenades on the south side of the town, outside the gate of Bale. The cathedral is the most remarkable building; the tower is ascended by 303 steps, and on the inside of its walls inscriptions in Hebrew, Greek, Latin, and German recount the dreadful ravages of the plague of 1541. The other objects worth notice are the court-house, town-house, college (which has a library of 36,000 volumes, and a collection of paintings on wood by Martin Schön, Albert Dürer, and others), the institution for deaf-mutes, hospital, theatre, museum, and the beautiful church of the Dominicans, in the nave of which the corn-market was not long ago held. The high court for the departments of Haut-Rhin and Bas-Rhin is held in the town, which has also tribunals of first instance and of commerce.

Colmar is one of the principal seats of the cotton manufactures in France. The machinery of its numerous factories is chiefly moved by the mountain-streams above named, but steam is also largely employed. All descriptions of cotton-goods, as well as cloth, hosiery, ribands, room-paper, and leather, are manufactured. The town has also large cotton-printing and cotton-spinning establishments; and a brisk trade in corn, wine, iron, groceries, &c. Before A.D. 1220 Colmar was a more village. In that year it was raised to the rank of a town. It was enlarged in 1292, and soon after was made an imperial free town, and disputed with Ensisheim the precedence among the towns of Upper Alsace. In 1552 it was surrounded with fortifications, which were considerably augmented at a subsequent period. The Swedes took Colmar in 1632. Louis XIV. took it in 1673 and razed the fortifications. It was united to France by the treaty of Ryswick. Colmar was formerly included in the diocese of Bale.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

COLMARS. [ALPES, BASSES.]

COLMONELL. [ATYRSHIRE.]

COLNBROOK. [BUCKINGHAMSHIRE.]

COLNE, Lancashire, an ancient market and manufacturing town in the parish of Whalley and hundred of Blackburn, is situated on an elevated ridge near the river Calder, in 53° 51' N. lat., 2° 9' W. long.; distant 35 miles S.E. by E. from Lancaster, 218 miles N.N.W. from London by road, and 222 miles by the North-Western and East Lancashire railways. The population of the town of Colne in 1851 was 6644. The government of the town is in the hands of the county magistrates. The livings are perpetual curacies in the archdeaconry and diocese of Manchester.

Colno is a town of considerable antiquity, although antiquaries are not agreed as to the date of its origin. The town was known in the

commencement of the 14th century as a seat of the woollen manufacture. At present cotton-spinning and the making of printed calicoes and mousselines de laine are the chief occupations of the place. Colne has increased very much in the course of the present century. Several limestone and slate quarries and coal-pits are in the neighbourhood. The Leeds and Liverpool Canal passes near the town. The church is ancient; it has been several times repaired, the last time in 1815. Several district churches have been erected since 1835. The Baptists, Independents, and Wesleyan and Primitive Methodists have places of worship in Colne. The Free Grammar school is of ancient foundation: at this school Archbishop Tillotson was in part educated. There are several National schools, and a savings bank. A county court is held. Many interesting old mansions are in the neighbourhood. The market-day is Wednesday. Fairs are held in March, May, and October for cattle, and in December chiefly for woollen and fancy goods; a fair for cattle is held also on the last Wednesday of every month.

COLOCZA (Kalocsa, Kalotscha), a town in Hungary, is situated in a swampy plain, on a small arm of the left bank of the Danube, near 46° 32' N. lat., 19° 0' E. long., and has about 6000 inhabitants. It is the seat of an archbishop. The most striking buildings are the palace of the archbishop, which resembles a fortress, and contains a library of 30,000 volumes; and the cathedral church of the Annunciation. To the archbishopric of Colocza is united the bishopric of Bacs, the metropolitan chapter of which has its seat also here. The town has an archiepiscopal lyceum, with a theological seminary; a Piarist college, a gymnasium, and a grammar school. The library contains a Manuscript called the 'Colocza Codex of Old German Poems,' supposed to have been written in the latter part of the 15th century. This valuable work is written and illuminated on beautiful parchment, contains 336 pages, and comprises 15 poems, consisting in all of 54,000 verses. The inhabitants are chiefly engaged in the breeding of horses and cattle, and in the Danube fishery. Steamers plying on the Danube stop opposite Kálocsa.

COLOGNE (Cöln and Köln), an ancient and fortified city in Prussia, capital of the government or administrative circle of Cologne, in the Rhein-Provinz, is situated in 50° 56½' N. lat., 6° 57' 52" E. long., 212 miles by railway E. from Ostende, 390 miles E.N.E. from Berlin by railway through Hanover and Magdeburg; and had in 1853, 100,000 inhabitants, including the garrison and the suburb of Deutz, on the right bank of the Rhine. The city extends in a crescent-shape along the left bank of the Rhine. It is inclosed by a lofty wall about six miles in circuit, defended by 83 towers, and surrounded with ramparts and deep ditches. It has 24 gates on the land and water sides, and in front of the 7 principal gates strong redoubts have been erected. Cologne occupies the site of the Oppidum Ubiomum, or chief town of the Ubii, a German nation (Tacitus, 'Ann.' i. 36). This town was a Roman station, and subsequently a colonia, under the name of Colonia Agrippina, or Agrippinensis, so called by the emperor Claudius in honour of his wife Agrippina, who was born here while her father Germanicus commanded in these parts. Agrippina adorned it with an amphitheatre, temples, aqueducts, &c., the ruins of which may still be traced. It soon became a very large and important city, and the chief town of Germania Secunda. Vitellius was at Colonia when he was proclaimed emperor. Trajan also, on the death of Nerva A.D. 98, assumed the purple here. Colonia continued to be the capital of Lower Rhenish Gaul till A.D. 330, about which time it was taken by the Franks; it was recovered however by Julian, about A.D. 356, and was then a strongly fortified place. The Franks took permanent possession of it in the first half of the 5th century, and Childeric, Chlodowig, and others of their kings resided in it. After a frequent change of masters it was annexed to the German empire in 870. Some remains of the Roman walls are still seen, and the gate called Pfaffen Porte is supposed to be the Porta Claudia. Many statues and sarcophagi have been found with the inscription C. C. A. A. Colonia Claudia Augusta Agrippinensium; and there are many traces of Roman roads in the neighbourhood. The old town of Cologne was that which was inclosed with walls by the Romans, and was called, till near the close of the 12th century, 'Civitas intra Coloniam.' About A.D. 1180 a new wall inclosed the suburbs.

Cologne took part in some of the many disputes which arose in the German empire, and was besieged by Henry V. for its attachment to his father Henry IV.; and afterwards unsuccessfully by Philip of Swabia, for having proclaimed his rival Otto IV. In 1349 the principal Jews of Cologne, anticipating the same fearful persecutions as in other places, shut themselves up with their wives and children, and set fire to their houses; upon this the surviving Jews were compelled to leave the city, and though they subsequently obtained permission to return, they were again obliged to quit it in 1429.

Cologne was one of the most powerful and wealthy cities of the Hanseatic league. In the 13th century it could muster an armed force of 30,000 men, and its population amounted to 150,000. When the Hanseatic league engaged in a war with England in 1452, Cologne sided with England, on which account it was formally excluded from the league; but on the conclusion of peace by the treaty of Utrecht in 1474, it was re-admitted to this privilege upon the intercession of the emperor Frederick III. During the whole of this period the commerce of Cologne was extremely flourishing. In the 11th century the

Colognese vessels carried Rhenish wines, corn, flour, malt, beer, linen, and other German produce to all countries lying on the German Ocean and the Baltic, to England, France, Spain, Portugal, Italy, Norway, Sweden, and Russia, and brought back the productions of those countries.

The trade of Cologne with England at this early period was very considerable, and King John conceded to the merchants of Cologne commercial privileges rarely granted to his own subjects. Cologne had a large factory in Norway and another in the Netherlands; and after 1259 all vessels navigating the Rhine were obliged to unload their cargoes at Cologne, whence they were conveyed in its own ships. The arts and sciences were equally flourishing, partly it is supposed in consequence of frequent intercourse with Italy; and its university, suppressed during the French occupation of the city, was one of the most famous in Germany. The specimens of its architecture, paintings on glass, sculptures, and pictures, which still exist, attest the perfection which its artists had attained. The manner in which the carnival is celebrated, and the amusement of the puppet theatre, are proofs of a former close connection with Italy. Intestine divisions, the expulsion of the Jews, the public destruction of its looms, which compelled their owners to emigrate, and various other causes, hastened its decline. Another and perhaps a leading cause of the decline of this city was the closing of the navigation of the Rhine by the Dutch in the 16th century. The restriction was removed in 1837, and Cologne, which is now a free port, trades directly with foreign countries, and sea-going ships are built in it. Cologne ceased to be a free town soon after the first French revolution. The French took the city, shut up the monasteries, and plundered several of the churches and collections in the town, which they made the capital of the department of the Rôer from 1801 to 1814. At the peace Cologne and its dependencies fell to Prussia.

Cologne is divided into four sections, and is built in a very irregular manner; the streets, many of which still retain their Roman names, are generally narrow, dark, and crooked, and paved with basalt. Of late years however many of the streets have been widened and neatly paved, new houses built and old ones repaired, so that the town is less dirty than it formerly was. A large portion of the area within the walls is now occupied by neglected fields and gardens, the once well-tilled property of the conventual houses. It contains 25 churches, 8 chapels, a synagogue, and many other public buildings. The Cathedral is the most magnificent monument of gothic architecture in the world. The name of the architect who furnished the original plan (which still exists), is unknown, but the structure was begun in 1248 by Archbishop Conrad of Hochsteden. It is in the form of a cross, 500 feet in length and 200 feet in breadth; the roof rests on 100 columns, of which the four central ones are 30 feet in circumference. The only part however which was finished until the present century was the splendid choir (which is 180 feet high), with its surrounding chapels and its superb painted glass windows. Of the two towers, which were intended to have been 500 feet in height, one was raised only half this elevation, and the other not more than 21 feet. But by the munificence of the Prussian government, and by means of subscriptions, the works have been pushed on with vigour, especially since 1842, and the body of this magnificent cathedral was solemnly opened in presence of the Archduke Johann of Austria and the King of Prussia on the 15th of August 1843, the 600th anniversary of the foundation of the building. The choir contains the tombs of Archbishop Conrad, its founder, and Mary de Medicis; and abounds in relics and curiosities, especially the chapel of the Three Kings, which is richly adorned with gold and precious stones. Among the other interesting churches are those of St. Ursula, St. Columba, the Annunciation, St. Gereon, and St. Peter, which last contains the Crucifixion of Peter painted by Rubens. The other buildings of note are—the ancient Carthusian convent, the town-hall, the Gurzenich, where the several diets of the German empire formerly met, the archiepiscopal palace, the court-house, the exchange, theatre, museum, the Roman tower, &c. Between Cologne and Deutz (which is included in the line of fortifications) is a bridge which rests on 39 piers, and is 1250 paces long. A bridge is we believe in course of construction between Cologne and Deutz, for the purpose of connecting the railways on each bank of the Rhine.

Cologne is the residence of an archbishop, and the seat of various public boards. It contains two gymnasia; has several good libraries; collections of Roman antiquities, manuscripts, coins, natural history, &c.; and a great number of educational establishments.

The manufactures of Cologne are cotton-yarns, cotton-goods, hosiery, woollens, silks, velvets, tobacco, brandy and spirits, Eau de Cologne, of which above a million bottles are annually exported, &c. Being a free port, and having communication by railway with Belgium and various parts of Germany, Cologne has an important transit trade in home and foreign produce, which has greatly contributed to its present prosperity. In the vicinity of the city are several coal-mines, and abundance of a particularly fine sort of porcelain-earth and potter's clay. Steamers ply regularly between Cologne and the towns along the Rhine.

Cologne gave title to a bishop from A.D. 314 to the 8th century, when the see was raised to an archbishopric. In the 14th century the archbishops were made Electors of the German empire; they

were further styled archbishops of the empire in Italy, and held the third rank among episcopal Electors. The last elector of Cologne was Maximilian, who died in 1801. The electorate comprised a large territory on the left bank of the Rhine, now included in the Rhein-Provinz; a portion of the duchy of Westphalia, of which Arensburg was the capital, and the county of Recklinghausen. The archbishops of Cologne formerly resided at Bonn. [BOON.]

The government or administrative division of Cologne comprises an area of 1532 square miles, and had at the end of 1849 a population of 497,330, of whom about six-sevenths are Catholics. [RHEIN-PROVINZ.]

COLOMBIA is the name which was adopted by the northern countries of South America in 1819, when New Granada and Venezuela united and established one central government for the purpose of resisting the Spanish government. In 1829 Venezuela renounced the union, and constituted itself a separate republic. After the resignation of Bolivar in 1830 it again joined New Granada; but this union lasted only a short time. In November 1831 a new separation took place, and Colombia was divided into the three republics of ECUADOR, NEW GRANADA, and VENEZUELA.

COLOMBO, or COLUMBO, an episcopal city, the capital and seat of the British government in Ceylon, is situated on the western coast of the island, in 6° 59' N. lat., 80° 4' E. long., 368 miles S.W. from Madras. The population, which is composed of Europeans, burghers, Malabars, Singalese, and Moors, besides some Malays, Chinese, Parsees, Caffres, and Pattangs, amounts to about 40,000.

The fort of Colombo is on a promontory, two-thirds of the extent of which is washed by the sea. It has a circuit of about a mile and a quarter, and is defended by eight principal bastions, four of which are towards the sea, and three face a lake and command the narrow approach from the town. Towards the land the fort is surrounded with a deep moat, and a lake bordering on the glacis adds to the strength of the place. On the side of the sea, where the surf does not render a landing impracticable, every part is well commanded by the batteries. Inside the fort are several straight and regular streets. The residence of the governor, called the 'Queen's house,' is in King-street; and behind it is the lighthouse, a handsome edifice, the light of which is 97 feet above the level of the sea. The principal government offices and courts are within the fort; also an English church, a public library, a medical museum, an hospital, a lunatic asylum a well-arranged prison, besides hotels and numerous shops. A fine statue of Sir Edward Barnes has been recently erected.

The lake before alluded to being connected by canals with the Mutwal River, almost insulates the town. In the centre of the lake is a piece of land called Slave Island, covered with cocoa-nut trees, and easy of access from the town or fort by a small stone bridge. It is the head-quarters of the Ceylon Rifle regiment.

Colombo has a small semicircular harbour admitting vessels not exceeding 200 tons. Ships of larger burden anchor in the roads. The town is regularly built, with several streets, the chief of them running east and west, and the others at right angles to them. The houses are built of cabook, white-washed, and present a good appearance. The pithah, or black town, lies on the north side of the fort; it consists of two principal and several cross streets, some of which have a row of trees on each side.

Among the public buildings are the supreme court-house, and the various public offices. There is also a library belonging to the burghers, a small-pox hospital, a masonic hall, and a number of religious edifices. Trinity church was consecrated by the Bishop of Colombo in 1846. There are places of worship belonging to the Wesleyan Methodists and Baptists, the Dutch Protestants, and the Roman Catholics. The Dutch church, erected in 1746, is a lofty cruciform building, standing in the centre of the town. A college was established here some years back by the Bishop of Colombo for training native clergy, catechists, and schoolmasters. There are also the government academy or college, and several other schools, a savings bank, and many religious and benevolent institutions. The diocese of Colombo includes the whole island. The Bishop of Colombo has now an allowance of 2000*l.* a year from the East India Company.

The commerce, external and internal, which is very extensive, has been noticed under CEYLON. The exports to Europe are cinnamon, pepper, coffee, cocoa-nut oil, plumbago, cordage, arrack, cardamoms, elephants' tusks, deer horns, tortoise-shells, ebony, satin-wood, &c.; and the imports consist of articles of European manufacture. There are now at Colombo large establishments for crushing the cocoa-nut by steam power, and the manufacture of cocoa-nut oil, besides several native presses. The quantity of cocoa-nut oil now exported to England from Colombo is very great. At Colombo are fine cinnamon gardens; and between Colombo and Kandy is the government botanical garden.

The climate of Colombo, which is very salubrious, has been spoken of under CEYLON.

COLORADO RIVER. [CALIFORNIA; NEW MEXICO.]

COLSTERWORTH. [LINCOLNSHIRE.]

COLUMB MAJOR, ST., Cornwall, a market-town and the seat of a Poor-Law Union, in the parish of St. Columb Major and hundred of Tyder, is situated in 50° 24' N. lat., 5° 1' W. long., distant 12 miles

W. from Bodmin, and 246 miles W.S.W. from London. The population of the parish was 2980 in 1851; of this number the town probably contains about one-half. The living is a rectory in the archdeaconry of Cornwall and diocese of Exeter. St. Columb Poor-Law Union contains 16 parishes and townships, with an area of 71,226 acres, and a population in 1851 of 17,360.

St. Columb Major is a small town, but being placed on the slope of a hill which commands some interesting views, the situation is pleasant. The parish church is a spacious cruciform edifice, and has in the interior some curious specimens of early workmanship, and numerous monuments. The living of St. Columb Major is the richest benefice in Cornwall. The Wesleyan and Calvinistic Methodists have places of worship in the town. The market-day is Thursday; in summer there is also a market on Saturday. Fairs are held on the Thursday in mid-Lent and the Thursday after November 13th. In this parish is an extensive circular enclosure called Castle-an-dinas.

COLUMBIA, DISTRICT OF, the seat of the government of the United States, lies on the left side of the Potomac, and is bounded on the N.E., N.W., and S.E. by the state of Maryland; the Potomac separates it from the state of Virginia on the W. and S.W. Until 1846 it occupied a square of 100 square miles; but in that year the portion of the district on the right side of the Potomac was retroceded to Virginia, and the area of the district is now only 60 square miles. The total population in 1850 was 51,687, including 9973 free coloured persons and 3687 slaves. That part of the district which was on the right side of the Potomac was ceded by the state of Virginia, and that which is on the left side of the same river, by the state of Maryland, to the United States, July 16, 1790, when it had been determined to establish the seat of the Federal Government on the banks of the Potomac. Washington became the seat of the Federal Government in 1800. The government of the district is vested solely in Congress. The inhabitants send no representative to Congress, and have no voice in the election of federal officers.

The surface of the district is diversified by slight elevations; the soil is rather light and poor. The Potomac receives here a small affluent called the Eastern Branch, and by their junction a spacious harbour is formed for the largest vessels. The tide ascends as far as Georgetown. Excellent coach-roads, railways, and canals afford every facility for communication with the interior. Agriculture is chiefly directed to the supply of the city markets with vegetables and fruit; but wheat, rye, oats, and maize are raised in considerable quantities. In 1850 there were in the district 16,267 acres of improved and 11,187 acres of unimproved lands, which together were valued at 1,730,460 dollars. The number of farms was 264; the value of farming implements and machinery 40,320 dollars. The number of horses was 824, asses and mules 57, milch cows 813, working oxen 104, other cattle 123, sheep 150, and swine 1635.

In manufactures a capital of one million dollars is invested, and about 1000 persons are employed. There are two iron works, a cotton and a woollen factory, and a large number of small handicraft establishments.

The foreign commerce is inconsiderable. Georgetown is the only port: most of the commerce of this part of the river is centred in Alexandria, which lies on the right bank of the Potomac, and was the chief port of Columbia until ceded to Virginia in 1846. The number of vessels entered at Georgetown in 1850 was nine, of the aggregate burdeu of 1414 tons, and there cleared ten vessels of 1720 tons. The tonnage of the district amounted to 17,010 tons. The steam marine measured 1949 tons.

The towns of Columbia are WASHINGTON (38° 53' N. lat., 77° 1' W. long.), the capital of the United States, and Georgetown.

Georgetown, the port of Columbia, is separated from Washington by Rock Creek, but the towns are connected by several bridges. The town is built on undulating ground, which rises above the Potomac and is backed by heights on which are numerous handsome villas: the population in 1850 was 3366. The town has been much improved of late years, and is now a well-built place. It has several good public buildings, one of the most conspicuous of which is the Roman Catholic University, which has 160 students, a museum, and a library of 24,000 volumes. A square of five acres by the river side has a botanical garden in the centre, and on the sides the Roman Catholic bishop's palace, a neat chapel, convent, and schools. There are several churches and schools belonging to different sects, and several literary institutions. On the heights is a cemetery with a neat gothic chapel. In the town are a cotton factory, a rolling-mill, and several flour-mills. The commerce of the port has been noticed above. The Chesapeake and Ohio Canal is here carried across the Potomac by a magnificent aqueduct 1446 feet long and 36 feet above high-water mark. It is supported by nine massive granite piers: the cost of construction was two million dollars. Georgetown is connected by canal and railway with all parts of the Union.

The judiciary of Columbia consists of a circuit court, presided over by a chief judge with a salary of 2700 dollars, and two associate judges with salaries of 2500 dollars each; a criminal court, the judge of which has a salary of 2000 dollars; and an orphans' court, the judge of which has a salary of 1500 dollars.

COLUMBIA. [CAROLINA, SOUTH.]

COLUMBIA RIVER is the largest of the American rivers which fall into the Pacific, running probably more than 800 miles. Its numerous upper branches rise in the Rocky Mountains between 42° and 54° N. lat., and are at their source about 650 miles from the Pacific in a straight line. The principal branch rises in a lake near 50° N. lat., and runs first in a north-north-western direction along the base of the Rocky Mountains; but in the neighbourhood of Mount Brown (near 52° N. lat.) it suddenly turns to the south, and continues in that direction through more than three degrees of latitude till it meets another of its great branches, the river Clarke, which also rises in the Rocky Mountains near 45° N. lat., and traverses more than three degrees of latitude in a north-western direction. At the point of junction the Columbia turns to the west, but by degrees declines again to the south, so that at its junction with the river Lewis or Saptin, which also rises in the Rocky Mountains, it has a complete southern course. At their junction the width of the Columbia is above 3000 feet, and its level 1236 feet above the Pacific. Between the mouths of the Clarke River and the Lewis, in its passage through the Cascade Mountains, occur the greatest impediments to navigation. Not far below the mouth of the Clarke River are the Kettle Falls, 21 feet high; and above that of the Lewis are other cataracts, where the descent in 1200 yards is 37 feet 8 inches, and where the rapids extend from three to four miles. From the lowest of these rapids to the Pacific, a distance of 120 miles, the Columbia, though in many places obstructed by sand-bars, is navigable for vessels drawing under 12 feet of water. In this part it is from one to three miles wide, embracing a number of islands, some of which are of considerable extent. It empties itself into the Pacific a little north of 46°. At its mouth it is seven miles wide, but from each of the opposite points, Cape Adams and Cape Disappointment, there extends a sand-bar which renders the navigable channel very narrow. Throughout its course the Columbia receives a vast number of tributaries, some of which are considerable streams. The Columbia forms the boundary between the United States territories of OREGON and WASHINGTON. The Indian name of the river is Oregon.

COLUMBUS. [OHIO, State of.]

COLVILLE. [PRINCE EDWARD'S ISLAND.]

COLYTON, Devonshire, a small market-town in the parish and hundred of Colyton, is situated on the little river Coly, a feeder of the Axe, in 50° 44' N. lat., 3° 4' W. long., distant 22 miles E. from Exeter and 151 miles S.W. by W. from London. The population of the parish of Colyton, including the tithing of Colyford, in 1851 was 2504. The living is a vicarage, with the perpetual curacies of Moulton and Shute annexed, in the archdeaconry and diocese of Exeter. Colyton is pleasantly situated in a vale through which run the two small rivers the Axe and the Coly. The houses are built mostly of flint and roofed with thatch. The church is a cruciform edifice in the perpendicular style. In the interior are a fine stone screen and some interesting monuments. The Independents and Unitarians have places of worship. There is an Endowed school for 25 boys. The parish of Colyton contains much good dairy land, and the inhabitants are chiefly employed in agriculture. The market days are Tuesday, Thursday, and Saturday, and fairs for cattle are held on May 1st and November 30th. In the parish is the village of Colyford, which is incorporated, and has a mayor, who receives the profit of a large cattle fair held annually. Near the town is Colcombe Castle, once the seat of the Courtenays, earls of Devonshire, now converted into a farm-house.

COMANCE. [VIRGIN ISLANDS.]

COMBE MARTIN. [DEVONSHIRE.]

COMBER. [BHURTPUR.]

COMBRAILLES, a district in Lower Auvergne, in France. Its capital was Evreux. Combrailles now forms the eastern part of the department of Creuse. [CREUSE.]

COMMAGENE, a small but rich and fertile district in ancient Syria, was bounded N. by the Taurus, E. by the Euphrates, W. by the Amanus Mountains, which divided it from Cilicia, and S. by the great western bend of the Euphrates, and *Cyrrhestica*—a country which lay between the southern part of Amanus Mountains and the Euphrates in its southern course below Zeugma. Commagene was annexed to Syria under the Seleucidae; but in the disorders that followed upon the dissensions of Grypnus and his brothers it recovered its independence, which it maintained for upwards of a century. During this period it was ruled by kings. Upon the death of Antiochus III. A.D. 17, the kingdom of Commagene was reduced to a Roman province, but in A.D. 38 it was restored by Caligula to Antiochus IV., whose territories were enlarged by grants of a part of Cilicia, and afterwards of a part of Armenia, on account of his services under Corbulo in the Parthian War, A.D. 50. In A.D. 73 Antiochus was deposed on a charge of conspiring with the Parthians, and his kingdom was finally reduced to the condition of a province.

The district of *Cyrrhestica* (so named from one of its chief towns *Cyrrhus*, ruins of which are seen at the village of Khoros, about 30 miles S.W. from Aintab and near 37° E. long.), was united by Constantine to Commagene: the united territory which was called *Euphratensis* was placed under a *Præses*, and had Hierapolis instead of Samosata for its capital. *Cyrrhestica* was the scene of the campaign between the Romans and Parthians, which ended in the latter defeat

of the latter under Pacorus, who was slain in the battle. The Romans were commanded by Publius Ventidius Bassus.

Commagene is now usually considered part of Asia Minor. *Cyrrhestica* is included partly in the pashalic of Aleppo, and partly we believe in the pashalic of Marash.

The chief town was Samosata, a fortified place, which contained a royal residence; it was the birthplace of Lucian. The Zeugma, or one of the great passes of the Euphrates, was in Commagene.

COMMENTRY. [ALLIER.]

COMMERCEY. [MEUSE, Department of.]

COMMINES. [FLANDERS, WEST; NORD.]

COMMINGES, a district of the former province of Gasconne, in France, which is now chiefly included in the departments of Haute-Garonne and Ariège. Among the towns comprehended in this district were St.-Bertrand the capital, on the Garonne, and Lombes, which was formerly of episcopal rank; St.-Girons, on the Salat, and St.-Gaudens, on the Garonne.

COMO, a province of Austrian Italy, is bounded N. by the province of Valtellina, and the Swiss cantons of Grisons and Ticino, from which it is separated by several offsets of the Rhetian Alps; W. by the Lago Maggiore, which divides it from Piedmont, S. by the Milanese, and E. by the province of Bergamo. The length of the province from Mount S. Giori, on the frontiers of the Grisons, to the borders of the province of Milan, near Missaglia is about 40 miles. Its breadth is very irregular. The area is 1090 square miles, and the population according to the official returns of 1850 and 1851 was 423,206.

The east or larger division of the province incloses the whole length of the *Lago di Como*, the *Lacus Larius* of the Romans, a fine piece of water, long, narrow, and tortuous, shut in between shores which are richly diversified by numerous promontories, gulfs, and little bays. Its most northern extremity called *Laghetto* (or 'small lake') is joined to the other part by a narrow channel. At the junction of the *Laghetto* with the wide part of the lake, the *Adda*, coming from Valtellina, enters it on the east side. The lake then extends nearly due south for 15 miles; after which it divides into two branches: one to the south-west, which is about 18 miles in length, retains the name of *Lago di Como*, the city of *Como* being at the extremity of it; the other branch runs south-east for 12 miles, and is called *Lago di Lecco*, from the town of *Lecco*. The *Adda* issues out of the lake at *Lecco*. The breadth of the lake is very unequal; towards the middle, just above the separation of the two branches, it is about 3 miles, but in most other places it is only between one and two miles. A steamer plies between the city of *Como* and the several towns along the shores of the lake.

Two projections of the Rhetian Alps encompass the basin of the lake. One of these proceeding from the group of the Splügen runs parallel to the western shore, and divides it from the basin of the Lake of Lugano, the level of which is more than 200 feet above that of the Lake of *Como*: the highest summit in this ridge, called *Monte S. Giori*, or *Iöri Berg*, is about 9000 feet above the sea. The eastern ridge is an offset of the chain which divides Valtellina from Lombardy, and in *Monte Legnone*, to the north-east of the Lake of *Como*, rises to about 9000 feet above the sea; it thence runs south, parallel to the eastern shore of the lake, dividing the province of *Como* from the *Val Breubana*, in the province of Bergamo. These two ridges sink lower and lower as they advance to the south, until at last both merge into the great plain of Lombardy. They send out many offsets towards the lake, forming transverse valleys, which are drained by numerous streams that empty themselves into the lake. The neighbourhood of the Lake of *Como* is one of the most delightful regions of Italy, the climate being mild and genial, the soil productive in fruits and vegetables, and the country studded with thriving villages, with fine villas and mansions. Among the latter may be mentioned the *Villa d'Este*, in which Queen *Caroline* of England long resided, and on the east bank, near the pretty village of *Torno*, the villa called *Pliniana*, on account of the intermittent spring which *Pliny* the naturalist (ii. 103) describes, and which continues to exhibit the same phenomena: these are described also, though with some discrepancy, by the younger *Pliny* (iv. 30). On the promontory which divides the two branches of *Lecco* and *Como*, is *Bellagio*, where *Pliny*'s seat, which he called '*Comædia*,' is believed by some to have been, on account of the gay appearance of the landscape. His other villa, which he calls '*Tragædia*,' was probably at *Lenno*, on the west bank, where the landscape is wild and stern. The most northern part of the province includes the lower heights of the Alps, which are covered generally with forests of larch, fir, birch, oak, and chestnut; while the slopes and valleys are covered with pasture. The southern declivities of the mountains are formed into terraces, and cultivated with great labour. At *Bellagio* also is the *Villa Melzi*, once inhabited by the vice-president of the Italian republic in the first years of *Bonaparte*'s dominion. Farther north on the east bank is a fine cascade, called *Fiume di Latte*, with a glass manufactory near it; next comes *Varena*, in a sheltered warm situation, where the olive, vine, and orange and lemon trees, and other southern plants are seen thriving. Higher up on the same side is *Bellano*, at the entrance of the *Val Sassina*; a district subject to very cold winds from the Alps. A wild romantic spot in this neighbourhood, where the stream *Piovorus* forms a cascade among

the rocks, is called L'Orrido di Bellano. Farther north is Colico, whence the high-road of the Stelvio began, but it is now continued as far as Lecco. A branch road strikes off to the left near Colico, leading by Chiavenna to the pass of the Splügen. On the west shore are Donaso, where the steam-boat from Como stops; Gravedona, a large village (3200 inhabitants), with the vast marble palace of the dukes d'Alvito; Dongo, with its iron mines and works; the castle of Musso, cut in the rock, where the Condottiere Gian Giacomo Medici of Milan, brother of Pope Pius IV., defended himself for eight months against all the forces of Francesco Sforza II., duke of Milan, whom he obliged at last to grant him 35,000 gold sequins, and a full amnesty, in 1532. Near Musso are quarries of white marble, of which the cathedral of Como is built. Lower down are Crenna, Rezzonico (Rhotonicum), and Menagio, another large village, whence a road leads over the mountains to Porlezza, on the north extremity of the Lago di Lugano, which here protrudes into the province of Como.

In the triangle formed by the two south branches of the lake are two ranges of hills, one parallel to each branch, both meeting in the promontory on which Bellagio stands. Between these ranges is the valley called Assina, in which the river Lambro, a feeder of the Po, has its source; here also are the town of Asso, the little lake of Sagrino, and the two villages of Castel Marte and Proserpio. At the south entrance of the valley stands the little town of Erba, in the middle of a plain encircled by hills, the southernmost of which form the group known by the name of Colline di Brianza, which extend between the Lambro and the Adda, and on the borders of the two provinces of Como and Milan, to within a few miles of Monza. These are the nearest hills to Milan, and the favourite resort of the wealthy Milanese in the summer and autumn. Among them are many mansions, country-houses, gardens, and cheerful villages. This district produces excellent wine, of which that of Mont' Orobio (a village which perpetuates the name of the Orobii, the most ancient inhabitants of this region) is the best; but it is not carefully enough prepared to be fit for exportation. Here and in all the southern part of the province, extending from the Adda to the upper valley of the Olona and the Lago Maggiore, the culture of the white mulberry-tree and the rearing of silk-worms form a most important branch of industry; and nowhere is the preparation of raw silk for manufacturing use better understood than here. In the environs of the city of Como there are great pine-forests. The cypress flourishes in many parts of the province. The roads are good, as they are in all Austrian Italy. There is a branch railroad from Como to Milan through Monza.

The western part of the province of Como consists of the district of Varese and the east coast of the Lago Maggiore. Varese is a bustling town with above 8000 inhabitants and several silk factories. It stands near the little lake of Varese, in a fine hilly country, where some of the best silk in Lombardy is produced. The lake is about five miles long and two miles wide at its greatest breadth. This is another favourite place of resort with the Milanese, and is full of handsome country-houses. On a steep hill north of Varese is the sanctuary of La Madonna del Monte, to which the country people resort in the month of September. A road leads from Varese to Laveno, whence boats cross over the Lago Maggiore to Pallanza in Piedmont. On the Como side of the lake is Luvino, near the river Tresa, an outlet of the Lake of Lugano into the Lago Maggiore. The district of Cuvio, or Valcurio, not far from Luvino, has been drained of an extensive marsh. To the east of Valenno, and separated from it by a range of hills, is Viconago, on the west bank of the Lake of Lugano, which on this side touches the province of Como, and where are lead-mines and works. Towards the Milanese the hills gradually sink, and the southern verge of the province of Como merges into the great plain of Lombardy. The districts of Tradate and Appiano are situated at this end.

The province of Como is well cultivated; it produces corn, wine, fruit, and silk. The lake abounds with fish, especially of the trout species. The people are industrious, and elementary education is very widely diffused among them. A great number of young men from the mountain districts emigrate in quest of employment; many follow the trade of masons and lapidaries as in ancient times, when, under the Lombard kings, master-masons in Upper Italy were generally styled 'magistri Comaceni'; others go to various countries as pedlars, carrying barometers, spectacles, looking-glasses, &c., which are manufactured at Como.

The province of Como is divided into 26 districts and 528 communes. In each commune there is at least one elementary school; and there are also several holiday schools, charitable foundations, and private schools authorised by the government. The civil, criminal, and commercial courts for the whole province are held at Como.

Besides the capital, Como, which is noticed in the next article, there are hardly any places in the province deserving of special notice. The villages are numerous, but their population is seldom above 3000, and in many cases it is not so much as 1000. The following however may be here given:—*Lecco*, about 17 miles E. from Como, at the point where the Adda emerges from the Lago di Lecco, has about 5000 inhabitants, who manufacture silk, cotton, and woollen stuffs. *Mariano*, 10 miles S.E. from Como, has about 4000 inhabitants.

COMO, the capital of the province of Como in Italy, is situated at the south-west extremity of the lake of Como, surrounded by hills on which

are several old castles, in 45° 48' N. lat., 9° 6' E. long., 22 miles N. by W. from Milan, and has a population of 20,000, including its nine suburbs. The railway to Milan (28 miles in length) commences at Camerlata, about a mile south of the town. The city of Como is surrounded by old walls flanked with towers and pierced by lofty gateways, which are remarkably fine specimens of the military architecture of the middle ages. The streets are wide and regular, and the houses well built; a harbour is formed in the lake by two piers, each terminating in a square pavilion, the view from which over the translucent waters of the lake, and the bright cheerful scenery along its shores, is peculiarly interesting. The suburb of Vico, to the north of the town, abounds with pleasant walks and villas; among the latter the Villa Odescalchi is the most splendid. The suburb called Borgo di San Augustino is the manufacturing quarter of Como. Como gives title to a bishop.

Among the twelve churches of the city, almost all of which are decorated with fine paintings, the cathedral is the most celebrated. This very beautiful building was commenced in 1396, but the cupola or dome was not completed till 1732. In a work so long in construction it might be expected that different styles and tastes might be exhibited, but this is not the case; the building belongs to the Italian gothic, and it is surpassed only by the Duomo of Milan and the Certosa of Pavia. The edifice was built entirely by the voluntary contributions of the townspeople, and is a noble monument of their piety. The exterior is cased with white marble. The pilasters and other portions of the façade are covered with curious religious symbols in bas-relief—the fountain, the vine, the lily, the church upon a hill. In the arch above the portal is represented the Adoration of the Magi in large bas-reliefs. But the most remarkable ornaments of the façade are statues of Pliny the Elder and his son, who are claimed by the Comaschi as 'fellow citizens,' and are enthroned under ornamental canopies. The lateral fronts are also richly and tastefully ornamented; the doorways particularly are admired for the delicacy and finish of their sculptures and carving. The interior is spacious, and has a very imposing effect. It is lighted through stained-glass windows. The groining of the vault is painted and gilt. The numerous altars and other parts of the building are adorned with valuable paintings. The baptistry is attributed to Bramante. The cathedral has two fine organs. Adjoining the cathedral is the Broletto, or town-hall, which is constructed with red and white marble in alternate courses. This building, completed in 1215, consists of a loggia upon open pointed arches, with a floor above lighted through large, round-arched windows, the central one of which is projected, and from this spot the members of the municipality of Como used in the olden times to address the parliaments or assembled democracy. This building is surmounted by a belfry tower.

Como has an imperial and royal lyceum, the front of which is adorned with busts of the worthies of Como; it contains a good library, reading-rooms, a collection of natural history, a chemical laboratory, &c., and is a handsome building. There are besides in the city a gymnasium, a diocesan school for theological students, a college for boarders called Gallio, and an institution for female education under the direction of the nuns of St. Francis de Sales. The church of S. Fedele is still older than the cathedral; both this church and that of S. Abondio, which contains the tombs of several bishops of Como, date from the time of the Lombard kings. They are both remarkable for their rude ornamentation—serpents, griffins, lions, &c. The interiors of both have been somewhat modernised. The palace of the Giovio family, called *Edes Jovis*, has a collection of ancient inscriptions placed under its portico and round the court. The theatre is also a handsome building with a good façade; it stands upon the site of the old castle, and adjoins the lycæum. On a hill above Camerlata, near the road to Milan, is the old tower *Del Baradello* in which Napoleon della Torre, the popular chief and lord of Milan, being defeated by his rival Ottone Visconti in 1277, was shut up in an iron cage, in which he died after nineteen months' confinement. Como is the native country of the two Plinys; of Paolo Giovio, and his far more worthy brother Benedetto Giovio, the historian of Como, whose monument is in the cathedral; of Piazzi, the astronomer; of Pope Innocent XI.; and of Alessandro Volta, the great discoverer in electricity, to whom a statue by Marchesi is erected in the Piazza Volta.

Comum is said to have been built by the Orobii, the oldest known inhabitants of the country. It was afterwards occupied by the Gauls with the rest of Insubria. In the year B.C. 196 M. C. Marcellus, having defeated the Boii and the Insubres, occupied Comum. The place was afterwards ravaged by the Rhatians. C. Pompeius Strabo, father of the great Pompey, sent a colony to Comum; and Cæsar is said to have sent a fresh colony, among whom were 500 Greeks of distinguished families. It then assumed the name of *Novum Comum*. After the fall of the empire Como passed under the Goths, Longobards, and Franks, and became at last an independent municipal community. It was one of the chief towns of the Ghibelines in Lombardy, and as such quarrelled repeatedly with the Milanese, who took it after a long siege, and burnt it in 1127. It was afterwards gradually rebuilt where it now stands.

Como has several considerable manufactories of silks, cottons, woollens, and soap.

COMORN, or KOMORN, a royal free town and fortress in Hungary, is situated at the eastern extremity of the island of Schütt, opposite the efflux of the Waag into the Danube, in $47^{\circ} 45' N.$ lat., $18^{\circ} 8' E.$ long., and has about 20,000 inhabitants. The town is irregularly built, and the streets are dark and narrow; but it is well situated for trade, which it carries on to a great extent in grain, honey, wine, timber, and fish. It contains four Roman Catholic churches, of which that of St. Andrew is of considerable dimensions, two places of Protestant worship, a Greek church, and a synagogue; a council-house, town-hall, Roman Catholic and Protestant gymnasium, grammar school for the citizens, and an hospital. To the east of the town, and at the point where the Waag and Danube form a junction, stands the maiden fortress of Comorn, which is defended by extensive works and têtes-de-pont on both banks of the Danube; it was founded by Mathias Corvinus, and has been re-built and rendered one of the strongest places in Europe by the additional fortifications erected since 1805. The town itself is included within the modern defences. The Danube is crossed at this spot by a bridge of boats. Comorn became celebrated towards the close of the Hungarian insurrection for its defence against the Austrians. Its surrender or capitulation to the Austrians on the 28th of September, 1849, put an end to the insurrection.

COMORO ISLES, a group of four islands in the Mozambique Channel, between Africa and the north-west coast of Madagascar. *Comoro*, the largest of them, is about 30 miles long, and 12 miles broad. Fat bullocks, sheep, and goats are cheap; oranges, lemons, and plantains abundant. No spring-water is to be had on this island, which is seldom visited by Europeans. There is a large town with a landing-place for boats on the east side of it. *Mohilla*, the smallest of the group, is about 30 miles S.E. by S. from Comoro; it contains several villages, and abundant supplies of water and provisions. The coast is dangerous on account of the reefs and the surf; but there are two tolerable anchorages. *Mayotta*, the most southern of the islands, is entirely surrounded with reefs; provisions and water can be had, but there is danger in attempting to land. This island has been held by France since 1841. *Johanna*, or *Anzouan*, or *Hinzuan* is the best known of the group, having been long frequented by European ships for the purpose of getting provisions on the outward voyage to India. At the town of Machadou on the coast there is good anchorage; and water and other provisions may be obtained. The island has 12,000 inhabitants, who trade in slaves and the produce of the island with the coast of Arabia, from which they carry back Indian piece-goods and other commodities. Small fat bullocks, poultry, rice, yams, sweet potatoes, pine-apples, oranges, guavas, and other fruits are given to ships' crews in barter for red and blue cloth, apparel, nails, iron, razors, knives, beads, looking-glasses, muskets, cutlasses, gunpowder, flints, &c. The sultan of the islands resides at Machadou, which has 3000 inhabitants. The population of the islands is said to be diminishing in consequence of the incursions of pirates from Madagascar, who carry the people away into slavery. The group is of volcanic origin, and contains several peaked mountains, one of which in Johanna is 6000 feet high. Except on these summits the soil is very fertile. (Sir W. Jones; Horsburg, *Directory*; Macgregor, *Statistics*; Balhi, *Géographie*.)

COMPIÈGNE, a chief town of arrondissement in France, in the department of Oise, is situated on the left bank of the river Oise, just below its junction with the Aisne, 36 miles E. from Beauvais, and has 8986 inhabitants, including the whole commune. It is a first class station on the railroad from Paris to St. Quentin, from which it is distant 65 and 46 miles respectively. The St. Quentin line leaves the Northern-of-France railway at the Crell junction, 23 miles S.W. from Compiègne. The town is ancient; most of the streets are ill-built; and there are few good houses except in the neighbourhood of the palace and the Rue St.-Corneille. The churches of St.-Jacques and St.-Autoine, and the town-house are fine buildings, and remarkable for their sculptured decorations; the new theatre and the bridge over the Oise are handsome structures. But the edifice which renders Compiègne eminently worthy of being visited is the magnificent palace built here by Louis XV., according to the designs of the architect Gabriel. It is surrounded by extensive gardens, adjoining which is a forest containing 37,000 acres. This palace was the residence of Charles IV. of Spain and his queen, during the first part of their captivity in France. Here Napoleon and Maria Louisa, archduchess of Austria, first met on occasion of their marriage in 1810. The present emperor of France, Napoleon III., occasionally visits Compiègne. The palace has electro-telegraphic communication with Paris. Hosiery, cotton-yarn, and ropes are made, and boats for the navigation of the Oise are built in the town. There is a considerable trade carried on in corn and wood. The town has a college, a tribunal of first instance, and a public library.

Compiègne originated in a hunting seat called Palatium, erected and much frequented by the early kings of France. Charles the Bald gave the town the name of Caropolis, and founded there the abbey of St.-Corneille. Clothaire I. died here in A.D. 561. A parliament was held in Compiègne in 757. Louis le Debonnaire here surrendered (830) to his son Lothaire. In 877 Louis le Begue was crowned at Compiègne, where he also died and was buried. Carloman assembled the nobles of France at Compiègne in 884 to devise measures to check

the ravages of the Northmen; and at a parliament held here in 888, composed of the bishops and grandees of France, Eudes count of Paris was chosen king. Louis V., the last king of the second race, was crowned and died at Compiègne. At a general assembly convoked at Compiègne in 1022, Hugues, the eldest of the sons of Robert, was raised to the crown in conjunction with his father. The town obtained a charter in 1322. In the wars between the Bourguignons and the Armagnacs, Compiègne was seized by the former; but they were forced to surrender in 1414 to Charles VI., who held it till 1417, when the English and the Bourguignons entered the town without resistance. The town afterwards opened its gates to Charles VII., who was besieged in it by the English. It was in a sally from Compiègne upon this occasion that Jeanne d'Arc was taken prisoner.

COMPLUTUM. [ALCALÁ DE HENARES.]

COMPOSTELLA. [GALICIA.]

COMPTON, LONG. [WARWICKSHIRE.]

COMRIE. [PERTSHIRE.]

COMTAT D'AVIGNON, LE, a county in France, which originally extended along the Rhône and the Durance from the city of Avignon, which it included, to the town of Tarascon. A portion of this territory, subject to the Pope from 1348 to 1791, comprised only the city of Avignon, the village of Morières, and the parish of Montfavet. The Comtat d'Avignon in this restricted sense is now included in the department of Vaucluse.

COMTAT VENAISSIN, LE, a small province in Provence, which before the first French revolution formed with the county of Avignon an independent state, the sovereignty of which was vested in the Pope. It took its name from Veusaque (Vindiscina), now a poor village but formerly an important town, which was its capital, and gave title to a bishop till the 11th century. This county formed part of the kingdom of Arles, and subsequently of the marquisate of Provence. In 1225 it fell to the count of Toulouse, in whose family it remained till 1229, when Raymond VII. signed a treaty in Paris ceding all the territories he possessed to the east of the Rhône to the Holy See. Gregory IX., then pope, renounced the grant in favour of the count; but Gregory X., after the estates of the counts of Toulouse fell by succession to Philippe le Hardi, king of France, insisted upon the fulfilment of the treaty, and Philippe made over the territory in question to the Pope in April, 1274. By a decree of September 14, 1791, the county was re-united to France, and it now forms about two-thirds of the department of Vaucluse. From the time of François I. the inhabitants of the county were considered as Frenchmen.

The capital of the county whilst it was under the Holy See was Carpentras; other towns were Valréas, Cavailon, and Vaison. The county was governed by an officer called Recteur, who was assisted by a general assembly, which met every year at Carpentras. The Roman law and the Pspal constitutions were in force in the country whilst it was subject to the Pope. [VAUCLUSE.]

CONCAN, NORTH AND SOUTH, a maritime district of Hindustan in the Bombay presidency, extending from the sea to the Western Ghaut Mountains, which form its eastern boundary. Its length from north to south is about 220 miles; its breadth in no part exceeds 50 miles, and on the average is 35 miles. The entire area is estimated at 12,270 square miles. The district includes many fertile places, which yield abundant harvests of rice: sugar, spices, cocoa-nuts, and hemp are also produced; but the surface is in general very rough, and much intersected by steep and rocky hills. The mountain range is from 2000 to 4000 feet high, and exceedingly abrupt on the west: the passes are numerous but steep, and very seldom practicable for carriages. The northern part of the chain of ghauts and that part of this district which lies at the base is inhabited chiefly by Bheels. More to the south the country is inhabited by Coolies, who are less predatory in their habits and altogether more civilised than the Bheels. The Bheels live quietly when in the open country, but resume all their wildness in places that are strong either from hills or jungle. They are small of stature and black; they wear few clothes, and are usually armed with bows and arrows.

The Northern Concan, which extends from the district of Surat on the north, or about $20^{\circ} 20'$ to about $18^{\circ} 50'$ N. lat., was ceded to the British in 1817; and the Southern Concan, which extends farther in the same direction to about $16^{\circ} N.$ lat., was obtained partly by cession and partly by conquest in 1817 and 1818. A great part of the Northern Concan was once held by the Portuguese, who divided the lands into large estates. These estates were given to Europeans, whose opulence is proved by the remains of many splendid public buildings and private dwellings which they erected, some of which are still standing in places which are now mere wastes. The district is traversed by numerous mountain streams, but has no river of magnitude. It contains along the coast many small bays and harbours. The land and sea breezes blow alternately during the 24 hours. The Northern Concan is divided into 46 pergunnahs, containing 2111 villages. The Southern Concan comprises 47 pergunnahs and 2291 villages. The whole population is estimated at rather more than a million. Five-sixths of the inhabitants are Hindoos. The roads throughout the district are little more than paths, excepting near the sea-coast, where, at some of the more difficult and precipitous places, steps of an easy ascent have been constructed, mostly at the expense of private individuals.

CONCEPCION. [CHILL.]

CONCEPTION BAY. [NEWFOUNDLAND.]

CONDÉ. [CALVADOS; NORD.]

CONDOM. [GERA.]

CONDOMOIS, a district in the south of France, was a dependency according to some of Gasconne, to others of Guienne. It was bounded N. by Agenois, of which it originally formed part; S. by Armagnac; and E. by the Lomagne. The capital was Condom: other towns were Nérac and Gabarret. Condomois now forms the most northern part of the department of Gers, the most southern part of Lot-et-Garonne, and the most eastern part of Landes. In Julius Cæsar's time the territory of Condomois was inhabited by the Nitobriges, and was included in Aquitania. From the Romans it passed to the Visigoths, and subsequently to the dukes of Gasconne and Guienne. In the reign of Charles VII. it was united to the crown of France along with the Bordelais and the rest of Guienne.

CONGLETON, Cheshire, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Astbury and hundred of Northwich, is situated in 54° 10' N. lat., 2° 11' W. long., distant 33 miles E. from Chester, 162 miles N.W. by N. from London by road, and 170 miles by the North-Western and North Staffordshire railways. The population of the town of Congleton in 1851 was 10,520. The borough is governed by 6 aldermen and 13 councillors, one of whom is mayor. The living is a perpetual curacy in the archdeaconry and diocese of Chester. Congleton Poor-Law Union contains 32 parishes and townships, with an area of 50,357 acres, and a population in 1851 of 30,508.

The town of Congleton is about a mile in length: many of the houses are constructed of timber frame-work and plaster. The situation of the town is extremely picturesque; it is embosomed in a deep valley on the banks of the river Dane, and is surrounded by fertile fields inclosed by well-timbered hedge-rows, which at a distance give the appearance of a miniature forest. Numerous mansions stand at the west end of the town, and have ornamental gardens and shrubberies attached. The guildhall is a commodious brick building, erected in 1804 on the site of the old hall. The market-hall and assembly-room was erected in 1822 at the expense of Sir E. Antrobus of Eaton Hall, Astbury. Some have supposed that the Romans had a military station at Congleton. In Domesday Book it appears to be written Cogleton. From ancient burgh records it appears that bear-baiting was at one time a favourite amusement with the inhabitants.

There are three churches belonging to the Establishment. St. Peter's, a plain building, neatly fitted up in the interior, was rebuilt in 1740, with the exception of the tower, which was then repaired only, and had a clock placed in it with four dials. St. Stephen's, a neat brick edifice, will accommodate about 1000 persons. St. James's is a new building in the style of the 13th century. The Baptists, Independents, Wesleyan, Primitive, and New Connexion Methodists, Unitarians, and Roman Catholics have places of worship. The Free Grammar school, founded in 1590, had 36 scholars in 1851. There are several National and Infant schools, and schools connected with some of the Dissenting chapels. In the town are an Atheneum news-room and library, and a savings bank. A county court and petty sessions are held here.

The Macclesfield Canal passes through Congleton. At one period the chief manufactures of Congleton were gloves, and tagged-leather laces called 'Congleton points,' but for nearly a century the silk manufacture has been the principal occupation. The making of silk ribbons has of late years grown into an important branch of industry, in which females as well as males find employment. In the neighbourhood are several extensive coal-mines. The market-day is Saturday. Fairs are held on the Thursday before Shrove-tide, on May 12th, July 12th, and November 22nd, for cattle, Yorkshire woollen cloths, and pedlery. The Congleton viaduct of the North Staffordshire railway, about half a mile from the station, is a fine work of ten arches. It is constructed of blue brick with stone bastions and stone parapet. The arches are 50 feet in span. The height from the bed of the stream to the rails is 114 feet; the length of the viaduct, exclusive of the embankments, is 231 feet.

CONGO. This name, in its most extensive application, as explained under the word ANGOLA, comprehends the whole of the region lying along the western coast of Africa, which is more correctly divided into the four kingdoms or districts of Loango, Congo Proper, Angola, and Benguela. In this large and loose sense it extends from Cape Lopez Gonsalvo, in 0° 44' S. lat., to Cape Negro, in 15° 40' S. lat. Congo, properly so called, however, at least according to its modern limits (for it is said to have been more extensive formerly), does not stretch to the north beyond the river Zaire (otherwise called the Congo), in about 6° S. lat., which separates it from Loango, nor to the south beyond the river Dando, in 8° 20' S. lat., which separates it from Angola. It is believed to extend a considerable distance into the interior, but we have no distinct information respecting its limits in that direction, and they are probably not very definitely marked.

The first European who reached Congo was the Portuguese navigator, Diego Cam, who made his way thither from Elmina in 1482. Diego revisited the country in 1489, making his voyage on that occasion from Portugal. The following year another armament arrived

from Portugal, under the command of Ruy de Souza. After this the king of Congo and many of his subjects made professions of Christianity, and the Portuguese formed considerable establishments in the country. It was in the course of the 17th century however that the most strenuous endeavours were made in the work of converting the natives. Ample accounts of the proceedings of the Portuguese missionaries are given in the 'Voyage' of Michel Angelo di Gattina and Dionisio Carli di Piacenza, two Capuchin friars, who set out to join the mission in Congo in 1666; in that of Geronimo Merolla di Sorrento, another Capuchin, who joined the same mission in 1692; and in a work drawn up by Filippo Pigafetta from the journals of Duarte Lopez, a Portuguese captain, about 1589. Various information about the country is given also in Purchas, Hakluyt, and other English collections. But it may be added, that although much has been written about Congo, not much is really known about the country.

According to the old accounts, the native division of Congo is into the six provinces of Bamba, Sogno (or Sonio), Soudi, Pango, Batta, and Penda. The Portuguese however appear to have divided the country into what they called the metropolitan province of San Salvador, the duchy of Bamba, the duchy of Soudi, the marquisate of Pemba, and the county (or earldom) of Sogno, thus omitting altogether Pango and Batta, or comprehending them under some of the other names. The Portuguese province of San Salvador is a part of the native province of Pemba, the marquisate of Pemba being the remainder. It is placed along a portion of the left bank of the river Congo, immediately to the north-east of Sogno, which occupies the angle formed by the river and the sea-coast. In this province is the capital, called Banza Congo, or 'chief town of Congo.' The Portuguese having established a settlement here, gave the place the name of San Salvador. It is described as situated about 150 miles from the sea, and about a third of that distance from the river, in a hollow on the south-east side of a lofty mountain, having on the summit a plain of about ten miles in circuit, which is covered with towns and villages. The palace of the native sovereign and the Portuguese part of the town are each surrounded by an inclosure of about a mile in circumference; but the suburbs of the Portuguese town are described as also of considerable extent. The principal ornaments of San Salvador were—a cathedral and nine or ten other churches, all built of stone, although, with the exception of that of the Jesuits, roofed only with thatch. The religious establishment consisted of a bishop and chapter, a Jesuits college, a convent of Capuchins, &c. It appears however that even before the end of the 17th century the ravages of war had almost ruined San Salvador, and the native sovereign had transferred his residence to another place, called Lemba, in the province of Bamba, and nearer the sea-coast.

The Congo River was formerly supposed to be the embouchure of the Niger; but long before this point was settled, the soundest geographers were of a different opinion, although Captain Tuckey's expedition (of which a 'Narrative' was published in London in 1818), was undertaken with the view of ascertaining the matter; and in the official account of the voyage the identity of the two rivers is elaborately contended for by a writer who declares that "the hypothesis which makes the Niger to pour its waters into the Gulf of Benin is entitled to very little attention." The Congo is not properly called the Zaire, it seems, as Diego Cam was led to suppose (that being merely a word signifying any great river), but the Moienzi Euzaddi, which means the river that swallows up all other rivers. The old accounts represent the velocity with which it rushes into the sea to be so great that it preserves its stream unaffected by the salt water for twenty leagues or more. This description Captain Tuckey found reason to believe considerably exaggerated. It had been usually stated that the Congo was always full of water; but when he entered it, in the beginning of July, he found it from eight to eleven feet lower than the point which from the marks on the rocky banks it appeared to have reached at other seasons. The tide also was very perceptible at 140 miles up the river. The velocity of the current at the mouth of the river was found nowhere to exceed 4½ or 5 knots an hour, and in many places it was not more than 2½. The accounts of some preceding navigators make it flow at the rate of six or seven knots; and so it very possibly may do when the channel is more full of water. The depth however in the middle of the stream here was very great, no bottom having been found with a line of 160 fathoms; so that when the river is at high flood the mass of water which it pours forth must be immense. Its breadth for some distance from the sea is not less than five or six miles; it is then divided by a number of islands into several streams: at the distance of 140 miles from the mouth the 'Narrows' commence, and continue for about 40 miles, during which it forces its way between two opposite barriers of steep rocks, not more than from 300 to 500 yards asunder. Many ledges of rocks stretch across this part of the river, the most formidable of which however, called the Great Yellala, or Cataract, has a fall of only about 30 feet in 300 yards, and would be more appropriately designated by the term 'Rapid.' Above the Narrows, which terminate at a place called Inga, the river expands to a breadth of two, three, and even four miles. Tuckey ascended it for about 100 miles beyond this point, and he was assured by the natives that after this there was no impediment to its continued navigation for a great distance. Its direction,

according to their account, continued to be nearly in a straight line towards the north-east; and Tuckey appears to have felt convinced that it must have its source in some vast lake or chain of lakes several degrees to the north of the equator. Much surprise was experienced at finding that it did not receive the water of any other stream in the whole distance along which the survey extended. The old delineations of the river, it is to be observed, also represent it as without any tributaries in this part of its course; but they make numerous rivers to flow into it higher up. The torrents that pour down in the rainy season however, through the ravines between the hills on both sides of it, probably bring it a considerable supply. In the lower part of its course the Congo spreads out into extensive swamps, which are covered with mangrove and palm-trees, as are also the islets by which it is here interrupted; above the swampy region, hills, none of which much exceed 2000 feet, rise at a short distance from the channel. Up to the great Yellala these hills are stony and nearly barren, and the rocks at the Narrows are composed of masses of micaceous slate; but beyond this point the rocks are of limestone, and the country is described as fertile and beautiful. Even below this however, between the hills and the water, vegetation is in many parts very luxuriant, and numerous villages are to be seen both in the hollows and even on the flat summits of the mountains. The old maps make five or six smaller rivers fall into the sea between the Congo and the Dando.

The climate is hot and unhealthy along the coast, but temperate and salubrious in the interior. The range of the thermometer in the period of a month during Captain Tuckey's survey, from about the middle of July to the middle of August, was never below 60° during the night, nor above 80° during the day; the common noon-day heat was 76°. Among the vegetable products (for many of which the natives must have been indebted to the Portuguese) are mandioc or cassava, yams, maize, sweet potatoes, pumpkins, millet, calvanses, cabbages, spinach, pepper, capsicum, the sugar-cane, and tobacco. Of fruits they have the banana, the papaw, the orange, the lime, and the pine-apple, which last Captain Tuckey found growing in the open places at the extreme point to which he penetrated. Wine is made from the juice of the palm-tree, which is described as an agreeable and a wholesome drink. Of domestic animals there are goats, hogs, fowls, ducks, and pigeons, as well as a few hairy sheep. There are also some horned cattle. Of wild animals, the country abounds with elephants, leopards, lions, buffaloes, large monkeys, antelopes, wild hogs, &c. Guinea fowl and red-legged partridges are abundant, large, and fine; and wild pigeons, of three or four species, very plentiful. Bees are in great numbers; the flea and the bug were the only insects that were found troublesome. The lower part of the river Congo abounds in different species of fish, which form an important part of the subsistence of the people; it also, especially above the Narrows, swarms with hippopotami and crocodiles.

The native sovereign of Congo resides at Banza Congo, six days' journey southward from the river. Under the king are the Chonoos. "The Chenooships," says Captain Tuckey, "improperly named kingdoms by Europeans, are hereditary fiefs, passing in the female line, that is, on the decease of the Chenoos the succession instead of passing to his son goes to his brother, or uterine uncle or cousin." Of the inferior officers, the chief is the Mafook, or collector of the customs, who is generally qualified to act as an interpreter to the European visitors of the coast. These functionaries used to amass considerable wealth by giving their services as agents to the slave traders who formerly resorted to Congo. A place called Embomma, on the north bank of the river, and about 50 miles from its mouth, was the great slave mart.

The natives of Congo cultivate regularly two crops of Indian corn in the year. Rights of property are well understood among them. But their houses are mere huts constructed of a few posts stuck in the ground and interwoven with reeds; and they go naked, with the exception of a small apron, generally of grass-matting, tied round their loins. They tattoo their bodies and file away the two upper front teeth. They seem to be a thin and unwarlike race, and both their indolence and their sensuality are extreme. Their women are their drudges in all kinds of laborious work, and, not excepting the sisters, daughters, and wives of the highest personages, are eagerly offered by them for a trifle to a white man of any grade. Their sense of the whites being a race of beings altogether distinct from themselves seems to be complete. They scarcely appear to have gained a step towards civilisation by their intercourse with the Portuguese.

The language of Congo, which is a dialect of that of Angola, Benguela, and the other neighboring districts, is (it is said) radically the same as that spoken by the natives of the east coast of Africa. This was first noticed by Mr. Marsden (author of the 'History of Sumatra,') and the statement is corroborated by the lists of Congo words collected by Captain Tuckey.

CONI, properly CUNEO, an administrative division of Piedmont, is bounded N. by the division of Turin, E. by that of Alessandria, S.E. S., and W. by the Apennines and the Maritime Alps, which separate it from Genova, Nizza (Nice), and France. Its greatest length from east to west is 69 miles, from north to south 58 miles. The area is 2710 square miles, and the population in 1848 amounted to 600,872. The surface presents mountain ridges springing from the

Alps and Apennines, all converging to the basin of the Po, and inclosing valleys of great fertility, which yield corn, maize, wine, silk, pulse, hemp, and fruits. The white mulberry-tree is cultivated with great care and success for the rearing of silk-worms, which gives profitable employment to great numbers of the peasantry. The lower slopes of the mountains are covered with forests of chestnut; and their higher parts afford abundant summer pastures, on which great numbers of cattle are fed. Iron, lead, marble, slates, mineral salt, &c., are found.

The rivers are numerous. They are all tributaries of the Po, which, rising from the eastern side of Monte Viso, flows east to within a short distance of the town of Saluzzo; it then turns north-east and enters the province of Torino or Turin. The Vraita flows east from the Maritime Alps as far as Castigliole, whence it turns north, and enters the Po on the right bank, a little above Carmagnola. The Maira rises also in the Maritime Alps, and flows in a direction parallel to that of the Vraita, and enters the Po about 2 miles nearer Carmagnola. The next river to the south is the Stura, which flows parallel to the preceding as far as Fossano, where it turns north-north-east, and enters the Tanaro on the left bank near Cherasco; its principal affluent is the Vermegnana or Gesso, which enters it on the right bank below Cuneo. The Tanaro, rising in the Maritime Alps a little east of the Col-di-Tende, flows nearly due north at a little distance west of an offshoot from the main chain as far as Cherasco, where it passes through a gap to the eastern side of the ridge, passing the towns of Alba and Asti; from the latter it runs east to a little below Alessandria, near which it receives from the Apennines the Belbo and the Bormida increased by the Orba from the right bank, and then turning north-east enters the Po about 7 miles north of Marengo. From Asti the Tanaro is navigable for barges, but with some difficulty, owing to the rapidity of the stream at some points. A railway runs from Turin through Savigliano to Fossano in the administrative division of Cuneo. The line will probably be continued to Cuneo.

The division of Cuneo consists of four provinces, which, with the area, mandamenti, and population of each, are as follows:—

Provinces.	Area in sq. miles.	Mandamenti.	Population in 1848.
Cuneo . . .	1003	18	179,636
Alba . . .	408	12	118,844
Mondovi . . .	679	18	148,450
Saluzzo . . .	620	14	153,942
Total . . .	2710	62	600,872

The Province of Cuneo contains 67 comuni, and occupies the south-western portion of the division. The chief town is Cuneo, which stands on the right bank of the Stura, 47 miles S. from Turin, and has, including the garrison, about 20,000 inhabitants. It is the seat of a bishop, and the residence of the intendant-general of the whole division; it is well built, and has a cathedral and several other churches, a royal college, town-hall, theatre, and public baths. It is a busy place, and has cloth and silk factories, and a considerable trade in the produce of the country by means of the canal joining the Stura and the Po, which runs from this town to Carmagnola. The city was strongly fortified in 1800; its defences were dismantled by the French after the battle of Marengo. It is still however inclosed by a wall. Busca, on the left bank of the Maira, stands at the foot of a hill, in a rich wine district, and has 9000 inhabitants. Boves, S. of Cuneo, at the foot of mountains in which iron mines and marble quarries are worked, has 8709 inhabitants. Caraglio, 6 miles W. from Cuneo, has a college, some silk manufactures, and a population of 7000. Chiusa, on the left of the Pesio, a feeder of the Tanaro, has 5800 inhabitants, who manufacture silk and glass. Demonte, a fortified town, 15 miles W.S.W. from Cuneo, on the left bank of the Stura, has a population of 6956, including the whole commune. The town is defended by a strong fortress which commands the valley of the Stura and road to Franco by the Col-d'Argentiere. The fort was taken by the French and Spaniards in 1744, and destroyed on their retreat from Cuneo. It has been since rebuilt. Dronero, 10 miles W.N.W. from Cuneo, on the Maira, which is here crossed by a handsome bridge, has a college, and a population of 7716. Fossano, on the left bank of the Stura, 15 miles N.N.E. from Cuneo, 37 S. by E. by railway from Turin, is a well-built town, with a royal college, a handsome cathedral, silk factories, paper-mills, and tanneries. The town, which is inclosed by old walls, stands on a hill, the summit of which is surmounted by an old castle. The streets are rather gloomy, the houses being built over arcades, which form the footways. It is the seat of a bishop, and has 16,041 inhabitants, who trade in corn, hemp, and cattle. Limone, at the foot of the Col-di-Tende, and near the source of the Vermegnana, has 3500 inhabitants, who are employed as guides, and in keeping in repair the terraced roads over the neighbouring mountains. Peveragno; population, 6080.

The Province of Alba, before described, occupies the north-eastern part of the division, and contains 77 comuni. [ALBA.]

The Province of Mondovi lies east of that of Cuneo, south of Alba, and contains 71 comuni. The chief town, Mondovi, stands on the Ellero, a feeder of the Tanaro, 50 miles S.S.E. from Turin, and has 15,921 inhabitants. It is defended by walls and a strong castle,

contains several fine churches, ecclesiastical and royal colleges, and has manufactures of silks, woollens, leather, iron, cotton, paper, and hats. The town gives title to a bishop. The French under Napoleon here routed the Sardinians, April 22, 1796; and Marshal Soult sacked the town in 1799. *Cherasco*, a walled town at the confluence of the Stura and Tanaro, 30 miles S.S.E. from Turin, has a college, two hospitals, and 8393 inhabitants, who trade chiefly in wine and silk. The town is well built and contains several fine buildings: it is quadrangular in form, and is supposed to occupy an ancient site. Each of the principal streets terminates in a noble arch. Cherasco is supplied with water by a canal, which drives the machinery of several silk factories. The neighbourhood of the town is famous for its white truffles. The chief towns of the other mandamenti have populations under 5000.

The *Province of Saluzzo* occupies the north-western part of the division, and contains 52 comuni. The capital, *Saluzzo*, 31 miles from Turin, stands on the northern slope of a ridge that projects from Monte Viso, and separates the waters of the Po from those of the Vralta. It is a large episcopal town, and contains an old castle formerly belonging to the marquises of Saluzzo, but now used as a prison; a handsome cathedral, several other churches, a royal college, an hospital, and 14,426 inhabitants, who trade in the produce of the country, and manufacture silk, leather, hats, linen, and iron. The part of the town built on the hill is walled; the lower town is open. Saluzzo was the capital of the department of Stura during the French occupation of Italy. *Racconigi*, a pretty town near the confluence of the Grana and the Maira, is situated in the most fertile part of Piedmont, and has 10,102 inhabitants. Here is the palace of the Prince of Carignan, situated in a fine park. *Racconigi* is a station on the railroad to Fossano, and is 23 miles distant from Turin. *Savigliano*, east of Saluzzo, and 32 miles S. from Turin, stands in a fertile plain watered by the Maira and other feeders of the Po, and has 15,546 inhabitants. It is a well-built town, and has a fine market-place, several handsome churches (one of which is collegiate), two hospitals, and silk, linen, and cloth factories. At the end of the principal street a triumphal arch is erected in honour of the marriage of Victor Amadeus with the princess Christine of France. This is a favourite place of residence with the provincial nobility and landed proprietors. It is surrounded by old fortifications. There are several other towns, but none of them have a population exceeding 5000.

CONN, LOUGH. [MAYO.]

CONNAMARA. [GALWAY.]

CONNAUGHT, a province of Ireland, containing the counties of Galway, Mayo, Roscommon, Leitrim, and Sligo. It lies between 52° 52' and 54° 25' N. lat., 7° 33' and 10° 15' W. long. The latitude is about that of Yorkshire and Lincolnshire; but from its proximity to the ocean the climate is much more moist and variable. It is bounded N. and W. by the Atlantic Ocean, E. by the river Shannon and the counties of Cavan, Fermanagh, and Donegal, and S. by the county of Clare. Clare, which is now annexed to Munster province, was at one time a part of Connaught, to which indeed it would appear naturally to belong. The greatest length of Connaught, from Scariff on the borders of Clare on the south to Mullaghmore Head on those of Donegal on the north is 103 miles; and its greatest breadth from the boundary of Leitrim on the north-east to Slysne Head on the south-west, 118 miles. The area comprises 4,392,048 acres, of which 2,220,960 are arable, 1,006,002 unencultivated, 48,340 in plantations, 3877 in towns, and 212,864 acres under water. In 1851 there were 172,204 acres under crops, of which 359,807 acres were under corn, beans, and peas, 151,976 under potatoes, and 53,409 acres under other green crops. The population in 1841 was 1,418,859; in 1851 it was 1,012,006.

The mountain ranges are distributed round the coast. From their inland declivities the province has a comparatively level surface to the Shannon. This river thus becomes the main drain of the intermediate country. Its chief feeders in Connaught are the Suck and the Gara; the latter discharges the waters of Lough Gara and Lough Key, and the former, a large river, is navigable from its confluence with the Shannon to Balliforan, a distance of about 20 miles. The streams which flow to the ocean are much more numerous, but the body of water brought down by them is not so great. They take their rise chiefly in lakes, which are distributed through the mountain districts of Galway and Mayo. Of these Loughs Corrib, Mask, and Carra discharge their united waters southward by Galway; and Loughs Conn, Arrow, and Oilly northward by Ballina, Ballasallare, and Sligo respectively. The rivers which flow westward from the lakes of Connamara and Erris are short and rapid in their course, and comparatively inconsiderable in the quantity of water; so that with reference to its rivers the province may be divided generally into three districts: that of the Shannon, that of the basin of Lough Corrib, and that of the basin of Lough Conn. The neighbourhood of Ballihaunias in Mayo, about the centre of the province, forms the summit-level from which these principal slopes diverge; and lines drawn from this point to Scariff on the south-east, Sligo on the north-east, and Westport on the west, will be found to mark pretty nearly the boundaries of each.

The limestone field of Connaught is very nearly co-extensive with the low district between the Shannon and the western elevations.

The mountain groups that inclose this plain present towards the inland field successive elevations of sandstone, clay-slate, granite, and quartz, corresponding pretty nearly with the development of the same strata on the opposite side of the island. The limestone field is very much encumbered with bog, which in Ireland is almost always found to rest on limestone gravel. The remainder of the province is more mountainous than any other district of equal extent in Ireland; so that Connaught, in produce and population, is far behind the other provinces.

Connaught was formerly a kingdom of the Irish Pentarchy. Its kings were of the race of O'Connor. It enjoyed a comparative independence until the year 1590, when it was made shire-ground under the 11th Eliz. c. 39, and divided into six counties, namely, those above enumerated and Clare, which had formerly been part of Munster. In 1602 Clare was re-annexed to the latter province, yet so late as 1792 remained on the Connaught circuit. In the various rebellions down to the end of the 17th century Connaught was the refuge of the fugitive and dispossessed Irish. The Irish language is still very prevalent; and the condition of the poorer classes to this day attests the miserable circumstances which brought the population together. Employment is here more difficult to be obtained than in any of the other provinces. The loss of the potato crop in 1846, and the diminished value as well as amount of agricultural produce consequent on that calamity, and on the legislative changes induced by it, completed the ruin of great numbers of proprietors, and entailed a wide-spread concurrent devastation among the occupying tenantry. In the year 1847-8 alone the total number of holdings evicted or thrown up by the occupiers was 26,599, or one-sixth of the entire number of holdings in the province.

The state of Connaught both physical and moral has been perhaps too generally underrated, though it must be admitted that as a whole it is beneath the average state of the three other provinces of Ireland. Numerous projects have been formed for the improvement of this province and the development of its great resources. The improvement of the navigation of the Shannon has given a continuous line of water-carriage along the eastern boundary of the province.

Perhaps the most useful of the various efforts made for the improvement of Connaught has been the introduction or revival of the culture of flax. The quantity grown in 1847 was 10,866 cwt.; in 1851 it was 21,597 cwt. The system of farming has been greatly improved in those districts which have passed through the transition attendant on the change of proprietary and occupants. The main resources of the province must however for a considerable period continue to rest on the industry of the native race of small farmers.

CONNECTICUT, one of the United States of North America, is bounded S. by Long Island Sound, which separates it from Long Island; E. by Rhode Island; N. by Massachusetts; and W. by the state of New York. It lies between 41° and 42° 2' N. lat., 71° 40' and 73° 48' W. long. The form of Connecticut is nearly that of a parallelogram, which is about 85 miles long from east to west, with a mean width of 60 miles from north to south. The area is 4674 square miles. The following table shows the increase of the population since 1810. The total population in—

1810	was	262,042,	including	6453	free coloured persons	and	310	slaves.
1820	"	275,202,	"	7944	"	"	97	"
1830	"	297,675,	"	8047	"	"	25	"
1840	"	309,978,	"	8104	"	"	17	"
1850	"	370,792,	"	7456	"	"	0	"

The federal representative population in 1850 was 370,792, which entitled the state to send four representatives to Congress. To the Senate, like all the other United States, Connecticut sends two members.

Coast-line, Surface.—Connecticut has a sea-coast of about 95 miles along the Long Island Sound, which is indented by several good harbours, of which New London, Stonington, New Haven, Bridgeport, and Norwich are the chief. The best of the harbours is that of New London, which is spacious, deep, and not liable to be frozen over in winter. Stonington and Bridgeport harbours are protected by breakwaters. The Sound admits of free navigation along the entire coast of the state for ships of the largest size. There are lighthouses at the west side of the entrance to the Thames; at the west side of the entrance to the Connecticut; on Faulkner's Island, off Guilford Harbour; on a point at the east side of the entrance to Stonington Harbour; at Morgan's Point, near Mystic; on the north side of Fisher's Island Sound; on Five-Mile Point, at the east side of the entrance to New Haven Harbour; on Stratford Point, at the entrance of Stratford Harbour; on Fair-Weather Island, at the entrance to Black Rock Harbour, Fairfield; on Norwalk Island, at the mouth of the Norwalk; on Great Captain's Island; and on North Dumplin Island, in Fisher's Island Sound. There are also floating lightships on Bartlett's Reef, off New London, and on Eel-Grass Shoal.

The surface of the country is generally uneven, but there are no lofty mountains. The principal ranges of high ground, which are continuations of the Massachusetts mountain ranges, run from north to south in the direction of the Housatonic and the Connecticut, the two principal rivers of the state. The Green Mountain range terminates at High Rock, 2 miles N.W. from New Haven. The Lyme range on the east side of Connecticut River separates the lower basin

of the Connecticut from the Thames. A range of high land of moderate elevation, called the Middletown Mountains, or Mount Tom range, runs from Hartford on the Connecticut, past Middletown to East Rock, 870 feet high, north-east of New Haven, where it terminates. The Blue Hills in Southington, a part of this range, are said to be the loftiest in this state, attaining an elevation of 1000 feet. The Housatonic Mountains run along the western margin of the state, on the west side of the Housatonic River.

Hydrography, Communications.—The rivers are generally only navigable in their lower courses. The most important is the *Connecticut*, which rises in Lower Canada, about 45° 20' N. lat. Its general course is south by west, and then south-west to the point where it breaks through one of the Appalachian ranges, and receiving the Passamsic, descends over the Barnet Falls from the high valley in which it has hitherto flowed into a lower basin. From the junction of the Passamsic it continues as before to form the boundary between New Hampshire and Vermont till it enters Massachusetts, through which state it flows, still in a generally southern course. It leaves Massachusetts about 5 miles below Springfield. Its general southern course continues to Middletown in Connecticut, where it is deflected to the south-east by some high land, and continuing this direction it enters the Sound. The whole course of the river is probably not less than 400 miles. The Connecticut is in many respects a very remarkable river. Its general course, as already described, is nearly due south; though it receives numerous streams, they are comparatively of small importance. The river basin above the junction of the Passamsic is about 80 miles wide: below this point it widens to about 40 miles; the whole surface of the basin is calculated to be about 9300 square miles. The river generally flows in a deep and often narrow valley, bordered by high lands, which, where they recede from the river, leave fine alluvial plains. One of these alluvial plains stretches uninterruptedly for 40 miles from a little above Middletown, in Connecticut, to South Hadley, in Massachusetts. The alluvial tracts on the river are exposed to dreadful inundations. The river has a bar at its mouth, but it is navigable for vessels drawing 10 feet of water to Middletown, which is at the head of tide-water, and 36 miles from the Sound; vessels drawing 7½ feet ascend to Hartford, 15 miles above Middletown. Though this river is much obstructed by rapids, falls, and shoals, it has been made navigable, by means of canals and locks, for boats of considerable size to the mouth of Well's River in Vermont. The Tunxis, or Farmington, which has its source on the Green Mountains in Massachusetts, is the principal tributary of the Connecticut in this state. The *Housatonic* rises in Berkshire county, Massachusetts, in a fine plain 1000 feet above the sea, and running a general southern course through a picturesque valley enters the Sound at Milford Point, after a course of about 120 miles. Large vessels cannot enter it, but it has a sloop navigation for about 12 miles. The *Thames*, which is formed by the confluence of the Quinnebaug and the Shetucket a little above Norwich, at which town it is swelled by the junction of the Yantic, has a navigable course of about 14 miles, and falls into the Sound at New London. The small streams which add so much to the fertility of the country are very numerous.

There is now no canal in the state of any length or consequence, the Farmington Canal having been filled up and converted into a railway.

The common roads are numerous and well kept. The railways running east and west through the state are the lines between New Haven and Worcester, in all about 126 miles, which together form a part of the southern main-trunk line, connecting New York and Boston; and the Hartford, Providence, and Fishkill railway, of which little more than 50 miles are yet completed. The lines running north and south from the ports on the Sound are the Norwich and Worcester, 66 miles, of which about 40 miles are in Connecticut; the New London, Willimantic, and Palmer, 66 miles; the New Haven, Hartford, and Springfield, 62 miles; the New Haven and Northampton, on the head of the old Farmington Canal, 45 miles; the Naugatuc, 57 miles; the Housatonic (Bridgeport to Pittsfield, 110 miles), 74 miles completed; and the Danbury and Norwalk, 24 miles. Besides these there are several branches and small lines: the total length of railway completed in the state in October 1853 was 565 miles, and about 100 miles were in course of construction.

Geology, Mineralogy.—The prevalent rocks of the hill ranges are granitic, or hypogene; metamorphic limestones; and in a depression of the granitic rocks occur thin bedded strata of new red-sandstone, shale, and conglomerate, with masses of trap intruded, the beds dipping to the eastward at angles varying from 5 to 50 degrees. The triassic rocks, according to Sir Charles Lyell, must have been "formed in shallow water, and for the most part near the shore, and some of the beds have been from time to time raised above the level of the water, and laid dry, while a newer series, composed of similar sediment, was forming." The red flags of thin-bedded sandstone are often ripple-marked; and "on some shales of the finest texture impressions of rain drops may be seen, and casts of them in the incumbent argillaceous sandstones." But what has rendered this formation an object of unusual interest to scientific men is the circumstance of the numerous impressions and casts of the footsteps of a great variety of birds and reptiles which walked over the strata at the time when they were deposited. According to Professor Hitchcock "the footprints of no less than thirty-two species of bipeds and twelve of quadrupeds have

been already detected in these rocks. Thirty of these are believed to be those of birds, four of lizards, two of chelonians, and six of batrachians. The tracks have been found in more than twenty places, scattered through an extent of nearly 80 miles from north to south, and they are repeated through a succession of beds attaining at some points a thickness of more than 1000 feet, which may have been thousands of years in forming." (Lyell, 'Elements of Geology'; Hitchcock, 'Mem. of American Academy,' New Ser., iii. 129.) No fossil bones, either of birds or reptiles, have as yet been met with in these rocks; the fossil fish are however numerous and very perfect: they belong to a peculiar type which has received the name of *Ischipterus*.

The mineral wealth of Connecticut is considerable. Iron ore is found at Salisbury, Kent, and other places, in great abundance, and of excellent quality. In copper ore this state is one of the richest in the Union. The chief mines are those of Bristol and Plymouth. According to Professor Silliman the Bristol vein extends for above 30 miles from Bristol southward as far as Hampstead, and if fully worked is capable of affording employment to 30,000 miners. The Plymouth mines are said to be equally rich. Copper is likewise found at Granby. Lead, zinc, plumbago, cobalt, and manganese are also met with. At Milford a very fine marble is obtained, and marbles of different kinds occur there and elsewhere. A freestone much in demand for building purposes is quarried in several parts of the state. The mineral springs at Stafford are much resorted to.

Climate, Soil, Agriculture.—The climate is subject to sudden and extreme variations of heat and cold, especially along the coast. With a change of wind a great alteration generally occurs in the weather. In the winter the north-west winds are very keen, the south winds are warmer and more genial.

The soil of Connecticut is only of a medium quality, more suitable for grazing purposes than the growth of wheat, except in the river valleys, some of which contain rich alluvia. In the valley of the Connecticut the soil varies from a hard stiff clay to a light sandy loam. In the eastern part of the state a warm, strong, fertile soil prevails, which is excellent for grasses. In the western part are many fertile districts. The north-western is more cold and sterile, but contains some good grazing districts. In the south the peach perfects its fruit. The farms are mostly small and carefully cultivated; but the farmers usually follow some manufacturing occupation during a part of the year.

In 1850 there were in the state 1,768,178 acres of improved land, and 615,701 acres of unimproved land, which together were valued at 72,726,422 dollars. The number of farms under cultivation was 22,445. The total produce of the principal crops in 1850 was—wheat, 41,762 bushels; rye, 600,393 bushels; maize, 1,935,843 bushels; oats, 1,158,738 bushels; barley, 19,099 bushels; buckwheat, 229,297 bushels; potatoes, 2,689,725 bushels; hay, 516,131 tons; clover-seed, 13,841 bushels; other grass-seed, 16,608 bushels; peas and beans, 19,090 bushels; tobacco, 1,267,624 lbs.; maple sugar, 50,796 lbs.; flax, 17,923 lbs.; wine, 4269 gallons. The value of orchard products was 175,118 dollars; of market-garden products, 196,874 dollars.

The number of horses in 1850 was 26,879; asses and mules, 49; milch cows, 85,461; working oxen, 46,983; other cattle, 80,226; sheep, 174,181; swine, 76,472. The products of animals were thus returned:—wool, 497,454 lbs.; butter, 6,498,119 lbs.; cheese, 5,363,277 lbs. Value of animals slaughtered during the year, 2,202,266 dollars. Silk cocoons, 328 lbs.; bees-wax and honey, 93,304 lbs.

Manufactures, Commerce, &c.—Connecticut possesses considerable manufactures, but the manufacturing industry of the state is distributed over a large number of small shops. The number of establishments in 1850 producing to the value of 500 dollars and upwards annually was 3913, of which 128 were cotton factories, employing 2708 males and 3478 females; 149 woollen mills, employing 2907 males and 2581 females; and 91 iron-houses, of which 60 manufactured castings, employing 942 persons, 13 pig-iron, employing 148 persons, and 18 wrought-iron, employing 374 persons. There are also factories for the manufacture of steam-engines and locomotives, hardware, cutlery, fire-arms, gunpowder, paper, soap, candles, boots and shoes, and most of the ordinary articles of home consumption; besides numerous flour, grist, and saw-mills, distilleries, breweries, tanneries, potteries, glass-houses, &c.

The foreign commerce of the state is not large. The exports in 1852 amounted to 506,174 dollars, the imports to 394,675 dollars, of which the value brought in foreign vessels was only 13,397 dollars. In the same year 65 vessels, of 9034 tons burden, were built in the state. The amount of shipping owned in the state in 1850 was 113,085 tons, of which 31,028 tons were employed in foreign commerce, 11,483 tons in the whale-fishery, 5249 tons in cod-fishing, and 571 tons in mackerel-fishing; the remainder were chiefly employed in the coasting trade. The steam marine of the state, which is wholly employed in the coasting trade, amounted to 8455 tons.

Divisions, Towns, &c.—The state is divided into eight counties—Fairfield, Hartford, Litchfield, Middlesex, New Haven, New London, Tolland, and Wymundham, which are subdivided into 148 townships. It contains 6 cities and 12 boroughs. The following are the cities,

all of which are port towns, and have daily communication by steam-boats with New York: the population is that of 1850:—

Hartford, the capital of Hartford county, and one of the seats of the state legislature, is on the right bank, and 50 miles from the mouth of the Connecticut, at the head of the ship navigation, 41° 45' N. lat., 72° 40' W. long., 385 miles N.E. from Washington: population, 17,968. The city stands on rising ground, is regularly laid out, and is a mile long and three-quarters of a mile wide. The principal public buildings are the state-house, city-hall, custom-house, arsenal, market-house, Trinity college, the American asylum, the retreat for the insane, and Wadsworth atheneum. Some of the churches, of which there are 24 belonging to the various sects, are handsome buildings. Besides Trinity college there are numerous academies and schools in the city. Hartford is the centre of the state railway system, and carries on a large trade with the interior. There are considerable manufactories of machinery, fire-arms, boots and shoes, &c., and several large lumber yards. Eight newspapers and two magazines are published in the city, and there is an extensive book-selling business. The American Asylum for the Deaf and Dumb was the first established, and is still the most flourishing and important asylum of the kind in the United States. The number of students in 1850 was 210, of whom a large number were supported by other states. The Retreat for the Insane is another very important institution; it contained 143 patients in 1850.

New Haven, the capital of New Haven county, and, alternately with Hartford, the seat of the state legislature, stands at the head of New Haven Bay, 4 miles from Long Island Sound, 41° 18' N. lat., 72° 56' W. long., 160 miles by railway S.S.W. from Hartford: population, 22,539. The city is pleasantly situated, the streets are wide, regularly laid, and generally bordered with rows of fine elms. The central square forms a sort of public park, planted with numerous rows of elms, and is said to be the finest public ground in the United States. In this square are three fine churches, the state-house, and the chief part of the buildings of Yale college. The city contains 22 churches, Yale college (next to Harvard college the most important university in America), several scientific institutions, two popular lyceums, having libraries and reading-rooms, numerous academies and schools, several benevolent institutions, and two extensive cemeteries, in which several of the more eminent Americans are interred. The public buildings are mostly of brick; the houses in the older part of the town are mostly of wood, and surrounded by shrubberies or gardens. The state hospital, founded in 1832, is a substantial stone edifice, standing on an elevated site. The new railway station is considered to be one of the finest structures of the kind in the United States. New Haven is the chief seat of the foreign commerce of the state, as well as of an extensive coasting trade, and considerable fisheries. The harbour is spacious but shallow, and is gradually silting up. The tonnage belonging to the harbour in 1850 was 15,731 tons, of which 2568 tons were propelled by steam. There are considerable manufactories, especially of carriages and clocks; ship-building yards, tanneries, potteries, woollen-factories, hardware and cutlery works, lumber yards, &c. Four or five railways meet at New Haven, and afford great facilities for communication with all parts of the Union. Several newspapers and monthly and quarterly magazines, as well as Professor Silliman's 'American Journal of Science,' are published at New Haven.

Bridgeport, situated on an arm of Long Island Sound, 78 miles S.W. from Hartford; population, 7538. The harbour is eligible for large steam-boats and coasting vessels. The manufactures are extensive. The city is neat and regularly built, and contains several churches. The Housatonic railway unites with the New York and New Haven railway at Bridgeport.

Middletown, on the right bank of the Connecticut, 14 miles S. from Hartford; population 8791; is situated on gently rising ground, the main street in which are all the principal buildings running parallel with the river, and the other streets at right angles with it. Some of the public buildings are handsome structures, and there are good mansions in the higher part of the city and its vicinity. Middletown has considerable manufactures and an extensive coasting trade. In the vicinity are very productive lead and silver mines, and inexhaustible quarries of felspar, in much request for the manufacture of porcelain. The Wesleyan University is a fine building. Railways connect the city with Hartford and other towns. Three newspapers are published here.

New London, on the right bank of the Thames, 3 miles above Long Island Sound, 43 miles S.E. from Hartford: population, 9006. The city contains the county buildings, seven churches, and several academies and schools. The harbour has a depth of 30 feet, and is the finest in the state. New London is the chief port for the coasting and whaling trade of Connecticut. The tonnage of the port in 1850 was 40,486 tons. The foreign trade is chiefly with the West India. The city has ample railway facilities.

Norwich stands on a very picturesque site on the Thames, at the junction of the Quilmebaug and Yantic rivers, 36 miles E.S.E. from Hartford: population, 10,265. It contains the usual county buildings, a town-hall, and eight churches. There are numerous manufactories of cotton and woollen goods, paper, hardware, cutlery, &c., the rivers affording great water-power. The celebrated Yantic falls are in the vicinity. Three railways pass through the city.

The following are the twelve boroughs:—**Danbury**, near the western border of the state, 48 miles S.W. from Hartford; population 5964; possesses good water-power, which works several mills. There are seven churches and an academy in the town. **Essex**, on the right bank of the Connecticut, 7 miles from its mouth; population about 1200; has a considerable coasting trade, and carries on a good business in ship-building, rope-making, &c. **Guildford**, a short distance from Long Island Sound, 36 miles S. from Hartford; population 2650; is celebrated for the picturesque scenery in its vicinity, and is much resorted to in the season for sea bathing. The harbour is frequented by coasting and fishing vessels. **Litchfield**, the capital of Litchfield county, lies between the Naugatuc and Shepaug river, 28 miles W. by S. from Hartford: population, 3957. The town contains the usual county buildings, several churches, academies, and schools. There are considerable manufactories of woollens, paper, leather, and iron, and numerous grist, fulling, and saw-mills. Great Pond covers an area of 900 acres, and is the largest sheet of water in the state. **New Britain**, 10 miles S.W. from Hartford; population 3028; has considerable manufactures of brass-ware and cutlery: the State Normal school is established here. **Newtown**, on the Housatonic railway, 41 miles S.W. from Hartford; population 3358; stands on high ground in the midst of a fertile district, and has several woollen and cotton factories, and grist and saw-mills, tanneries, &c. **Norwalk**, on the Norwalk River, at its entrance into Long Island Sound, 63 miles S.W. from Hartford; population 4651; is a place of considerable trade, and has extensive factories of felt-cloth and carpets, hats, &c., besides tanneries, potteries, and grist and saw-mills. Vessels drawing 6 feet of water ascend the river to Norwalk bridge. **Southport**, on the right bank of the Mill River at its entrance into Long Island Sound, and on the New York and New Haven railway, 60 miles S.S.W. from Hartford: population, 3184. The harbour, which affords good anchorages for vessels of 100 tons burden, is protected by an extensive breakwater constructed by the government of the United States. **Stamford**, on the Mill River, at its entrance into Long Island Sound, and on the New York and New Haven railway: population, 5004. The harbour admits vessels drawing 8 feet of water, and a considerable coasting trade is carried on. There are also extensive iron and wire manufactories, lumber-yards, &c. **Stonington**, on Long Island Sound, near the south-eastern extremity of the state, 51 miles S.E. from Hartford; population 5434; is a large well-huilt and busy town. The harbour, which is one of the best in the Sound, is protected by a breakwater built at the expense of the United States government, and has a lighthouse at its entrance. The shipping of the harbour in 1850 amounted to 19,913 tons, of which 4020 tons were engaged in the coasting trade, 8861 tons in the whale fishery, and 2226 tons in the cod and mackerel fisheries. Besides ship-building and other works of a maritime character, there are manufactories of plaids and linseys. During the summer Stonington is a fashionable watering place. The town has daily steam communication with New York, and the Stonington railway connects it with most parts of the Union. **Waterbury**, on the Naugatuc, 25 miles S.W. from Hartford; population 5187; is one of the busiest manufacturing towns in the state. The factories, for working which there are great facilities of water power, consist of very extensive works for making pins, gilt and plated buttons, silver and plated goods, hardware, India rubber webbing, &c.; there are also rolling-mills and woollen factories. The town is generally well built, and some of the churches and schools are said to be of a rather superior architectural character. **Willimantic**, on the Willimantic River, 23 miles E. by S. from Hartford, contains several large cotton factories and some paper and other mills: three railways pass through the town.

Government, Judiciary, Education, &c.—Every white male citizen of the United States, 21 years of age, who has resided 6 months in the town, has a freehold of the annual value of 7 dollars, or has done military duty for one year, or has paid a state-tax within the year, and has a good moral character, may vote at all elections on taking the oath; and is eligible to any office unless it be especially excepted. The legislative body, styled the General Assembly, consists of a Senate of 21 members and a House of Representatives of 120 members, who are chosen annually by districts of equal population. The General Assembly meets on alternate years at Hartford and New Haven. The governor, who with the council of state similarly elected forms the executive, is also elected for one year: he has a salary of 1100 dollars.

The revenue from all sources for the year 1852-3 was 150,650 dollars; the expenditure was 135,104 dollars. The state debt, chiefly contingent, was 91,212 dollars. The militia of the state is composed of 51,049 men, of whom 456 are commissioned officers.

The judiciary consists of a supreme and superior court, presided over by a chief justice with a salary of 1300 dollars, and 4 associate justices with salaries of 1250 dollars each, who hold their offices until 70 years of age; and of county courts, which have jurisdiction in civil actions where the matter in dispute exceeds 50 dollars: from the county courts there are appeals to the superior court in all cases where the damages exceed 200 dollars.

The state has a school-fund derived from the sale in 1795 of 2,500,000 acres of land in the north-eastern part of Ohio. The fund amounted in September 1852 to 2,049,482 dollars; the dividends from it amounted

to 143,693 dollars. The number of common school districts in 1852 was 1642; of children between the ages of 4 and 16 years, 96,382; attending school in winter, 74,100; average attendance, 55,100. The state has a Normal school at Hartford in which 200 pupils are instructed without charge; and schools or conventions for training teachers have been established in each county. A State Reform school for boys under 16 who have been convicted of offences punishable by imprisonment has been established at Meriden, the grounds of which cover an area of 161 acres. There are several colleges and superior academical institutions in the state. Yale College is one of the oldest, and next to Harvard University the most important and the most numerously-attended institution of the kind in the United States. It has a staff of 35 professors and tutors, and in 1850 had 555 students, of whom 432 were students in the academical department, 38 in theology, 26 in law, 38 in medicine, and 21 in philosophy and the arts. The buildings cover a large area, and contain a library of 53,000 volumes; the medical and theological libraries and schools; the finest geological and mineralogical collection in the United States; the Turnbull gallery of paintings; chapel, &c. Trinity College is an Episcopal institution: it has 13 instructors and 79 students, and a library of 15,000 volumes. The Wesleyan University at Middletown has 7 instructors, 106 students, and a library of 12,000 volumes. The Congregational Theological Institution at Hartford has 3 instructors, 17 students, and a library of 5000 volumes. In 1850 the Congregationalists had 267 churches and 35,158 communicants; the Baptists 111 churches and 16,230 communicants; the Episcopalians 9360 communicants; the Episcopal Methodists 148 ministers. The total number of newspapers and periodicals published in the state in 1850 was 51, of which 30 were political and 21 religious, scientific, &c.

(Colton, *Statistical Gazetteer of the United States*, 1853; *American Almanac*, 1854; Derby; Haskel and Smith; Lyell, &c.)

CONNOR, county Antrim, Ireland, a small village situated on the Gluewhirry River in the barony of Antrim. Some six or seven centuries ago the village was a walled town or city, and gave its name to the bishopric of Connor. It was a place of some note in 1315, at the time of the invasion of Edward Bruce, by whom it was taken, after the defeat of the English under Richard, earl of Ulster, before its walls. It is supposed to have gone to decay after the irruption of the expelled Irish in 1333. A large Presbyterian meeting-house is now the chief object in the village.

The bishopric of Connor was founded by Aengus, the son of Nissa, usually known as Saint Maenish, who died in 514. In the 12th century the diocese was known indifferently as Connor and Dalnaraighe, or Dalaradia. In 1442 one John, being bishop of this diocese, prevailed on Pope Eugene IV. to unite the sees of Down and Connor. By the 3rd and 4th William IV., c. 37, sec. 121, the united bishopric of Down and Connor has become augmented by the diocese of Dro-more. The income of the united diocese is 4204*l.* per annum.

CONQUES. [AUDE; AVEYRON.]

CONSTANCE. [CONSTANZ.]

CONSTANTIA. [CAPE OF GOOD HOPE.]

CONSTANTINA (the *Qostanthynah* of the Arabs), the capital of the French province of Constantina in Algiers, stands on a high rocky peninsula formed by the Rummel in 36° 22' N. lat., 6° 37' E. long., at a distance of 185 miles E. by S. from the city of Algiers, and 45 miles due S. from the Mediterranean. The peninsula is joined to the adjacent country by an isthmus on the south-west side. Before the French conquest of the town it is said to have had upwards of 40,000 inhabitants; the population in 1847 exclusive of the garrison was about 21,000, of whom nearly 2000 were Europeans. The city is surrounded by old walls and entered by four gates, the elegant structure and sculptured decorations of which prove them to be the work of the Romans. The interior of the town has nothing remarkable. The streets are narrow and ill laid out. The houses are generally built of brick on stone foundations, low and without windows; and they have sloping roofs, a circumstance that denotes a colder climate than that of the sea-coast where the houses have flat roofs, to which the inhabitants ascend in the evening to enjoy the cool breeze. There are a college, an hospital, and a citadel in the town, which has also manufactories of saddlery, harness, and other leather goods, and trades in corn with Tunis, and in the products of Central Africa with the tribes to the southward.

Constantina occupies part of the site of the ancient *Cirta*, which was the capital of Numidia, and the birthplace of the Numidian kings Masinissa and Jugurthas. *Cirta* was built by architects from Carthage, and its name is a slight corruption of the Phœnician word for 'city.' *Cirta* was the residence of the kings of the Massylii, who had a splendid palace here. In the reign of Micipsa, who enlarged and beautified the city, it could send forth an army of 10,000 cavalry and 20,000 infantry. *Cirta* was the strongest fortress in all Numidia; it is frequently mentioned in the Punic, Jugurthian, and Civil wars. After the defeat and death of Jugurtha the ancient town passed with the rest of Numidia into the hands of the Romans, who sent out a colony to *Cirta*, which then got the name of *Cirta Sittianorum*, from the chief, Sittius, to whom it was granted by Julius Cæsar. It continued under this name to be the chief town of Numidia Propria till the time of Constantine, from whom it was called Constantina. In recent times it was the residence of a Bey until its capture after a murderous

assault by the French under General Danrémont and the Duc de Nemours, October 13, 1837. The city and its environs, especially the plain on the south-west side, abound in ancient Roman remains. Among these are—the bridge across the Rummel, which is adorned with bas-reliefs, and still in good repair; the four gates above mentioned; several sepulchral monuments; and numerous remains of cisterns, aqueducts, columns, and altars. The finest of the ancient remains, a triumphal arch, has been removed to Paris. The extent of surface over which these remains are spread proves the ancient city to have been much larger than the modern one. All the Roman roads in Numidia converged upon *Cirta*. Below the bridge the Rummel turns northward, and flows for about a quarter of a mile in a subterranean bed, issuing from which it forms a large cascade. From the height above this point criminals and infidels were precipitated into the river during the sway of the Arabs. The neighbourhood of Constantina is very fertile and well cultivated.

(Sallustius, *Bell. Jug.*; Shaw, *Travels in Barbary*; Balbi, *Géographie*.)

CONSTANTINOPLE (Stamboul), the capital of the Ottoman empire, is situated in 41° 0' N. lat., 28° 59' E. long., on the European shore of the Sea of Marmara, and at the southern extremity of the Bosphorus, which connects the Sea of Marmara with the Black Sea. [BOSPORUS.] The population is variously estimated, for there is no official census: some make the inhabitants number only about 600,000 (which may perhaps be the population of the city exclusive of the suburbs); others estimate them at a million, composed of about 200 different tribes and races. The following numbers are taken from notes of travellers who visited Constantinople in 1852 and 1853:—About 500,000 are Turks, 200,000 Armenians, 60,000 Jews, 30,000 Greeks, and about 20,000 Franks.

The ground on which Constantinople stands is fitted by nature for the site of a great commercial city, the connecting link between Europe and Asia. A gently-sloping promontory secured by narrow seas stretches out in a triangular form towards the Asiatic continent, from which its extreme point is separated by so narrow a strait (the Bosphorus) that in a quarter of an hour a boat may row from one continent to the other. Indeed Scutari, on the Asiatic coast immediately opposite, is always considered as a suburb of the European capital. Just before the Bosphorus enters the Sea of Marmara it makes a deep elbow or inlet on the European shore, flowing between the triangle of Constantinople proper and its European suburbs of Galata, Pera, &c., and forming the magnificent port of the Golden Horn. [BYZANTIUM.] The triangle which, allowing for many vacant spaces within the walls, is entirely covered by Constantinople is thus washed on the north by the deep waters of the port, and on the south-east by the Sea of Marmara. The base of the triangle, or the ground immediately beyond the walls, which attaches it to the European continent is an open elevated flat, with some slight inequalities. The area of the triangle is occupied by gentle hills, which are highest towards the land side and suburb of Eynb, and gradually decline to the Seraglio point, the apex of the triangle, shelving off on each side to the Sea of Marmara and the port. As Rome was built on seven hills so the founders of Constantinople called these the Seven Hills, though if the principal chain only were counted there would be less; and if the minor hills or spaces were included there would be more than seven. The ridge of the first or most eastern hill is occupied by the buildings and grounds of the Seraglio, behind which a little on the reverse of the hill the dome of Santa Sophia shows itself. The second hill is crowned by the bold and lofty dome of the Osmanieb mosque. The still loftier mosque of Solyman the Magnificent towers on the third hill; whilst the aqueduct of the emperor Valens, the arches of which are of a considerable span, unites the summits of the third and fourth hills. On a fifth point, the most elevated of the little chain within the triangle, there is a slender lofty tower, built in 1828, in which a guard is constantly kept to watch the breaking out of fires, which are very frequent and destructive in a city where all the private habitations are built almost entirely of wood. The situation of Constantinople upon hills is the main cause, not only of its picturesque beautiful appearance, but of its general salubrity. (Malignant fevers prevail it is true during the heat of summer, but chiefly among people who expose themselves to the noontday sun.) It receives all the breezes from the Bosphorus, the Sea of Marmara, and the adjoining plains of Thrace; and the dirt, for which its streets are proverbial, partially at least descends the hill-sides to the port or the open sea, in both of which it is carried off by a strong current. The lower edge of the city, adjacent to the port, and the suburb of Galata (the Wapping of the Turkish capital) on the opposite side of the port are filthy places.

The form of the triangle is somewhat irregular, the side on the Sea of Marmara, from the old stato prison called the Seven Towers to the Seraglio point, being considerably the longest; its length cannot be much short of 5 miles. On this side the old walls and towers are in a very ruinous state, and on the side towards the port they have almost entirely disappeared. But on the land side Constantinople presents a double line of strong and lofty stone walls (built in 447 during the reign of Theodosius II.), which might be easily put in a state of complete repair, and which in their more dilapidated parts present such magnificent and picturesque specimens of mural ruins as probably no other city can boast of. The length of this latter line

of wall, from the head of the port to the Sea of Marmara, near the Seven Towers, is about 4 miles. The walls are flanked at short intervals by towers, which are mostly rectangular. Of the towers 120 are now standing; there were 180 in 1422, according to a plan then made by Bondalmondo, a Florentine. Besides the double walls, which are almost entire, and still retain their ancient battlements, the outer ditch was faced with a wall which made a third rampart, but this is in part destroyed, and seems never to have been defended by towers. The intervals between the walls are in many places choked up with earth and masses of the ramparts which have fallen under the shocks of war or of earthquakes. The great ditch, which is about 30 feet broad, is partly cultivated and converted into kitchen gardens.

There are six gates on this (the land) side:—1. Egro-Kapoussi (the Oblique Gate); 2. Edrene-Kapoussi (the Gate of Adrianople); 3. Top-Kapoussi (the Cannon Gate), through which the conqueror Mohammed II. made his public entry on the capture of Constantinople; 4. Selivri-Kapoussi (the Gate of Selivria); 5. Yeni-Kapoussi (the New Gate); 6. The Gate of the Seven Towers. The 'Golden Gate,' so celebrated by the Byzantine writers, has been sought for in vain, though a gate now wholly blocked up, with two mean pillars supporting a low arch, is sometimes shown to travellers for it. Near to the Top-Kapoussi, where Ptolemy, the last of the Christian emperors fell, is the breach through which the Turkish besiegers poured into the city: the wide rent, which has never been repaired, is now full of trees and shrubs.

A waste, a stillness, and a solitude, difficult to conceive near so great a capital, reign immediately beyond these walls, which are so lofty that from the road which passes under them the eye can scarcely catch a glimpse of the mosques and minarets of the city. This melancholy aspect is heightened by several cemeteries, with dark cyresses and white marble tombs, that lie outside of the walls. A recent traveller (Mr. Dickeus) says, "Within gunshot beyond this great city, with its 600,000 inhabitants, there is not a road nor a bridge upon the most frequented ways; there is not a house, nor a garden, nor a thriving tree. Look along the shores of the Bosphorus. They are desert. Scarcely a plough stirs the land that might be one of the largest corn-growing districts in the world. . . . Not a merchant's-bark, with the crescent flying at its mast-head, anchors in the waters; not a loom is at work, not a wine-press; no manufactory plies its busy trade. . . . The Turks do nothing. Even the smart little steam-boat which still runs from the bridge at Stamboul to Bujukderé is manned with Englishmen, and our Caidje (boatman) is a Greek." The boatmen however are generally Turks.

The triangle on which Constantinople stands does not much exceed 13 miles in perimeter. The treble walls and ditches on the land side, the extensive gardens of the Seraglio, and other palaces, the large court-yards of the royal mosques, the Hippodrome and other vacant spaces, materially diminish the extent covered with houses.

With the exception of the land walls, and the church of Santa Sophia, there does not remain much of the Byzantine architecture; the greater part of the antiquities which were seen by Gyllins, by Spon, and other old travellers have disappeared. The fact is, the Turks, instead of digging in the quarry, have knocked down the Grecian buildings to use the materials in their own public edifices, such as mosques, minarets, and fountains, or to cut them up into tomb-stones.

The site of Constantinople is one of the worst sites that could be selected on the score of water supply. On the European side of the Bosphorus there is no mountain at any reasonable distance to look to, no lake, no river. But in the forest of Belgrade near the Black Sea there are gulleys and heads of valleys, down the sides of which the water pours in great abundance during the rains. In each of these valleys bends, or reservoirs, have been formed by building dams across them, and thence the water is conveyed by aqueducts to Constantinople for the use of the mosques and fountains. In the hot season a supplementary supply for private use is brought by water-carriers from Scutari, for then three-fourths of what dribbles through the aqueducts are absorbed by the mosques, which are entitled to be first supplied. Under the city are vast reservoirs, which were constructed by the Roman emperors, and kept full of water for the supply of the city during sieges, independent of the aqueducts. Many of these old cisterns still have water in them. There is a vast subterranean edifice of this kind, the roof of which is supported by 424 columns, each column being oddly formed of three separate pillars placed one on the top of the other. The Turks call it the palace of the 'thousand and one pillars;' not that this is the precise number, but because it is a favourite number with all eastern nations. Though the earth has in part filled it up, it is still of great depth. This particular one is dry; it is 240 feet long by 200 wide, and is occupied by a number of persons who spin silk by hand. Another which still exists as a cistern, though it is hardly known except to a few Turks whose houses are situated above it, and who call it the 'Subterranean Palace,' may be described as a subterranean lake, extending under several streets, having an arched roof that covers and conceals it supported on 336 marble pillars.

The Turks retain the translated name (they call it the At-Meidan, or horse-course) of the famed Hippodrome, the scene of the massacre of the Janizzaries; but all the ancient splendour of

the place has disappeared. It is now not a circus, but an oblong open space, about 300 paces long by 150 paces wide. It is partly flanked on one side by the mosque of Sultan Achmet, and partly on the other by the high dead walls of a building which was once an hospital, but recently used as the sultan's menagerie. At the upper end of the Hippodrome there is a granite obelisk of rather mean proportions, and partly covered with hieroglyphics of poor workmanship; it is called after Theodosius, though it is probable that emperor only removed it from another part of the city where it was erected by Constantine, and set it up here, after it had been thrown down by an earthquake. Near this obelisk is the fragment of the wreathed column of bronze, which according to an old tradition supported the golden tripod of Delphi, and was shattered by Mohammed II. with his battle-axe. It is now a poor mutilated thing, with one end in the ground, above which it does not rise more than 7 feet, and the other end open and almost filled with rubbish. The marble pyramid of Constantine Porphyrogenetus, the Colossus Structilis of the old topographers, does not at present fairly stand on the At-Meidan, though it is near it and visible from it: it has long been stripped of the plates of gilded bronze that once covered it; the shaft is held together by rude iron hoops, and blackened by the many conflagrations that have raged round it. It is now an unsightly object, about 90 feet in height, and 83 feet in circumference. Most of the great works of art which adorned the baths and squares of Constantinople were destroyed by the Latin crusaders. The four bronze horses of San Marco at Venice are the only relic left of the great works of art that once adorned the city of Constantinople.

The famous Seraglio, or palace of the sultan, occupies the most eastern part of the city, and with its various gardens, baths, mosques, government buildings, and groves of cypress covers a space about three miles in circuit. It is separated from the rest of the city by high walls extending down to the Sea of Marmara. The inner inclosure or court of the Seraglio is occupied solely by the sultan and his harem. In the second court are the divan, the treasury, imperial stables and kitchen, the hall of justice, the arsenal (which was formerly the church of St. Irene), and the column of Theodosius. In the outer court are various state offices, the mint, infirmaries, &c. A large massive range of buildings occupied as government offices, mounted on a platform, ascended by a noble flight of stone steps, and ornamented by fine columns stands in the outer court, and contrasts strongly with the wooden kiosks and tall minarets; it is situated close to the large gate entrance of the Seraglio, from which it takes its name of the 'Sublime Porte,' which is also applied as a designation of the sultan's government.

Many of the mosques erected by the Turks are distinguished by grandeur and beauty. There are 14 chief or imperial mosques, nearly all lofty, and magnificent in their general dimensions, and built from base to dome, chiefly of white marble, slightly tinged with gray. Some of these have two, some four, and one (that of Sultan Achmet) has even six of those light, thin, lofty, arrowy, and most graceful towers called minarets. Besides the imperial mosques, there are 60 others, varying in size and beauty, but all considerable edifices; and then 200 and more small mosques, which have little minarets, often made of wood, contiguous to them.

The mosque which has been most talked of, because it was anciently a Christian temple, and was supposed to have suggested to the Turks the grand dome or cupola which predominates in all the great mosques they built themselves, is that of Santa Sophia, which is to the west of the Seraglio. Santa Sophia is built in the form of a Greek cross, 269 feet in length by 143 feet in breadth between the walls. It is surmounted by a flattened dome 180 feet high above the pavement, by several smaller cupolas, and by four minarets added by the Turks. In the interior are many large columns, a floor of variegated marble and magnificent bronze gates. The old Byzantine decorations have been marred by Turkish inscriptions, and the grand effect of the interior is destroyed by the lamps, globes, and insignificant ornaments hung up under the dome. Santa Sophia, originally a Christian cathedral, was built by the emperor Justinian (A.D. 531-8.) Several of the imperial mosques however in situation, boldness, and beauty far excel Santa Sophia, which externally is rendered hideous by the clumsy buttresses that have been built against it at different periods to keep it from falling. If the Turks really copied the dome from Santa Sophia they have improved on the original, which is comparatively low and heavy, whilst most of their cupolas are lofty, light, and elegant. This is particularly the case with the mosque of the Sultan Achmet, which flanks the Hippodrome, and which may be deemed altogether the grandest edifice in Constantinople. Among the other imperial mosques may be named those of Solyman the Magnificent, a masterpiece of Saracenic architecture; of Mohammed II., Bajazet II., Selim III., Mustapha III., Othman and Eyub, and the Valide mosque erected by the mother of Mohammed IV. There are 36 Christian churches and several synagogues in the city. The colleges and hospitals, which are generally attached to or near the great mosques, offer no striking architectural features, but some of them are grand institutions of the kind. The mosque of Mohammed IV. is surrounded by eight colleges, a house in which the poor are fed, an hospital, caravanserais, and baths, all surmounted by cupolas covered with lead. Some of the detached chapels or sepulchres

('turbés'), where sultans, viziers, and great personages repose, are handsome. The spacious barracks erected by the late Sultan Mahmud for the Nizam, or troops of the line, may be reckoned among the public ornaments of the city and suburbs. The government has established naval and military medical colleges, and numerous schools, but the instruction given in them is of a very confined and elementary character. The military hospital on the west side the city is a well-regulated establishment: there is also a plague hospital.

The public baths, of which there are said to be upwards of 120 within the walls, with their very low and small and flat domes, do not contribute to the beauty of the city externally, though within many of them are exceedingly handsome and spacious. The public fountains are remarkable and numerous: some of them, with their pure white marble façades, elaborate arabesque ornaments, and Chinese roofs, are most beautiful objects. The water is conveyed to Constantinople, as also to the suburbs of St. Dimitri, Pera, Galata, &c. by the aqueduct of the Sultan Mahmud, erected in 1732, and by means of narrow subterranean aqueducts, and 'souterazi,' or hollow hydraulic pyramids, which latter are placed at certain irregular distances, and so contrived as to overcome the inequalities of surface presented by the country that intervenes between the boudts and the city. Within the walls the lofty aqueduct of Valens still performs its duty, carrying the fluid across a deep hollow.

From the sea Constantinople with its mosques, cupolas, and minarets, interspersed with dark cypresses, and with its port crowded with shipping, has a very imposing and splendid appearance; but a stroll through the city soon dispels this illusion. With the exception of one very long street, which traverses the city nearly from the high walls of the Seraglio to the gate of Adrianople, the streets are narrow, winding, filthy, and perilous from dogs and thieves; they display no public buildings of any account, no trade, no luxury, and are uncommonly dull and deserted. The houses are low, and mostly constructed with wood or rough stones. The 'gazeboo' or 'shah-nishins' (projecting windows) are latticed and closed like the windows of convents; and many of the houses have no windows at all towards the street, but only a low, narrow, dingy door. All the life and activity of the interior of the city is concentrated in the bazaars or bezestines. These are long wide corridors, communicating with each other mostly in an irregular and striking manner; their side walls are built of stone, and they are covered in with stone arches or successions of domes, through which a subdued light is admitted. The dealers are separated by nations or religions and by trades. As in most eastern towns, and formerly also in European towns, persons who practise the same trade or follow the same occupation live together in streets by themselves. Towards the evening the coffee-houses, which are excessively numerous, though chiefly of mean appearance and dimensions, are much thronged by Turks, Armenians, Greeks, and Jews, all smoking and indulging in tiny cups of coffee; which is generally drunk by the poorer classes, not only without milk, but without sugar. The city proper comprises separate quarters for the Jews, Armenians, and Greeks. The Greek quarter called the 'Fonar' extends along the west shore of the Golden Horn, opposite Pera, and is connected with this suburb by a bridge of boats erected in 1837. The Turks leave commerce generally to the Armenians and Greeks, many of whom are very wealthy. The Jews of Constantinople are descendants of the Jews of Malaga and Granada, expelled from Spain in the 16th century; they still speak the Spanish language. The Turkish women in Galata and some other parts of the town are importunate beggars; the only male beggars to be seen are Greeks and Dervishes. The city is badly lighted at night: there is a law enjoining its inhabitants to hang out a lamp on every fifth house, but it is very generally disregarded, as is also the law which commands all persons going out after dark to carry a lantern.

The communication between the city and the opposite suburbs of Galata, Pera, and Tophana is kept up by means of caiques, or light fast wherries, the constant passing and repassing of which give the port an animated appearance in the day-time. The imperial dock-yard, the arsenal, the artillery barracks are all on the northern side of the Golden Horn, and the elevated plateau of Pera is the residence of the foreign ambassadors to the Porte, of the dragomans, Frank merchants, &c. An active communication is also kept up by the same means with Scutari, where caravans and travellers are constantly arriving from various places in Asia Minor.

To an inhabitant of western Europe the number of dogs in Constantinople is a subject of astonishment. These animals are never domesticated but always live out of doors—wherever there is a dry spot in the filthy streets there they lie. They and the rats (which are numberless) are the only scavengers; they feed upon the offal thrown into the streets from butchers' shops and private houses, upon the carcasses of animals, and occasionally on the bodies washed out of the sea upon the shore of the Bosphorus, along which and in some of the cemeteries they prow in search of prey. They seem to have divided the city into wards, and no dog is allowed under pain of a desperate worrying to trespass on his neighbour's territory. They are seldom known to bite any person unless trodden upon. Hydrophobia is unknown in the east. Myriads of pigeons too are seen in the city, each mosque feeding a great number of these birds; and

in the harbour and along the Bosphorus vast numbers of gulls, puffin birds, ducks, herons, and other water-fowl are seen, fearless of man, as the Turks never molest much less kill them.

The port of the Golden Horn is safe, capacious, and beautiful; but it has one serious drawback which affects it as an emporium. During the summer, the Etesian or north wind blows unremittingly from the Black Sea down the Bosphorus, the Sea of Marmara, and Straits of the Dardanelles, thus retarding the approach of all sailing vessels from the Mediterranean and Aegean to the capital. Sailing-vessels undertaking the voyage upwards at that season are often detained two or even three months at Besica Bay or at Tenedos, on the coast of Troy, near the mouth of the Dardanelles, where whole fleets of wind-bound ships, laden with goods for the capital or the Black Sea, are frequently at anchor. This serious obstacle can only be overcome by steam-vessels. The first steamer that appeared on the Bosphorus was an English boat, purchased by the Turkish government in 1828. Now Austrian, Russian, French, and English steamers ply regularly to Constantinople. The Golden Horn extends for about 5 miles from south-east to north-west between the city and the suburbs of Pera, Galata, Tophana, Cassim Pasha, and St. Dimitri, and has a breadth of from one to four furlongs, with depth enough for the largest ships. It is capable of holding 1000 sail and is generally full of mercantile and other ships, with a vast number of caiques, which ply between the city and the suburbs. In the suburb of Tershanna, which lies along the north shore of the Golden Horn, to the north of Galata, and west of Cassim Pasha, are the government arsenals and dockyards and the bagnio. The quays of the harbour are good, and ships lie alongside. The suburbs just mentioned are the residence of foreigners, and the principal commerce of Constantinople is carried on there. The present sultan has built a new palace in the Tophana suburb, which he inhabits in preference to the old palace at Seraglio Pont. The new structure is built of white marble, and has a fine effect rising from the water's edge. There are also extensive cannon foundries in this suburb.

As a manufacturing town Constantinople scarcely deserves mention; pipes and pipe-sticks, muslin handkerchiefs, costly saddlery, and horse-trappings are the principal articles produced. The foreign trade however is very considerable; it is entirely in the hands of the Armenians, Greeks, and foreign merchants. The exports are made up of raw silk, opium, carpets, hides, wools, Angola goats' hair, boxwood, galls, hullion and diamonds, yellow berries, madder, valonea, linseed, and bones. The imports comprise manufactures, colonial and other goods, not only for its own population but for a considerable portion of both European and Asiatic Turkey. The chief articles of import are—corn, iron, timber, tallow, and furs, chiefly from Russia; cotton stuffs and yarn, woollens, silks, coals, tin plates, tin, cutlery, jewellery, watches, paper, furniture, glass, drugs, and dye-stuffs, from western Europe; corn and coffee from Egypt (but considerable quantities of coffee from Brazil and the West Indies are imported in English and American ships), wax, copper, drugs, gums, porcelain, rum, pepper, spices, &c.; sugar is imported partly from the East but chiefly from the West Indies. The exports are always very much less than the imports. Between 5000 and 6000 ships enter and clear out of the port annually, but these numbers include many vessels on their way to or from the Black Sea ports. The nations principally engaged in the foreign maritime commerce of Constantinople are England, Greece, Austria, Russia, Italy, and the Ionian Islands. A considerable foreign trade with Persia, Armenia, and other eastern countries is carried on by caravans from the suburb of Scutari, which is built on the Asiatic shore of the Bosphorus, opposite the entrance of the Golden Horn.

Although the land in the immediate neighbourhood of Constantinople is neglected and desolate, there are many beautiful spots to the northward along the shores of the Bosphorus. Among these may be mentioned Stenia, Therapia (the favourite resort of the Greeks in summer, and the site of the summer palace of the French embassy), and Bujukderé, on the European shore; the last-mentioned is situated at the eastern extremity of a beautiful valley, and contains many lovely gardens and the summer residences of most of the foreign ambassadors. The valleys and villages just named, and others in their neighbourhood, abound in picturesque and beautiful scenery, neat cottages, and thriving villages, situated among well-cultivated gardens. This enviable prosperity they owe to the immunities accorded to the foreign embassies, whereby they are exempted from the tyranny and extortions of the Pashas and Cadis, which have converted the land about Stamboul generally into a desert. Nearly opposite Bujukderé, on the Asiatic shore, is Unkiar Skelessi, once a favourite resort with the sultans, on the site of whose palace now stands a paper factory, built of white marble, erected by Selim III. At the extremity of the valley of Unkiar Skelessi is the Giant's Mountain, or Juscha-Tagh, as it is called by the Turks, who have a tradition that Juscha, or Joshua, was buried on it. The Russian army in 1833 encamped on the Giant's Mountain and in the valley at its foot, and here the treaty of Unkiar Skelessi was signed (June 26), whereby Turkey bound herself to close the Dardanelles against the fleets of England and France. The suburb of Scutari, which has been merely mentioned in this article, is described under its proper head.

The Turks have never loaded trade with heavy duties or jealous prohibitions; their code extends immunities and high consideration

to merchants; but unfortunately these immunities are not enjoyed by the consumers, or by any class, and the cultivator of the soil is, or was till lately, the helpless victim of the extortion and tyranny of the government officers.

A city stood here in remote antiquity, the extent of which is probably marked out by the present walls of the Seraglio. [BYZANTIUM.] The present enlarged city was founded A.D. 328, by the emperor Constantine, but the 11th of May 330 is considered as the birthday of the city. It took its name from Constantine, who enriched it with treasures of art taken from all parts of the Roman world. Though called the rival of Rome it could never be compared to the Eternal City either in extent or population. The empire of the east of which Constantinople was the capital, commenced with the reign of Arcadius, A.D. 395. In the fifth year of the reign of Justinian the city was almost entirely reduced to ashes, in the memorable sedition of the Nika. Justinian, who reigned from A.D. 527 to 565, repaired the city, of which he is considered the second founder. The Persians, under Chosroes, maintained a camp in sight of the city from 616 to 626, and the Avars more than once during that period threatened Constantinople on the European side of the Bosphorus. In the latter year the masterly campaign of the emperor Heraclius delivered the city. The Arabs for the first time besieged Constantinople A.D. 668-675, but baffled by the strength of the walls and the strange effects of the Greek fire, they retired after losing 30,000 men. In the second siege, 716-718, they were again compelled to retreat. The Russians attacked Constantinople in A.D. 865, again in 904, a third time in 941, and a fourth time in 1043. In 1203 the Venetians, under 'the blind old Dandolo,' and the French besieged, and in 1204 stormed and pillaged the Imperial City, which then became the seat of the Latin empire till 1261, when it was recovered by the Greeks. The Sultan Amurath II. besieged Constantinople in 1422, but it was not till 1453 (May 29) that it was taken by the Sultan Mohammed II. Constantine XIII., the last of the Palæologi, fell in defence of the walls of his capital exclaiming 'θέλω θανεῖν μάλλον ἢ ζῆν' ('I had rather die than live').

CONSTANZ (Costnitz), the capital of the Baden See-Kreis, or Circle of the Lake, is situated on the southern shore of the Lake of Constance, in 47° 36' N. lat., 9° 10' E. long., and has about 5000 inhabitants. It is fortified in the old style, with a high wall flanked by towers and a broad ditch, besides bastions on the western side and the side of the lake. Kreuzlingen, one of its suburbs, separated from it by a ditch, is defended by two bastions; and Petershausen, which lies on the other side of the strait that connects the Bodensee and Untersee, is united to Constance by a covered wooden bridge, on which there are grinding and sawing mills. In this last suburb is the castle of Petershausen, a fortress, the works of which have been converted into pleasure-grounds. There is a third suburb, called Paradise, in which John Huss and Jerome of Prague were burnt. The most remarkable buildings in the town are—the cathedral, which contains a magnificent high altar; the church of St. Stephen; the Kaufhaus, or mart, once a Carthusian monastery, built in 1388, which contains the hall where the council of Constance sat (1414-18) which asserted its right to claim obedience even from the pope himself, deposed popes Benedict XIII. and John XXIII., elected Martin V., and condemned the tenets of Huss and Jerome of Prague; and the old Dominican monastery on the Island of Genf. Constance is the seat of various official departments, and has a lyceum, gymnasium, hospital, and Dominican nunnery for the education of young females. In the 15th century its population was above 25,000. The chief occupations are trade, fisheries and navigation, the cultivation of vineyards and gardens, brewing, and some manufactures of silk, calico, and watches. Steamers ply between Constance and the different ports on the lake. Constance is one of the oldest towns in Germany, and some think that it occupies the site of the ancient Canodornm. It was for a long time a free Imperial town. A treaty signed here in 1474 between the emperor Sigismund and the Swiss confederation put an end to the long struggle between Austria and Switzerland. Constance belonged to the crown of Austria from 1549 to 1810, when it was transferred to Baden by the treaty of Pressburg. The bishopric of Constance was suppressed in 1802. Constance has magnetic communication with Zurich.

CONSTANZ (Bodensee Costnitz), a large lake in the south-west of Germany, on the confines of Austria, Bavaria, Würtemberg, Baden, and Switzerland. It lies between 47° 29' and 47° 45' N. lat., 9° 2' and 9° 44' E. long. It is 1233 feet above the level of the sea: its greatest length, from Bregenz to Bodmann, is about 45 miles; its greatest breadth, between Rorschach and Friedrichshafen, is about 13 miles, and its average depth is 320 feet, the greatest being 961 feet. The lake is divided into the Upper and Lower Lakes, of which the Upper, which is by far the most considerable, extends from Bregenz to Constance. The Lower Lake is subdivided into Lake Zell, or Zellersee (which is about 60 feet deep, and contains the fertile island of Reichenau, belonging to Baden), and the Lower Lake (Untersee), through which the Rhine flows. The northernmost bight, which contains the island of Meinau, also belonging to Baden, and the island of Lindau, is called Lake Bodmer, or the Ueberlingersee. The Rhine enters the lake at Rheineck and leaves it at Stein. Above 50 larger and smaller streams empty themselves into Lake Constance. Owing to its great depth it is seldom frozen over, but this has sometimes occurred.

It has on several occasions been subject to sudden risings of the waters. In 1549 it rose four or five times in one hour upwards of 2 feet above its ordinary level; in 1770 it rose in one hour from 20 to 24 feet above the ordinary level. There is a considerable traffic on the lake in corn, timber, cattle, wine, fruit, &c. About a dozen steamboats ply between the several towns along its shores. Many kinds of aquatic and marsh fowl frequent Lake Constance, and it contains a great variety of shell-fish and other fish, particularly trout, pike, carp, and salmon (*Salmo murana*). The wine, called lake-wine, grown along the lake, is rough, but becomes excellent when old. The Lake of Constance and its environs, present the most varied and picturesque scenery in Germany. It is mentioned by ancient writers under the name of *Lacus Brigantinus*. The Helvetians lived to the south of the lake, the Rhetians on the south-east, and the Vindelicians on the north. In ancient times it was surrounded by dense forests, through which however the Romans carried a road, traces of which still exist at some distance from the northern shore. Tiberius built a fleet on it in order to attack the Vindilici, whom he conquered in a naval battle fought near an island in the lake, probably the island of *Reichenau*. (Strabo, vii. 292.)

Two railroads now terminate on the north shore of the lake, one at Lindau, which runs through the Bavarian territory to Augsburg, and the other at Friedrichshafen, which traverses Würtemberg running through Biberach and Ulm to Stuttgart. Electro-telegraphic wires are laid down along both these lines.

CONSUEGRA. [CASTILLA-LA-NEUEVA.]

CONVERSANO. [BARI, TERRA DI.]

CONWAY, more properly CONWY, or as it is sometimes called, ABER-CONWY (Conwy-Mouth), Caernarvonshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Conwy and hundred of Isaf, is situated near the mouth of the river Conwy, on its left bank, in 53° 16' N. lat., 3° 50' W. long.; distant 22 miles N.E. from Caernarvon, 223 miles N.W. from London by road, and 233½ miles by the North Western and Chester and Holyhead railways. The population of the borough in 1851 was 2105. The borough is governed by a mayor and corporation and is a contributory borough to Caernarvon in returning a member to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Bangor. Conwy Poor-Law Union contains 15 parishes and townships, with an area of 35,196 acres, and a population in 1851 of 11,616.

Some antiquaries consider Conway to be the site of the Roman station Conovium; others place Conovium at a village now called Caer-Rhun, 5 miles higher up the river. Conway Castle was built by Edward I. in 1283, for the purpose of keeping his Welsh subjects in check. In 1290 Edward was besieged here by the Welsh, under Madoc, and was reduced to great extremity by famine, but he was at length relieved by the arrival of a fleet with provisions. When Richard II. landed in Wales from Ireland to attack Bolingbroke (afterwards Henry IV.), on finding the disaffection of his army and nobles he took shelter in Conway Castle, whence he was soon afterwards allured and delivered to his enemies. The parliament respected this noble edifice when they dismantled most of the other castles in Wales; but the roofs and floors were afterwards removed by the Earl of Conway, to whom it was granted after the Restoration. One of the towers has a large breach in the lower part, caused by the inhabitants undermining it while digging for slates. The strength of the masonry has kept the upper part in its place.

This fortress, one of the noblest piles in Britain, is in form nearly a parallelogram, extending along the verge of a precipitous rock on the south-east side of the town: two of the sides are within the walls of the town; the others are washed, one by the Conwy, which here expands into an estuary, the other by a small stream which flows into the Conwy. The walls, which are partly covered with ivy, are from 12 to 15 feet in thickness, flanked on each of the two sides without the town by four vast circular embattled towers with slender turrets rising from them. The grand entrance was on the west, towards the town, but there was a communication with the river by a small advanced work and a narrow flight of steps cut out of the rock. The interior consists of two courts; the apartments are only in a few instances traceable. The state hall was about 130 feet in length, 32 feet broad, and 30 feet high. The roof was supported by eight arches, some of which still remain. The mayor of Conway is constable of the castle.

The town is still surrounded by its ancient walls, which are strengthened at intervals by 21 towers, besides two towers to each of the three entrances. The streets of the town are narrow and irregular, and many buildings are in a ruinous condition. Of the houses a large proportion are constructed chiefly of timber. One remarkable building, called the Pils Mawr, or Great Mansion, is an object of much interest. It is in the Elizabethan style, and was erected in 1576. The rooms are profusely ornamented with figures, coats of arms, scrolls, &c., and some are carved in oak. Devices of a similar description ornament the exterior of the house. From the turret a fine view of the town and vicinity is obtained. The parish church, which stands near the centre of the town, occupies the site of the conventual church of a Cistercian abbey, founded here in 1185, by Llewelyn ap Iorwerth, prince of Wales. The church is a venerable

and commodious edifice; the earliest parts, which are in the gothic style, date from the beginning of the 14th century. The Independents, and the Wesleyan and Calvinistic Methodists have places of worship in Conway. There are here National schools for boys and girls, and a parochial lending library.

In the river, about 100 yards from the rock on which the castle stands, is an insulated rock, eastward from which, for about half a mile, extend sands covered by the sea when the tide is up, but dry, with the exception of a narrow channel, at low water. When the improvement of the communication with Ireland was under the direction of parliamentary commissioners, it was determined to throw a suspension-bridge from the castle rock to that in the river (between which rocks is a deep and rapid tideway), and to connect the latter with the eastern shore by an embankment across the sands. The works were begun in 1822 and finished in 1826 by Telford, the celebrated engineer. The amount of public money voted for the construction of this bridge was 40,000*l.* The length of the bridge, measured between the centres of the supporting towers, is 327 feet; the height of the underside of the roadway above the high water of spring tides, 15 feet; the embankment, which is of mountain clay faced with stone, is 2015 feet in length, and averages 9 feet in height above the high water of spring tides, rising to 13 feet at the end next the bridge: the width of the base at the highest part is 300 feet, the breadth at the top 30 feet. The spring tides in the Conway rise 21 to 24 feet. Near this bridge is the wrought-iron tubular bridge, constructed in 1848 by Mr. Robert Stephenson the engineer of the larger work on the same principle, the Britannia bridge, over the Menai Strait. Both of these works form part of the line of the Chester and Holyhead railway. The Conway tubular bridge cost 110,000*l.* The length of the tube is 400 feet. Its height above high-water mark is 18 feet. The line of railway runs immediately under that portion of the castle wall on which is the broken tower mentioned above.

The town and trade of Conway have been considerably improved since Telford built the suspension-bridge. Ship-building has been carried on to some extent, and several large vessels have been built. The harbour is convenient. Timber and slate are exported. The market-day is Friday; fairs are held on March 26th, April 30th, June 20th, August 10th, September 16th, October 20th, and November 15th. Conway is considered, as a place of residence, favourable to health. Numerous lodging-houses are here for the accommodation of visitors frequenting the town for sea bathing during the summer. Pearl oysters have been found in the river Conway, near the town.

(Parry, *Cambrian Mirror; The Land We Live In*, vol. iii.; *Communication from Conway*.)

COOCH BAHAR, or COOCH BEHAR, a principality occupying the north-east extremity of the province of Bengal, and lying between 26° and 26° 30' N. lat., and between 88° 52' and 89° 52' E. long. This principality, which once formed the western division of the ancient kingdom of Camröop, has long been in a state of absolute dependence on the English government. The revenue is about 13,200*l.* a year, of which one-half is paid to the British government in name of tribute. The extreme length of the principality from east to west is 60 miles, and its mean breadth about 22 miles; the area is 1364 square miles. The population of the principality is estimated at about 140,000.

The distinctive name, Cooch, has been given in order to mark the difference between this principality and the province of BAHAR. This name, Cooch, is derived from that given to the majority of the inhabitants. Many of the Cooch tribes have relinquished the practices of their ancestors and have adopted the Brahminical faith; while others who inhabit the northern quarter of the principality, near to the frontier of Bootan, continue rude and barbarous in their habits. The southern parts of the principality are much improved by culture, and are of considerable fertility; but in the north the country is low and marshy, and contains abundance of thick jungle. A considerable quantity of opium is produced, as well as indigo, and some cotton. Wheat is cultivated, and a little barley. Trade between the principality and the adjoining British territory is perfectly free, and the people have also commercial dealings with Asam and Bootan. The sovereign of this country is described in the *Ayin Akbari* as having been a powerful chief, having Asam and the whole kingdom of Camröop under his sway, his territory being bounded E. by the Brahmaputra River, S. by Gorbaghaut, W. by Tirhoot, and N. by the Tibet Mountains. This country was conquered by the Moguls about the year 1660. In 1772, when the East India Company had succeeded to the rights of the Mogul emperor, the raja of Cooch Bahar applied to the collector of Rungpoor for protection against the attacks of the Bootaners, by whom he had been reduced to great extremities. The raja offered to pay an annual tribute to the English, equal to one-half of his revenue, which offer being accepted, a British force was despatched to his assistance, and the Bootaners were made to retire precipitately. The tribute having fallen into arrears once and again, and at last in 1813 the affairs of the district having fallen into confusion, and the country being in a state of anarchy, a resident English commissioner was appointed by the Governor-General. The raja was compelled to dismiss his ministers, and to appoint others on the nomination of the English government, and a system of criminal

jurisprudence was established, which was administered through the agency of the British commissioner.

(*Ayin-i-Akbari*; Rennell, *Memoir of a Map of Hindustan*; Mill, *History of British India*.)

COOK. [WALES, NEW SOUTH.]

COOKHAM, Berkshire, a village, formerly a market-town, and the seat of a Poor-Law Union, in the parish and hundred of Cookham, is situated on the right bank of the Thames, in 51° 30' N. lat., 0° 42' W. long., distant 28 miles W. by N. from London. The living is a vicarage in the archdeaconry of Berks and diocese of Oxford. Cookham Poor-Law Union contains 7 parishes and townships, with an area of 30,430 acres, and a population in 1851 of 11,768. Further particulars respecting Cookham will be found under BERKSHIRE.

COOKSTOWN, county of Tyrone, Ireland, a post-town and the seat of a Poor-Law Union, in the parish of Derrylaran and barony of Dungannon, is situated in 54° 39' N. lat., 6° 45' W. long., 109 miles N. by W. from Dublin, and 14 miles N. from Dungannon. The population in 1851 was 2993, exclusive of 296 persons in the Union workhouse. Cookstown Poor-Law Union comprises 16 electoral divisions, with an area of 96,478 acres, and a population in 1851 of 38,740.

The town consists of one very long and wide street, occupying the line of the leading road from Armagh northward to Coleraine and Londonderry. A double row of trees gives the street the character of a mall. The public buildings are a neat market-house, sessions court-house, linen-hall, parish church, two Presbyterian meeting-houses, and the Union workhouse. There is a considerable trade in linens. Killymoon castle, in the vicinity, is a handsome edifice in the gothic style, from designs by Nash. The plantations which adorn the demesne give additional interest to the appearance of the town. The Ballinerry river runs through the Killymoon grounds.

COORG, or CADUGA, a small principality which occupies the eastern part of the mountain range called the Western Ghauts, and extends from the Tambercherry Pass, on the south, in 11° 25' N. lat., 76° 20' E. long., to the river Hennaivutty, on the confines of Bedune, on the north, in 12° 42' N. lat. The greatest length is about 70 miles, and the mean breadth about 22 miles. It is bounded N. by Canara and Mysore, W. and S. by the province of Malabar, and E. by Mysore.

The country presents a succession of hills and valleys, enjoys a temperate climate, and has a fertile soil; in many parts it is well cultivated, in others it is overrun with jungle, which is the resort of wild elephants and many beasts of prey: some considerable forests also occur, and from these a good deal of sandal-wood is obtained. The Tunga and Bhadra, which after their junction are called the Toombudra, and the Cavery, have their sources in the Coorg country. Rice is produced in sufficient abundance to allow of exportation to Mysore. Considerable quantities of cardamom-seeds are raised and exported. There is abundance of excellent pasture, on which great numbers of cattle are reared. The manufactures of the country are confined to a coarse kind of blanket. *Periapatam*, in 12° 22' N. lat., 76° 11' E. long., was formerly the capital of the principality, but its proximity to the Mysore territory occasioned it to be abandoned in favour of *Mercara*, which is now the residence of the raja and the seat of his government. This town stands surrounded by an amphitheatre of hills, in 12° 26' N. lat., 75° 30' E. long. The fort is a pentagon, with towers and bastions; within this is the raja's palace, which is handsomely furnished in the European style. Coorg was ceded to the British in full sovereignty in 1834. The raja of Coorg brought his daughter to England in 1853, for the purpose of having her instructed in the Christian religion. She was received by the Queen, and the duty of superintending the young lady's education was committed to a person approved by her Majesty. At the raja's request his daughter was baptised according to the mode of the Church of England.

COOTEHILL, county of Cavan, Ireland, a post-town and the seat of a Poor-Law Union, in the parish of Drumgoon and barony of Tullaghgarvey, is situated in 54° 5' N. lat., 7° 3' W. long., 73 miles N.N.W. from Dublin. The population in 1851 was 2105, besides 1101 in the Union workhouse and other public institutions. Cootehill Poor-Law Union comprises 19 electoral divisions, with an area of 105,348 acres, and a population in 1851 of 44,333.

Cootehill lies on the road from Kingscourt to Clones, and has four principal streets, which are wide and substantially built. It contains a neat church, besides chapels for Roman Catholics, Presbyterians, Methodists, Moravians, and Quakers. There is here a brisk trade in linens, and a large market for agricultural produce. The town stands at the western extremity of a series of lakes which are navigable for the greater part of the distance (7 miles) hence to Ballybay. The neighbourhood is well cultivated, and adorned with numerous demesnes and mansions. Quarter sessions for the county are held at Cootehill. There are here a bridewell, a dispensary, and a station of the constabulary force. A fair is held on the second Friday in each month.

COPENHAGEN (*Kjöbenhavn*, 'Merchants' Haven'), the metropolis of the kingdom of Denmark, is situated partly on the east coast of the island of Sialand, at the southern extremity of the Sound, which is here about 14 miles broad, and partly on the northern coast of the small island of Amager or Amak, in 55° 40' N. lat., 12° 34' E. long., and had a population of 129,695 in 1850. The city is about 8 miles in circumference; in this space are included the harbour and docks. It is divided into three principal districts—the Old Town, or Aldstadt,

the New Town, or Fredericksstadt, and Christianshavn on the isle of Amak. These three quarters are surrounded by ramparts and ditches, and defended by 24 bastions, besides outworks, and towards the sea on the north-east by a very strong citadel called Frederikshavn, which is a regular polygon, with five bastions, and is joined to the city by an esplanade. Without the wall there are three suburbs. The city is divided into 12 quarters, and contains 10 public squares, 5 market-places, 3 royal palaces, 9 parochial and several other churches, a Roman Catholic chapel, 3 synagogues, 3 theatres, several hospitals, a foundling asylum, and 30 poorhouses. With the exception of some of the public buildings the architecture of the city is entirely devoid of beauty. The houses are built of brick and stucco in the plainest and most uninteresting style. Nevertheless its aspect on emerging from the narrow entrance into the port, which is capable of containing 500 merchant vessels besides the whole Danish navy, is grand and striking. The city is entered by four gates, one of which is on the isle of Amak. The ramparts of the town and citadel are planted with trees, and form pretty walks. The entrance to the harbour is defended by the Trekroner battery.

The Altstadt, the most western quarter, is separated from the New Town by a canal and by a street called Gothers Gade, which commences at the city walls a little east of the North Gate, and runs nearly north and south to the 'Strømmer,' or channel that separates the island of Seeland from that of Amak. The Altstadt is united to Christianshavn by a drawbridge near the exchange. It consists for the most part of narrow winding streets; it comprises however the Castle Island, on which stand the Christianborg palace, the exchange, the bank, and Thorwaldsen's museum. In this quarter also are the university and several of the finest churches, and the Gammel and Nye-Torv, or Old and New Market—a large open space near the West Gate, on one side of which is the Raadhuus, a plain building, in which the courts of justice are held. The royal palace of Christianborg, originally built by Christian VI. between 1732 and 1740, was burnt down in 1795, but has been since rebuilt on a vast scale. The principal façade in the Slots-Plads, or Palace-square, is remarkable chiefly for its great dimensions and for the four bas-reliefs of Thorwaldsen over the entrance, representing Minerva and Prometheus, Hercules and Ibebe, Jupiter and Nemesis, and Æsculapius and Hygeia. The Ridderaal, or banquetting-hall, in this palace is unequalled in Europe for the grandeur of its proportions. The apartments are decorated with paintings, friezes, and sculptures by Danish artists. In the entrance-hall is the Triumphal March of Alexander into Babylon, by Thorwaldsen. In connection with the palace are royal galleries of paintings; the royal chapel; a supreme court of justice; a library, in which are 400,000 volumes and above 15,000 manuscripts; a valuable collection of above 30,000 engravings; an arsenal, in which arms from the earliest period to the present time are arranged in chronological order; and a Museum of Northern Antiquities, which contains very numerous specimens beautifully arranged in periods designated from the material of which the antiquities are made—stone, flint, bronze, iron, &c. On the north side of the palace stands the Thorwaldsen Museum (a handsome building surmounted by a colossal statue of Fame), which contains casts of all the works of that great master, and several marble statues presented by him to his native city. The other remarkable buildings in this quarter are—Vor Frue Kirke (Our Lady's church), which was almost destroyed during the bombardment of the city in 1807, but has been since completely restored, and ornamented with many of the works of Thorwaldsen, who was buried in this church; the Helliggeistes Kirke (Church of the Holy Ghost); Trinity church, on the top of whose singularly-constructed round tower (which is 115 feet high) an observatory is erected; and the University, which was founded in 1478 by Christian I. This university is attended by about 1100 students, and has a library of 100,000 volumes, which are kept in the upper part of Trinity church, a collection of manuscripts relative to northern and Icelandic history, a museum of northern antiquities, a botanical garden, a cabinet of natural history, a theatre of anatomy, &c. In the Kongens Nye-Torv (King's New Market) an irregular space of great extent nearly in the centre of Copenhagen, above twelve of the principal streets meet; in one of them, the Oster Gade, are the best shops in the capital. On the south side of the Torv is the palace of Charlottenborg, a huge, desolate-looking building, which was given to the Academy of Arts in 1788: it contains a gallery of casts from the antique. The grounds of the palace have been converted into a botanical garden. To the west of the palace is the principal theatre. In the centre of the Torv is a colossal equestrian statue of Christian V., made of lead, and of little merit.

The New Town is the most eastern quarter of the city; the southern part of it, called Fredericksstad, is the finest portion, but the whole of it is laid out in broad and regular streets, some of which however are unfinished. Here is the Castle of Rosenborg, in which are deposited the crown jewels, a beautiful collection of objects of art, arms and costumes belonging to Danish kings, and a cabinet of coins and medals. The castle gardens, which are extensive, are embellished with statues, and form a public promenade. The Castle of Rosenborg was erected in 1604, some say from a design by Inigo Jones. It is an irregular gothic structure, built of red brick, with a high pointed roof, and flanked by four towers. It originally stood without the walls, and was fortified; its defences have disappeared since the extension of

the city walls in 1608. The Ridderaal, the most spacious room in the castle, is lined with tapestry representing the battles of Christian V. Fredericks Plads, one of the finest open places in the New Town, is a circus divided into four equal portions by four streets which run through it. The circus is inclosed by four palaces, two of which are inhabited by the king and the others by members of the royal family. In the centre of the circus is a metal equestrian statue of Frederik V., mounted on a pedestal of white Italian marble. Between the circus and the citadel are the Almindelig and Frederik hospitals; the latter faces the Bred Gade, in which are the Roman Catholic chapel and the garrison church. The Frederik church, which was commenced on a grand scale, has been long left in an unfinished state. Between the gardens of the castle of Rosenborg and the city walls are extensive ranges of barracks; and a little way outside the eastern gate is the naval cemetery, in which is a monolithic obelisk of Norwegian marble, erected in honour of those who fell in defence of the city on the 2nd of April, 1801.

The third division of Copenhagen is Christianshavn, situated on the island of Amager, and united to the town by two bridges. The narrow arm of the sea which separates Amager from Seeland forms an admirable harbour, which is the great naval station of Denmark. In this quarter, which presents regular well-built streets and handsome squares, is Vor Frue's Kirke (Our Saviour's church), the finest in Copenhagen, surmounted by a tower, 288 feet in height; and the warehouses of the Danish East India Company. In this direction are situated the two smaller islands, Frederiks Holm and Nye Holm, which are united by a bridge, and contain the stores, dockyard, slips, and arsenals of the fleet, &c. On the island of Amager is the Amager Torv, which is used as a fish and vegetable market, and presents an attractive sight; the Amagers (descendants of a Dutch or Frisian colony, settled here in 1516 by Christian II.) retaining still their original Friesland costume.

The Royal Museum of Natural History in the Storm Gade contains extensive collections of shells and minerals; it is peculiarly rich in insects, comprising those of Brazil, the East Indies, the Cape of Good Hope, and Europe. It possesses also a great variety of birds, fishes, and reptiles. In the mineralogical collection is the famous Kongensberg mass of silver, 6 feet long, 2 feet broad, and 8 inches thick, as it was taken out of the Norwegian mine. Outside the west gate, in the suburb of Vesterbro, is the Moerskabs Theater, the favourite theatre of the humbler classes; and near it the Tivoli gardens, the most fashionable place of resort in summer. Near the west gate, also on the road to the Roeskilde railway, is a column of Bornholme stone, called the 'Statue of Liberty,' and erected in 1788 in commemoration of the abolition of feudal servitude by Christian VII. On its sides are emblematical bas-reliefs and inscriptions. About half a mile from the west gate is the Palace of Fredericksberg, situated upon an eminence which commands splendid land and sea views. The grounds are laid out in the English style, and open to the public. A beautiful avenue, shaded by noble chestnuts and lime-trees, and about a mile in length, leads from the Vesterbro suburb to the entrance of the park, and is lined on both sides with pretty villas and tea-gardens. Outside the north gate is the principal cemetery, which is laid out like a garden, and is a favourite walking place with the townspeople. To the north of the city a road runs along the Sound, affording views of the Swedish coast and of the isle of Hveen, with the ruins of Tycho Brahe's observatory, Uranienborg, upon it. On the land side are many pretty villas and an extensive forest, called Dyrbave, or Dearpark, which is much frequented by the Danes in summer.

Copenhagen is the seat of the metropolitan bishop of Denmark. It contains 22 hospitals, a naval hospital, and other benevolent institutions for human infirmities. Besides the libraries already named the city possesses the Classensche library in the Aualie Gade, containing above 40,000 volumes. Among the establishments for higher education are the Military High school and the Polytechnic school. The principal learned societies are the Royal Academy, the Society for Promoting Northern History and Languages, a Society of National Economy, Societies for Icelandic Literature and for Northern Antiquities, and several reading clubs, some of which have good libraries.

The chief source of employment for the population of Copenhagen is commerce and navigation, which are greatly promoted by the East India Company and various commercial associations. In the harbour there is a depth of 17 or 18 feet, and vessels load or unload alongside the quays. The anchorage in the roads outside the boom is also good and safe. By means of canals large ships reach the warehouses and the centre of the city. The harbour of Copenhagen is the station for the naval force of Denmark; in connection with the naval harbour are, a cannon foundry, naval arsenal, and shipbuilding docks. Including the foreign, colonial, and coasting trade, about 4000 vessels of all sizes enter and clear out of the harbour annually. The imports comprise timber, pitch, and tar from Sweden and Norway; flax, hemp, masts, sail-cloth, and cordage from Russia; coffee, sugar, and other West India produce; tobacco from America; wine and brandy from France; coal, earthenware, iron, steel, salt, and manufactured goods from England. In the year 1849 the importation of coffee amounted to 9,510,311 lbs.; sugar, 19,477,206 lbs.; tobacco, 1,944,156 lbs.; wool, 892,706 lbs.; train-oil, 10,580 casks; fish-fat, 4316 casks. These articles also enter into the exports. The exports consist chiefly of agricultural produce—corn, rape-seed, oil-cake (of which 13,738 casks

were exported in 1849), butter, cheese, beef, pork, horses, cattle, wool, hides, skins, bones, grain spirits, &c. Copenhagen has a great number of spirit distilleries, several breweries, vinegar distilleries, sugar refineries, soap-boilers' works, manufactories of tobacco, cloth, cotton goods, hats, gloves, linen, cordage, and silk; numerous tanneries, iron-foundries, &c., and a royal china manufactory, in which the choicest of Thorwaldsen's designs are reproduced in bisque china. General trade has rather declined, principally in consequence of Altona being a free port, and of the high port charges at Copenhagen. A railroad, 15 miles in length, connects the city with Roeskilde. There is a railway also with electro-telegraphic wires to Elsinore.

Copenhagen was founded by Bishop Axel in 1168, when it was only a poor hamlet of fishermen; but as a town Copenhagen dates only from the 13th century, and as a city only since 1443, when, having been much enlarged, it received municipal privileges and became the royal residence. Previously the capital of Denmark was Roeskilde. In the winter of 1658-9 it successfully withstood a long siege by Charles XII. of Sweden. On the 2nd of April 1801 Lord Nelson gained here a great naval victory over the Danish fleet, the effect of which victory compelled Denmark to abandon the alliance with Napoleon against England. Copenhagen was bombarded by the British army under Lord Cathcart in 1807, when vast injury was done to the city and a large number of the townspeople were killed. The city on this occasion capitulated, and all the ships and military stores were conveyed to England, in order to prevent their being of service to Napoleon in furtherance of his design of invading England.

The climate is damp and unhealthy; the water is bad; and the mortality is said to be greater than in any other town in Denmark.

COPPERMINE RIVER is a river in North America, which falls into the Arctic Ocean. It rises in a rocky country, near 65° N. lat., 112° W. long., where a series of lakes unite and form the river. The river first runs nearly due north, until it has passed 66° 30' N. lat., when it turns west and flows along the foot of a rocky but not high chain of mountains. Having attained 116° 30' W. long., it turns abruptly north, and breaking through the mountains continues its course in a northern direction to its mouth, 65° 50' N. lat., and near 116° W. long. Its whole course may be about 300 miles. It contains numerous rapids, but none which form insuperable difficulties to canoes and boats which descend the river. The mouth of this river was the first place on the coast of the Arctic Sea of America which was visited by Europeans. (Franklin and Richardson.)

COQUIMBO. [CHILL]

CORBRIDGE. [NORTHUMBERLAND.]

CORBY. [LINCOLNSHIRE.]

CORCYRA. [IONIAN ISLANDS.]

CORDOVA, or CORDOBA, a province of Spain included in the great territorial division of Andalusia, is bounded N. by the modern province of Ciudad Real (La Mancha), N.W. by the modern province of Badajoz in Estremadura, S.W. by the province of Sevilla, and E. by the province of Jaen. It is situated between 37° 13' and 38° 37' N. lat., 3° 58' and 5° 35' W. long. It is of a triangular form, each of the three sides being from 80 to 90 miles in length. The area is 4160 square miles. The population in 1849 was 348,956.

A general description of the provinces comprised in Andalusia is given under that head. [ANDALUCIA.] The mountain range of the Sierra Morena extends from east to west across the northern part of the province of Cordova: the Montes de Granada extend into the southern part, and there terminate. The Guadalquivir flows from east-north-east to west-south-west across the centre of the province, receiving on its northern bank, from the southern slopes of the Sierra Morena, the Rio de las Leguas, the Guadamellato, the Cuzua, the Ouadiata, and the Bembezar. From the northern slopes of the Sierra Morena the Guadalmez and Guadaramilla flow to the Guadiana. The Guadajoz is the only considerable river which enters the Guadalquivir by the southern bank.

Towns.—The city of Cordova is the capital of the province. [CORDOVA.] *Alcolea*, 9 miles E.N.E. from Cordova, is a small town on the northern bank of the Guadalquivir, which is here crossed by a fine bridge of black marble. *Baena*, 25 miles S.E. from Cordova, occupies the side of a conical elevation, the summit of which is crowned by a castle once the property of Gonzalo de Cordova, the 'Great Captain.' The town has a good plaza, and contains two churches. The population in 1845 was 12,944. The neighbourhood is very fertile. About six miles northward a solitary farm-house marks the site of the Castrum Priscum of the Romans, a town of some note in ancient times. Many cinerary urns and other Roman antiquities have been dug up in the vicinity. *Cabra*, 30 miles S.S.E. from Cordova, is a rich agricultural town, surrounded with gardens. It is a tortuous place, situated between two hills, but the streets on the level ground are handsome, and are cleansed by running water. The plaza is irregular, but striking. It has a college, and manufactures of bricks, tiles, linen, and soap. The population in 1845 was 11,576. *Castro-del-Rio*, 18 miles S.E. from Cordova, contains three or four churches, and has manufactures of wool and hemp. Population 9000. *Fuente-Ovejuna* (Sheep-Well), 45 miles N.W. from Cordova, occupies the flat summit and sides of a hill of considerable elevation on the Sierra Morena. The plaza, church, and some of the buildings are on the summit of the hill, but most of the houses, which are of one story,

are on the sides of the hill, surrounded by gardens and vineyards, and bounded by walls and other defences, leaving the base of the hill entirely open. The wells which give name to the place are at the bottom of the hill, on the western side: population about 6000.

Hinojosa, 45 miles N.N.W. from Cordova, has wide streets, with very small houses, generally of one story, white-washed, and very clean and neat. Each house has a garden or small court. It is a Moorish town, and has a population of about 8000. *Lucena*, 33 miles S.E. from Cordova, and 3 miles S. from Cabra, is an agricultural town, chiefly inhabited by a rural population and provincial gentry. It is ill-paved, most of the houses are in a dilapidated state, and the kennels are in a filthy condition. It has manufactures of coarse cloths and pottery. The population in 1845 was 16,665. *Montilla*, 20 miles S. from Cordova, is a well-huilt town on a hill-side. It contains two parish churches, and has manufactures of coarse linens and earthenware. There are also oil-mills, and the town is celebrated as having been the birthplace of Gonzalo de Cordova, the 'Great Captain,' and for the wine made in the neighbourhood: the population in 1845 was 13,224. *Montoro*, 26 miles E.N.E. from Cordova, stands on the south bank of the Guadalquivir, which almost encircles the town. There is here a good bridge over the river. The town is tolerably well-built, and has several fountains. There are manufactures of woollens and earthenware. The population in 1845 was 10,732. *Palma*, 30 miles S.W. from Cordova, stands in a plain on the southern bank of the Guadalquivir, and near the mouth of the Jenil (Xenil). There are several oil-mills: population, 5500. *Rambla*, 23 miles S. from Cordova, and 6 miles W. from Montilla, stands on a hill, in a country very fertile in grain, wine, and oil. It has manufactures of woollens and of coarse pottery, especially the porous vessels for cooling water called 'alcarrazas.' Population, 9000.

(Ford, *Handbook of Spain*; Widdrington, *Spain and the Spaniards in 1843*; Murray, *Cities and Wilds of Andalusia*; Madoz, *Diccionario de España*.)

CORDOVA, a city of Spain, capital of the province of Cordova, is situated on the right or northern bank of the Guadalquivir, in 37° 52' N. lat., 4° 45' W. long.; 80 miles N.E. from Sevilla, and 180 miles S.S.W. from Madrid. The population in 1845 was 41,976. The bridge which here crosses the Guadalquivir was originally built by the Romans, and the foundations are Roman, but the bridge itself, formed of 16 stone arches, and was constructed by the Moors. The city stands on a gentle declivity, and is sheltered to the north and north-east by the summits and ridges of the Sierra Morena. It is inclosed by high walls flanked by square towers, and was formerly entered by several gates, most of which are now walled up. The walls and towers were built by the Moors on Roman foundations, and inclose a large area, much of which is now occupied by gardens or by ruins, and there is one large plaza surrounded by handsome houses. The rest of the city is a mass of narrow streets and alleys, very gloomy, and by no means clean. The public buildings consist of the cathedral, 13 parish churches, many convents, most of which are now applied to secular uses, a bishop's palace with fine gardens, a palace of the Moorish sovereigns now converted into stables for a royal stud of horses, a city-hall, a lyceum, three colleges, a theatre, and several hospitals.

The Cathedral of Cordova is one of the most extraordinary places of worship in the world. It was originally a Moorish mosque, founded by Abd-el-Rahman I. in 786, and completed by his son Hixam in 794. The shape is quadrangular, the length being 394 feet from east to west, and 356 feet from north to south. The exterior is castellated and gloomy, with square buttress-towers, and with a belfry-tower similar to the Giralda of the cathedral of Sevilla; and there is a court adjoining it, now called the Patio de los Naranjos (Court of the Oranges), which is also similar to the one which adjoins the cathedral of Sevilla, but larger: it is 430 feet long by 210 feet wide, and has colonnades on three sides with fountains in the centre, and is planted with orange-trees and cypresses. The interior of the cathedral presents at first sight somewhat the appearance of a marble grove, the roof, which is only 35 feet high, being supported by a vast number of slender pillars, delicately wrought, with Corinthian capitals, and shafts of various-coloured marbles, and of jasper, porphyry, and other materials, so arranged as to form 29 aisles from east to west, and 19 from north to south. The pillars were obtained from Christian churches in different parts of the world where the Moslems had made conquests. The number of pillars is said to have been originally 1200, but a great many of them were taken away when the Christians, in order to convert the mosque into a cathedral, cleared an open space for a choir, and constructed a dome. The number of pillars still remaining is upwards of 850. The choir was begun in 1523, and completed in 1593. There are a number of chapels at the sides of the cathedral, of which the most interesting is the Capilla de la Villa Viciosa, originally the Maskurah, or seat of the kalif, now generally called by the Spaniards the Zancarron, which name has reference to the heel-hone of the foot of Mahomet having been shown here as a relic.

The streets of Cordova seem now to be almost deserted. It was always celebrated for its silversmiths, who came originally from Damascus, and some of the profession still continue to work in the chased filigree style. The peculiar leather called from the town Cordovan (Cordwain) was once celebrated, but the Moors carried their

industry to Morocco, and their leather has since assumed that name. Dupont, the French general, entered the city in June 1808 without resistance, yet he not only plundered the cathedral, the churches, and other public buildings, but massacred the people. The Alameda, or public walk, is outside the walls; it is not much frequented.

Cordova was the *Corduba* of the Romans. It was one of the chief cities of Hispania, and appears to have been a Roman colony from its first foundation in a.c. 152. It was regarded as the capital of Bæturia, or the country between the Bætis (Guadalquivir) and the Anas (Guadiana). Numerous coins of the city are extant, but most of the other antiquities have been destroyed. It was the birthplace of the two Senecas and of the poet Lucan. Abel-el-Rahman I. obtained possession of Cordova in 756, and assumed the title of kalif, making Cordova the capital of his kalifate, and it so continued till 1036, when it was converted into one of the small Moorish kingdoms of Andalusia. [ANDALUCIA.] In 1234 it was taken by Fernando III. of Castilla, and is said to have then contained 300,000 inhabitants.

(Ford, *Handbook of Spain*; Borrow, *Bible in Spain*.)

CORDOVA, the most important next to Buenos Ayres of the provinces of the Argentine Confederation, South America, comprehends the Sierra de Cordova and the surrounding hilly country, with some adjacent plains. It is divided on the N.E., N., and N.W. by the Gran Saliua from Santiago, Catamarca, and Rioja, and on the W. by a travesia, or desert country overgrown with stunted prickly trees, from San Juan. A sterile and thinly inhabited country lies on the south-east between it and San Luis. On the south it extends to the Pampas of Buenos Ayres. The low sterile tract in which the rivers Segundo and Primero are lost, and the Laguna Salados de los Porongos is situated, separates it on the east from Santa Fé. It has a population variously estimated at from 65,000 to 90,000. Cordova is much more fertile than the countries which surround it. Numerous rivers descend from the Sierra de Cordova, but all are lost in the desert, except the Rio Tercero, which, during part of the year, finds its way to the Carcarañal, which falls into the Paraná near Santo Espiritu below Santa Fé. This river would be navigable for six or eight months in the year, but for two small rapids, which however might easily be removed. The valleys within the Cordova Mountains, and those which extend along their sides, have a fertile soil, and maize and fruits are raised there in abundance, but the plains, as well as the declivities of the mountains, are only fit for pasture. Cattle and sheep constitute the principal wealth of the republic. Hides in large numbers and wool are exported to Buenos Ayres. At present the produce of this province is all sent to Buenos Ayres, but when steam navigation is established on the Paraná, the commercial intercourse will probably be largely carried on through Santa Fé. The province is ruled by a governor, assisted by a junta occasionally convoked; but the authority of the governor is in effect almost unlimited.

Cordova, the capital, is situated in 31° 26' S. lat.; it is built on the banks of the Rio Primero, in a narrow valley considerably depressed below the general surface of the country. This situation is in many respects disadvantageous, but it is thus sheltered from the north and south winds, which blowing alternately on the higher grounds produce sudden changes in the atmosphere which are injurious to health. The town contains about 15,000 inhabitants. The streets are regularly laid out, and the houses are built of brick, and better than in other towns in the interior; most of them have balconies. In the centre of the town is a spacious square, on one side of which is a neat town-hall, and on the other a fine cathedral. There are also ten other well-built churches of old date and chiefly Moorish in style; and one modern church erected in a very costly manner. The University erected by the Jesuits is on a scale of great magnitude, covering an area of 4 acres. In former times it was famous, being the principal college (the Colegio Maximo) of the order in this part of the world. It contained also a very important library, which on the expulsion of the Jesuits was sent to Buenos Ayres. The university is still maintained, but is now hardly better than a provincial college. There are two nunneries and two convents of Dominicans and Franciscans. A fine public promenade occupies a considerable space; it includes a square sheet of water of about 4 acres supplied by a running stream, which is surrounded by walks, well shaded by trees, and has in the centre a lantern-shaped temple. The Segundo which waters the town is in summer a shallow stream, but in winter becomes a deep and wide river; to preserve the town from the effects of its overflow a strong wall has been built, yet destructive floods still sometimes occur. Cordova was formerly the depot of the European merchandise intended to be sent to Peru, but this branch of commerce no longer exists. There is a mint in the town. The only manufacture is that of leather. There are no foreigners in the town and scarcely any in the province of Cordova. Religious toleration is unknown. *Ala Graecia*, a neat town near the base of the Sierra de Cordova, contains nearly 3000 inhabitants.

COREA is a large peninsula on the eastern coast of Asia, whose sovereign is tributary to the emperors of China and Japan, but otherwise independent. The peninsula is surrounded E. by the Sea of Japan, S. by the Strait of Corea (which divides it from the Japanese island of Kiou-siou), and W. by the Hoang-hai, or Yellow Sea, which separates it from China proper. It extends from south to north from 31° to 40° N. lat., or about 420 miles; but the countries north of the

peninsula as far as 43° are also subject to the sovereign of Corea, so that the whole country from south to north may be 630 miles. Its width, lying between 124° and 134° E. long., varies from 100 to 200 miles. Its area may be about 90,000 square miles, or about the same as the area of Great Britain.

Corea appears to be a very mountainous country. On its northern boundary is the Chang-pe-shah, a high mountain range partly covered with snow, which separates the Coreans from their northern neighbours, the Mandchou. From this chain another branches off in a south-south-east direction, which traverses the whole of the peninsula as far as the Strait of Corea. Its highest part is near the shores of the Sea of Japan, towards which it descends with great rapidity. The numerous offsets to the west, which are less elevated and steep, contain between them large and well-cultivated valleys.

The largest rivers occur in the northern part of the country, where the *Thumen-kiang* rising in the centre of the Chang-pe-shan Mountains runs north-east, and towards its mouth east, to the Sea of Japan. Its banks though fertile are uninhabited. A belt of land 15 leagues in width along the northern border of the peninsula, in which direction alone it is joined to the mainland, is left uncultivated and uninhabited in consequence of the mistrustful policy of the government, which has long condemned this country to a system of exclusion from all external influence. The inhospitable coast that bounds the country in all other directions, and the jealous vigilance of the authorities, keep the population cooped up as it were in a prison. The *Yalu-kiang* rises near the source of the Thumen-kiang, and runs first west, then south. According to the Chinese geographers it falls into the Hoang-hai by twelve mouths. It is said to be navigable for junks 35 miles, and for barges about 180 miles.

The coasts of Corea are high and bold. There are few islands along the eastern shores, except in Broughton's Bay (39° 30' N. lat.), where they are numerous. In the Strait of Corea, and between the island of Quolpaerts and the southern coast, are numerous islands and rocks. Between 34° and 35° N. lat., 125° and 126° E. long., Captain Maxwell found the sea literally dotted with islands and rocks, which he called the *Corean Archipelago*, and the most south-western group Amherst Isles. Farther north (38° N. lat.) is another group called James Hall's Archipelago. These islands are rocky and high, but generally inhabited. They are rarely more than three or four miles in length. The largest, the island of Quolpaerts, south of the peninsula, is about 60 miles in circuit, and in the centre a peak rises upwards of 6000 feet above the sea.

Corea is a very cold country. For four months the northern rivers are covered with ice, and barley only is cultivated along their banks. On the eastern coasts fogs are frequent.

The productions of Corea include rice, wheat, millet, cotton, silk, hemp, ginseug, and tobacco. Cotton and silk are manufactured and supply articles for exportation.

Horses and cattle are plentiful on the mountain pastures. The former, which are small, are exported to Chiuu. In the northern districts the sable and other animals give fur. The royal tiger, which is a native of the country, is covered with a longer and closer hair than in Bengal. On the eastern coast whales are numerous. Gold, silver, iron, salt, and coals are noticed in the Chinese geography as obtained in Corea.

The inhabitants, who are of the Mougol race, resemble the Chinese and Japanese, but they are taller and stouter. They speak a language different from the Chinese and Manchou, though it contains many Chinese words. They have also a different mode of writing it, though the Chinese characters are in general use among the upper classes. In manner and civilisation they much resemble the Chinese; they are likewise Buddhists, with the exception of a small number who have been converted to Christianity by French missionaries, who visit the country in disguise and at the risk of their lives. Education is highly valued, especially among the upper classes. They seem to have a rich literature of their own, but their language is very imperfectly known in Europe. The number of inhabitants is estimated at ten millions.

The sovereign of Corea sends an embassy with a tribute to the emperor of China every fourth year. The election of the king and his more important acts must be ratified by the emperor. The kingdom is divided into eight provinces.

King-ki-tae, the capital, which is a few miles north of a considerable river, Han-kiang, appears to be a large place, and is said to possess a considerable library. The name of the town is properly Kin-phu. The mouth of the river Tsing-kiang (between 34° and 35°), on the western coast, is said to have a very spacious harbour. *Fushan*, according to the Chinese geography, called by Broughton *Chosan* or *Thosan*, is a bay at the south-eastern extremity of the peninsula, opposite the Japanese island of Tsu-sima, at the innermost recess of which the town of *King-tseou* is built, which carries on an active trade with Japan, and is the only place to which the Japanese are permitted to come. In industry the Coreans mainly excel in the manufacture of cotton cloth and cotton paper, both of which are brought in great quantities to Peking. They have attained considerable skill in working iron, as swords are sent, with other articles, to the emperor of China as tribute.

Europeans are yet permitted to remain even a few days on any

part of the coast. The commerce of the country is limited to China and Japan. Commercial intercourse between China and Corea is carried on not by sea but by means of the narrow road which leads along the coast to the town of Fang-hoan, in Leao-tong. As the district from being uninhabited has become the haunt of numberless ferocious animals, the passage is much dreaded by travellers. Commerce therefore is principally carried on in winter, when the shallow Hoang-hai is covered with ice along its shores, which are more favourable to the transport of goods than the bad mountain roads. Besides the above-mentioned manufactured goods, gold, silver, iron, rice, fruits, oil, and some other articles are brought by this road to Peking. The commerce between Corea and Japan is limited to that between the island of Tsu-sima and the Bay of Chosan, and is carried on by Japanese merchants, who have their warehouses at each place. They import sapan-wood, pepper, alum, and the skins of deer, buffaloes, and goats, with the manufactured articles of Japan and those brought by the Dutch from Europe; they take in return the manufactures of Corea and a few other articles, especially ginseng.

(Broughton; Maxwell, in Ellis's *Journal of Lord Amherst's Embassy*; Basil Hall; Ritter, *Asien*.)

CORFE CASTLE, Dorsetshire, a small town, formerly a borough and market-town, in the parish and hundred of Corfe Castle, is situated about the centre of the isle or peninsula of Purbeck, in 50° 38' N. lat., 2° 3' W. long.; distant 24 miles E.S.E. from Dorchester, and 116 miles S.W. from London by road. Wareham station of the South-Western railway, which is 5 miles from Corfe Castle, is distant 126 miles from London. The population of the parish of Corfe Castle in 1851 was 1966. The living is a rectory, with the curacy of Kingston annexed, in the archdeaconry of Dorset and diocese of Salisbury.

The town of Corfe Castle consists of two streets; the houses are built of stone and roofed with tiles. The castle which gives name to the town was probably built in the 10th century by King Edgar. It is situated on a high hill. Portions of the structure are in the Norman style. Its stateliness and the strength of its position made it in former times a fortress of great importance. It was sometimes the residence of the West Saxon princes. Here King Edward the Martyr was assassinated by his step-mother, Elfrida (A.D. 978 or 981). King John in his war with the barons deposited his regalia in this castle for security; and Edward II, when he fell into the hands of his enemies, was for a time imprisoned within its walls. In the great civil war Corfe Castle was stoutly defended for the king by Lady Bankes, wife of Lord Chief Justice Sir John Bankes, the owner of it, with the assistance of her friends and retainers, and of a governor sent from the king's army. It however fell into the hands of the parliamentary forces by treachery in February 1645-6, and was by order of the Parliament dismantled. The ruins are extensive, and from their elevated situation form a very striking object. The castle is separated from the town by a ditch, now dry, which is crossed by a bridge of four very narrow high arches.

The parish church is a large and very ancient fabric, with many portions of Norman and early English architecture: it has an embattled and pinnacled tower of the 14th century, a large porch, and two buildings, one on each side of the church, which were formerly chapels, but are now applied to other purposes. The church was much damaged in the great civil war when the castle was attacked, A.D. 1646. Modern repairs and alterations have to a considerable extent destroyed the uniformity of the building. Kingston chapel, in the parish of Corfe Castle, was handsomely rebuilt by the late Earl of Eldon. The Independents have a large and well-built chapel in the town. There are here National and British schools.

Corfe Castle was a borough by prescription previous to the reign of Elizabeth, who bestowed on it a charter. The borough first sent representatives to the House of Commons in the reign of Queen Elizabeth. It was disfranchised by the Reform Act of 1832. Some of the inhabitants are engaged in the marble and stone quarries in the neighbourhood. The principal occupation is that of raising clay for the potteries.

(Communication from Corfe Castle.)

CORFINIUM. [ABRUZZO.]

CORFU. [IONIAN ISLANDS.]

CORIGLIANO. [CALABRIA.]

CORINTH (Κόρινθος), a city of ancient Greece, the capital of a small but wealthy and powerful district, was situated upon the isthmus which connects the northern part of Greece with the Peloponnesus. The Corinthian territory (Corinthia) was bounded N. by the Crisean Bay, N.E. by Megaris, E. by the Saronic Bay, S. by Argolis, and W. by the territories of Sicyon. The Phonicians appear to have early formed a settlement on the Acrocorinthus. The city was built upon a level rock to the north of a steep and high mountain called the Acrocorinthus, which served as a citadel, and was included within the wall. (Strabo, Casaub., p. 379.) Corinth had two ports; the nearer, Lechæum, on the Crisean Bay, was connected with the city by two parallel walls of 12 stadia in length each, which were partially destroyed by the Lacedæmonians A.C. 393. (Xenophon, 'Hellen,' iv. 4, § 13.) This harbour, which Colonel Leake conceives to have been for the most part artificial, is now nearly filled up; all that remains of it is a lagoon near the supposed site. (Leake's 'Moræa,' iii., p. 234.) The

other port, Cenchræa, on the Saronic Bay, does not appear to have been connected with the city; it was however a more considerable place than Lechæum, and contained several temples. (Pausan., ii. 2.) A few miles to the north of Cenchræa was a small bay called Schœnus. Here was the narrowest part of the isthmus, and a kind of canal called the Diholcus, of which there are still some remains, was carried from the harbour of Schœnus to the eastern extremity of Port Lechæum, and ships were run ashore at one of these points and dragged to the other sea. This work existed in the time of Aristophanes ('Thesmophor,' 645); but in the Peloponnesian war it appears that they had a method of transferring naval operations from the Crisean to the Saronic Bay without dragging their ships across the isthmus. (Thucyd., ii. 93.) A little to the south of the Diholcus was a wall, which was always guarded when any danger threatened the Peloponnesus.

The old name of Corinth was Ephyra; and under this name it was one of the seats of the Æolian race. Even in the time of Homer it was called 'the wealthy' ('Iliad,' ii. 570); an epithet which it acquired, according to Thucydides (i. 13), from the commercial spirit of its inhabitants, occasioned by the favourable situation of the town, which threw all the inland carrying trade of Greece into its power; while the difficulty of weathering Cape Maleæ (which was proverbial) made it the emporium of most of the trade between Asia and Italy. (Strabo, p. 378.)

About thirty years after the Dorian invasion of the Peloponnesus (that is, about 1074 B.C.), Ephyra fell into the power of Aletes, the son of Hippotes, a Heracleid, who had slain a soothsayer on the passage from Naupactus, and had been compelled to separate himself and his followers from the army of the Dorians. The city then assumed the name of Corinth, or the Corinth of Jupiter (Müller, 'Dorians,' i. 5, § 8); and the Æolian inhabitants became a subject class, though not altogether deprived of their civic rights. The descendants of Aletes ruled Corinth for five generations with royal power; but at length a rigid oligarchy was substituted for the monarchical form of government, and the power was vested in prytanes chosen annually from the powerful Heracleid clan of the Bacchiadæ. The members of this clan intermarried only with one another, and consequently kept aloof from all immediate intercourse with their fellow-citizens, whom besides they did not treat with much forbearance. In the year B.C. 657, Cypselus, an opulent citizen of Æolian descent, putting himself at the head of the lower orders, overthrew the oligarchy without much difficulty, and assumed the sovereign power. Although he taxed and oppressed the Dorian caste so much that many of them were obliged to emigrate, he seems to have possessed the full confidence of the great mass of the citizens, and always reigned without a body-guard. His son Periander, who succeeded to his authority, occupies a very prominent place in the ancient history of Greece. He was much more despotic than his predecessor; he had a bodyguard of 300 men, and trampled at pleasure upon the rights of his countrymen. His reputation for wisdom (by which we must understand that practical wisdom which consists in governing men) procured him a place among the seven sages of Greece. Upon his death in B.C. 583, his power devolved upon his nephew Psammethichus, the son of Gordias, who after three years was deposed by the Lacedæmonians. The former aristocratical form of constitution was then restored, but doubtless it was less exclusive than the hereditary oligarchy of the Bacchiadæ, and Corinth remained an oligarchical state till the beginning of the 4th century B.C. In the Peloponnesian war, which was in some measure brought about by them, the Corinthians were staunch supporters of the Lacedæmonians, and the bitterest enemies of Athens. About B.C. 394 a democratical faction endeavoured to overthrow the aristocracy, and to unite Corinth with Argos, but without any permanent success. (Xenoph. 'Hellen,' iv. 4.) Timophanes re-established the monarchical form of government by means of the mercenaries whom he commanded; but he was soon removed by his own brother Timoleon by assassination. (Aristot. 'Polit,' v. 6; Corin. Nepos, 'Timol,' c. i.; Plutarch, 'Timol,' iv.) Like the other states of Greece, Corinth felt the influence of the Macedonian power, and was garrisoned by Macedonians under Antigonus, but liberated by Aratus. (Pausan., ii. 8, § 4.) The Corinthians took the lead in the Achæan confederacy, and were at first allies of the Romans (Pausan., vii. 8, § 3); but at last the temptations held out by the wealth of the place, and the insults which the Corinthians had offered to the Roman embassy (Strabo, p. 381), led to the plunder and destruction of the town by L. Mummius, in B.C. 146, according to an express decree of the Roman senate. All the males were slain; the women and children were sold as slaves; and after the Roman soldiers had pillaged this the richest city in all Greece, it was at a signal given set on fire and reduced to ashes. (Liv., 'Epit,' liii.) Many works of art were destroyed, but some of the finest pictures and statues were removed to Rome. (Strabo, p. 381.) Corinth was restored by Julius Cæsar about 100 years after its conquest by Mummius, and peopled with freedmen, who enjoyed the privileges of a Colonia. It soon rose again to be a populous and prosperous city, and when St. Paul visited it 100 years after it had been rebuilt by Julius Cæsar, it was the residence of the Proconsul of Achæa. Two of the epistles of St. Paul are addressed to the flourishing Christian church which he founded in Corinth. When Pausanias visited Corinth in the 2nd century of our era, there were still many fine buildings and other monuments of the

former splendour of the city. (Pausan., ii. 1, § 7.) There now remains of ancient Corinth seven columns of a Doric temple, probably the oldest existing specimen of that style, an amphitheatre, and some Roman brickwork on the northern side of the bazaar of the modern town.

The colonies of Corinth were very numerous; with the exception of the colony that founded Potidea on the coast of Chalcidice, they were all sent out from Lechaum, and confined to the seas west of the isthmus. (Müller, 'Dorians,' i. 6, § 7.) The most celebrated were Syracuse and Coreyra.

Its wealth and the confluence of merchants from all parts favoured everything which ministered to the gratification of the senses; and both architecture and the other fine arts were, according to the testimony of the ancients, successfully cultivated in this wealthy emporium. (Pindar, 'Olymp.,' xiii. 25-31.) The citizens were addicted to luxury and sensual indulgence. The patron goddess of the city was Aphrodite, who had a splendid temple on the Acrocorinthus, where more than a thousand females under the name of Hieroduli, or temple-slaves, were kept for the service of strangers as a regular part of the worship of the goddess. In no other part of Greece is this institution of Hieroduli found to have existed: it was most probably established by the Phœnicians. The courtesans of Corinth were so exorbitant in their demands and obtained such high sums as often to ruin the merchants who visited the city. This circumstance gave rise to an ancient proverb. (Strabo, viii. 378; Horat., 'Ep.' l. xvii. 36.)

The only fertile part of the Corinthian territory was the plain between the city and Sicyon, which partly belonged to the latter. The rocky sides of the mountains, and the stony and sandy plain of the isthmus, were unsuited for growing corn. The fountain Peirene, on the Acrocorinthus, was celebrated by the poets (Strabo, p. 379); but in the time of Hadrian the inhabitants were so little satisfied with the springs in the town, that they induced the emperor to supply them with water from the Stymphalus by means of an aqueduct 20 miles long. Corinth is now a small town of 2000 inhabitants, who carry on a small export trade in dried fruits, wheat, oil, honey, and wax from the port in the Bay of Corinth or Gulf of Lepanto. The modern name of the town, *Gorthe*, is a corruption of the ancient name of the city. (Leake, 'Morea,' iii. 262.) The territory of Corinth united with Argolis, now forms a nome or department of the kingdom of Greece. The total population of the nome in 1852 was 105,243.

According to the fable, Bellerophon caught the winged horse, Pegasus, while drinking at the fountain of Peirene. Pegasus appears on the coins of Corinth and some of its colonies.



Coins of Corinth.

British Museum. Actual Size. Silver. Weight, old coin, 131 grains; the other, 132 grains.

The *Isthmus of Corinth* is a rocky sterile plain. On the northern side of it rise the mountains anciently called Geranea, and extending across the Isthmus from sea to sea. The mountains to the south of the Isthmus were called Oncion, which extend to the Saronic Gulf eastward; but the Acrocorinthus, an offset from it (separated from it however by a ravine), does not reach the sea on the western side. There is a level narrow space between the foot of the mountain and the sea, which was crossed by the long walls of the Lechaum. Besides the ravine already mentioned, the only other pass by which Corinth could be reached was along the shore at Cenchreae. Thus the long walls of the Lechaum, the Acrocorinthus with its citadel, and the walls of Cenchreae completely commanded the only three passes which led from the Isthmus to the Peloponnese. In the mountains to the north there were three passes, the most celebrated of which, as being the shortest road from Corinth to Megara, lies along the shore of the Saronic Gulf, and bore the name of the Scyronian Rocks.

CORK, a maritime county of the province of Munster, and the largest county in Ireland, lies between 51° 27' and 52° 16' N. lat., and 7° 45' and 10° 15' W. long. Its greatest length from Youghal on the east to the mouth of the Kenmare River on the west, is 110 miles; and its greatest breadth from the Old Head of Kinsale upon the south to Charleville on the north, is 70 miles. It is bounded N. by the

counties of Limerick and Tipperary, E. by the county of Waterford, S. by the Atlantic Ocean, and W. by the county of Kerry. The area comprises 1,846,333 acres, of which 1,308,862 are arable, 465,889 uncultivated, 52,180 in plantations, 6515 in towns, and 12,867 under water. The indentations of the coast from Youghal to Kenmare give a coast-line of about 200 miles. The population of the county, exclusive of the city of Cork, in 1841 was 773,398; in 1851 it was 863,158.

Surface, Hydrography, Communications.—The chief mountain groups in Cork county may be considered as offsets of the main ridge which separates Cork from Kerry. This ridge, the southern extremity of which separates Bantry Bay from the river of Kenmare, runs north-north-east and south-south-west, and on the side towards Cork sends off numerous lateral elevations. Of these the two chief are the ranges north and south of the valley of the Lee, which river divides the county into two nearly equal portions. The southern ridge running through the peninsula between Bantry Bay and the estuary of the Kenmare River, is distinguished by the names of the Glengarriff, Cahah, and Slieve Miskisk, among which the most celebrated summits are the Sugarloaf, and Hungry Hill, with its magnificent cascade. The northern and most extensive range consists of the almost continuous groups of the Muskerry, Boggra, and Nagles Mountains, and stretches in a uniform direction from the Kerry boundary on one side of the county, to within a few miles of the borders of Waterford on the other. The principal elevation in this line is Cahirbarnea, 2234 feet, near the boundary of Kerry. The Shehy group, which forms the southern boundary of the basin of the Lee, runs a much shorter distance from the main ridge; but the upland country of Kinalmeaky, into which it subsides, prolongs the elevation in a line parallel to the direction of the Boggra range across the entire extent of the county, from Dunmanway on the west to the high grounds above Cork and Passage on the east. Shehy Mountain has an elevation of 1769 feet. North and south of this central valley are the districts which form the basins of the Blackwater and the Bandon; the former included between the mountains of Limerick and Tipperary, and the Boggra groups; and the latter between the Shehy range and those elevations which rise southward towards the sea-coast. These three principal valleys are nearly symmetrically situated, and their respective rivers run very nearly parallel to one another. The bogs and waste lands lie among the mountain groups described; the remainder of the county is well tilled and productive, particularly along the banks and between the embouchures of the rivers.

Beginning from the east, the harbour of Youghal has a tolerable anchorage in six fathoms water without the bar, where vessels may wait the tide, which gives 20 feet of water on the bar at neaps. Three leagues south is a good anchorage and fishing-ground, in 5 to 12 fathoms water at Ring Point. From this the coast is rocky, with the exception of the extensive strand of Ballycotton Bay, to the entrance of Cork harbour four leagues farther west. This harbour is so commodious, says Smith, that it will admit the largest vessel at any time of the tide without striking sail, and has a land-locked anchorage in 10 fathoms water in some places, and in 7 fathoms water within a cable's length of the shore. On the shoalest part of the bar are 30 feet of water at ebb-tide. From this westward to Kinsale harbour the coast is rocky and dangerous. The harbour of Kinsale has 30 feet of water on the bar, and anchorage within in 7 fathoms; but it is not so capacious as that of Cork. There is also good anchorage in any depth of water on both sides of the promontory to the west called the Old Head of Kinsale. The Bay of Courtmacsherry, next west, is fit for vessels of 200 tons, but exposed. Clonakilty harbour is encumbered with a bar, on which are only 2 fathoms water at full sea, and vessels embayed here are in considerable danger. The harbour of Glandore has 14 to 30 feet of water in its channel, and a land-locked anchorage. Castlehaven Creek has safe anchorage in 14 feet, and Baltimore Bay pretty good in 6 fathoms. Baltimore is situated on the eastern side of an extensive bay, bounded on the east by Cape Clear Island, and on the west by Mizen Head; it contains the several minor bays of Baltimore, Roring Water, Crookhaven and Inisherkin, in all of which merchant vessels may find anchorage. West from Mizen Head the Bay of Dunmanus runs inland 12 miles in a north-east direction, with 10 to 30 fathoms of water throughout, and no bar. Bantry Bay is 40 fathoms deep at the mouth, 26 miles long, and from 3 to 5 miles broad. Bear Island at its entrance protects it from the south-westerly swell, and affords the land-locked anchorage of Berehaven in 10 to 16 fathoms water, for an unlimited number of vessels. Farther up Whiddy Island incloses the minor bays of Bantry and Glengarriff, the latter much celebrated for the magnificence of its scenery: it is calculated that all the shipping of Europe could ride secure in this noble harbour. The boundary of the county runs through the mountainous peninsula stretching between Bantry Bay and the estuary of the Kenmare River. On the southern shore is the town and bay of Castletown, south-west from which about 7 miles on the northern shore is the Bay of Ballydongan near the copper-mines of Allihais. At the point of the peninsula is Dursay Island, a rocky spot, about 3½ miles long by 1 mile broad.

Facilities for water-carriage are confined to the coast: the inland navigation of the Bandon is very inconsiderable; that portion of the Blackwater which is navigable lies in the county of Waterford; and the traffic between Cork and the sea is more a harbour than a river

navigation. The only lakes in the county are two small, but very picturesque sheets of water, near the source of the Lee, and some pools on the coast.

The great Southern and Western railway was completed in 1850. The total length of the line from Dublin to Cork is 164½ miles. The line is carried nearly parallel with the old mail-coach road to Limerick by the valley which separates the Nagles Mountains from the Boggra range. The Cork and Bandon railway gives a line of railway communication of 20 miles from Cork in the direction of the great harbours in the south-east of the county. [BANDON.] The Cork, Blackrock and Passage railway, 7½ miles in length, connects the city of Cork on the eastern side with the suburban districts adjoining the harbour and naval dépôt at Queenstown. The principal mail-coach routes have been superseded by the completion of the Great Southern and Western railway. The old road to Dublin, carried over the eastern flank of the Nagles Mountains by Rathormack, unites the valleys of the Lee and the Blackwater from Cork to Formoy. The road from Cork to Mallow, carried over the western flank of the same range, forms another line of communication between these valleys, and is used as the post-line to Limerick. Westward from Mallow to Millstreet, a distance of nearly 18 miles, the range of the Boggra Mountains formed an impassable barrier, until in 1823 permission was granted by government to make a road through the centre of this group at an expense of about 10,000*l.*, one-half to be levied by county presentments, and the other half to be defrayed out of the Consolidated Fund. The construction of this road saved the inhabitants of the valley of the Blackwater a distance of fully 20 miles Irish on every journey to and from the Cork market. It also supplies an easy means of transit for fuel to the low countries, both north and south. Before this road was opened the only means of procuring fuel from the upland bogs was on the backs of small horses, or of men and women. Other new roads have been made at the public expense within the county in the neighbourhoods of Clonakilty, Bandon, Skibbereen, and Courtmacsherry. A road from Castle Island in the county of Kerry, eastward, meets the new Boggra-road at its terminus on the Blackwater, by which a communication is opened between Castle Island and Mallow, shortening the distance from Castle Island to Cork by 22 miles. Another line connects this road with the post-line from Cork to Killarney, affording Killarney a direct communication through Mallow with Waterford. These two roads were completed in 1839, and are together 43 miles in length. A road has also been constructed by the Board of Works from Glengarriff to Kenmare. The ridge of mountain over which this road is carried is very precipitous towards Glengarriff, and the ascent resembles on a small scale some of the great passes of the Alps.

Climate, Geology, &c.—The climate is moist but genial in the south and east. The annual average of rain at Cork is about 38·26 inches. The wind blows between south and north-west for more than three-fourths of the year. The clay-slate and sandstone formation occupy the central area of the county, extending from Kerry to Waterford. Belts of carboniferous limestone occupy the vales of the Blackwater, the lower Lee, and the Bandon rivers. The Boggra and Nagles ranges consist of sandstone, which rock prevails throughout the district watered by the Lee. South of the Lee the slate-clay, on which the sandstone rests, crops out in longitudinal strata that have a uniform direction from north-north-east to south-south-west, and a prevalent dip to the south-east. This rock, varying from the hardest grit to clayey rubble, constitutes the whole of the southern portion of the county from the mouth of the Lee to the mountains of Bear and Bantry, where its elevations attain an altitude of above 2000 feet. Among these are some peaks of quartz formation, of which the most remarkable is the Sugarloaf, which rises over the Bay of Glengarriff. The veins which occupy many of the fissures of this rock abound in ores of iron, copper, lead, and manganese. The district north of the Blackwater is included partly in an extension of the central limestone plain, but chiefly in the Munster coal-field, which occupies an area of about 400 square miles in the north-west part of the county, forming a portion of the wild district above referred to. The coal of the district of the Blackwater is anthracite, or blind coal. The chief workings are at Clonbannon and Dromagh. There is abundance of iron-ore which could be made productive if coal could be had for smelting. While the county was well wooded iron works were carried on to a considerable extent. The principal copper mines of Ireland are situated at Allihais, at the extremity of the mountainous peninsula which separates Bantry Bay from Kenmare River. These mines give employment to about 1000 men. The ore contains from 55 to 65 per cent. of copper, and is valued at 8*l.* per ton. Specimens of asbestos have been found in the adjoining district of Berehaven. The soil of the coal district is cold, stiff, and moory. In the north-east and generally throughout the county wherever limestone abounds, it is warm and friable. Along the valley of the Lee is a red, crumbly, and heavy soil, which requires considerable manuring with lime or sea-sand. Throughout the schistose formations, south of the valley of the Lee, the earth is generally dry and sandy, requiring much manure to make it bear corn. Marl, fullers' earth, and clay for brick-kilns and potteries, are found in considerable abundance. The best cultivated parts of the county are the eastern portions of the basins of the Blackwater and the Lee, and the low district included between

their embouchures. The system of agriculture in these districts is good. There is a large resident proprietary, and every evidence of wealth and comfort.

Divisions, Towns, &c.—Cork county is divided into two ridings, for the purpose of holding general sessions of the peace. The baronies into which the county is divided are as follows:—East Riding—Barretts, Barrymore, Clondons and Clangibbon, Cork, Duhallow, Fermoy, Imokilly, Kerryourihy, Kinalea, Kinnatalloon, part of Muskerry East, Orrery and Kilmore, Kinsale, and Youghal Liberties. West Riding—Bantry, Bear, Carbery East and West, Courcneys, Ibane and Barryroe, Kinalmeaky, Muskerry West and part of Muskerry East. The following towns are described in separate articles:—BANDON, BANTRY, CASTLETOWN BEREHAVEN, CLONAKILTY, CORK, DUNMANWAY, FERMOY, KANTURK, KINSALE, MACROOM, MALLOW, MIDLETON, MILLSTREET, MITCHELSTOWN, QUEENSTOWN, SKIBBEREEN, SKULL, and YOUGHAL. These are all, with the exception of Queenstown, the seats of Poor-Law Unions. CLOYNE and ROSS, which give title to a bishop, are also separately described. Of places of minor importance we select the following for a brief notice here, giving in each case the population returned in the Census of 1851:—

Ballincollig, population 789, situated on the Bride River, 6 miles W. from Cork city on the road to Macroom, is rather a military and police dépôt than a village. Here are extensive gunpowder mills, formerly conducted by the government, but now by a private company. There are large barracks for artillery and police. The headquarters of the police for the province of Munster are at Ballincollig. The village is very well built, and many of the houses are of the better class. The neighbourhood is thickly studded with villa residences. About a mile west from the village are the ruins of Ballincollig castle, said to have been built in the reign of Edward III. The remains of the square keep and an inclosed bawn or space formerly defended by fortifications, stand on a limestone rock rising out of the plain. *Ballintemple*, population 473, about one mile and a half E. from Cork, is noticeable as the site of a church erected by the Knights Templars in 1392. The churchyard is still used for interments, although the church has disappeared. *Ballyclough*, population 432, about 3 miles N.W. from Mallow, contains some good houses, and has a neat and pleasing appearance. In the neighbourhood are Mount North, the seat of lord Lisle, and Lohort castle, the seat of the Percevals, earls of Egmont. The remains of Ballyclough castle stand a little way from the village. *Ballycotton*, population 603, situated at the mouth of a rivulet on the west shore of Ballycotton Bay, 6 miles S. by E. from Castlemartyr, is inhabited chiefly by fishermen. There is here a station of the coast guard. Ballycotton Islands, at the southern headland of the bay, are frequented by great numbers of sea-fowl. *Ballyhooley*, population 419, about 10 miles N. by E. from Cork, pleasantly situated on the left bank of the Blackwater, contains a church, a Roman Catholic chapel, and two schools. The neighbouring district is well cultivated and presents some good scenery. Connamore house, the fine seat of the Earl of Listowel, is in the immediate vicinity. The remains of Ballyhooley castle, formerly one of the chief fortified residences of the Roches, with the parish church, and the remains of an old church, occupy the summit of a rock near the village. A fair is held on August 26th. *Ballymacorra*, population 823, is on the Middleton River, about a mile from the town of Middleton, of which it is the port. Extensive warehouses are here for storing grain and other agricultural produce, of which large shipments are made. The neighbouring district is fruitful, and has a pleasant appearance. *Blackrock*, population 460, besides 1186 inmates of the county jail, is situated on a peninsula which projects into the Lee River, about 3 miles E. from the city of Cork, of which Blackrock is properly a suburb. Numerous villa residences are clustered together in this village and its vicinity. The public buildings include the parish church, a Roman Catholic chapel, an Ursuline monastery, and Blackrock castle, originally built in the reign of James I., as a round tower to protect the river, and repaired and enlarged in 1722 by the corporation of Cork. *Buttevant*, population 1531, is 137 miles S.W. from Dublin by the Great Southern and Western railway, on which it is a station, and 3 miles N.E. from Mallow on the River Awbeg. It was formerly a walled town, and a place of considerable ecclesiastical and feudal splendour. Two of the ancient castles remain, together with the ruins of the abbey finely situated on an eminence over the Awbeg. The Roman Catholic church is a handsome edifice of hewn limestone in the later English style. A barrack for infantry covers an area of 23 acres. There are here a fever hospital and a dispensary. Petty sessions are held. There are fairs in March, July, October, and November. *Carrigaline*, population 602, about 7 miles S.E. from Cork, at the embouchure of the Awnbuee River into an inlet of Cork harbour, although now an insignificant village was inteded by its founder, the first Earl of Cork, to compete with Cork city, a project which was stopped by the rebellion and the earl's death. Near the church, which is a neat gothic structure, are some picturesque ruins of Carrigaline Castle. There are large flour-mills here. Petty sessions are held. A fever hospital of the Cork Union district is maintained in the village. Fairs are held on Whit-Monday, August 12th, and November 8th. *Carrigtohill*, population 885, about 10 miles E. from Cork, on the road to Waterford, has a small church, a Roman Catholic chapel, and several schools. In

the vicinity are some remains of circular entrenchments, and numerous subterranean chambers or cellars. Fairs are held here in March, May, August, September, and November. Barry's Court, formerly called Castle Cloydubh, a lofty building in the square form, was originally erected in the 13th century, and was a place of considerable strength. In 1580 it was set fire to by the then proprietor, Lord Barry, to prevent it falling into the hands of Captain, afterwards Sir Walter Raleigh, who had orders to seize the castle. It has been repaired within the last few years, and is now inhabited. *Castlelyons*, population 479, about 4 miles S. by E. from Fermoy, contains some remains of a Dominican friary. The linen manufacture is carried on. There are here a church and a Roman Catholic chapel. Six fairs are held in the course of the year. *Castlemartyr*, population 1800, about 5 miles E. from Midleton, once a parliamentary borough, is now only a village, but has a neat appearance. In the vicinity the Earl of Shannon's demesne of Castlemartyr, with the ruins of its ancient castle, its plain modern mansion, and its extensive plantations, add much to the interest of the scenery. There are also numerous villa residences in the neighbourhood. There are a fever hospital and a dispensary. The market-house belongs to the Earl of Shannon. Fairs are held on May 2nd and October 2nd. *Castletownroche*, population 983, pleasantly situated on the Awbeg, 6 miles below Doneraile, and 1 mile above the junction of the Awbeg with the Blackwater, 147 miles S.W. from Dublin by way of Buttevant, is a remarkably picturesque village. The ancient castle of the Lords Roche, from which it derives its name, stands on a rock rising abruptly from the river, and forms a conspicuous object in the surrounding landscape. It has been modernised, and is still inhabited. Petty sessions are held here, and fairs on May 25th, July 25th, and December 12th. Edmund Burke attended the village school when a boy, his father being a resident in the neighbourhood. *Castletownsend*, population 570, a bathing village, pleasantly situated on the western shore of Castlehaven, about 4 miles S.E. by E. from Skibbereen. The custom-house for the port of Baltimore is at Castletownsend, and there is a station of the coast guard. The parish church stands within the demesne of Castletownsend, adjoining the village. *Charleville*, population 2660, besides 2274 in the workhouse, hospital, and bridewell, 129½ miles S.W. from Dublin by the Great Southern and Western railway, on which it has a station, is a well situated, compact, thriving town. The principal street extends about a mile along the old mail-coach road from Cork to Limerick, and is wide and neatly built. The Roman Catholic chapel is large and handsome. The town, which is situated in the midst of a rich tillage country, owes its origin to Lord Broghill, son of the first Earl of Cork, who founded it as a purely Protestant borough. The great majority of the inhabitants are now Roman Catholics. Charleville formerly sent two members to the Irish Parliament, but was disfranchised at the time of the Union. The manufacture of blankets and leather is carried on to a small extent. Petty sessions are held. There are a station of the constabulary, a bridewell, a dispensary, and a fever hospital. Fairs are held on October 10th and November 12th. *Churchtown*, population 249, reduced from 638 in 1841, situated midway between Buttevant and Doneraile, about 142 miles S.W. from Dublin, is a large, neat village, with a handsome church. It is the property of the Earl of Egmont, who takes his title from a townland in this parish. This part of the county of Cork abounds in military and ecclesiastical remains. [KANTURK.] *CLOYNE*, which gives title to a bishop, is described in a separate article. *Courtmacsherry*, population 526, about 6 miles E. from Clonakilty, situated on the south shore just within the entrance of Courtmacsherry Bay, is the station of a fishery and possesses some trade. A good deal of corn is exported. Near the village is Courtmacsherry House, the marine villa of the Earl of Shannon. There is here a station of the coast-guard. *Doneraile*, population 1856, situated on the Awbeg, about 142 miles S.W. from Dublin, is a neat, small town, formerly the residence of the Lords President of Munster. It contains a church, a Roman Catholic chapel, a small convent, and a court-house. Petty sessions are held here. Fairs are held on August 12th and November 12th. Doneraile town gives title to the family of St. Leger. The ruins of Killecoleman Castle, the residence of the poet Spenser, stand about 2 miles north of the town in a somewhat bleak situation on the declivity of the hill of Ballyorra. Recent investigation has shown that Spenser's wife was one of the St. Leger family ('Proceedings of the Royal Irish Academy,' 1850.) *Douglas*, population 758, about 2 miles from Cork, but regarded as a suburb of that city, is situated at the head of an inlet of Cork harbour. It has a sail-cloth manufactory and a rope-work. Numerous handsome villas adorn the vicinity. *Glanworth*, population 869, is a large village, about 4 miles N.W. from Fermoy, situated on the Funcheon River, an affluent of the Blackwater, which runs nearly parallel to the Awbeg. It was at one time a corporate town of some importance. Near the village are the remains of a castle which appears to have been of considerable strength. A Dominican monastery formerly stood here. Besides the parish church, which is an old building, there are a chapel for Roman Catholics and several schools. Six fairs are held in the course of the year. *Innishannon*, population 520, situated on the left bank of the river Bandon, about 4 miles N.E. from Bandon, was formerly a place of importance, but is now a mere village, with a small trade in

linen. By the Bandon river vessels can come up to Innishannon from Kinsale harbour. Petty sessions are held monthly, and fairs on May 29th and October 3rd. A dispensary of the Bandon Poor-Law Union is stationed here. *Kildorrery*, population 497, a small post-town, situated near the right bank of the Funcheon River, 4 miles W. by S. from Mitchelstown. There are here a Roman Catholic chapel and a dispensary of the Mitchelstown Poor-Law Union. Petty sessions are held monthly, and fairs in May, June, September, and November. *Kilworth*, population 1185, about 2 miles N.N.E. from Fermoy, is situated near the left bank of the Funcheon River, at the base of the Kilworth Mountains, on the road from Clogheen to Fermoy, in a favourable situation for manufactures; but the great water-power here available has hitherto been only applied to flax-dressing on a small scale. The town consists chiefly of one long street, which contains several good dwellings. Besides the parish church, which is ancient, there is a Roman Catholic chapel. The market-house is a neat building. The river is crossed here by a bridge of six arches. There are some corn-mills. Several fine mansions are in the vicinity. Fairs are held six times in the year. *Liscarrow*, population 531, a mile west from Churchtown, is a poor village with the remains of a noble castle. The erection of the castle is ascribed to King John. It forms a quadrangle of 240 feet by 120 feet, and was flanked by four circular and two quadrangular towers. Sir Philip Perceval, the ancestor of the Egmont family, surrounded it with a fosse and covered-way in 1641. Petty sessions are held here, and there are fairs on May 1st and 31st, August 31st, and November 29th. *Monkstown*, population 454, situated about a mile S. from Passage, on the west shore of Cork harbour, opposite Queenstown, is an agreeable bathing place, containing several good residences. The parish church is a neat modern edifice, with a tower and spire. On an elevated site near the town stand the ruins of Monkstown Castle, erected by Eustace Gould in 1636. The name of the town was derived from a Benedictine monastery, founded here in the 14th century. Fairs are held in March, May, August, and November. *Newmarket*, population 1265, besides 556 in an auxiliary workhouse of the Kanturk Poor-Law Union, situated on the river Allua, about 4 miles N.W. from Kanturk, is, as its name implies, a market-town. It consists chiefly of two streets, containing several good dwelling-houses. In the town are the parish church, a Roman Catholic chapel, several schools, a fever hospital, and a dispensary. John Philpot Curran was a native of Newmarket, and received his earliest instructions at a small school in the town. Fairs are held on June 8th, September 8th, October 10th, and November 21st. *Passage*, population 2857, about 6 miles E.S.E. from Cork, is pleasantly situated on the west side of Cork harbour, opposite Great Island. There are here dock-yards. A church, a Roman Catholic chapel, and a Wesleyan Methodist chapel are in the town. Petty sessions are held here. Passage is much frequented as a bathing place, and there are numerous villas in the vicinity. *Rathcoormack*, population 971, about 14 miles N.N.E. from Cork, on the left bank of the Bride River, consists chiefly of one street. Besides the parish church there are here a Roman Catholic chapel, a chapel for Methodists, several schools, a session-house, and a fever hospital. Petty sessions are held monthly, and fairs on August 12th and October 29th. Rathcoormack had a charter of 33 Charles II., conferring the power to send members to Parliament. Ross, or ROSS-CARBERY, which gives title to a bishop, is described separately. *Timeleague*, population 393, about 4 miles E.N.E. from Clonakilty, at the mouth of the estuary of the Arrigadeen River, is chiefly to be noticed for the remains of its once famous abbey, said to have been founded in the 14th century. There are also some vestiges of an old castle. Petty sessions are held monthly, and fairs four times in the year. *Watergrasshill*, population 651, about 9 miles N.E. by N. from Cork, is situated on the summit of the lofty tract of country which rises between the valley of the Lee and that of the Blackwater. The ground in the vicinity of the town is the highest under cultivation in the district. The general appearance of the surrounding district is bleak and barren. The town contains a small Episcopal chapel, a Roman Catholic chapel, and a dispensary. *Whitegate*, population 1228, about 5 miles S.W. from Cloyne, is situated on the east side of Cork harbour. Many of the inhabitants are employed in fishing. In the neighbourhood are several good mansions. Carlisle Fort, one of two fortifications by which Cork harbour is defended, stands near the village. There is here a station of the coast-guard.

Industry.—The linen and woollen manufactures at one time flourished in several towns of this county. Of late considerable efforts have been made to revive the linen manufacture. The growth of flax has been extensively promoted. Scutching-mills have been put up in various parts of the county, and an establishment was opened a few years ago at Drimoleague, near Skibbereen, for steeping the flax by an improved process. The cultivation of green crops has been considerably extended in consequence of the potato failure; and the condition of the southern districts of the county has been materially improved. The fisheries along the coast are important. The head-quarters of the various fishery districts are Youghal, Queenstown, Kinsale, Skibbereen, and Castletown. These districts comprise in all 389 miles of maritime boundaries, employing about 5000 registered fishing vessels, and about 25,000 men and boys.

Before the coming of the English, Cork was a separate kingdom, of which the princes were the Mac-Carthy's. The ancient kingdom of

Cork included, besides the present county, a considerable tract in Kerry and Limerick. In 1172 Dermot MacCarthy, king of Cork, swore fealty to King Henry II., but broke his engagements, and the kingdom thus forfeited was bestowed by King Henry in 1177 on Robert Fitz-Stephen and Milo de Cogan. The city of Cork, with the cantred adjoining, was reserved to the king. Fitz-Gerald, the eighth earl of Desmond, a descendant of De Cogan, found himself in possession of almost the entire kingdom of Cork; but assuming to himself the right of levying separate exactions on the king's subjects, after the Irish manner, he was attainted of treason and beheaded at Drogheda, 15th February 1467. Gerald, the fifteenth and last earl, possessed territory to an amount almost unexampled in the history of private property in Ireland. His estates extended upwards of 150 miles throughout the counties of Waterford, Cork, Kerry, and Limerick, and comprehended an area of 574,628 acres, according to the rough estimate of those times, the calculation seeming to have reference only to profitable land. When Simnel and Warbeck endeavoured to engage the English people in favour of their pretensions, many of the Irish nobility who were of English descent left their estates in Ireland in order to render assistance. While they were absent in England the Irish returned from their fortresses and overran the new plantations.

On the breaking out of the northern rebellion in Elizabeth's time, Cork was considered the fittest place for an attempt in favour of the Catholic cause under the auspices of King Philip of Spain, to whom the country had been offered by Pope Gregory XIII. The principal Irish agent in bringing about the invasion was James Fitz-Maurice, the brother of the fifteenth earl. The war which ensued was predatory and sanguinary on both sides, and lasted till November 1583, when the Earl of Desmond, after losing all his castles, and being driven to lurk for months together in the woods, was put to death by one Kelly. The forfeited estates were divided into seigniories, and granted to English adventurers. Upwards of 20,000 acres fell to Sir Walter Raleigh, who had been active in the suppression of the rebellion. In 1602 Sir Walter Raleigh conveyed his proportion in Cork and Waterford for a small sum to Sir Richard Boyle, afterwards earl of Cork. On the breaking out of the rebellion of 1641 the English were generally successful in retaining the walled towns and castles. Lord Castlehaven had some successes on the other side in 1645, taking Mitchelstown, Lisacarro, Mallow, Doneraile, and various castles north of the Blackwater in this county; but these places did not long remain in his hands. Two important engagements took place in the county in 1642 and 1647, in both of which the Irish were defeated. About 1657 Lord Broghill began to agitate the question of the restoration, which event he was mainly instrumental in bringing about in 1660; he was subsequently created Lord Orrery, and advanced to the presidency of Munster. During the war of the Revolution this county was again the theatre of a desultory but sanguinary series of conflicts between the native Irish of the rural districts and the militia of British descent.

The antiquities of Cork county are chiefly military, and comprise some of the finest buildings of the kind in Ireland. The castle of Kanturk, built by M'Donogh, Prince of Duhallow, is a quadrangle of 120 feet by 80 feet, and about 70 feet in height. Lohort castle, built in King John's reign, is a massive keep 80 feet high. Lisacarro castle, of the same date, is already noticed. Blarney castle, built by Cormack M'Carthy in 1449, is still a fine ruin, though only one-fourth of the original building is now standing: the walls are 18 feet thick, and the great tower 90 feet high. The other castles still standing in the county are very numerous, and of great historical interest.

Cork county lies within the dioceses of Cork, Cloyne, Ross, and, to a small extent, in Ardferit and Aghadoc. Cork is the assize-town. The county jail, about three-quarters of a mile from the city, is considered the most perfect institution of the kind in Ireland. There are 18 bridewells in the other principal towns. Quarter sessions for the east riding are held at Cork, Fermoy, Kanturk, Kinsale, Mallow, Midleton, and Youghal; for the west riding at Bandon, Bantry, Clonakilty, Macroom, and Skibbereen. The county infirmary and lunatic asylum are at Cork: there are fever hospitals at Cork and 15 other towns, and 71 dispensaries in the county. Cork city is the head-quarters of the Cork military district: there are 17 barrack stations in the county. A convict establishment commenced in 1847 is maintained on Spiko Island. The constabulary force numbers in all 647, including officers; in the east riding there are 12 districts with 79 stations; the west riding has 8 districts and 50 stations. The east riding has 19, and the west riding 33 stations of the coast-guard, including in all 29 officers and 246 men. In 1851 there were three savings banks in the county—at Cork, Fermoy, and Youghal. The amount owing to depositors on November 20th, 1851, was 303,728*l.* 14*s.* 7*d.*

The county was represented in the Irish Parliament by 26 members, of whom two were returned by the county, two by the city of Cork, and two each by the boroughs of Kinsale, Youghal, Bandon, Mallow, Doneraile, Rathcormack, Midleton, Charleville, Castlemartyr, Baltimore, and Clonakilty. With the exception of Cork, Bandon, Mallow, Kinsale, and Youghal, these boroughs, at the time of the Union, lost their privilege of representation. The representation in the Imperial Parliament is now confined to two members

for the county at large, two for Cork city, and one for each of the boroughs of Youghal, Bandon, Mallow, and Kinsale.

(Smith, *History of the County of Cork*; Cox, *History of Ireland*; *Ordnance Survey Map*; Thom, *Irish Almanac*.)

CORK, Ireland, a municipal and parliamentary borough, an episcopal city, a county in itself, and the seat of a Poor-Law Union, is situated in 51° 53' N. lat., 8° 20' W. long., distant 166 miles S.W. from Dublin by the Great Southern and Western railway. The population of the municipal borough in 1851 was 85,745, besides 4277 in the workhouse and other public institutions. The borough is governed by 16 aldermen and 48 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The public works are under the care of various bodies of commissioners. Cork Poor-Law Union comprises 28 electoral divisions, with an area of 169,828 acres, and a population in 1851 of 167,450.

The city is situated on the river Lee, about 7 miles above the expansion of that river which forms the land-locked harbour of Cork. The central part occupies the eastern half of an island about two miles in length and half a mile in breadth at the widest part, formed by the north and south channels of the Lee. The remainder of the city is built on the declivities of the river banks; the northern section extending to the distance of about a mile northward with a steep ascent along the leading road to Mallow, and the southern lying along a gentle slope parallel with the river. The name of the city (*Corcaigh*) indicates the marshy nature of the site on which it is built. The city is lighted with gas, and well supplied with water. Among the public buildings in the insular part of the city are the custom-house, the commercial buildings, the county club-house, and the chamber of commerce. The city and county court-house, erected in 1835, at a cost of 22,000*l.*, has an octostyle Corinthian portico, surmounted by colossal emblematic figures of Justice, Law, and Mercy. The columns, which are 30 feet high and advanced 20 feet in front of the building, rise from a platform 7 feet above the level of the street.

From the island a fine approach to the city is afforded through Great George-street and along the Western-road. In the northern part of the city are the city jail, and extensive barracks. The church of St. Anne Shandon stands on the ascent of the hill, and as its tower rises 170 feet high, it makes a conspicuous appearance. On the south side of the river are the corn exchange, the lunatic asylum, the cathedral, the Queen's college, and the county jail. The cathedral is a plain oblong building, almost wholly of modern erection. A pointed doorway, and the tower, which is surmounted by an octagonal spire, are the principal portions of the old building remaining. The diocesan library stands to the east of the cathedral. On the west is the episcopal palace, and to the west of this, on a bold site overlooking the gardens and promenades of Mardyke, from which it is separated by the south channel of the Lee, stands the Queen's college. The northern front, extending 300 feet, exhibits a bold elevation in the later English style. An entrance tower, 70 feet high, and an examination hall, advanced beyond the line of the façade, are conspicuous features. The interior quadrangle is cloistered on two sides. The material of the building is gray limestone. Both branches of the river, with the exception of a portion of the southern channel, are quayed throughout the whole extent of the city. The river is crossed by nine bridges, of which the principal are St. Patrick's bridge, of three arches, leading to St. Patrick's street from the northern side of the river, and Anglesey bridge, of cast metal, opposite the corn exchange, with a drawbridge to admit vessels to the upper quays of the south branch of the river. A tract of 240 acres has recently been reclaimed from the bed of the river, and laid out in walks and carriage drives as a city park.

Besides the cathedral there are in Cork six parish churches and two chapels of ease, three Roman Catholic parochial chapels, four monasteries, and two nunneries, each having a chapel attached; two chapels for Presbyterians, four for Methodists, two for Baptists, one for Independents, and one for Quakers. Of the Roman Catholic places of worship, the most spacious is the united parish chapel of St. Mary's and St. Anne's, Shandon, which serves as the cathedral of the diocese. It is externally a plain building in the later English style, but very richly decorated in the interior. Brickfield chapel of ease is a handsome edifice in the Grecian style, with an elegant portico of eight columns of gray marble, and a Corinthian eupola surmounted by figures of the Apostles. St. Mary's chapel, on Pope's Quay, in the northern division of the city, has an Ionic portico of six columns. The Roman Catholic chapel on Charlotte's Quay, adjoining the South Mall, erected a few years back by the very Rev. Theobald Mathew, the celebrated advocate of Temperance, is a rich and striking specimen of the pointed gothic, built in gray limestone. The front has an open portico of three lofty arches, with a screen of rich tracery in the centre arch, forming a porch. The building consists of a nave and aisles, with flying buttresses. The spire and tower, which are of light and graceful proportions, rise to a height of 200 feet. The cost of the building exceeded 20,000*l.*, to which Mr. Mathew contributed 10,000*l.*

The literary and scientific institutions are, besides the Queen's College, the Royal Cork Institution, incorporated in 1807, for "diffusing the knowledge and facilitating the general introduction of improvements in arts and manufactures, especially in agriculture;"

the Cork Library Society; the Mechanics Institute; the Agricultural, Horticultural, and Cuvierian societies; and an Art-Union. The Cork Institution is established in the old custom-house, a large brick building on the northern branch of the river, where there is a library, an observatory, a museum of physical and experimental philosophy, and a gallery of casts from the antique. The casts in the museum of the institution were originally presented by King George IV. to the Cork Society of Arts. This society was for a time eminently successful, and numbers among its former pupils some of the most distinguished artists of the day in painting and sculpture, for which arts the Cork youths are considered to possess a natural genius. The former botanical gardens attached to the Cork Institution, situated on the south-eastern outskirts of the city, near the workhouse, were purchased by the very Rev. Mr. Mathew, and have been converted into a cemetery on the plan of that of Père la Chaise at Paris.

Of the charitable institutions the principal until the new Poor Law superseded it was the Foundling hospital, originally intended as a workhouse. The hospital derived its income from a tax of one shilling per ton on all coals that came into the harbour. This impost is now abolished. Skiddy's almshouses, Bertridge's charity, the Blue-Coat hospital, and Green-Coat hospital, are charitable foundations in which relief is extended solely to Protestants. There are also two infirmaries and a Fever hospital, two Lying-in hospitals, two Houses of Refuge for destitute females, a general dispensary, and a number of minor charities and benevolent institutions. A sum of 30,000*l.* was in 1833 bequeathed by a Mr. Lapp for the support of the aged Protestant poor of the city.

The river banks from a distance of several miles above the city to Cork Harbour, are richly planted and studded with villas. The scenery from Cork to Passage by the river is particularly fine, the banks on both sides being continuously occupied with the ornamental planting and pleasure-grounds of a series of villa residences. Blackrock Castle, a picturesque tower used by the corporation of Cork as conservators of the river, and serving as a lighthouse, is situated about four miles below the city on the southern bank of the river, and is surrounded by scenery of great luxuriance. Below Blackrock Point the Lee forms a sheet of water called Lough Mahou, which is crossed at its narrowest part by a ferry between Passage and Great Island, and three miles farther south expands into the noble land-locked harbour of Cork. The northern portion of the basin of which Cork Harbour proper forms only a portion, is occupied by Little Island, Foaty Island, and Great Island, separated from one another and (on all sides but the south) from the mainland by narrow estuaries. The expanse of deep water included between Great Island and the southern shore of the basin is from 2 to 3½ miles from north to south by from 2 to 6 miles from east to west. The entrance from the sea is 2 miles long and three-quarters of a mile broad, and is defended by Carlisle fort at the eastern entrance and Camden fort at the western entrance. Spike Island, Rocky Island, and Hlawbowline Island lie on the western side of the harbour, and are occupied respectively by a convict dépôt and strong fortifications, a powder magazine, and naval and ordnance stores and warehouses. On the south side of Great Island, overlooking the luner harbour, is Cove, now Queenstown. Here is unlimited anchorage for the largest ships. [QUEENSTOWN.] Within the last few years great improvements have been made in the navigation of the river, and vessels of 600 tons can now unload at the quays. Belonging to the port are 140 pilots, who are under the care of the harbour commissioners. The number and tonnage of vessels registered as belonging to the port on December 31st 1852 were:—Under 50 tons, 160 sailing vessels, tonnage 3672; above 50 tons 232, tonnage 41,608: steam vessels, under 50 tons 7, tonnage 214; above 50 tons 16, tonnage 4671. The number and tonnage of vessels which entered and cleared at the port during 1852 were:—Coastwise, sailing vessels, inwards 1670, tonnage 135,657; outwards 1266, tonnage 84,465: steam vessels, inwards 249, tonnage 100,042; outwards 255, tonnage 102,145. Colonial, inwards 53 vessels, tonnage 14,388; outwards 75, tonnage 19,536. Foreign, inwards, British vessels 202, tonnage 39,675; foreign vessels 162, tonnage 37,933: outwards, British vessels 62, tonnage 12,494; foreign vessels 142, tonnage 33,608.

The school of St. Barr is supposed to have first drawn inhabitants to the locality. The city walls were built by the Danes in the 9th century, and afterwards repaired by King John. About 1620 Cork was counted the fourth city of Ireland, being inferior both to Waterford and Limerick. In 1690 it endured a siege conducted by the Duke of Marlborough, with a force of about 10,000 foot and 1200 horse, against which it held out for five days. The city has increased greatly since the beginning of the last century. The island was formerly intersected by numerous canals, which have been arched over from time to time, and now form the principal modern streets. The Grand Parade was thus formed in 1780; Patrick-street in like manner in 1783; and Nile-street in 1795. The South Mall, the best street in Cork, and Nelson's Place, had a similar origin. The insular appearance of the central part of the city is thus in great measure removed.

The enlargement of the city has been accompanied by the gradual draining and reclaiming of the adjoining marshes. These improvements were chiefly effected about 1720-30. The appearance of the city is somewhat marred by the practice of weather-slating the

street fronts of many of the houses. The stone generally employed in building is clay-slate of a dark colour.

A considerable amount of trade is carried on in Cork. The chief import trade is that of timber, of which the annual average is 15,000 tons. The principal articles of export are bacon, butter, corn, live stock, provisions, and linen. Cork butter holds a very high character in the market, chiefly owing, it is said, to the superior cooorage of the casks. Manufactures of glass, metal castings, gloves, leather, and woollen cloth are carried on. There are numerous and very extensive distilleries and breweries, and a large manufacture of flour meal. The foreign and colonial trade is principally with Portugal, the Mediterranean, the Baltic, and Canada. The amount of customs duties in 1851 was 236,531*l.* The city is the assize town for the county of Cork and is on the Munster circuit.

The see of Cork is in the archdiocese of Dublin and Cashel. The chapter consists of a dean, chanter, chancellor, treasurer, archdeacon, and 12 prebendaries. The diocese stretches across the central district of the county of Cork, and includes the county of the city. It extends in length, from east to west 74 miles, and from north to south 16 miles. It contains 83 parishes, constituting 77 benefices. The foundation of the see is ascribed to St. Barr, about the beginning of the 7th century. It became united to Cloyne about 1464, and so continued till 1586, when together with Cloyne it was annexed to the diocese of Ross. In 1678, these dioceses were again divided, Cork and Ross going together, and Cloyne forming a separate diocese. By the Act 3rd and 4th Wm. IV. c. 37, called the Church Temporalities Act, these sees again became united, and the income of the bishop was fixed at 2498*l.* per annum.

(*Ordnance Survey Map*; Smith, *History of the County of Cork*; Lewis, *Topographical Dictionary*; Thom, *Irish Almanac*.)

CORNOUAILLES, a county in Basse-Bretagne, in France, of which Quimper-Corentin was the capital. It comprised the dioceses of Quimper and St. Pol-de-Leou, and is now divided among the departments of Côtes-du-Nord, Finistère, and Morbihan. In the time of Julius Cæsar this district was inhabited by the Curiosoliti and the Osismii. The name souve derive from 'Cornu Gallie' (extremity of Gaul), others from the English 'Cornwall,' whence they say a number of the ancient Britons emigrated to this part of Bretagne.

CORNUS. [AVEYRON.]

CORNWALL, an English county, forming the south-west extremity of the island of Great Britain. The form of the county approaches that of a right-angled triangle, of which a line about 70 miles long, drawn east-north-east and west-south-west from Penlee Point at the entrance of Plymouth Sound to the Land's End, may be regarded as the base; another line 42 miles long, drawn north-north-west and south-south-east from Penlee Point to the north-east corner of the county as the perpendicular; and a line 81 miles long drawn north-east and south-west from the last-mentioned point to the Land's End as the hypotheuse. Cornwall lies between 49° 56' and 50° 56' N. lat., 4° 7' and 5° 42' W. long. The area of the county, exclusive of the Scilly Isles, is 1365 square miles, being rather less than the area of the triangle above described. The population of Cornwall, including the Scilly Islands, was 355,558 in 1851, being 259 persons to a square mile, the general average for England and Wales being 307 persons to a square mile.

The only county with which Cornwall is contiguous is Devonshire, which bounds it E.N.E.; on all other sides it is surrounded by the ocean. The north-west coast is high and rocky. Tracing it from the border of Devonshire it runs south by west, and forms two very shallow bays (Bude Bay and Widemouth Bay), succeeded by the headlands Dazard Point, Castle Point, Penkener Point, and Carnbeak. From Carnbeak the coast runs south-west and forms several headlands, Tintagel Head being the principal; and several small bays as far as Pentire and Stepper Points, near the mouth of the river Alan or Camel, the entrance of which forms the haven of Padstow. A few miles W.S.W. from these is Trevoze Head, the most prominent headland on this side of the county: this is succeeded by Constantine, Watergate, and Towan bays, Towan Head, Fistal, Cranstock, and Holywell bays, Penhale Point, Ligger or Perran Bay, and St. Ives Bay, Gurnard's Head, Cape Cornwall, Polpry and Peden-Mean-Due Points, the last of which is less than a mile from the Land's End. The general direction of the coast from Trevoze Head to Cape Cornwall is south-west; from Cape Cornwall to the Land's End due south. Along this side of the county are scattered several islets and insulated rocks, but nothing that is worthy of notice. Off the Land's End are the Scilly Islands, a numerous and not unimportant group. [SCILLY ISLANDS.]

The coast from Land's End to Plymouth Sound is marked by bolder promontories and deeper bays, and has more frequent intervals of low and shelving beach. From the Land's End to Mount's Bay the coast forms a line convex to the ocean, broken by a number of small headlands with intervening coves. Mount's Bay takes its name from St. Michael's Mount, a remarkable insulated rock opposite the town of Marazion, and connected with the mainland by a causeway over the sands; Cuddan Point forms the eastern boundary of the bay. From Cuddan Point the coast runs south-east to the Lizard, the most southern point of England; and thence turning north-east forms the headlands of Innis Head, Black Head, Chynals Point,

Dranna Point, Nare Point, Rosemullion Head, and Pendennis Point, which last two form the extremities of Falmouth Bay. Between Nare Point and Rosemullion Head is the wide estuary of the Helford River. Between Pendennis Point and Zono or St. Anne's Point (the next important headland) is the wide estuary of the Fal, known by the name of Carrick Road, of which Falmouth harbour and St. Mawes harbour are branches. From Zono Point the coast still runs north-east to Greber Head, forming Gerrans, Verryan, Mervagissey, St. Austell, and St. Blazey bays, with the intervening headlands Pennare Point, Dodman or Deadman Point (379 feet high), Chapel Point, and the Black Head. From Greber Head the coast runs east to the Raine Head and Penlee Point (which is the entrance of Plymouth Sound), forming Looe and Whitesand bays. The rocks and islets along this coast are too unimportant to require notice.

Launceston, which has commonly been considered as the county town, is on the eastern border of the county; but Bodmin, which has a better title, is more central: it is about 210 miles W.S.W. from London in a direct line, or 234 miles by the road through Salisbury and Exeter.

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The principal rivers of Cornwall are the Tamer, with its tributaries; the Fawey, or Fowey; the Fal; the Alan; the Seaton; the Looe; the Hel, or Helford; and the Heyl. The Tamer rises by Moorwinstow, in the moors which form the north-east point of the county and extend into Devonshire, and flows south-south-east into Plymouth Sound, forming almost throughout its entire course the boundary between Cornwall and Devonshire. It has some small tributaries called the Deer, the Claw, the Werington, the Attery, the Lyd, and the Inny. Below the junction of the Inny the course of the Tamer, hitherto tolerably straight, becomes more sinuous, especially where it skirts the base of Illegston Down. The bed of the river then widens and it becomes an estuary, or tide-water. Near its mouth it receives the Tavy from Dartmoor forest, and the Lynher or St. German's River from the downs between Launceston and Bodmin. The whole course of the Tamer is about 59 miles; it is tidal for about 19 miles. The Fawey, or Fowey, rises on the east side of Brown Willy, to the right of the high road from Launceston to Bodmin. It flows south-south-east for several miles, and then turning westward receives on the right the rivers St. Neot's and Warleggan, besides a number of brooks: it then turns south, and passing Lostwithiel falls into the sea at the borough of Fowey. It is not navigable above the point to where the tide flows. Its whole length is about 30 miles; the tide flows about 6 miles up—formerly it flowed higher. The Alan, or Camel (that is, the Crooked River) rises near Davidstow, about 3 miles N.N.E. from Camelford, and flows south by west past Camelford, afterwards to the south-west, then north-west to Padstow, a little below which it falls into the Bristol Channel between Pentire Point and Trevoze Head, on the north-west coast. Its whole course is about 29 miles, of which about 3 miles are navigable. The mouth of the Camel forms a harbour for ships of 200 tons. The Fal rises in Tregoss Moor, near the high road from Bodmin to Truro, and flows south or south by west to Grampound and Tregony, receiving in its course the water of a number of brooks. From Tregony it flows south-west 5 or 6 miles into the Mopus Road, formed by the waters of St. Clement's Creek, which rises near St. Michael or St. Mitchell and flows south by west, and of the rivers St. Allon, Kenwin, and another, which meet at Truro just before they join St. Clement's Creek. From its junction with the Mopus Road the Fal flows southward into Carrick or Carrog Road, where it is joined by a river from the neighbourhood of Redruth. Falmouth Harbour is an inlet of Carrick Road on the west side; St. Mawes Harbour is another inlet on the east Road. The

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Geology, Mineralogy, &c.—The rocks which predominate in Cornwall are among the lowest in the arrangement of the strata of our island, and belong to the primitive and transition classes. The high land which occupies the centre of this peninsular county, and extends from between Launceston and Bodmin on the north-east to the Land's End on the south-west, is composed of granite, which in several extensive districts rises to the surface. Occasional veins or 'shoots' from this granite formation penetrate northward and southward into the superincumbent strata; but they do not generally extend far from the principal masses of granite; they are frequently insulated. The granite of Cornwall contains numerous metallic veins, both of copper and tin. It is liable to decomposition, to which cause is ascribed the existence of a tract of loose white kaolin or porcelain earth, some miles in extent, near St. Stephen's, between Bodmin and Grampound, and on the south side of the granite range: this kaolin is sent to Worcestershire for use in the porcelain manufacture. The decomposition of granite has probably formed those singular phenomena which were once generally regarded as Druidical relics, the Logan Stone, Cheese-wring, &c. St. Michael's Mount, in Mount's Bay, is chiefly composed of granite split into irregular masses. Granite is termed by the Cornish miners 'grouan.'

The rock commonly reposing on the granite is the 'killas' of the miner, the grauwacke of the geologists. (De la Beche.) Grauwacke, indeed, forms the principal rock of Cornwall. On the south or south-east side of the granite formation, the strata dip south-east at an angle of about 70 degrees: on the opposite side of the granite formation the dip is nearly north-east. The killas is traversed by veins or dykes of granitic and felspar porphyry, termed by the miners 'Elvan.' These dykes (or channels in the language of the miners) are rarely found in the granite; their general direction on the surface is, according to Mr. Greenough's Geological Map, and the Geological Map of the Ordnance Survey, north-east and south-west; they vary from a few fathoms to 50 and even 80 fathoms in thickness; and in some cases are continuous through a long tract of country. The metallic veins, both of tin and copper, commonly pass through them, but are for the most part narrower when in the Elvan than when in the superincumbent and subjacent rocks. Roofing-slate is quarried in the killas formation near Tintagel Head. The metallic veins which contain copper or tin, or both, run usually east and west, and penetrate both the granite and clay-slate; those which contain lead, silver, cobalt, or antimony, run north and south, with little exception, and are believed to be always in the clay-slate.

The Lizard Head is composed of mica-slate, which however occupies a very limited area; the neighbouring country is composed of hornblende and diallago rocks, but chiefly of serpentine. Near the Lizard are veins of soap-stone, which, when first raised, is so soft that it may be kneaded like dough, but becomes friable after being exposed to the air; it is used in the manufacture of porcelain. The serpentine incloses and passes into asbestos, and small quantities of native copper have been found in it.

the Cork Library Society; the Mechanics Institute; the Agricultural, Horticultural, and Cuvierian societies; and an Art-Union. The Cork Institution is established in the old custom-house, a large brick building on the northern branch of the river, where there is a library, an observatory, a museum of physical and experimental philosophy, and a gallery of casts from the antique. The casts in the museum of the institution were originally presented by King George IV. to the Cork Society of Arts. This society was for a time eminently successful, and numbers among its former pupils some of the most distinguished artists of the day in painting and sculpture, for which arts the Cork youths are considered to possess a natural genius. The former botanical gardens attached to the Cork Institution, situated on the south-eastern outskirts of the city, near the workhouse, were purchased by the very Rev. Mr. Mathew, and have been converted into a cemetery on the plan of that of Père la Chaise at Paris.

Of the charitable institutions the principal until the new Poor Law superseded it was the Foundling hospital, originally intended as a workhouse. The hospital derived its income from a tax of one shilling per ton on all coals that came into the harbour. This impost is now abolished. Skiddy's almshouses, Bertridge's charity, the Blue-Coat hospital, and Green-Coat hospital, are charitable foundations in which relief is extended solely to Protestants. There are also two infirmaries and a Fever hospital, two Lying-in hospitals, two Houses of Refuge for destitute females, a general dispensary, and a number of minor charities and benevolent institutions. A sum of 30,000*l.* was in 1833 bequeathed by a Mr. Lapp for the support of the aged Protestant poor of the city.

The river banks from a distance of several miles above the city to Cork Harbour, are richly planted and studded with villas. The scenery from Cork to Passage by the river is particularly fine, the banks on both sides being continuously occupied with the ornamental planting and pleasure-grounds of a series of villa residences. Blackrock Castle, a picturesque tower used by the corporation of Cork as conservators of the river, and serving as a lighthouse, is situated about four miles below the city on the southern bank of the river, and is surrounded by scenery of great luxuriance. Below Blackrock Point the Lee forms a sheet of water called Lough Mahon, which is crossed at its narrowest part by a ferry between Passage and Great Island, and three miles farther south expands into the noble land-locked harbour of Cork. The northern portion of the basin of which Cork Harbour proper forms only a portion, is occupied by Little Island, Foaty Island, and Great Island, separated from one another and (on all sides but the south) from the mainland by narrow estuaries. The expanse of deep water included between Great Island and the southern shore of the basin is from 2 to 3½ miles from north to south by from 2 to 6 miles from east to west. The entrance from the sea is 2 miles long and three-quarters of a mile broad, and is defended by Carlisle fort at the eastern entrance and Camden fort at the western entrance. Spike Island, Rocky Island, and Hawlbowlie Island lie on the western side of the harbour, and are occupied respectively by a convict depot and strong fortifications, a powder magazine, and naval and ordnance stores and warehouses. On the south side of Great Island, overlooking the inner harbour, is Cove, now Queenstown. Here is unlimited anchorage for the largest ships. [QUEENSTOWN.] Within the last few years great improvements have been made in the navigation of the river, and vessels of 600 tons can now unload at the quays. Belonging to the port are 140 pilots, who are under the care of the harbour commissioners. The number and tonnage of vessels registered as belonging to the port on December 31st 1852 were:—Under 50 tons, 160 sailing vessels, tonnage 3672; above 50 tons 232, tonnage 41,608: steam vessels, under 50 tons 7, tonnage 214; above 50 tons 16, tonnage 4671. The number and tonnage of vessels which entered and cleared at the port during 1852 were:—Coastwise, sailing vessels, inwards 1670, tonnage 135,657; outwards 1260, tonnage 84,465: steam vessels, inwards 249, tonnage 100,042; outwards 255, tonnage 102,145. Colonial, inwards 53 vessels, tonnage 14,888; outwards 75, tonnage 19,536. Foreign, inwards, British vessels 202, tonnage 39,675; foreign vessels 162, tonnage 37,938: outwards, British vessels 62, tonnage 12,494; foreign vessels 142, tonnage 33,608.

The school of St. Barr is supposed to have first drawn inhabitants to the locality. The city walls were built by the Danes in the 9th century, and afterwards repaired by King John. About 1620 Cork was counted the fourth city of Ireland, being inferior both to Waterford and Limerick. In 1690 it endured a siege conducted by the Duke of Marlborough, with a force of about 10,000 foot and 1200 horse, against which it held out for five days. The city has increased greatly since the beginning of the last century. The island was formerly intersected by numerous canals, which have been arched over from time to time, and now form the principal modern streets. The Grand Parade was thus formed in 1780; Patrick-street in like manner in 1783; and Nile-street in 1795. The South Mall, the best street in Cork, and Nelson's Place, had a similar origin. The insular appearance of the central part of the city is thus in great measure removed.

The enlargement of the city has been accompanied by the gradual draining and reclaiming of the adjoining marshes. These improvements were chiefly effected about 1720-30. The appearance of the city is somewhat marred by the practice of weather-slating the

street fronts of many of the houses. The stone generally employed in building is clay-slate of a dark colour.

A considerable amount of trade is carried on in Cork. The chief import trade is that of timber, of which the annual average is 15,000 tons. The principal articles of export are bacon, butter, corn, live stock, provisions, and linen. Cork butter holds a very high character in the market, chiefly owing, it is said, to the superior coöperation of the casks. Manufactures of glass, metal castings, gloves, leather, and woollen cloth are carried on. There are numerous and very extensive distilleries and breweries, and a large manufacture of flour meal. The foreign and colonial trade is principally with Portugal, the Mediterranean, the Baltic, and Canada. The amount of customs duties in 1851 was 236,531*l.* The city is the assize town for the county of Cork and is on the Munster circuit.

The see of Cork is in the archdiocese of Dublin and Cashel. The chapter consists of a dean, chanter, chancellor, treasurer, archdeacon, and 12 prebendaries. The diocese stretches across the central district of the county of Cork, and includes the county of the city. It extends in length, from east to west 74 miles, and from north to south 16 miles. It contains 83 parishes, constituting 77 benefices. The foundation of the see is ascribed to St. Barr, about the beginning of the 7th century. It became united to Cloyne about 1464, and so continued till 1586, when together with Cloyne it was annexed to the diocese of Ross. In 1673, these dioceses were again divided, Cork and Ross going together, and Cloyne forming a separate diocese. By the Act 3rd and 4th Wm. IV. c. 37, called the Church Temporalities Act, these sees again became united, and the income of the bishop was fixed at 2495*l.* per annum.

(*Ordnance Survey Map*; Smith, *History of the County of Cork*; Lewis, *Topographical Dictionary*; Thom, *Irish Almanac*.)

CORNOUAILLES, a county in Basse-Bretagne, in France, of which Quimper-Corentin was the capital. It comprised the dioceses of Quimper and St. Pol-de-Leon, and is now divided among the departments of Côtes-du-Nord, Finistère, and Morbihan. In the time of Julius Cæsar this district was inhabited by the Curiosoliti and the Osismii. The name some derive from 'Cornu Gallie' (extremity of Gaul), others from the English 'Cornwall,' whence they say a number of the ancient Britons emigrated to this part of Bretagne.

CORNUS. [AVEYRON.]

CORNWALL, an English county, forming the south-west extremity of the island of Great Britain. The form of the county approaches that of a right-angled triangle, of which a line about 70 miles long, drawn east-north-east and west-south-west from Penlee Point at the entrance of Plymouth Sound to the Land's End, may be regarded as the base; another line 42 miles long, drawn north-north-west and south-south-east from Penlee Point to the north-east corner of the county as the perpendicular; and a line 81 miles long drawn north-east and south-west from the last-mentioned point to the Land's End as the hypotenuse. Cornwall lies between 49° 56' and 50° 56' N. lat., 4° 7' and 5° 42' W. long. The area of the county, exclusive of the Scilly Isles, is 1365 square miles, being rather less than the area of the triangle above described. The population of Cornwall, including the Scilly Islands, was 355,558 in 1851, being 259 persons to a square mile, the general average for England and Wales being 307 persons to a square mile.

The only county with which Cornwall is coterminous is Devonshire, which bounds it E.N.E.; on all other sides it is surrounded by the ocean. The north-west coast is high and rocky. Tracing it from the border of Devonshire it runs south by west, and forms two very shallow bays (Bude Bay and Widemouth Bay), succeeded by the headlands Dazard Point, Castle Point, Penkever Point, and Carnbeak. From Carnbeak the coast runs south-west and forms several headlands, Tiutegel Head being the principal; and several small bays as far as Pentire and Stepper Points, near the mouth of the river Alan or Camel, the entrance of which forms the haven of Padstow. A few miles W.S.W. from these is Trevoze Head, the most prominent headland on this side of the county; this is succeeded by Constantine, Watergate, and Towan bays, Towan Head, Fistal, Cranstock, and Holywell bays, Penhale Point, Ligger or Perran Bay, and St. Ives' Bay, Gurnard's Head, Cape Cornwall, Polpry and Peden-Mean-Due Points, the last of which is less than a mile from the Land's End. The general direction of the coast from Trevoze Head to Cape Cornwall is south-west; from Cape Cornwall to the Land's End due south. Along this side of the county are scattered several islets and insulated rocks, but nothing that is worthy of notice. Off the Land's End are the Scilly Islands, a numerous and not unimportant group. [SCILLY ISLANDS.]

The coast from Land's End to Plymouth Sound is marked by bolder promontories and deeper bays, and has more frequent intervals of low and shelving beach. From the Land's End to Mount's Bay the coast forms a line convex to the ocean, broken by a number of small headlands with intervening coves. Mount's Bay takes its name from St. Michael's Mount, a remarkable insulated rock opposite the town of Marazion, and connected with the mainland by a causeway over the sands; Cudden Point forms the eastern boundary of the bay. From Cudden Point the coast runs south-east to the Lizard, the most southern point of England; and thence turning north-east forms the headlands of Innis Head, Black Head, Chynals Point,

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The mail road from London to Falmouth passes over a considerable part of the county, entering it by Poulstou bridge, over the Tamer, not far from Launceston, and running south-west by Launceston, Bodmin, and Truro. Here, and farther south, several branch roads strike off and afterwards re-unite with the main road, which proceeds to the Land's End. Another road from London by Exeter and Tavistock crosses the Tamer at New bridge, and runs south-west by Callington, Liskeard, and Lostwithiel, St. Austell, and Grampound, to Truro. The mail-coach roads are very good.

Geology, Mineralogy, &c.—The rocks which predominate in Cornwall are among the lowest in the arrangement of the strata of our island, and belong to the primitive and transition classes. The high land which occupies the centre of this peninsular county, and extends from between Launceston and Bodmin on the north-east to the Land's End on the south-west, is composed of granite, which in several extensive districts rises to the surface. Occasional veins or 'shoots' from this granite formation penetrate northward and southward into the superincumbent strata; but they do not generally extend far from the principal masses of granite; they are frequently insulated. The granite of Cornwall contains numerous metallic veins, both of copper and tin. It is liable to decomposition, to which cause is ascribed the existence of a tract of loose white kaolin or porcelain earth, some miles in extent, near St. Stephen's, between Bodmin and Grampound, and on the south side of the granite range: this kaolin is sent to Worcestershire for use in the porcelain manufacture. The decomposition of granite has probably formed those singular phenomena which were once generally regarded as Druidical relics, the Logan Stone, Cheese-wring, &c. St. Michael's Mount, in Mount's Bay, is chiefly composed of granite split into irregular masses. Granite is termed by the Cornish miners 'grouan.'

The rock commonly reposing on the granite is the 'killas' of the miner, the grauwacke of the geologists. (De la Beche.) Grauwacke, indeed, forms the principal rock of Cornwall. On the south or south-east side of the granite formation, the strata dip south-east at an angle of about 70 degrees; on the opposite side of the granite formation the dip is nearly north-east. The killas is traversed by veins or dykes of granitic and felspar porphyry, termed by the miners 'Elvan.' These dykes (or channels in the language of the miners) are rarely found in the granite; their general direction on the surface is, according to Mr. Greenough's Geological Map, and the Geological Map of the Ordnance Survey, north-east and south-west; they vary from a few fathoms to 50 and even 80 fathoms in thickness; and in some cases are continuous through a long tract of country. The metallic veins, both of tin and copper, commonly pass through them, but are for the most part narrower when in the Elvan than when in the superincumbent and subjacent rocks. Roofing-slate is quarried in the killas formation near Tintagel Head. The metallic veins which contain copper or tin, or both, run usually east and west, and penetrate both the granite and clay-slate; those which contain lead, silver, cobalt, or antimony, run north and south, with little exception, and are believed to be always in the clay-slate.

The Lizard Head is composed of mica-slate, which however occupies a very limited area; the neighbouring country is composed of hornblende and diallage rocks, but chiefly of serpentine. Near the Lizard are veins of soap-stone, which, when first raised, is so soft that it may be kneaded like dough, but becomes friable after being exposed to the air; it is used in the manufacture of porcelain. The serpentine incloses and passes into asbestos, and small quantities of native copper have been found in it.

Thin beds of limestone are found in Cornwall, alternating with killas, or grauwacke; it is of a blue colour, and contains veins of calcareous spar. Trappeau rocks are associated in small quantities with the grauwacke, and also with the carbonaceous rocks, which form the north-eastern extremity of the county. Copper and tin are the most important minerals of Cornwall. The extent of the metalliferous veins as well as the depth to which they extend are unknown: no miner has yet seen the end or bottom of a vein. Their width varies much, from the thickness of a sheet of paper to 30 feet; but they are usually from 1 to 3 feet in thickness. The ores of copper or tin do not often occur together in the same vein at any great depth. If tin be discovered first, it sometimes disappears, after sinking 100 feet more, and is succeeded by copper; in others, tin is found to the depth of 1000 feet beneath the surface, almost without a trace of copper; if copper be first discovered, it is very rarely if ever succeeded by tin. It is seldom that either ore is found nearer to the surface than 80 or 100 feet. If a copper vein meets one of tin, it usually passes through it, and heaves it out of its course. The veins not metalliferous usually pass through the tin and copper veins, or lodes, as they are termed: these non-metalliferous veins have their course usually north and south.

The copper and tin mines, excepting some mines chiefly of tin near Callington, are south-west of the rivers Alan and Fowey. The chief mining district extends from St. Agnes on the north coast by Redruth to the neighbourhood of Helston and Marazion; and some mines are worked west of Marazion. St. Austell is in the centre of another but less extensive mining district near the south coast.

The lead mines of Cornwall are not numerous, though the ore has been discovered in many parts of the county. Silver ores have been obtained from several mines in Cornwall, chiefly in lodes or cross courses in the grauwacke. In Herland mine, near Gwinnar, silver had in 1839 been raised to the value of 8000*l.*; at Dalcoath mine to about 2000*l.*; while at Wheale Duchy, near Callington, which is new granite, and at the 10 fathom level, a course of silver ores accompanied by native silver occurred for 3 fathoms in length, yielding about 200*l.* per fathom. (De la Beche.) Gold has been found in the tin streams. Iron ore is also obtained, and shipped to Wales. Zinc, antimony, cobalt, and arsenic are procured, as well as some other of the semi-metals. Freestone of different qualities is quarried.

The quantity of copper ore sold at the public ticketings during 17 years, 1833-49, amounted to 2,499,782 tons of 21 cwt., computed to yield in all 195,793 tons of fine copper; the total value in money being reckoned at 14,456,600*l.* These figures give a yearly average of 147,046 tons ore, 11,517 tons fine copper, and 850,388*l.* in money value. The average per centage of copper obtained during the whole period was 7*½*; the highest average was 8*½* in 1849; the lowest was 7*½* in 1842. The ore is purchased by eight firms in South Wales; one house, that of Willinms and Co., purchased in 1849 ore to the amount of 35,126 tons, and the value of 204,748*l.* The total amount of lead ore raised in Cornwall during the year 1848 was 10,494 tons; from which the quantity of lead smelted was 6614 tons.

In summing up his notice of the mineral produce of the district, Sir H. T. De la Beche observes, "If we estimate the value of the metals annually raised in Great Britain and Ireland at about 10,597,000*l.*, and consider that of this sum the iron amounts to 8,000,000*l.*, the value of the remaining metals would be 2,597,000*l.*, of which Cornwall and Devon would furnish about 1,340,000*l.*, or more than one half, leaving 1,257,000*l.* for the value of all the metals, with the exception of iron, raised in other parts of the united kingdom. The two great metallic products of this district are copper and tin; of the former it yields one-third, and of the latter nine-tenths of the whole supply of copper and tin furnished by the British Islands and all the countries of the continent of Europe."

(De la Beche, 'Report on the Geology of Cornwall, Devon,' &c.; 'Transactions of Geological Society'; 'Transactions of Geological Society of Cornwall'; Boase, 'Treatise on Primary Geology'; Ordnance Survey; Greenough, and Society for Diffusion of Useful Knowledge Geological Maps.)

Climate, Soil.—Cornwall being situated between two seas, is more subject to variations of weather than most other counties; the mountains attracting the clouds, charged with moisture, which the prevalent west winds bring from the Atlantic. From this cause, the harvest is not in general so early as in the more inland counties, which are in a more northern latitude by two or three degrees. The soil of the mountainous districts is extremely barren and unproductive; but in a few of the vales a tolerably rich soil is found, well adapted to the growth of corn, roots, and artificial grasses. The substratum of the whole county being rocky, and slate being the predominating rock, the surface consists chiefly of an argillaceous earth produced by the decomposition of slate, mixed with various portions of vegetable matter accumulated in the course of ages. The soil is loose and porous. The most fertile lands are found from Endellion to St. Colombo, on the north coast, in the peninsula which terminates in the Lizard Point, the neighbourhood of Buryan and St. German's, the lands near the Fowey, and a great part of the hundred of Stratton.

The soil and climate of Cornwall are peculiarly favourable to the growth of potatoes, of which two abundant crops are sometimes produced in one season, an early crop taken up in June, and a second in

October. The principal cattle in Cornwall are of the Devonshire breed. The old Cornish breed, which was a small black mountain breed, is nearly extinct, as are likewise the small Cornish sheep: they have been superseded by better breeds.

The county is rather bare of trees. Many proprietors however have planted on a large scale; and some forest-trees rear their heads on many eminences, to the great improvement of the face of the country.

In the mining districts the land is naturally barren; but many spots are cultivated by the miners, to whom small patches of barren soil have been let at a low rent, on condition of their building habitations for themselves and families.

Divisions, Towns, &c.—Cornwall was formerly divided into seven hundreds—Conarton, Fawiton, Pawton, Rialton, Stratton, Tibesta or Tibesterna, and Winneton or Wlnneton. There are now nine hundreds: Stratton hundred and East hundred, on the east along the bank of the Tamer; Lesnewth and West hundreds, to the west of these; Trigg hundred, to the west of Lesnewth; Pyder and Powder hundreds, west of Trigg and West hundreds; and Penwith and Kerrier at the western end of the county.

The number of parishes in the county is about 205. The number of market towns is 36, namely:—St. Agnes, St. AUSTELL, St. Blazey, BODMIN, Boscastle, BOSSINEY, Callington, Camborne, CAMELFORD, St. COLUMN MAJOR, St. Daye, FALMOUTH, Fowey, St. GERMANS, GRAMPOND, HELSTON, St. IVES, LAUNCESTON, LISKEARD, East Looe, West Looe, LOSTWITHIEL, MARAZION, St. MAWES, Movagiassey, Padstow, PENRYN, PENZANCE, Polperro, REDRUTH, Saltash, STRATTON, Tregron, TRURO, Tywardreath, Wadebridge. The places printed in small capitals are noticed in distinct articles; the remainder, with the small sea-port town of Hayle, and a few of the more important villages, we notice here; the population is that of 1851.

St. Agnes, on the north-west coast, 26 miles W.S.W. from Bodmin, population of the parish 6674, being a decrease since 1841 of 1081, occasioned by the less prosperous state of the mines and by emigration. St. Agnes is a small town, in a district which contains numerous mines. The market is held on Thursday. There is a harbour at Trevenance, in this parish; the pilchard fishery has been established here since the beginning of the present century. There are Dissenting places of worship, and a Free school. Opie, the painter, was born at St. Agnes. St. Agnes Beacon is on a pyramidal hill near the town, 621 feet above the level of the sea; it is formed out of an ancient cairn or tumulus, and was used as a beacon during the alarm of invasion in the beginning of the present century.

St. Blazey, anciently called Landreth, 9 miles S. from Bodmin: population of the parish 3570. The town has increased of late in consequence of the prosperous state of the mines in the vicinity. St. Blazey was in 1845 made a perpetual curacy. The church has been rebuilt. There are in the town places of worship for Dissenters, and a National school. The public buildings are a market-house and a post-office. Near St. Blazey is the Treffrey viaduct, a remarkable granite structure, erected at the cost of the late Mr. Treffrey, carrying across the valley of Carniers a railway and a stream for mining purposes. The stream flows in a passage under the roadway.

Boscastle (which name is a corruption of Bottreux Castle) is situated on a steep hill on the north-west coast, not far from Tintagel Head, 19 miles N. by W. from Bodmin: population of the parishes in which the town is situated, Forrabury 379, and Minster 479. Boscastle is a poor little place, but in a very romantic situation. It has a weekly market. There is a pier, to which vessels come with coals. The harbour is very much exposed to boisterous seas. Near the market-place are the remains of an ancient church or chapel. During summer the Boscastle fishermen capture numerous seals.

Callington, population of the parish 2146, is 22 miles E. from Bodmin. The situation of the town is low and unpleasant, at the foot of Hington Down; the buildings, with the exception of the church, are mean and unimportant; the houses are chiefly arranged in one broad street. The church was erected or rebuilt about the middle of the 14th century, by Nicholas de Asheton or Aesheton, one of the justices of the King's Bench, who was buried here. In the churchyard is an ancient sculptured cross. There are places of worship for Dissenters. A market is held on Wednesdays for corn and provisions. Several extensive mines are worked in the neighbourhood. Callington was the last town in Cornwall admitted to the right of sending members to Parliament, not having acquired that privilege till 1855. It was disfranchised by the Reform Act of 1832. Kit Hill (1067 feet high), which rises immediately above Callington, affords from its summit one of the finest views in the west of England.

Camborne, population of the town 6547, is 23 miles S.W. from Bodmin, in the midst of the mining districts. The town is neatly built. The church is a fine specimen of the granite churches of this county, built in the perpendicular English style; it has a tower, and contains a carved pulpit of wood, and an altar-piece of Sienna marble. There are places of worship for different classes of Methodists. The market, established in 1802, is considerable; it is held on Saturday; the market-house was built by Lord De Dunstanville.

St. Daye, population of the parish of Gwennap, in which the town is situated, 10,465, is 26 miles N.W. from Bodmin, and about 2 miles

E.N.E. from Redruth. It appears to have fallen much into decay; of late years it has recovered, owing to the extension of mining operations. There was formerly a chapel, which is said to have been much resorted to by pilgrims in former days, and from the resort of these pilgrims arose a market, which was afterwards given up. The market now held on Saturdays for butchers' meat and other provisions, was established some years since for the benefit of the miners. A new chapel was consecrated at St. Daye in 1828. There is near St. Daye a curious amphitheatre of rude construction, called Gwennap Pit, supposed to have been of British origin; it was selected by Wesley as a place for public preaching, and is still used by his followers at some of their anniversaries.

Fowey, population of the parish 1606, is on the right bank of the river Fowey, near its mouth, about 11 miles S. by E. from Bodmin. The scenery around this town is very picturesque. The rocks about Polruan, on the opposite side of the river, rise to a considerable height, and are broken into rude cliffs and bold promontories. At the mouth of the haven are the ruins of two square stone forts or blockhouses, one on each side, built in the reign of Edward IV. to protect the entrance. The harbour is commodious; it is now defenced by two modern batteries, and by a fort called St. Catherine, which was built in the reign of Henry VIII. The town is built in a very straggling manner, the houses extend a considerable way along the haven, and the streets are so narrow and full of angles as to be almost impassable for carriages. Most of the buildings are of stone. The church is a spacious and lofty fabric of the perpendicular style. A chapel called St. Catherine's Chapel, which gave name to St. Catherine's Hill, existed here in Leland's time. There is a spacious market-house with a town-hall over it. A public walk overlooks the town and harbour. The chief business of Fowey consists in catching and curing pilchards, in which many vessels are employed. Fowey is a corporate town; the corporation consists of a mayor, recorder, eight aldermen, and a town-clerk. This town sent members to Parliament from the time of Queen Elizabeth; it was disfranchised by the Reform Act of 1832. There is a market on Saturday. There are two Free schools, and an almshouse for eight poor widows. The harbour is safe, and has excellent anchorage. The townsmen of Fowey acquired wealth by feats of war and piracy in the wars of Edward I. and III., and Henry V., and their wealth enabled them to increase the commerce of the town to a great extent. Fowey furnished 47 ships to the fleet of Edward III. before Calais, being more than any other port in England, and 770 men, a number second only to the number furnished by the port of Yarmouth. The French burnt the town in 1457. When peace was made between England and France in the time of Edward IV., the Fowey men still kept up hostilities, for which the king ordered their fleet to be confiscated. Fowey also distinguished itself against the Armada in 1588, and the fact is recorded by a painting in the church. Place House, the seat of the Treffrey family, is at Fowey.

Grampond, population of the township 588, is 17 miles N.W. by N. from Bodmin. The river Fal flows through the town, the greater part of which is to the east of that river, and consists of one main street on the declivity of a hill. A small chapel of ease and a granite cross are in the town. The market, which is small, is held on Saturday. Grampond is a corporation by prescription. It sent members to Parliament from the reign of Edward VI. until 1821, when it was disfranchised for bribery.

Hayle, population returned with the parishes of Phillack and St. Erth, in which it is situated, is a small town and port on the shore of the inner basin of St. Ives' Bay, about 5 miles S.E. from St. Ives. The principal object of interest is the iron-foundry, in which are cast cylinders of the largest size, not only for the mines in Cornwall but also for exportation. A large work of this kind was sent several years ago from Hayle to Holland, for the drainage of the Haarlem lake. There was formerly at Hayle a 'copper-house,' in which extensive smelting operations were carried on, but it is now found to be a cheaper method to carry the ore to Swansea to be smelted in the vicinity of coal-mines. Vessels of 200 tons burden can now enter the port of Hayle, in consequence of the erection of a breakwater, by which the sand has been prevented from filling up the harbour. Three steamers sail weekly between Hayle and Bristol.

East Looe, population of the chapelry 970, is on the left bank of the river Looe, which here falls into the sea, about 18 miles S.E. from Bodmin. It is built on a flat piece of ground between the river Looe and the sea, and is described as a labyrinth of short narrow dirty alleys, above which rises the low embattled tower of a little chapel of ease. On the land side rises a high steep hill. On the height above the town are numerous gardens, in which throughout the year the myrtle and the geranium flourish in the open air. East Looe is united with West Looe on the opposite side of the river by a bridge 141 yards long, but only 6 feet 2 inches wide. The inhabitants are chiefly engaged in the pilchard fishery. The harbour admits vessels of 100 tons, and is protected by a battery. There is a market on Saturday. The town was incorporated by Queen Elizabeth, and returned members to Parliament from the time of Elizabeth to the passing of the Reform Act of 1832, by which it was disfranchised. There is an Endowed Free school for teaching mathematics, especially those branches connected with navigation. East Looe united with

Fowey in sending a member to a council of trade held at Westminster in the reign of Edward I., and furnished 20 vessels and 315 men to the fleet of Edward III.

West Looe, population 746, is separated from East Looe by the River Looe. A chapel at West Looe dedicated to St. Nicholas has been converted into a guildhall. The market has been long discontinued. This place was incorporated by Queen Elizabeth; the corporation consists of 12 burgesses, including the mayor. It sent members to Parliament from the time of Edward VI., but was disfranchised by the Reform Act of 1832. Opposite the Looes is St. George's, or Looe Island, about 14 acres in extent; beyond it are some rocks, known as Rennie's Rocks; a rock between the island and the mainland is called Midmain.

St. Mawes, population of the parish of St. Just 1557, is situated on an arm of the Carrick Road, about 30 miles S.S.W. from Bodmin. It is a wretched little place, consisting of one street at the base of a hill near the sea, and containing a few houses inhabited by fishermen and pilots. There is here a chapel built by the marquis (now duke) of Buckingham, in 1812. A castle built by Henry VIII., nearly at the same time as Pendennis Castle, on the other side of the roadstead, but much inferior to it in size, is now used as a residence for the lieutenant-governor. The market on Friday is very small. St. Mawes returned two members to parliament from 1562 up to the passing of the Reform Act of 1832, by which it was disfranchised.

Mevagissey, population of the parish 2022 (a decrease of 288 since 1841 is ascribed to the ravages of cholera in 1849 and to a decline in trade), on the coast of the channel, on Mevagissey Bay, 17 miles S.S.W. from Bodmin. The inhabitants are chiefly dependent on the pilchard fishery. Ships of 100 tons may ride securely in the pool or basin of Mevagissey. The market, which is held by prescription, is on Saturday. So alarmed were the fishermen by the ravages of cholera in 1849, that they took their families in their boats to Fowey Haven. On this occasion the houses and streets of Mevagissey received the advantage of a thorough cleansing.

Padstow, population of the parish 2224, at the mouth of the river Alan, or Camel, which here forms a wide estuary, is 15 miles N.E. from Bodmin. The town is in a vale, adorned with gardens on each side, and the beauty of the situation is increased by the estuary, which, when the tide is up, presents a clear expanse of water apparently land-locked by the granite cliffs which form the banks. The harbour is the best on the northern coast of Cornwall, and, though the entrance is much obstructed by sand, is capable of receiving vessels of great burden. The streets are in general narrow, and many of the buildings antiquated; but the town has been much improved within the last half century by the erection of many new houses; the general roofing is a fine blue slate. There are an excellent pier, a custom-house, several quays and shipwrights' yards, and a workhouse, with a school-room over it. A steam-vessel plies between Padstow and Bristol. The church, which is in the perpendicular style, has been lately repaired and fitted with stained-glass windows. It contains a curious old font. In the time of Leland the town carried on a considerable trade with Ireland and Wales; the chief imports now are coals and iron from Wales, timber from Norway, and various goods from Bristol; corn, malt, and block-tin are exported. The market is on Saturday. There are here a small Endowed school, and day schools, established by voluntary subscription. The place appears to have had anciently the name of Adeltowe or Aldestowe, and in the Cornish language Lodenek.

Polperro, population of the town about 800, is on the coast between Plymouth and Fowey, about 16 miles S.E. from Bodmin. The situation of this little town is singularly romantic, the houses being on the side of two steep rocky hills, forming a very narrow valley, through which there runs a small river. The harbour will accommodate vessels of 150 tons; it is protected by a double pier. An extensive hook and line fishery is carried on; there is also a pilchard fishery; and some trade is carried on in coals, limestone, and grain. The market is held weekly on Friday. There are in the town Endowed Charity schools for boys and girls.

Saltash, population of the chapelry 1621, on the right bank of the Tamer, a little above its junction with the Lynher, 29 miles E.S.E. from Bodmin, is built on the ascent of a steep hill, the summit of which is crowned by a chapel of ease and the town or mayoralty hall. Beneath the town-hall is an open market-place. The principal street is at right angles to the river; a large proportion of the houses are of stone quarried in the rock on which the town stands, intermingled with others built of brick. Some of the houses are fronted with plaster, others with slate. Saltash is now chiefly inhabited by fishermen. Some trade is carried on in malt. The market is on Saturday. Besides the chapel of ease, there are Dissenting meeting-houses, and a Free school. Saltash was made a free borough in the reign of John or Henry III. The borough sent two members to parliament from the time of Edward VI.; it was disfranchised by the Reform Act of 1832.

Tregony, population of the parish of Tregony St. James, in which the borough is situated, 846. The boundaries of the town extend into the adjoining parishes. Tregony is situated on the left bank of the river Fal, 18 miles N.N.W. from Bodmin; it was formerly of some consequence, but it gradually decayed as Truro increased in importance. The houses are chiefly arranged in one long street on the side

of a hill sloping down to the Fal, over which there is a bridge. The parish church of Cuby is in the upper part of the town. The market is on Saturday. From the time of Queen Elizabeth two members were returned to parliament from Tregony until the borough was disfranchised by the Reform Act of 1832. Tregony is considered to have been a Roman station, *Centium* or *Voluba*.

Tycardreath, population of the parish 3287, situated about 5 miles S. by W. from Lostwithiel, has increased considerably within the last 30 years in consequence of the success of mining operations. A Benedictine priory formerly existed here. Besides the parish church, there are a National school, a post-office, and a market-house.

Wadebridge, population about 850, is situated at the head of the estuary and on both sides of the river Camel or Alan, about 6 miles N.W. from Bodmin, and 239 miles W.S.W. from London. The river Alan is here crossed by a bridge of 17 arches, which was erected in the time of Edward IV., chiefly through the exertions of the then vicar of Eglosayle, who also left an annuity to keep it in repair. In the town are a Proprietary Episcopal chapel, chapels for Wesleyan and Association Methodists and Independents, National schools, a library, and a savings bank. The market is held on Friday; fairs are held on May 12th, June 22nd, and October 10th. A railway from Wadebridge to Bodmin affords facilities for conveying the produce of the copper and iron mines for shipment at Wadebridge, and for carrying to the interior the imports received at the port, as well as sea-mud to be used as manure. Some corn is exported; the river is navigable for vessels of 150 tons burden.

The following are among the more important villages, with the population in 1851, and a few other particulars:—

Bude, written also *Budehaven*, and *Budeham*, population of the parish of Stratton, in which it is situated, 1696, is a small bathing village on the north-west coast, 14 miles N.W. by N. from Launceston. It is much frequented in summer. The formation of the canal from Bude to Launceston, commenced in 1819, has been productive of much advantage to the district. The canal has its outlet here into a shallow bay, in which a great accumulation of sand constantly takes place. At low water the farmers remove the sand in immense quantities to be used for manure. As much as 4000 horse loads has been carried off in one day. The carriage of sand to the inland parts of the county forms a considerable part of the traffic on the canal. From the heaviest seas the bay is sheltered by an embankment. In Bude village is the residence of Mr. Gurney, the inventor of the Bude light. *Kilhampton*, formerly written *Kilhamland*, population of the parish 1221, is near the border of the county, 16 miles N. by W. from Launceston. The extensive reservoir of the Bude Canal is partly in this parish. The parish church, an ancient structure, is said to be one of the finest in Cornwall. The south doorway is remarkable for its curious mouldings and numerous grotesque heads. In the church is a handsome monument to Sir Beville Grenville. The Rev. James Hervey, when curate of this parish, wrote here his 'Meditations among the Tombs.' *Landewednack*, population of the parish 430, 50 miles S.W. by S. from Bodmin. In this parish, which is the most southerly in England, the Lizard Point is situated. The church has a Norman doorway and inscribed front in good preservation. An ancient cross constructed of granite stands between the church and Lizard Point. On the coast are some magnificent caverns and bold and picturesque cliffs. *Millbrook*, population of the parish of Maker, in which it is situated, 2822, forms with Dodbrook in Devon one town. There is here a new district chapel. A portreeve is elected annually. From the summit of Maker tower an extensive and beautiful prospect is obtained. *Morwintown*, population of the parish 1094, is situated on the coast, in the most northerly parish of the county. The church, which is a good-sized building, stands near the shore; its site commands an extensive sea-view. The cliffs here rise to the height of 420 feet; the coast is dangerous for vessels. *St. Neot*, population of the parish 1628, is 4 miles N.W. from Liskeard. The parish church contains some very fine specimens of stained glass, in restoring which the late Rev. R. G. Grylls of Helston laid out upwards of 2000*l.* The church was built in 1480: it is 116 feet long by 55 feet broad. It has a tower, which is 71 feet high. At the period of the Domesday Survey there was a college here called Neotstow. Dozmare Pool, an inland lake of about a mile in circumference, 890 feet above the sea, is situated on the moors at the northern extremity of the parish of St. Neot. This pool is regarded with superstitious fear by the country people, who have many legends respecting it. By a trench cut through a marsh at the western end of the pool, its waters now find their way to the river Fowey. Near the lake is a remnant of antiquity called the Four Holo Cross, on the line of road from Bodmin to Launceston. It is decayed and imperfect, two holes only now remaining. This is supposed to be one of the oldest crosses in Cornwall. *Perranabuloe*, or Perran in the Sands, population of the parish 3114, about 20 miles S.W. from Bodmin, is chiefly remarkable for the successive engulfment in the sands of two of its churches. In 1835 the remains of the original parish church, supposed to have been embedded in the sand since the 9th century, were discovered, and a space around the building cleared. It is small, and of rude construction: it has been named St. Perran's Oratory. About a mile and a half from the present parish church is an amphitheatre, called Perran's Round, which has seven ranges of seats, and is apparently

capable of accommodating about 2000 persons. Here it is supposed important meetings were held, or games and plays performed for the amusement of the Cornish inhabitants in ancient times. During summer the village of Perran Porth is frequented by numerous visitors. *Stoketinsland*, population of the parish 2596, is 6 miles S. by E. from Launceston. The parish church is a fine old gothic building, and has a tower with 8 bells. Cider is made here. The mines are in a flourishing condition. In this parish is Kit or Kito Hill, the summit of Hingston Down, 1067 feet above the sea, one of the stations of the Trigonometrical Survey. On Kit Hill the Parliament of Tiuners, both of Devon and Cornwall, used to assemble in ancient times once in seven years. *Torpoint*, population of the parish of Antony 3201, a village of modern origin, at the south-eastern angle of the county. By a steam-bridge, plying every quarter of an hour during the day, communication is kept up with Devonport on the opposite side of the Tamer, distant about a mile. A chapel of ease was opened here in 1820.

Divisions for Ecclesiastical and Legal Purposes.—Cornwall was anciently a diocese by itself; the see appears to have been originally fixed at St. German's and thence removed to Bodmin, where it continued until it was united with the see of Crediton. Out of this union rose the see of Exeter, in the diocese of which Cornwall is now included. The limits of the county nearly coincide with those of the archdeaconry of Cornwall. The 'Census of Religious Worship' in 1851 gives the following return in reference to the county of Cornwall:—Places of worship—Wesleyan Methodist, 412; Church of England, 265; Bible Christian, 182; Wesleyan Association, 93; Primitive Methodist, 38; Independent, 37; Baptist, 25; Society of Friends, 12; Roman Catholics, 7; Wesleyan Reformers, 6; others, 27; total number, 1104. The total number of sittings provided was 262,911. By the Poor-Law Commissioners the county is divided into 13 Unions: St. Austell, Bodmin, Camelford, St. Columb Major, Falmouth, St. Germans, Helston, Launceston, Liskeard, Penzance, Redruth, Stratton, and Truro. These Unions include 223 parishes and townships with an area of 836,092 acres, and a population in 1851 of 353,965; but the boundaries of the Unions are not strictly co-extensive with those of the county. Cornwall is in the western circuit. The assizes and quarter sessions are held at Bodmin. The county jail is at Bodmin, and another older county jail at Launceston, which is used at the assizes.

This county is however under a peculiar jurisdiction, which requires notice here—that of the Duke of Cornwall. The duchy of Cornwall was created in 1337 in favour of Edward the Black Prince, and settled by Act of Parliament on the eldest son of the king of England. The duke enjoyed large revenues, arising from the lordship of castles, boroughs, and manors, granted to him in Cornwall and Devonshire; the profits arising from the coinage of tin, and various other sources. The annual revenue on the average of the three years subsequent to the death of the Black Prince was 2493*l.* 7*s.* 3*d.*; the clear revenue in the 15th year of Henry VIII. amounted to 10,095*l.* 11*s.* 9*d.*; in the 44th year of Queen Elizabeth, in 1602, it had fallen to 4569*l.* 12*s.* 2*d.*; and at the publication of Messrs. Lysons' 'Magna Britannia' (1814), the gross amount was estimated at 22,000*l.*, of which 8500*l.* arose from the tin-duty in the county of Cornwall, and 3500*l.* from the rents of manors, fines, &c. in the same county: the sources from which the remainder was derived are not mentioned. The tin-duty before the war of 1793 had been 14,000*l.* per annum. By an Act passed in the 1st and 2nd of Vic. cap. 120, in lieu of the old coinage duties, a customs duty of 1*s.* the cwt. for tin, and 10*l.* for every 100*l.* value of tin-ore is imposed.

The immediate government of the county was early vested in the Duke of Cornwall, who has still his chancellor, attorney-general, and solicitor-general, and his court of exchequer. He also appoints the sheriffs. The mining-trade is under the separate jurisdiction of the Stannary Courts; the Lord Warden of the Stannaries, and the Vice-Warden, are at the head of this jurisdiction, with a final appeal to the duke and his council. The four Stannary Courts are Foy More, Blackmore, Tywarnhaile, and Penwith and Kerrier.

An Act was passed in the 6th and 7th Wm. IV. cap. 106, entitled 'An Act for the better and more expeditious Administration of Justice in the Stannaries of Cornwall, and for enlarging the Jurisdiction and improving the Practice and Proceedings in the Courts of the Stannaries.' By section 4 of this Act, the equitable jurisdiction of the Vice-Warden is extended to all matters connected with the working of lead, copper, or other metal or metallic minerals within the county of Cornwall. By section 6, the Stannary Courts are consolidated, and are to be held before the Vice-Warden, who is to have the same authority that the stewards had. Other sections appoint the Vice-Warden's Court to be a Court of Record, and to be held at Truro. By the 2nd and 3rd Victoria, cap. 58, a Stannary Court's duty of one farthing in the pound sterling was imposed on tin and tin-ore.

Previous to the Reform Act Cornwall had the largest share in the parliamentary representation of all the English counties: up to 1821 it had sent forty-four members, namely, two for the county, and two each for 21 boroughs, none of them of any great importance, and some of them utterly insignificant. The county was represented in Parliament at the time of the first summons of Edward I., and in the latter part of that monarch's reign it returned two knights of the

shire, and representatives for six boroughs: to these were added seven others in the reign of Edward VI.; two in the reign of Mary; and six in that of Elizabeth. By the Reform Act the county was formed into two divisions, each returning two members: and various changes were made in the representation of the boroughs, making the number of members sent by the county only fourteen.

Natural Curiosities.—The granite rocks of Cornwall present in different places an appearance so singular, that they have been mistaken for the efforts of human art in its earliest and rudest stage. The Cheesewring occupies the highest ridge of a hill north of Liskeard, one of the hills which gradually decline from Brown Willy and Rough Tor, the highest parts of the county. The summits of all these hills are covered with granite cairns in different states of ruin, and their sides are strewed with boulders which have fallen from them. The Cheesewring is a pile apparently consisting of five stones piled one on the other, of which the upper ones are so much the largest as to overhang on all sides the lower ones, which form their base. The collective height of the whole pile is about 20 feet. The formation of this group is ascribed by Dr. McCulloch solely to natural causes. It is, in fact, the vestige of a much larger mass, the lateral parts of which have fallen away, not being so well poised as the singular part which yet remains. The granite of Cornwall is in general split by fissures, which tend for the most part to the horizontal or perpendicular; and by these fissures it is divided into cubical or prismatic masses. Where the rock rises above the surface, the influence of the atmosphere causes a gradual decay, by which first the angles formed by the fissures with the external face of the rock become rounded, then the surfaces in contact become separated, the masses originally angular acquire a curvilinear outline; and if the centre of gravity of the whole mass be high and far removed from the perpendicular of the fulcrum, the upper parts of the mass fall down, and, by the continuance of the disintegration, acquire the spheroidal form which the granite boulders often exhibit. If however the centre of gravity be in the perpendicular of the fulcrum, the mass retains its position, as in the case of the Cheesewring, or produces the phenomenon that will be next described.

The Logging (or, as it is commonly written, Logan) Stones are stones which are poised on a fulcrum, and which rock, when moved by an adequate force. The most remarkable of these Logging Stones is near the Land's End, on a peninsula of granite jutting out 200 yards into the sea, the isthmus still exhibiting some remains of the ancient fortification of Castle Treryn. The granite which forms this peninsula is split by perpendicular and horizontal fissures into a heap of cubical or prismatic masses. The whole mass varies in height from 50 to 80 or 100 feet; it presents on almost every side a perpendicular face to the sea, and is divided into four summits, one of which, near the centre of the promontory, the stone in question lies. The general figure of the stone is irregular; its lower surface is not quite flat, but swells out into a slight protuberance, on which the rock is poised. It rests on a surface so inclined, that it seems as if a small alteration in its position would cause it to slide along the plain into the sea: for it is within two or three feet of the edge of the precipice. The stone is 17 feet in length, and above 32 feet in circumference near the middle, and is estimated to weigh nearly 66 tons. The vibration is only in one direction, and that nearly at right angles to the length. A force of a very few pounds is sufficient to bring it into a state of vibration, even the wind blowing on its western surface, which is exposed, produces this effect in a sensible degree. The vibration continues a few seconds. There is another Logging Stone at St. Just, and a third at Sithney, which has been thrown down; but this near the Land's End is the largest. This was displaced in a frolic a few years since, but was restored, though with great difficulty.

On the horizontal surface of the granite the action of water has formed excavations with rounded bottoms, occasionally circular in their outline, and as regularly spheroidal as if shaped with a turning-lathe. They are of various depths, and sometimes communicate with each other. The surface of 'the rock basin quoit' at Carn-brea is honeycombed by these hollows. In the parish of Constantine are two very singular monuments. One is a huge stone resembling an inverted cup or mortar, but not hollow, so regularly formed as to present the appearance of art. It is 30 feet in girth and 11 feet high, according to Dr. Borlase. The other monument is a vast stone perched on the points of two rocks, so that a man may creep under it; it is 33 feet long from north to south, which is its greatest dimension; the breadth from east to west is 18½ feet, and the thickness or vertical dimension is 14½ feet; the circumference is computed to be 97 feet, and the girth about 60 feet; it is estimated to weigh at least 750 tons. The top is honeycombed by rock basins similar to the rock basin quoit at Carn-brea. There are in Cornwall and the Scilly Isles other stones similarly supported; they are commonly designated by the name 'Tol-men,' that is, hole of stone. (Borlase, 'Antiquities of Cornwall.')

The cairns on Carn-brea Hill, near Redruth, and the Roche Rocks, a little to the left of the road from Bodmin to Truro, are of the Celtic period; they are formed of granite, and owe much of their picturesque form to natural causes.

History and Antiquities.—Before and at the time of the Roman

invasion, Cornwall was probably included in the territory of the two tribes, the Damnonii and the Carnabii. Ptolemæus mentions only the former of these, whom he terms Dumnonii; and they seem to have occupied the south-eastern part, comprehending all the Channel coast. The Carnabii are not we believe noticed by any writer except Richard of Cirencester, who considers that they gave to the county the name which it had in the Latin of the middle ages, Cornubia. It is however more probable that the district gave name to the people, and that both Carnabii and Cornubia contain the Celtic root kern or corn, signifying a horn. The second part of the modern designation of Cornwall is derived from the Saxon Wealas, a name given to the Britons, some of whom, on the Saxon invasion, retired into the western part of the island, and maintained a long struggle for their national independence.

At an early period this part of the island was frequented by the Phœnicians of Gadeira (Cadiz), who came hither to procure tin, lead, and skins, but especially the first; in return for which they gave salt, earthenware, and copper goods. (Strabo, lib. iii. 175.) It was probably from these Phœnicians that the western extremity of Britain, with the Scilly Islands, obtained the name of the Cassiterides ('tin islands'), from a root which, in some of the oriental tongues, as well as in Greek, denotes tin. The Greeks appear to have had some knowledge of those parts of the island where tin was wrought, before the time of the Roman conquest.

To this remote period we may refer some of the rude stone monuments which are still numerous in this part of the island; and to which are generally ascribed a Celtic origin. Rough blocks or obelisks standing in pairs, and supposed to be memorials of the dead, are found at Dryft, in the parish of Sancreet, between Penzance and the Land's End, and at Trewren, in Madderu parish, near Penzance. There are two stones at Bolleit in St. Buryan or Burian (also near the Land's End) which are a furlong apart, one 12 feet, the other 15 feet high. On the downs between Wadebridge and St. Columb are nine rude stone blocks or pillars placed in line, bearing north-east and south-west, and called the Nine Maids. The circles of stones are numerous in this county, and are generally known by the name of Dawns Men, that is, the stone dance. Boskednan circle, in the parish of Gulval and Boscawen-ûn in St. Buryan, are formed of stones placed at some distance from each other. Boscawen-ûn has a stone in the centre fixed in the ground, but leaning far forward. Other circles are formed by stones not erect, but placed near each other, so as to form a kind of fence: such as Zenor Circle, between St. Ives and Cape Cornwall, and Kerris Roundago, near Penzance, an oval inclosure, with four stone pillars at one end, marking out a quadrangular space. All these are in the western part of the county. Near Liskeard are three circles, very near each other, formed by erect stones placed at some distance; several of the stones have been carried away, and others overthrown. This monument is locally named 'the Hurlers,' from a popular superstition in the district. At Botallack, in St. Just parish, near Cape Cornwall, are several stone circles intersecting each other: and on the hill Carn-Menelez in the parish of Wendrou, between Redruth and Helston, is a stone circle, having in the middle of it a natural rock of four masses piled on each other after the manner of the Cheesewring. There are also in Cornwall several circles, which Dr. Borlase supposes to have been devoted to the purposes of an amphitheatre. They are called 'plan an gaure,' 'the plain of sport or pastime.' But some of these, at least, are more probably encampments than amphitheatres.

Various other antiquities may be noticed here as having probably had a British origin, though of uncertain date. There are several barrows, or tumuli, composed some of loose stones, others of earth, and others of stones and earth mingled. Some of these, on being opened, have been found to contain sepulchral urns; others in the Scilly Isles, have an outer ring or edge of large stones, and within a cavity formed by stone walls, with flat stones at the top, and the cavity covered with the mound of loose stones or earth. There are also several cromlechs, the top stones of which are in Cornwall called 'quoits.' The quoit of Lanyon Cromlech is 19 feet long and 47 feet in circumference; its thickness varies, being in some parts as much as 2 feet; it is raised so high that a man can sit on horseback under it. It has four upright stones, but one is too short to give it any support.

Among the smaller relics of antiquity may be mentioned the sepulchral urns dug up from some of the barrows; celts of both brass and stone; spear-heads and broken pieces of copper swords; lumps of fine copper, evidently designed for melting; and a considerable number of gold coins found in 1749 near Carn-brea Hill, in the neighbourhood of Redruth.

There are also in Cornwall several artificial caves or subterranean galleries, formed by walls of upright stones, with other stones laid across; some of the galleries extend 30 feet or even 60 feet in length. The upright stones, or obelisks, with inscriptions in the Roman character, and in the Latin tongue, must be referred to a period subsequent to the Roman invasion; and from their inscriptions or symbols, several must have been posterior to the introduction of the Christian religion. Other antiquities of British origin we must pass over.

The period at which Cornwall fell under the power of the Romans is not known. Dr. Borlase ascribes the conquest to Agricola; Dr. Stillingfleet to Vespasian. As however none of the Roman historians

who have recorded the affairs of Britain notice the conquest of Cornwall, or of the tribes inhabiting it, it is probable that it was not signalled by any great exploits. Some of the older antiquaries denied that Cornwall ever came under the Roman dominion; but apart from the improbability of the rich mines of this county escaping the notice, or being defended from the power of that people, the quantity of Roman coins and other Roman remains found in Cornwall shows that Cornwall shared in the general subjection of South Britain.

The geography of Cornwall during the Roman period is very obscure. Ptolemæus notices the headlands of Antivestium, or Bolerium, supposed to be the Land's End; and Ocrinum, or Damnonium, supposed to be the Lizard: and Richard of Cirencester mentions also the Rame Head. Ptolemæus mentions the estuaries of the river Tamar, which the name enables us to identify with the Tamer, and the Cenion, probably the Fal, which has the most remarkable estuary west of the Tamer. Of the towns of the Damnonii, mentioned by Ptolemæus, Voluba, or Voliba, has been fixed at Tregony, or Gram-pound, or perhaps at Wolvedon, where is a camp, probably Roman, on the Fal (the name of which has been supposed to be incorporated in the word Vol-uba), and at Lostwithiel, or elsewhere on the Fowey. Uxela, which some have fixed at Lostwithiel, is more generally regarded now as having been in Somersetshire. Tamara, fixed by Horsley at Saltash, is by others removed into Devonshire to Tamerton. To these towns, all mentioned by Ptolemæus, we may add on the authority of Richard, Cenia, whose name seems to connect it with the Fal, the Cenion of Ptolemæus, but which is nevertheless fixed by some at Condurra, on the river Hel, or Helford, where are the remains of a Roman camp; Musidum, or Musidunum, which is fixed near Stratton; and Halangim, supposed to be Carn-brea. Two if not three Roman roads enter Cornwall from Devonshire. One was the continuation of the great road which ran westward from Isca Dumniurum, or Exeter, and it is said may be traced on the downs west of Liskeard; it is conjectured to have proceeded westward by Lostwithiel, St. Austell, and Gram-pound (or Tregony) to Bossens, where is a Roman camp, near the river Heyl, which falls into St. Ives' Bay, and thence to Marazion, or rather to St. Michael's Mount, the presumed Ictis of Diodorus. The other road came from the north of Devon to Stratton, and is conjectured to have led towards Bude Haven, which was probably then a large and more important harbour. The existence of a third Roman road is doubtful. A road, probably British, the direction of which is marked by the occurrence of tumuli, runs from the Land's End, near Redruth, Michel or St. Michael's, and St. Columb, towards Stratton. Besides the places above mentioned, Launceston has been supposed to be a Roman station. Cornwall was included in Britannia Prima.

Upon the departure of the Romans Cornwall recovered its independence, which it maintained for a long time against the invading Saxons. The famous Arthur, whose history has been so distorted by fable as to cast a doubt over his existence, is generally reputed to have been a native of this county.

The continued and resistless pressure of the Saxons having driven westward those Britons who refused to bear the yoke of the invaders, Cornwall and Devonshire became the place of refuge to many. It was probably about this time that part of the superabundant population thus compressed into the extremity of the island took refuge in Bretagne, already colonised by their countrymen, and gave to a district there (Cornouailles) the name of the country they had left. The Cornish Britons and those of Wales appear to have recognised one supreme authority until the middle of the 7th century, when Cadwaladr, the last British sovereign, abdicated his throne, and went to Rome, where he died. Upon his death, A.D. 680, Ivor, son of Alain, king of Bretagne, was sent by his father with a powerful fleet to obtain the crown, and met at first with considerable success, defeating the West Saxons, and obtaining possession of Cornwall, Devonshire, and Somersetshire: he was however afterwards driven from the island by the West Saxon king Kentwin. From this period till the reign of Egbert the Britons were exposed to the constant hostility of the Saxons. During the reign of Egbert's successors little is known of the history of Cornwall until we come to the time of Athelstan, by whom the whole country, including the Scilly Isles, was reduced and incorporated with the now consolidated kingdom of England. From this time the provincial history of Cornwall offers little to interest the reader for many centuries. Some ravages of the Danes and some intestine commotions are the only memorable events. The attempt of Henry De la Pomeroy to seize St. Michael's Mount in order to support the rebellion of Prince John against his brother Richard I. is noticed under MARAZION.

Of the obscure and troubled period over which our historical notice extends Cornwall retains many memorials in the camps and earth-works, which are more numerous in this county than in any other. These are for the most part nearly round or oval, a form which induces us to refer them to any other than a Roman origin. They possibly were formed during the severe and protracted struggles of the Cornish Britons with the Anglo-Saxons. In many places of the coast a small promontory or portion of the cliff is inclosed by a rampart, or vallum, running from one edge of the cliff to the other, and strengthened on the land-side by a ditch. These, if situated by any clue to their origin, may be ascribed to the Danes. The space

inclosed is considerable; in one case (in the parish of St. Gorrán, near Mevagissey) it amounts to 100 acres. Our space forbids a description of these works, and a mere catalogue would be useless.

The ruins of castles and of monastic establishments belong to a later period than the earth-works; but in these Cornwall is not remarkably rich. On the hills are remains of rude circular buildings called castles, the walls of which were formed of dry stones not joined with any cement: these must be referred to an early period; Dr. Borlase considers them to be of Danish origin. In the narrow part of the county west of Mount's Bay and St. Ives' Bay there are no less than seven of these castles, one of which, Chûm Castle, consists of an oval inclosure surrounded by a wall, which Borlase estimates to have been originally 15 feet high, or rather more; 8 feet thick at the present top, but thicker at the foundation; outside of this is a ditch 30 feet wide; and outside of this an outer wall, probably 10 feet high, and about 5 feet thick. The entrance, made intricate for the purpose of defence, is inclosed by walls running from the outer wall, on one side of the entrance quite to the inner wall, and on the other to within three feet of it: two other walls running from the outer to the inner wall serve with the entrance to divide the ditch into three parts. Round the outer wall is a ditch. The space inclosed by the inner wall is 125 feet from east to west, and 110 feet from north to south; it is divided into several compartments ranged round the inside of the wall. There is a well in the inclosure.

Of castles intended for residence as well as defence may be mentioned Karn-brê, or Carn-brea Castle, on Carn-brea Hill, near the Land's End. This is very small, scarcely 60 feet long by 10 feet wide, built upon a ledge of rock, whose uneven surface has caused great diversity in the level of the rooms upon the ground floor. Carn-brea Hill abounds with antiquities: there is an ancient camp of irregular form, some cairns, and other antiquities of rough stone. Tintagel Castle has been already noticed. [BOSSINEY.] For Launceston Castle, see LAUNCESTON.

Trematon Castle is on an eminence over the river Lynher, in the parish of St. Stephen's, and not far from Saltash. It has a base-court surrounded by an embattled wall of irregular form, following the shape of the hill on which it stands, and pierced with loop-holes. The keep is on an artificial mound, at the north-east corner of the base-court, about 30 feet high: the walls of the keep are 30 feet high and 10 feet thick: it is nearly oval, and its inner dimensions are 66 feet by 52 feet. It has no windows in the outer wall. In the time of William Rufus this castle was held by the Valletort family. In the Cornish rebellion in 1549 (reign of Edward VI.) Trematon Castle was defended for a while against the rebels by Sir Richard Grenville.

Of Restormel Castle, in the parish of Lanlivery, near Lostwithiel, the only part now remaining is the keep, a building of large dimensions: it is on a steep mound formed out of a rocky hill, and has a deep ditch. The inclosure of the keep is an exact circle of 110 feet diameter within; it has walls 10 feet thick at the top: from the present floor of the ground-rooms to the top of the parapet is 34½ feet. The castles of Fowey, St. Mawes, and Pendennis are noticed elsewhere.

There are few remains of monastic buildings in Cornwall. The church of St. German's priory is described under ST. GERMAN'S. Monastic remains on St. Michael's Mount have been repaired and converted into a dwelling-house. [MARAZION.] Of the monastery of St. Benet, near Lanivet, there are considerable remains. The tower of the church is also standing. The chapel of St. Lawrence's Hospital, near Bodmin, remains. Morwinstow church, in the northern extremity of the county, and Kilkhampton or Kilkhampton church, near Stratton, are very ancient, being wholly or chiefly of Norman architecture. Sheviok church, near St. German's, has some portions of early English and other portions of decorated English architecture.

In the war of the Roses the Cornish men seem to have taken the Lancastrian side, induced mainly by the influence of Sir Hugh Courtney of Bocounee and Sir John Arundell of Lanherne: they were present in the field at Tewkesbury, and it was in their country (at St. Michael's Mount) that the Earl of Oxford, one of the Lancastrian leaders, sought to make a stand after that fatal day. In the reign of Henry VII. (1495), they rose in rebellion on occasion of a tax levied to defray the expense of a war with Scotland. In 1497 the Cornish men were again in arms to support Perkin Warbeck, but the flight of that pretender caused the failure of the attempt. The change of the religious institutions of the county led to the change of the common language of Cornwall; the people, for the most part of British descent, with comparatively few Saxons settled among them, had retained a language of their own, a dialect of the Celtic. The introduction of the English church service paved the way for the gradual decline of the Cornish dialect. In the reign of Charles I. some aged people near Penryn were quite ignorant of the English language. In the early part of the last century the Cornish was still spoken by the fishermen and market women near the extreme southern point of the county. At present this ancient tongue is the study of the scholar and antiquary alone. A few manuscripts in it are extant; the most remarkable of which are some interludes partly written in the 15th century.

In 1595 Penzance and one or two places near it were burnt by the Spaniards.

In the great civil war of Charles I. and his parliament the Cornish men seem to have been on the whole in favour of the king. They distinguished themselves on the royalist side at the battle of Lansdowns and the siege of Bristol in 1643; and the king in reward of their loyalty wrote them a letter of thanks, which he ordered to be printed and published, and a copy to be read in every church and chapel in the county. In July 1644 the Earl of Essex marched into Cornwall at the head of the parliamentary forces and took possession of Lanneston, Saltash, Bodmin, Lostwithiel, and Fowey; but being followed by the royal army under the king in person was forced to retreat to Fowey with his infantry, his cavalry having previously got clear off. From Fowey Lord Essex escaped with some other persons to Plymouth; but his infantry, 6000 in number, under Major-General Skippon, were forced to capitulate on September 2nd. In the autumn and winter of 1645 Charles II., then Prince of Wales, spent some time in Cornwall: in March 1646 he embarked at Pendennis Castle for the Scilly Isles upon the approach of the Parliamentarians under Fairfax, who, after defeating Lord Hopton at Torrington, entered Cornwall, forced the royalist cavalry to surrender, and acquired possession of the whole county. The royalist army had been disorganised by the disputes of their leaders. Pendennis Castle, one of the last places in England which held out for the king, surrendered in August 1646. The Scilly Islands had some time before been seized by the victorious party, and Prince Charles forced to flee, first to Jersey, and afterwards to France. In 1648 an attempt to raise forces for the king was defeated by Sir Hardress Waller. The Dutch made two attempts on the Cornish coast in the war between them and the Commonwealth, but were defeated in both. Since this period the local history of Cornwall presents little that is of general interest.

Cornwall is mainly a mining county. In 1851 the county possessed nine savings banks, at Bodmin, Falmouth, Helston, Launceston, Liskeard, Penzance, Redruth, Truro, and Wadebridge. The total amount owing to depositors on the 20th of November 1851 was 503,760*l.* 3*s.* 3*d.*

COROMANDEL COAST, originally Cholomandala, or, according to Major Rennell, the Sora Mandalam of Ptolemaeus, is the sea-board of the western side of the Bay of Bengal, extending from Point Calimere on the south, in 10° 18' N. lat. and 79° 56' E. long., to the mouth of the Kistnah on the north, in 15° 45' N. lat. and 80° 53' E. long. Along the coast from south to north are Nagore, Trauquebar, Cuddalore, Pondicherry, Madras, and Nellore; but throughout its whole extent, about 350 miles, forming part of the sea-board of the Carnatic, the coast does not afford any secure port or harbour, and owing to the prevalence of the surf it is difficult to effect a landing except by means of boats constructed for the purpose.

CORON (*Koroni*), a town in the Morea, on the west coast of the Gulf of Kalazata (called also Gulf of Koroni), the ancient Messenian Gulf. It appears to stand at or near the site of the ancient Colonides, while the town of Corons, of which Pausanias speaks as having been built by the Messenians when they were restored to their country by the help of the Thebans, would seem by the description which that author gives of its locality to have stood farther north on the same coast, near the spot where the village of Petalidhi now stands. Leake however makes Koroni occupy the site of Asino; Colonides he places at Kastéla, where are some ruins of ancient buildings; while the French commission places it on the Bay of Phœnicus to the north-west of Cape Gallo, the ancient Acritas. The present Coron is a place of some trade, and exports oil and silk, which are produced in the neighbouring district.

The town contains a large castle in tolerably good repair, in which the Turkish inhabitants used to reside before the Greek revolution, the Greek population then occupying the suburb called Varusi. The roadstead is open and exposed to the south winds, but the bottom of the shore being soft sand, vessels driven upon it often escape without much damage. The town stands on a promontory surrounded by a fertile plain, which is divided from the district of Modon, on the west coast of the Morea, by a barren ridge which runs north and south through the peninsula to Cape Gallo. (Leake's 'Morea,' vol. i.)

CORRÈZE, an inland department of France, deriving its name from the river Corrèze, which falls into the Vézère, a tributary of the great river Dordogne. It extends between 44° 55' and 45° 44' N. lat., 1° 13' and 2° 22' E. long.; and is bounded N. by the departments of Haute-Vienne and Creuse, E. by those of Puy-de-Dôme and Cantal, S. by the department of Lot, and W. by that of Dordogne. The department is of irregular form; its greatest length from north-east to south-west is 64 miles, from east to west 51 miles. Its superficial extent is 2265 square miles; its population according to the census of 1851 was 320,864, which gives 141.66 to the square mile, being 33.05 below the average per square mile for the whole of France.

This department is formed out of Bas-Limousin, and consists of two regions of highlands and lowlands. The district that forms the east and north of the department, comprising the arrondissement of Ussel and the greater part of that of Tulle, is called La Montagne (the Highlands), from its being covered with the Auvergne Mountains or Mountains of Limousin, as they are called, which separate the waters that flow to the Loire from those that feed the Dordogne. Numerous offsets from the Mountains of Limousin run in a southerly

and south-west direction into the interior of the department. These regions present caverns, ravines, torrents, cascades, high plains, and wild, bare, and barren summits, which rise in some places to the height of 4000 feet above the sea, and are covered with snow for several months in the year. The lower slopes are clothed with forests in which the chestnut thrives in favourable situations; the high plains and valleys produce some good pasture; but the general character of this portion of the department is extreme sterility, the shallow, cold, and hungry soils yielding but scanty crops of rye, oats, buckwheat, hemp, and flax. Neither grapes nor any other fruits ripen thoroughly except walnuts, and they are of a small size.

The south and south-west of the department, called Le Pays Bas, or the Lowlands, has a richer soil and a denser population. Here the vine and other fruit-trees generally flourish, and in addition to the cereal grains before mentioned, wheat, barley, and maize are produced. Horned cattle are reared in considerable numbers in the lowlands, sheep and goats on the mountain pastures. Among the wild animals are the wild boar, the wolf, and the fox; reptiles are very numerous, and among them several varieties of the adder. Birds, both native and migratory, exist in great numbers and variety. Throughout the whole department the climate is cold and damp; fogs are almost always hovering over the courses of the numerous rivers and the saturated soil of the lowlands; the nights even in the middle of summer are cool, and white frosts are very common. The habitations of the peasantry are for the most part wretched in the extreme.

In consequence of the extreme humidity of the climate the surface of the department, except when covered with snow, presents everywhere an agreeable verdure not very common in France. The Fauna of the department is extremely rich in grasses of different kinds, in odoriferous and umbelliferous plants, and in mosses, lichens, and fungi. Among forest-trees the principal species are chestnut, walnut, and in dry situations the oak. The fruit of the chestnut enters largely into the food of the people. The phenomenon of the spontaneous carbonisation of the chestnut-tree is not rare in this department. Horned cattle are generally used in the plough throughout the lowlands, where a good number of cattle are fattened for the Paris and other markets. The stock cattle of the department are recruited by importations from the departments to the southward, as the offspring of the native breeds soon degenerates. Sheep, on the contrary, improves in quality on the pastures of the department.

The Dordogne and its feeder the Chavaunon form the eastern boundary of the department for a considerable way, separating it from those of Puy-de-Dôme and Cantal. The Dordogne crosses the south-eastern angle of the department, and enters that of Lot near the point where it is joined by the Cère from the left bank. Its principal feeders within this department are the Diège, the Troussonne, the Lazège, the Doustre, and the Loyre, all of which rise in the north-east of the department and fall in on the right bank. [DORDOGNE.] The *Corrèze*, from which this department is named, rises in the mountains near Meymac, and, flowing south-west past Tulle and Brives, enters the Vézère on its left bank near the western boundary of the department. The *Vézère* drains the north and north-west of the department; it rises near Chavagnes in the arrondissement of Ussel, and runs south-west past Treignac, Uzerche, and Larche, near which it enters the department of Dordogne; here continuing in the same direction, it passes Montignac, a few miles south-west of which it falls into the Dordogne on the right bank. The *Haute-Vézère*, a feeder of the Isle, rises in the west of the department near Lubersac. None of these rivers is navigable within this department. The department is crossed by 5 state and 5 departmental roads.

The department is rich in minerals, especially in coal, iron, lead, granite of different colours, porphyry, alabaster, &c.; but of this wealth little advantage is taken from want of facilities for transport. The iron and coal raised are chiefly used in the department. Fire-arms, leather, glass, bricks, coarse woollens, wax-candles, and nut-oil are the principal articles of industrial produce. A great number of fairs are held in the year, at which, besides the articles named, cattle, horses, mules, linen yarn, chestnuts, &c., are sold.

The whole surface of this department contains 1,449,624 acres. Of this area 302,566 acres are under various crops, 334,000 are capable of cultivation, 180,561 consist of natural grass-land, 406,032 of heaths and moors, 90,366 of woods and forests, and 37,569 acres are under vineyards, which yield 5,566,000 gallons of inferior wine yearly.

The department is divided into 3 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Tulle	12	118	138,111
2. Brives	10	101	116,640
3. Ussel	7	74	66,113
Total	29	293	320,864

1. In the first arrondissement the chief town is *Tulle*, which stands on the Corrèze at a distance of 291 miles S. from Paris, in 45° 16' N. lat., 1° 46' E. long., and has 10,748 inhabitants, including the whole commune. The town, which is built on the slope of a hill, is

ancient and ill laid out: the houses are in general old and ugly, but some are remarkable for their gothic structure and sculptured ornaments. The most important buildings are the cathedral, the court-house, the departmental prison, and the theatre. The town is the seat of a bishop, has tribunals of first instance and of commerce, ecclesiastical and communal colleges, and a pretty promenade along the Corrèze, which is here joined by the Soiane, and is crossed by several bridges. Tulle is a place of some manufacturing industry, and has a good trade in cattle and agricultural produce; but it is chiefly noted as the centre of a manufacture of fire-arms, which gives employment to above 1000 workmen in the town and neighbouring districts. On the hill above the town there is a high square tower said to be of Roman construction, and near the tower is the public cemetery. *Argentat*, a thriving commune and town on the right bank of the Dordogne, which is here crossed by a suspension-bridge, has 3197 inhabitants, who trade with Bordeaux in oak staves, iron, charcoal, and coal raised in the neighbouring mines. *Treignac*, on the left bank of the Vézère, has an ancient castle, a college, and some trade in wool, wax, cattle, sheep, &c. The population, including the whole commune, exceeds 3000. The manufactures are hats, stockings, and woollen yarn. About two miles above the town the Vézère, issuing from a narrow rocky defile, descends to a level 100 feet lower at a single bound. *Uzerche*, a pretty town farther down the Vézère, occupies a very picturesque site, and has a college and, including the commune, 3237 inhabitants. The houses are well built, covered with slates, and many of them are decorated with turrets.

2. In the second arrondissement the chief town is *Brives-la-Gaillarde*, which stands in a fertile valley on the left bank of the Corrèze, 19 miles S.W. from Tulle, and has 8413 inhabitants, including the commune. A circular avenue, formed of elms and bordered with pretty houses built of cut stone, surrounds the town, the interior of which disappoints the expectation thus raised, as the streets are narrow and irregular; but the houses in general are well and substantially built. The best buildings are the college, the church of St. Martin, the hospital (a house built during the English occupation of this part of France, which is decorated within and without with curious gothic sculptures), and the Belvédère Tower, from which there is a fine view of the town, the valley of the Corrèze, the vineyards, and wooded slopes of the vicinity. The town has an ecclesiastical seminary, trades in timber, wine, chestnuts, violet mustard, truffles, turkeys, wool, cattle, pigs, &c., and has manufactures of cotton-yarn, nut-oil, and wax-candles. Coal-mines are worked near the town.

Of the other towns we give the following, with the population of the communes in which they stand:—*Allassac*, 9 miles N. from Brives, population 4200, chiefly engaged in tillage and the culture of the vine. *Beaulieu*, on the right of the Dordogne, has 2513 inhabitants, and an old church which is decorated with very remarkable sculptures. *Donzenac*, 6 miles N. from Brives, is prettily situated among vineyards and plantations of walnut, chestnut, and poplar trees: population 3260, employed in agriculture and in the slate-quarries near the town. *Jouillac*, on the western border of the department and near the lead-mines: population 2455. *Lubersac*, near the Haute-Vézère: population 3768. *Pompadour*, a small village near Lubersac, is noted for its castle, which was bestowed by Louis XV. on one of his mistresses, who took her title of marchioness from it. *Meyssac*, 12 miles S. from Brives, has 2591 inhabitants, who raise great quantities of walnuts. A little west of Meyssac is the village of *Turenne*, commanded by an ancient castle which belonged to the dukes of Aquitaine, the ancestors of Marshal Turenne, who took his title of duke from it. *Vigeois*, 8 miles from Brives, has paper-mills and 2508 inhabitants, including the whole commune.

3. In the third arrondissement the chief town, *Ussel*, is situated among mountains between the Diège and the Sarsonne, which unite and fall into the Dordogne near Bort. It has a tribunal of first instance, a college, and 4238 inhabitants, who manufacture coarse woollens, canvases, nails, and leather, and trade in hemp, skins, wax, tallow, timber, oak staves, &c. *Bort*, a commune and town on the right bank of the Dordogne, has 2367 inhabitants; near this place is a hill called *Orgues-de-Bort*, which is composed of enormous basaltic columns. *Meymac*, in a pretty valley 10 miles W. from Ussel, has an hospital, an ancient church, and 3389 inhabitants, including the whole commune. *Neuric*, 13 miles W. from Ussel: population 2918.

The department forms the see of the bishop of Tulle, is under the jurisdiction of the High Court of Limoges, but an assize court is held in Tulle. It is included in the 21st Military Division, of which Limoges is head-quarters.

(*Dictionnaire de la France; Statistique de la France; Annuaire pour l'An 1853.*)

CORRIB, LOUGH. [GALWAY.]

CORRIENTES, one of the Riverine provinces of the Argentine Confederation, South America, comprehends the northern portion of the peninsula formed by the rivers Paraná and Uruguay; the southern portion of the peninsula being occupied by the province of Entre Rios. The population is about 35,000.

The southern and eastern parts of the province are somewhat hilly, but the remaining and by far the greater part is low. About half the surface is covered with timber-trees, much of the wood being available for house and ship-building. Some thousand square miles

are covered with palm-trees, which are used for a great number of purposes. In the northern part of the province is the Laguna Ybera, which is in fact a vast marsh overflowed during the periodical risings of the Paraná. It feeds all or nearly all the rivers which rise in the interior of the province and fall into the Paraná on the one side or the Uruguay on the other. The soil of Corrientes is generally sandy, but produces excellent crops. Cotton, tobacco, rice, sugar, indigo, and other tropical productions flourish, yet little attention is given to them, partly owing to the scantiness of the population and partly to the general dislike of the peasantry for agricultural occupations. Besides the articles mentioned above, maize and barley, arrow-root, melons, sweet potatoes, and various tropical fruits are raised. The sugar-cane is at present only grown in order to extract molasses for distilling; the sugar consumed in the province is imported from Brazil. All kinds of crops suffer at times from visitations of enormous swarms of ants and locusts, which entirely devastate the district in which they appear. The chief employments of the inhabitants are the rearing of cattle and horses, there being a considerable extent of good pasture land; sheep however do not thrive very well. Large numbers of hides are exported. Mechanical pursuits are entirely neglected. The province is well adapted for commerce, there being on the Paraná four places which serve as good ports, and three on the Uruguay. The opening of these rivers will doubtless prove of great benefit to Corrientes, but the traffic can only be fairly developed when the rivers are navigated by steam-vessels. The inhabitants are for the most part a mixed race of Indians and Spanish, and of indolent habits. The language spoken, according to Mr. Woodbine Parish, is "more Guarini than Spanish." There are exceedingly few foreigners in either the capital or the country parts of the province. Most of the peasantry possess 40 or 50 mares, 30 or 40 cows, and from 100 to 200 sheep. The women are of more industrious habits than the men. They do a good deal of the agricultural labour, as ploughing, hoeing and attending to the crops, and reaping; make cheese for sale as well as home consumption; act as shepherds; and spin and weave both cotton and woollen cloths for summer and winter garments.

The government is almost entirely in the hands of a governor, who is elected by the Congress for a term of three years. The Congress consists of 15 deputies,—one from each of the 14 departments, except that of the capital, which returns two deputies. The revenue is derived chiefly from customs duties, and the church property which was seized by government during the civil wars. The army consists in time of peace of 1000 men, but during war all males between the ages of 14 and 60 are liable to serve. Indeed during the late war with Buenos Ayres a reserve corps was formed of 900 or 1000 women mounted on horseback, who are said to have proved of great service in some engagements with the army of Rosas. As was mentioned under ARGENTINE CONFEDERATION, Corrientes took a leading part in the revolt of the other provinces against the supremacy of Buenos Ayres, and entered into the engagements with foreign powers which led to the downfall of Rosas. The main incitement to these measures on the part of Corrientes was the determination of Rosas to enforce the closing of the Paraná and Uruguay against all foreign vessels; and Corrientes made the opening of the navigation of these rivers a leading object in all negotiations. The war between Buenos Ayres and the other provinces under General Urquiza, the governor of Corrientes, still continues (February 1854), but there appears to be a growing desire on both sides to bring it to a friendly termination.

Corrientes, the capital, population about 5000, is situated in 27° 27' S. lat., 58° 50' W. long., below the confluence of the Rio Paraná with the Paraguay; and stands on a considerable elevation. It is rather a well-built town, but contains few buildings of any consequence. The situation of the town is admirably adapted for commercial purposes, affording on the one hand every facility for inland intercourse; and on the other for carrying on the export and import trade with Buenos Ayres and with foreign states by the navigation of the Paraná. *Santa Lucia*, also on the Paraná, 29° S. lat., 58° 55' W. long., is the next important town in the province. It has some trade, but contains less than 3000 inhabitants.

The *Misiones*, which, according to the treaty between Brazil and Buenos Ayres, in 1828, was to constitute an independent republic, extend eastward from Corrientes, between the Paraná and Paraguay to the confines of Brazil. This fertile tract, which was very populous under the sway of the Jesuits, is now filled with depopulated ruins. It contained only about a thousand inhabitants in 1825; many of them perished in the following war and others emigrated, and it is now almost entirely depopulated.

CORROFIN, county of Clare, Ireland, a market-town and the seat of a Poor-Law Union, in the parish of Kilneboy and barony of Inchiquin, is situated on a small stream which unites the lakes of Taddon and Inchiquin, in 52° 56' N. lat., 9° 4' W. long., distant 7 miles N.N.W. from Ennis, and 119 miles W.S.W. from Dublin. The population of the town of Corrofin in 1851 was 994, besides 255 in the workhouse. Corrofin Poor-Law Union comprises nine electoral divisions, with an area of 61,386 acres, and a population in 1851 of 9352. Corrofin is pleasantly situated in the plain between the hills of Inchiquin and Burren. From Taddon Lake a series of lakes and connecting streams runs north-north-east towards Kilmacduagh.

The town contains a dispensary, and a station of the constabulary force. Petty sessions are held here, and there are two yearly fairs. In the vicinity are the ruins of a castle, formerly the residence of the O'Briens.

CORSEUL. [CÔTES-DU-NORD.]

CORSHAM, Wiltshire, a decayed market-town in the parish of Corsham and hundred of Chippenham, is situated in 51° 25' N. lat., 2° 10' W. long, distant 14 miles N.W. from Devizes, 97 miles W. by S. from London by road, and 98½ miles by the Great Western railway. The population of the parish of Corsham in 1851 was 3172. The living is a vicarage in the archdeaconry of Bristol and diocese of Gloucester and Bristol. The town of Corsham consists chiefly of one street of considerable length; the houses are built of stone. Near the centre of this street is a market-house erected in 1784. The parish church, dedicated to St. Bartholomew, is an ancient structure of mixed styles, and consists of a nave and chancel, with a tower and spire. The Independents and Baptists have places of worship. There are a Free school, a British school, almshouses, and several parochial charities. Previous to the general introduction of machinery into the woollen manufacture, spinning and weaving were carried on to a considerable extent in Corsham. The population is now chiefly engaged in agriculture. Fairs are held March 7th and September 4th for cattle.

CORSICA, or as the French call it, *Corse*, an island in the Mediterranean, about 180 miles E. from France, of which it forms a department, extends between 41° 21' 4" and 43° 41' 7" N. lat., 8° 32' 10" and 9° 33' 26" E. long. The northern part of the island consists of a mountainous projection, only 9 miles broad at its widest part, 23 miles in length, and terminating in Cape Corso (the ancient Sacred Promontory). From this point to the Strait of Bonifacio, the southern boundary of Corsica, the whole length of the island is 116 miles; its greatest breadth is 52 miles. The area is 3377 square miles, and the population in 1851 was 236,253, which gives 69.94 to the square mile.

A great number of small islands are scattered round the coast, the most important of which are Girajila and Finocchiarolo on the north; Capraja, belonging to the king of Sardinia, on the north-east; l'Isle-Rousse or Isola Rossa, Gargalo, and les Iles Sanguinaires on the west; les Iles Cervicales and Toro on the east; and Razzoli, Maddalena, Santa Maria, Capraja, Sparagi, and Budelli in the Strait of Bonifacio.

The western coast is high, and indented by numerous gulfs and bays, many of which afford excellent harbours, though they are comparatively useless owing to the difficulty of communication with the interior. The principal bays on this coast are those of Porto, Sagone, Ajaccio, and Propriano; the chief harbours on the west coast are Santa Fiorenza, or St. Florent, Isola Rossa (Ile-Rousse), Calvi, and Ajaccio. The eastern coast is low, and presents a continuous line, broken only towards the north by the shore-lake of Biguglia, and near the southern extremity by the fine harbour of Porto Vecchio and the Gulf of Santa Manza. The low grounds along the east coast are unhealthy, but the greater part of the island is free from malaria. The best harbours are those of Bastia, Santa Manza, and Porto Vecchio (the ancient Portus Syracusanus). Here and there, in picturesque situations along the sea-shore, are seen a great number of towers, which were erected during the Genoese occupation of the island, and served to give notice by fire-signals of the approach of the Barbary cruisers, to whose incursions the island was in former times greatly exposed. On the south side of the island is the harbour and town of Bonifacio, which gives name to the strait between Corsica and Sardinia. The interior of the island presents a mass of mountains, broken by abrupt gorges, and inclosing many beautiful valleys, through each of which a torrent or a rapid brook hurries along; steep frowning precipices re-echoing the roar of the waters struggling past their base; and extensive forests, which present in their native luxuriance a rich contrast with the bare and rocky heights that here and there spring up above the general elevation of the ranges.

The principal mountain chain, the ramifications of which cover the greater part of the surface of the island, runs due south from Cap Corso to about 42° 37' N. lat.; it then turns west as far as Monte Grosso, which attains the height of 6500 feet above the sea. From this point it again runs south under the name of the Monti-di-Frontogna to the summit of Paglia-Orba, which is 8697 feet high; hence it turns south-east as far as the pass of Foce-di-Verde, near 42° N. lat., having passed its culminating point in Monte Rotondo (the ancient Mons Aureus), which reaches to the height of 9068 feet. From Foce-di-Verde its course is due south to its termination in the Strait of Bonifacio. The mountains of Corsica are composed chiefly of limestone, but the crystallised rocks, granite, porphyry, sienite, serpentine, &c. appear in the main chain and on the west coast. The summits are covered with snow for several months in the year. From this chain numerous rapid rivers run in all directions to the sea: the principal of them are the Golo and the Tavignano, both of which rise in the group of Monte Rotondo, and flowing eastward enter the sea, the former near the ruins of the ancient Mariana, the latter near those of Aleria; the Valinco, Talavo, Prunelli, Gravona, Liamone, and Valinco rise on the western side of this mountain chain, and flow westward to the sea. The forests, which clothe the mountain sides, consist chiefly of oak, larch, heech, chestnut, pine, cork, turpentine-tree, wild olive, &c. The vast extent of these forests and the magnitude and excellence of the timber which they produce, has been cele-

brated from very remote ages. But notwithstanding this advantage and the abundance of harbours on the west and south coasts, the rugged nature of the surface of the island rendered Corsica in ancient as it still does in modern times one of the wildest and least civilised portions of southern Europe. The higher part of the mountains produces pasture, in which aromatic plants abound; and on the very crest of the chain lakes are found well stocked with fish. On the mountain pastures during the summer the herdsmen feed their sheep, goats, and pigs, resting at night in some of the numerous caverns in the rocks. The climate is excellent, the temperature varying of course with the elevation; and the air, except in a few marshy districts on the east coast, is pure and healthy: on an average 237 days in the year are fine and clear, 18 are rainy, and 110 cloudy. The prevailing winds are the south-east and south-west, which sometimes blow with great violence. The cold in winter on the highlands is of course intense.

The surface of the island comprises 2,161,610 acres, of which 8514 are planted with olives, 24,427 with vines, 68,322 with chestnuts, 355,837 are under corn cultivation, 1090 are artificial meadows, 572,603 are covered with rocks and forests, 515,606 are natural grass land not susceptible of cultivation, and 14,551 are covered with waters. The remainder of the surface is overgrown with a dense tangled underwood, consisting of arbutus, cistus, laurel, myrtle, heath, hroom, &c., and forming an almost impenetrable cover, called by the natives maquis, which is easily removed by burning; but if the land thus cleared be not kept in constant cultivation, it soon returns to its former state. The soil, except in the lower valleys where it is alluvial, is stony but fertile. Wheat, maize, and barley are the chief cereal grains. The yearly produce of wine is 6,600,000 gallons, some of which, especially that of Cap Corso, is of good quality, but in general it is carelessly made, ripe and unripe grapes being put indiscriminately into the wine-press. Of chestnuts, an important article of food, the produce is enormous. The chestnut tree is one of the most magnificent vegetable productions of the island. The mulberry is cultivated for the production of silk. The cotton-shrub, sugar-cane, indigo, tobacco, and madder are grown. The orange, citron, fig, almond, pomegranate, date-palm, and other fruit-trees flourish, and their produce is largely exported. The chestnuts and walnuts of the island are of the best quality and of the largest size. The forests abound in wild bees, and wax and honey are now as in ancient times important exports of the island. In ancient times the honey of Corsica was notorious for its bitter taste, owing to the bees (it is said) feeding on the box-trees, which rendered it unpalatable to strangers. The longevity of the inhabitants in ancient times was attributed to the abundant use of honey as an article of food.

Mules are the principal beasts of burden; horses and asses are small. Cows do not thrive, owing either to neglect or the nature of the pasturage; they give little milk, and their flesh is bad. Sheep and goats are very numerous, and are much prized for the delicacy of their flesh. The sheep are black, and generally have four, sometimes six, horns. The shepherds' dogs and stag and boar-hounds of the island are of very superior breed. Pigs are very numerous. Among the wild animals are foxes, wild boars, deer, hares. Partridges, woodcocks, snipes, guinea-fowl, pheasants, quails, &c. are very abundant. Eagles, vultures, and other birds of prey haunt the mountain summits. Reptiles are numerous; but the only venomous animal in the island is a black spider called malmignate, the bite of which is said to be mortal. Great quantities of tunny, pilchards, anchovy, and other fish are taken along the coast, and sent to the markets of Florence, Naples, and Genoa.

Iron, lead, antimony, black manganese, granite varying in colour from gray to red, porphyry, white marble, limestone, jasper, emerald, amianthus, &c. are found; but for the reasons stated above this mineral wealth lies comparatively useless. The granite of Corsica is of very fine quality. The Romans quarried it for architectural purposes, and obtained their chief supplies from the little islets a few miles from Bonifacio. There are several hot and cold mineral springs. Of manufacturing industry there is little. A little iron is manufactured from ore brought from the island of Elba, for no mines are worked by the Corsicans. The island has several oil and flour-mills, tanneries, and brick-works, two establishments for the manufacture of soap, and one for making glass. These articles, together with turnery, pitch and tar, and bad cheese, are almost the only industrial products. The commerce consists of the agricultural produce, and brandy, olive-oil, dried fruits, wax, salt fish, coral, ship-timber, myrtle-leaves, orange-flowers, lichen, tanned hides, goat-skins, deals, &c. No fairs are held in the island.

The island is divided into 5 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Ajaccio	12	72	55,008
2. Bastia	20	93	70,288
3. Sartène	8	46	20,735
4. Calvi	6	34	24,390
5. Corté	15	110	56,830
Total	61	355	236,251

Towns.—The chief towns are those which give names to the several arrondissements. Of these Ajaccio and Bastia have been already noticed. [AJACCIO; BASTIA.]

Sariène, or Sariena, the seat of a tribunal of first instance, is situated in the southern part of the island on a hill-ridge between the valleys of the Valinco and the Ortolo, and has, including the whole commune, 3235 inhabitants. It is surrounded by old ruined walls, and contains many well-built houses. The land in the neighbourhood is very fertile in corn, chestnuts, oil, and wine.

Bonifacio, a fortified sea-port town on the south coast of the island, gives name to the Strait of Bonifacio, which divides Sardinia from Corsica. The narrowest part of the strait, between Longosardo in Sardinia and the southernmost point of Corsica, is about seven miles across. At the east entrance of the strait are several clusters of islands. Near the Corsican coast is the island of Cavallo; and between that and Maddalena on the Sardinian side is Santa Maria, with several other islets and rocks, which make the Mediterranean sailors in general avoid passing through the strait. The land on both sides of the strait is mountainous. The town is built on a level rocky peninsula in the strait 180 feet above the sea, 20 miles S. from Sartena, 45 miles S. from Ajaccio, and has 3135 inhabitants, including the whole commune. It originated in a fortress built by a Pisan nobleman named Bonifacio in 830. The Genoese seized the fort in 1195, and thus gained a footing on the island. The town and fortifications are reached from the suburb built along the port by a very steep ascent. It is badly supplied with water. The harbour is formed by a natural inlet of the sea, sheltered by the limestone rocks on which the town is built, as by a mole; the entrance for about 500 yards is open to the south-west; it then runs from west to east for about 1400 yards with a mean width of 150 yards. The principal buildings are the churches of Santa Maria Maggiore, erected by the Pisans, and richly decorated with marble and porphyry; the church of San Domenico, a gothic structure, formerly belonging to the Templars, and erected in 1343; the church of San Francesco, which dates from the close of the 14th century; the fine barracks built by the French government in 1775; and the arsenal, which is the largest in the island. The neighbourhood of the town is very fertile in corn, fruit, and pasture. In the islands in the strait are seen the granite quarries worked by the Romans, who seem to have neglected the mines of the island. The force of the sea has formed many large and beautiful caverns near the town.

Porto Vecchio, a small fortified sea-port town of about 2000 inhabitants, is situated at the head of a wide deep bay, which forms one of the finest and safest harbours in Europe. The bay is everywhere of great depth, and affords room enough for the largest fleets. During the summer and autumn Porto Vecchio is an unhealthy place; the malaria from the marshy district round it forces the inhabitants temporarily to desert it for the healthy highlands. A good deal of salt is made at salt-works near Porto Vecchio.

Calvi, a small place on the west coast important for its fortifications, is situated on a peninsular rock at the head of the Bay of Calvi, in 42° 34' 7" N. lat., 8° 45' 53" E. long.: population 1746. The rock is occupied with a strong citadel which commands the harbour, but is itself within cannon reach of a hill called Mozzello, on which there is a small fort. The citadel and the part of the town adjacent to it are surrounded by strong walls built of blocks of granite. The rest of the town is built along the shore. The harbour of Calvi is deep and well sheltered. The town was always faithful to the Genoese during their occupation of the island. The English took Calvi after a stout resistance in 1794, but it was recovered by the Corsicans in the following year. The old palace of the Genoese governors is now converted into barracks. The trade of Calvi has decayed greatly, its commerce being transferred to *Isola Rossa, or Ile-Rousse* (as the French call it), which is situated a few miles to the north-east of Calvi, and is named from the red granite rock of which the island is composed, and which abounds along this coast. In the 16th century the Genoese joined the rock to Corsica by a bridge, and erected a tower upon it for the defence of the coast against the Moorish corsairs. In 1760, when the Genoese held only the coast towns and the Corsicans were masters of the interior of the island, Pascal Paoli erected some buildings on the *Isola Rossa*, in order to carry on trade and to have communications with foreign countries. The place soon increased and became the chief emporium for this part of the island. The French surrounded the town with walls, and built a mole to give greater security to the harbour, which is deep enough for the largest vessels: population, 1500. *Algajola,* a small place on the coast between Calvi and *Isola Rossa*, was formerly the residence of the Genoese governor of the province of Balagne, which included the north-west of the island.

Corté, formerly the 'patriot' capital of Corsica, is an ill-built fortified town nearly in the centre of the island, a few miles north-east of Monte Rotondo. It stands on the left bank of the Tavignano at its junction with another mountain stream, the Restonica, and has a tribunal of commerce and above 4000 inhabitants, including the whole commune. The town is built on the eastern slope of a hill above a lovely valley laid out in gardens, vineyards, and olive-grounds, and dotted with country houses. It is abundantly supplied with good water by means of an aqueduct nearly three miles in length. The citadel, the court-

house (in which the apartment occupied by Paoli is shown), and the barracks are the most remarkable buildings.

Of other places the following in the arrondissement of Bastia may be mentioned:—*Boryo,* a small place on an eminence between the Golo and the Berinco, not far from the ruins of Marians, deserves mention as the scene of the last victory gained by Paoli and the Corsicans over the French in 1763. *Luri* is beautifully situated on the eastern side of the projection of Cap Corso, in a rich well-cultivated valley, screened by mountains and watered by a rapid stream which is at times a furious torrent. A wide avenue extends from the town to the sea, which is three miles distant: the road is protected from the torrent by a stout wall. The church of Luri is handsome; in the interior are five marble altars. *Rogliano,* near the extremity of Cap Corso, has 1525 inhabitants; they have many vague traditions about Seneca, who probably spent part of his exile hereabouts. *St.-Florent (Sauta Fioranza),* prettily situated at the head of the bay of the same name, and at the extremity of a rich valley, is a small town inclosed by a wall, and further defended by a strong tower. The harbour is shallow, fit only for fishing smacks, but well sheltered. *St.-Florent* is a few miles west from Bastia. It is an unhealthy place during the summer and autumn in consequence of the marshes near it.

The only roads in the island are the following:—One from Bastia to the village of Santa Fioranza on the west coast, crossing the mountains by the pass called Bocca San Antonio; a second runs south from Bastia, then up along the left bank of the Golo, which it crosses a few miles north of Corté; having passed through Corté, it gains the western side of the mountain chain by the fortified pass of Bocca di Bogogiano, and, running along the right bank of the Gravona, terminates at Ajaccio; and a third, which coincides with the preceding for a few miles south from Bastia as far as the river Bovinco; having crossed this river, it runs along and within view of the east coast all the way to Bonifacio, where it turns north-west, and passing through Sarterne and Olmeto, terminates at Ajaccio. The other roads are mere tracks.

The island is called *Kurnos* by Herodotus (i. 165; vii. 165); later writers call it *Korsis* and *Korsica*. The last seems to have been the native name, and was that adopted by the Romans. The earliest inhabitants appear to have come from Liguria. The Phœceans founded the city of Alalia on the eastern coast, B.C. 564. The Tyrrhœnians, and after them the Carthaginians, made themselves masters of the island. In B.C. 259, it came under the power of the Romans, who took Alalia or Aleria, which was afterwards colonised from Rome and became the principal city of the island under the Roman empire. Its ruins exist about half a mile from the sea, though it was a sea-port in the time of the Romans. At the decline of the Roman empire the island was seized by the Goths, who held it till the 8th century, when they were dispossessed by the Saracens. In the reign of Pope Gregory VII. it was annexed to the Holy See, by which it was given first to the Pisans, and in 1297 to Jayme II., King of Aragon. The Genoese, after many previous unsuccessful attempts, conquered the island in 1481, and, notwithstanding the joint efforts of Henri II. of France and the Turks in the 16th century to deprive them of it, held it till 1755. In this year the Corsicans, headed by General Paoli, shook off the yoke of the Genoese. The latter, in 1763, resigned their claims to the island in favour of the French, who, after a desperate resistance from the patriots, subdued it in 1769. On the breaking out of the French revolution in 1793, the patriots, commanded by Paoli and assisted by the English, swept the French from the island, which was then placed under the protection of the British crown; but in 1796 the French again appeared, and drove out the English in less than six weeks. Since then, with the exception of a short occupation by the English in 1814, the island has remained annexed to France, and this annexation was confirmed by the Treaty of Paris in the last-mentioned year.

The island forms the see of the Bishop of Ajaccio, is under the jurisdiction of the High Court of Bastia and of the University of Ajaccio, and forms the 17th Military Division, of which Bastia is headquarters. It is now incorporated with France, of which it forms a department.

The Corsican is frugal and indolent. The peasant labours little; the listlessness of the herdsmen's employment seems preferable to a calling which would render more exertion necessary; and of such labour as there is the burden is thrown upon the women. One predominant characteristic of the islanders is the spirit of jealousy and revenge which divides the inhabitants of most of the villages of the interior into hostile parties or tribes. The love of personal independence makes the Corsican prefer to be the executioner of vengeance for his own wrongs, and assassination was until lately of frequent occurrence. These blood feuds have been greatly checked by the government of Napoleon III. Robbery is not uncommon, the central part of the island being infested with brigands. Gendarmes and troops are posted in detachments over the island, for the purpose of preventing these outrages. The dress of the peasantry of the interior is simple: it consists, for the men, of a short jacket, breeches, and gaiters, all of chocolate-coloured cloth; a neat pointed black velvet cap, or a coarse woven cap of the same colour as the rest of their dress, with perhaps a sort of cowl which goes over the head, or

is allowed to hang at the back of the neck. They generally carry a loaded musket, and have commonly a stiletto concealed about them, though this is prohibited by the French authorities. There are few peculiarities in the dress of the women: those in the neighbourhood of Ajaccio frequently wear a large round straw hat; those near Bastia have the head covered with a sort of veil, like the Italian peasantry. The villages are chiefly built on eminences: the houses are mere huts of four walls covered with a rude roof, and many of them have only one opening, serving for door, window, and chimney. Some are built of unwrought stone, and have a second story, the ascent to which is not by a staircase, but by a ladder. The fire, when one is lighted, is in the centre of the room. The furniture consists of stools, benches, and tables of the rudest construction. They use a pine stick for a flambeau or candle. These particulars apply only to the villages of the interior. The religion is the Roman Catholic.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

CORTÉ. [CORSIKA.]

CORTONA, an episcopal city in Tuscany, in the province of Arezzo, 15 miles S. by E. from the town of Arezzo, is built on the slope of a high and steep hill facing the south, and commands a splendid view of the fertile Val di Chiana and of the Lake of Perugia, the ancient Thrasymene. Its origin is lost in the remotest antiquity. Dionysius says that it was originally an Umbrian city, that it was seized by the Pelasgians. Virgil, no mean antiquarian, speaks of the city under the name of Corythus, and immortalises the old legend of its foundation by Dardanus. ('Æneid' iii. 167, vii. 206.) It seems to have been the central stronghold of the Pelasgians and Etruscans. Its walls which still remain are of the structure called Cyclopean or Pelasgic, consisting of large polygonal stones put together without cement. About the middle of the 5th century of Rome we find Corythum allied to the latter, and it remained faithful to its alliance during the second Punic war, when Hannibal ravaged its territory before the battle of the Lake Thrasymene. Little is known of its subsequent history, except that according to Dionysius it received a Roman colony most likely in the time of Sulla. History is likewise silent about Cortona, after the fall of the empire, until the end of the 12th century, when it appears as an independent municipal community, like most other Italian cities at that time, having its consuls, and its council composed of nobles and head tradesmen. The city became an episcopal see in the early ages of Christianity, but in the 13th century the bishop of Arezzo claimed spiritual jurisdiction over it. It was repeatedly at war with its neighbours of Arezzo, who plundered the town, and raised the castle in 1258. It afterwards became subject to a powerful family called Casali, who assumed the title of Vicars General and Lords of Cortona for nearly a century. In 1409 the citizens being dissatisfied with their lord, called in the Neapolitan troops of King Ladislaus, who put to death Casali, took possession of Cortona, and then sold it two years after to the Florentines for 60,000 golden florins. From that time Cortona has remained subject to Florence.

The city with its suburbs contains 5000 inhabitants. It still gives title to a bishop. Its territory is very fertile, especially in wine, corn, olive and mulberry-trees. The high road from Florence to Perugia passes near Cortona.

The cathedral, built in the 11th century, has some good paintings, and a fine basso-relievo of the Roman time. The other churches and convents are also rich in paintings. There is a diocesan seminary for clerical students, a college kept by the fathers of the Pious Schools, a conservatorio for female education, kept by nuns, and a drawing school. The Academia Etrusca, founded here in 1726, has published several volumes of memoirs on Etruscan antiquities, and has a library with some valuable manuscripts, and a museum. There is in the suburbs a remarkable Etruscan monument, supposed to have been a sepulchre, of similar construction to the city walls; it is named Tanella di Pitagora, Cortona being confounded with Crotona, the residence of Pythagoras.

(*Dizionario Geografico Storico della Toscana; Valéry, Voyages Littéraires en Italie; Denis, Etruria.*)

CORUÑA (in English commonly written *Corunna*), a city and seaport of Spain, capital of the modern province of Coruña, one of the divisions of the ancient province of Galicia, is situated in 43° 22' N. lat., 8° 21' W. long., 42 miles N. by E. from the city of Santiago. The population in 1845 was 18,840. The city is built partly on the eastern side of a small peninsula or headland, and partly on the isthmus which joins the peninsula to the mainland. It consists of an upper town and a lower town. The upper town occupies the peninsula; it is the more ancient, and contains two old parish churches. The lower town occupies the isthmus, having on one side the Bay of Coruña, and Orsan Bay on the other. The lower town, formerly called the Pescadería, or Fish-market, is comparatively modern, and is well built, mostly of granite. The two principal streets are wide, well paved, and handsome. The houses are furnished with balconies. The town contains a court-house, custom-house, theatre, arsenal, and barracks. It is defended by a citadel, and is otherwise sufficiently fortified to resist an assault, but is commanded by some heights to the southward near the walls. The Bay of Coruña forms the harbour, having the entrance between San Diego Point and

the headland on which the upper town of Coruña is situated. The river Mero enters the bottom of the bay by a ria, or estuary. The harbour is of great extent, has deep water, and is very safe. The inhabitants are chiefly occupied by the herring and pilchard fisheries on the coast, and there are some manufactures of linen and woollen goods, hats, cordage, sail-cloth, and cigars. Ship-building is also carried on. North of the town on an elevation of the headland is the Tower of Hercules, an ancient Roman structure, probably a pharos, now converted into a modern lighthouse; it is of a square form, 92 feet high, and the walls are more than four feet thick.

Coruña was founded by the Phœnicians, and was afterwards taken by the Romans, who called it *Ardohricum Coronium*. The Spanish Armada was refitted here in May, 1588, and 130 ships mounting 2630 guns sailed out of the harbour in June in order to make the conquest of England. The French army under Soult was here repulsed by the British army under Sir John Moore, who then received his death-wound, Jan. 16, 1809; his body wrapped in a military cloak was interred the same evening by the officers of his staff in the citadel of Coruña.

(*Ford, Handbook of Spain; Napier, History of the Peninsular War.*)

CORVO. [AZORES.]

CORWEN, Merionethshire, a town and the seat of a Poor-Law Union, in the parish of Corwen and hundred of Ederniou, is situated on rising ground on the right bank of the river Dee, in 52° 58' N. lat., 3° 20' W. long.; distant 12 miles N.E. by E. from Bala, and 194 miles N.W. by W. from London by road. The population of the parish in 1851 was 2069. The living is a sinecure rectory and a vicarage in the archdeaconry of Montgomery and diocese of St. Asaph. Corwen Poor-Law Union contains 15 parishes and townships, with an area of 65,900 acres, and a population in 1851 of 15,409.

Corwen is a small hut neat town; its situation above the river imparts to it a pleasant appearance, and also contributes to its salubrity. The town is supplied with water. Corwen is regarded with interest by the Welsh as the scene of two victories over the English, one in 1165 by Owen Gwynedd over Henry II., and the other by Owen Glyndwr over Henry IV. In the vicinity of the site of Corwen a British or Welsh post existed: it consisted of a circular wall a mile and a half in circumference on the summit of a steep hill, and a circular habitation now in ruins within the inclosure. The parish church, a neat cruciform building, stands in a picturesque situation immediately at the foot of a rocky precipice, forming part of the Bervyn Mountains. The Calvinistic and Wesleyan Methodists, Baptists, and Independents have places of worship. There are a parochial school for 150 children, and a reading-room. Corwen possesses an endowed hospital for widows of clergymen.

(*Parry, Cambrian Mirror; Cliffe, Book of North Wales; Land We Live In*, vol. iii.; *Communication from Corwen.*)

COS (Kôs), an island in the Archipelago, belonging to Turkey, the modern name of which is *Stanco*, or *Stanchio*. It lies in the mouth of the Gulf of Ceramus; its principal city, which was immediately opposite to Halicarnassus, was destroyed by a great earthquake in the Peloponnesian war. (Thucyd., viii. 41.) This city was, in very ancient times, built on the other side of Cape Scandarium (which points up the gulf), and was called *Astypalæa* (Old Town). The new capital, called Cos, was not large, but well built and picturesquely situated. (Strabo, p. 657.)

Cos was colonised from Epidaurus at a very early date (Herod., vii. 99), as is indeed sufficiently shown by the worship of Æsculapius, which prevailed in such a remarkable degree both at Epidaurus and in Cos. (Pausan., iii. 23, § 6.) A school of physicians was attached to the temple of Æsculapius; the great collection of votive models in which made it a kind of museum of anatomy and pathology. (Strabo, pp. 373, 657.) A similarity of origin and religion induced the Cosans to form a league with Halicarnassus, Cnidos, and the Rhodian Tripolis; and the confederacy celebrated the Triopian rites on a promontory of that name near Cnidos. (Herod., i. 144.) Cos subsequently came under the rule of the Athenians and of the Romans. The emperor Claudius made it a free state, and Antoninus Pius rebuilt the city of Cos after it had been destroyed by an earthquake. The ancient constitution of the island seems to have been monarchical. The wines, ointments, and purple dyes of Cos were famous throughout Greece. The climate is delightful. (Leake, 'Morea,' ii. 429.) Hippocrates, Apelles the painter, and Ptolemæus Philadelphus were natives of Cos.

Cos is 23 miles long and about 65 round. It is generally mountainous on the south and west, but there is a large tract of level fertile land towards the north and east. The population is about 8000, composed of Turks and Greeks. The island maintains its ancient reputation for fertility. The chief products are corn, cotton, silk, wine, fruits, &c. The city of Cos still exists. An unhealthy lagoon marks the position of the ancient harbour; near it is a Turkish castle, which Christian travellers are not permitted to enter. In the walls are some elaborate sculptures. The harbour of Cos is much frequented by merchant vessels.

COSENZA. [CALABRIA.]

COSFORD, a hundred in the south-western division of the county of Suffolk, which has been constituted a Poor-Law Union. The hundred of Cosford is bounded N. by the hundred of Thedwestry; E. by the hundreds of Bosmere and Claydon, and Sampford; S. by the river Stour, which forms here the boundary between the counties

of Suffolk and Essex; and W. by the hundred of Babergh. The boundaries of Cosford Poor-Law Union are much more extensive than those of the hundred; the Union contains 23 parishes and townships, with an area of 43,135 acres, and a population in 1851 of 17,791.

CÖSLIN, or KÖSLIN, a division of Pomerania in Prussia, comprising the eastern part of that province, is bounded N. by the Baltic, along which it extends for above 100 miles; and E. and S. by the province of West Prussia. It has an area of about 5468 square miles; is divided into nine minor circles, and contained at the end of 1849 a population of 448,516. The surface is a level, occasionally broken by slight elevations, and rising into sand-hills near the Baltic. There are considerable woods and forests. The division is watered by the Rega, Parsante, Wipper, Stolpe, and numerous other streams; it has many lakes, but none of any considerable dimensions: several of them lie along the shores of the Baltic, and are separated from them by narrow spits of sandy soil, through which some of them find an outlet. Agriculture and grazing are the chief pursuits; to these must be added the manufacture of woollens, cottons, ribbons, leather, iron-ware, glass, paper, tobacco, &c. Amber is obtained all along this coast.

Köslin (formerly Cholin), the capital of the division, and of the principality of Camin, is about 5 miles from the Baltic, and situated on the banks of the Niesenbecke, or Nesebach, which falls into the shore lake of Jasmund; in 54° 12' N. lat., 16° 10' E. long., and has about 9000 inhabitants. The town, which is above a mile in length, stands at the foot of the Gollenberg, from which it is supplied with fresh-water. It is well-built, surrounded with a wall, and has four gates and three suburbs. It was formerly the residence of the bishops of Camin, and is now the seat of provincial administration and of the superior courts of judicature. It has a gymnasium and a training school, and manufactures of Russia leather, linens, woollens, hosiery, and tobacco. The market-place contains a statue in freestone of Frederick William I., who rebuilt the town after its destruction by fire in 1718. On the Gollenberg is a monument commemorative of the Pomeranians who fell in the campaigns of 1813, 1814, and 1815.

Among the other towns are *Colberg*, already noticed [COLBERG]: *Stolpe*, another walled town of about 9000 inhabitants, situated on the river Stolpe, which is navigable, and has a harbour at its mouth in the Baltic, 12 miles below the town. The town has a castle, manufactures of woollens and linens, and some trade in amber and fish. *Rügenwalde*, 13 miles N.E. from Köslin, is situated near the mouth of the Wipper, and has a population of about 4000, who are engaged in the manufacture of linen, broadcloth, saddlecloth, and spirits. The town is frequented as a watering place. It has a castle, baths, two hospitals, a small harbour, and docks for building coasting craft. *Neustettin*, 40 miles S. from Köslin: population, 4000. *Belgard*, 15 miles S.W. from Köslin (population, 3300), is the seat of a forest board, and has an old castle.

COSSAKS. [НИЗВРЕ.]

COSSAKS, a people inhabiting those parts of the Russian empire which border Turkey, Tartary, Mongolia, and China. The name is derived it is said from the Tartar word *Kasak*, or *Knisaks*, signifying light-armed mercenary horsemen. They were for a long time known by the Caucasian appellation of *Tsherkassi* (or *Circassians*), and to this day the capital of the Don Cossaks is called *Tsherkask*. As to descent they appear to be of the native Russian race, intermixed with Tartars and *Calmucks*. Russian forms the basis of their dialect; but there is a considerable admixture of Polish, which is explained by their residing long on the frontier of Poland and serving under the Polish kings. The first mention made of them is about the time of the downfall of the Tartar dominion in Europe, and they seem to have sprung up in southern Russia out of the remains of that dominion. There, amalgamating with the natives and fugitives from all parts, they formed a kind of military republic, and gradually extended their power to the Bug and Dnieper, building towns and villages and waging war against the Turks and Tartars. For the purpose of defence they were classed into the married and unmarried, of whom the latter devoted themselves exclusively to the profession of arms, and to plunder. They fortified themselves in their headquarters (called a 'Setch,' from which females were excluded) on an island of the Dnieper, called *Korlitzkol-Ostrof*. The married men lived at some distance from the spot in villages, between the Dnieper and Bug. When an emergency arose they elected a chief, called *attaman*, or *hetman*, whose authority terminated with the cessation of the emergency. They furnished troops at their own cost to the *Voivodes* of the Ukraine. In 1570 they accompanied *Ivan IV.* of Muscovy on his victorious campaign against the Turks, and on their return left a colony at the mouth of the Don. In 1580 the Cossaks are first mentioned as distributed into 'puls,' or regiments, on the occasion of their defending *Tshegrin*, in Poland, against the Tartars, under the command of *Ostafy Dakiewitch*. In 1592 *Stephen Bathory*, the king of Poland, divided their forces into 10 regiments of infantry and 2000 horsemen, the latter receiving pay out of a tax levied upon the rebel peasantry. He also appointed an *attaman* or *hetman* as chief over them, and his successors endeavoured on all occasions to interpose them as a barrier against the incursions of the Tartars of the Crimea and *Budjak*, and hence arose their implacable enmity to the Turks and Tartars. The encroachments made on their rights by *Sigismund III.* gave rise to a long series of contentions, which ended

by *Chmlelnitzk*, their *attaman*, seeking the protection of Russia in 1654, in whose service they still remain.

Their troops are almost wholly composed of cavalry. The Cossaks form the irregular troops of Russia, and some of them are enrolled in regiments of the guards and the line. Territorially they are established in the basin of the Don and nil along the southern border of Russia, where they form a military cordon from the Black Sea nearly to the Sea of Okhotsk, protecting the empire against, or extending it on the side of, the *Circassians*, *Kirghiz*, and other *Tartars*, *Mongols*, and *Chinese*. The area and population of the principal Cossak settlements in European Russia are as follows (the *Ukraine Cossaks* are for the most part settled and are not here given):—

	Area in Square Miles.	Population in 1840.
Tschernomerski, or Black } Sea Cossaks . . . }	14,564	124,100
Don Cossaks	62,270	704,300
Asovien Cossaks	110	6,000
Ural Cossaks	23,223	55,000
Total	102,179	889,400

Besides the settlements indicated there are colonies of Cossaks on the Russian side of the Lower Danube, in the Caucasus, in *Astrakhan* and *Orenburg*, and along the frontiers of *Siberia* and *China*; but we have no means of stating the extent of their territory or the number of the population. The Cossaks also form the bulk of the troops employed in *Siberia*. The following table gives an approximation to the number of men afforded by this warlike people to Russia in ordinary times:—

	Regiments of Cavalry.	Men.	Pieces of Artillery.
Don Cossaks	58	42,000	112
Danubian	2	1,700	—
Tschernomerski	12	9,000	32
Caucasian	18	16,000	24
Uralian	12	7,500	—
Orenburg	10	7,500	24
Siberian frontier	9	6,500	24
Chinese frontier	—	1,000	—
Astrakhan	3	2,000	8
Total	124	93,200	224

The Cossaks of the Caucasus besides the 9000 cavalry above given furnish also 9000 infantry, and in the *Siberian* towns 24 battalions of 1000 Cossaks each are stationed, making the total of this force employed in the empire in time of peace 126,200. One half of this force is always kept in readiness for service; the other forms the reserve: the whole however may be called out at once, and the strength of the regiments may be augmented at the emperor's pleasure. Every Cossak between the ages of 18 and 40 is liable to perform military duty. Each regiment is drawn from one or more 'stanitzas,' or districts, and every Cossak is required to supply himself with a horse, arms, and equipments. The young are called out first, and men of advanced age are retained as the reserve unless they volunteer for field duty. In time of war the period of service is unlimited; in time of peace it is confined to three years. The *Tschernomorski Cossaks*, who are attached to the corps stationed in the regions of the Caucasus and Georgia, are almost incessantly in active service. The nominal dignity of *Hetman-general* of all the Cossaks is vested in the *Czarowitz*, or heir-apparent to the Russian crown. The Cossak receives no pay but when on active service. The dress of the soldiery is a short vest in the Polish style, large trousers of deep blue, and a black sheepskin cap. Their arms consist of a long spear, sabre, musket, pair of pistols, and a whip with a leather thong, which they apply to their enemy's as well as their charger's back. They are mostly members of the *Russo-Greek Church*, and are a purely military people.

The Cossaks are of middle stature, strongly built, and able to endure great fatigue. They have chestnut-coloured hair, blue eyes, and wear the beard long. On service they sleep in the open air; learn almost at a glance the nature of the ground over which they have to march; fall suddenly on fugitives or isolated detachments, and vanish as rapidly before a strong and organised force; for expertness in plunder they are unequalled, and pity is unknown among them. They elect their own officers, with the exception of those of superior rank; these are named by the government. They all bear long lances, which they handle dexterously. They are excellent horsemen: their horses are small, lively, and very hardy. The Cossak regiments which form part of the Imperial guards are of course well clothed and armed; but the other regiments are in general wretchedly equipped, and their miserable condition stimulates them in time of war to acts of rapacity and barbarism which render them the terror of every country they invade. The Cossaks afford great support to the operations of a regular army by harassing the enemy's flanks and cutting off his supplies. They are paid only whilst on active service.

On the termination of hostilities they return to their homes, and resume their usual industrial or agricultural employments. Among themselves they are all equal, and all distinctions that existed during the campaign are effaced. In return for their service in time of war, of their manning the forts along the southern border of the empire, and the Cossaks have some small liberty of internal government, the right of fishing, hunting, making brandy, and collecting salt in the salt-lakes and marshes of the steppes; they also hold a very considerable territory.

The *Cossaks of the Ukraine* are descendants of emigrants from Red Russia, who about the middle of the 14th century sought a place of refuge on the lower Dnieper from the Poles and Tartars. Soon after these settlers were joined by other Russians who fled from the yoke of Poland, and their descendants formed a kind of military republic, which in course of a short time occupied the territory between the Dnieper, the Dniester, and the Bug. Here they built towns and villages, whence they made frequent incursions upon the Tartars. The kings of Poland looked upon them as auxiliaries, and granted them lands and several privileges. In the reign of Stephen Bathory their capital was Trekhimirof, and their hetman's authority extended as far as Kiev. In the 17th century, as stated above, being ill treated by the Poles they devoted themselves to the service of the Czars, and were then able to muster a force of 60,000 men. Baturine became the residence of their hetman, and Kiev, Poltava, Tchernigov, and seven other towns became head-quarters of as many regiments, all settled along the Dnieper. Pressed for room they sent out thence colonies to Bielgorod and the vast steppes between the Dnieper and the Don. Thus arose the Slobode Cossaks, of whom there were five regiments; the original stock from whom they sprung were long distinguished as the Zaporogh Cossaks, from their living with respect to those beyond the Cataracts (Porogh) of the Dnieper. Both these divisions of the Ukraine Cossaks bore arms, sometimes for the Poles, sometimes for the Russians, and were not content with either. In the reign of Peter the Great their hetman endeavoured to shake off the yoke of Russia by joining Charles XII. Peter punished the Cossaks as rebels; and from this time the hetman-in-chief was a creature of the Russian court till the office was entirely suppressed by Catharine II. The Cossaks of the Ukraine have lost in a great measure their military organisation, and with the exception of a few privileges they differ little from the rest of the Russians: they number about 900,000. When France invaded Russia in 1812 however they equipped at their own expense 18,000 cavalry.

The *Zaporogh Cossaks*, established on the islands and along the left bank of the Dnieper, formed a very turbulent republic. Their capital was a Setch, or collection of huts built of wood and clay and surrounded by a kind of rampart. Here on new-year's day meetings were held to divide the hunting-grounds and fisheries, to elect chiefs, and to organise the plundering excursions for the year. Russia disliked such free-minded neighbours, and took advantage of their revolt to Charles XII. to inflict such cruelties upon them as drove them into Turkey. Soon tired of their Turkish masters they, with the permission of the empress Anne, returned to Russia and built a new Setch; but their habits of brigandage and their dislike of discipline continued so strong that the Russians destroyed their new Setch, and the inhabitants once more entered Turkey, where Catharine II. finding them dispersed through the Crimea gave them leave to settle in the Isle of Taman and along the Kuban and the eastern shores of the Sea of Azof. She gave them also the privilege of choosing their hetman, of fishing, and of making brandy, on condition of guarding the frontier against the Circassians. This was the origin of the Tschernomorski, or Black Sea Cossaks, whose chief town is Ekaterinodar. They extend along the Kuban and to the foot of the Caucasus. They clothe themselves in sheepskins, and live on fish, game, and the produce of their flocks; but their rich men go richly clad, and have large numbers of horses and cattle.

The *Cossaks of the Don* had for their capital a town called Rasdora, which was situated at the northern mouth of the Don. Towards the end of the 16th century they admitted among them several Russian settlers, and in the beginning of the 17th century some of the Circassian Zaporoghs joined them. A town was built on the Don, which was named Tscherkask from the latter, and became the capital of the Don Cossaks. From this town they carried on their forays against Azof, the Turks, and the Tartars of the Crimea. The republican government, which has always been the characteristic of the Cossaks, was here administered with some regularity. The country was divided into nine stanitzes, or districts, each of which annually elected its local hetman and administered its own affairs independently. In a popular assembly the hetman-in-chief proposed matters for public deliberation, and the people gave their decision. Russia, alarmed at these democratic institutions, placed the Cossaks under a military chancery, presided over by a hetman in name, who is appointed by Russia, and is at the same time civil and military governor. Indeed the Russians have succeeded in getting the appointment of the hetman in nearly all the Cossak tribes, and the office is now filled in all instances by a Russian officer. The capital of the Don Cossaks, which soon became a flourishing town, was destroyed by fire in 1744; a new town, also called Tcherkask, was built in 1805, but though it is a pretty large place it has not superseded old Tcherkask, owing to the favourable

situation of the latter for trade upon the Don. These are the only towns in their territory. The Don Cossak territory is divided into above a hundred stanitzes: such of the population as have adopted a settled life live in hamlets on the lands of the nobles entirely separated from the stanitzes, which are inhabited by Cossaks only. The Don Cossaks have the right of hunting, fishing, and making brandy (which rights are generally enjoyed by all the Cossaks) in return for military service. They also rear vast numbers of horses and cattle.

From the Don Cossaks have sprung the Cossaks of the Terek, the first settlement of which was established on that river by Peter the Great; the Grebenski Cossaks who were driven out of Russia for their robberies on the Volga, and settled among the Caucasian Mountains; and the Cossaks of Astrakhau, who are descended from the regiments sent to defend the frontier against the Tartars.

A part of the horde driven by the Russians from the Volga marched eastward under Yermak or Yermolai-Timofief in 1575 and subjugated a large portion of Siberia, and by their arms Russia extended her sway over the whole of north-eastern Asia. Many of the Siberian Cossaks have become peasants; the rest still maintain their military organisation, and like the Don Cossaks inhabit a series of stanitzes, each commanded by its local hetman.

The *Ural Cossaks* are also descended from those of the Don, and were originally part of the horde driven on account of their robberies from the Volga by the Russians in the latter half of the 16th century. They are a very mixed people however, as they have admitted into their number Turkomans, Kalmuks, Persians, Kirghiz, and others whom the fortune of war has put into their hands. Their country is a wild steppe, barren except in a few spots, and where the inundations of the Ural fertilise it. They cultivate gardens and the vine to some little extent, and the increase of population compels them to attend to agriculture; but their chief wealth consists in their vast flocks of sheep and in the sturgeon fisheries of the Ural, which were granted to them by the Czar Michael Feodorowitz. Wool and sheep they export in return for manufactured and other goods. Like all the other Cossaks they have lost their liberties; they are subjected to a military chancery in which their hetman presides, but which is directed by the military governor of Orenburg. Peter the Great was the first who abrogated their republican constitution. They often revolted and suffered much in their endeavours to regain them. Under Catharine I. they stooped to petition for a restoration of their ancient privileges, and obtaining nothing they again revolted and joined the famous Pugatschef, who represented himself to be Peter III. In the cause of this cruel and unprincipled leader they suffered dreadfully, and at last betrayed him to the Russians. Nevertheless their old liberties were not restored; their artillery was taken from them, their popular assemblies were suppressed, and a Russian garrison was stationed in their stronghold of Jaik. From Jaik they had hitherto taken their distinctive name, but henceforth they were to call themselves 'Cossaks of the Ural.' They were allowed to retain their lands and the exclusive right of fishing. Their chief town, Uralak, is situated near the confluence of Tschagan with the Ural.

COSSAIR, a town of Egypt on the west coast of the Red Sea, in 26° 7' N. lat., 34° 21' E. long., is about 100 miles E. by S. from Kenneh on the Nile in Upper Egypt. The caravans which trade with Arabia proceed from Kenneh to Cosseir through the sandy desert east of the Nile; the track about two-thirds of the way from Kenneh crosses a rocky ridge, on the east side of which a valley opens leading to the coast of the Red Sea where Cosseir is situated. Several springs or wells are found on this track. The Atoni Arabs live in this part of the country and escort the caravans between Kenneh and Cosseir. Cosseir is defended by a citadel; although there is no harbour at the place it is the chief medium of communication between Egypt and Arabia. From Cosseir vessels cross over to Jidda, the port of Mecca, or to Yambo, the port of Medina. Cosseir is composed of a small assemblage of poor dwellings, the resident population of which amounts to about 1600; but there are large storehouses where the caravans deposit their goods. About 6 miles N.W. from the modern town is the village of old Cosseir.

COSSIMBAZAR. [MOORSHEDABAD.]

COSTA RICA, Republic of, the most southern state of Central America; occupies the western part of the table-land which divides the plains of Panama from those of Nicaragua. It lies between 8° and 11° N. lat., 82° 30' and 86° W. long. On the S.E. it is bounded by the republic of New Granada, from which it is divided by a line extending from Point Burica (about 83°) north by east, to a point a little west of the lagoon of Chiriqui; on the N. it is bounded by the republic of Nicaragua, from which it is divided by the Rio San Juan from its mouth in the Caribbean Sea to the point where it issues from Lake Nicaragua, and west of that by the southern extremity of the lake itself, and thence westward by an imaginary line about 11° N. lat., to Salinas Bay on the Pacific Ocean. On the E. Costa Rica is bounded by the Caribbean Sea; on the W. by the Pacific Ocean. Its extreme length is about 260 miles, its average breadth about 80 miles. The area is about 17,000 miles; the entire population 100,174.

Coast-line, Surface, &c.—Both the eastern and western coasts have a general north-western and south-eastern direction, but they differ considerably in character. Along the Caribbean Sea the coast is

bordered by a narrow plain, is little indented by creeks or bays, and affords no large or secure harbour. Port Matina (10° 20' N. lat.) at the mouth of the river of the same name, though small and far from safe, is the best harbour on this coast: it serves as the port of Cartago, and is occasionally visited by vessels from the West Indies. The western coast is much more broken. At its southern extremity is the wide open Golfo Dulce, the low shores of which are much indented by the numerous streams which fall into it. Farther north is Port Muntas, and beyond that is the bay formed by the Rio Estrella: neither of these appears to be used by shipping. More important is the Gulf of Nicoya, which is some distance northward. It has a wide open entrance turned to the south-south-west, but becomes narrower inland. It affords good shelter for shipping, is about 70 miles in length, and contains several islands. Punta de Arenas, on the eastern side of the gulf, is one of the best harbours on this part of the Pacific for vessels not drawing more than 10 feet of water. The Punta de Arenas is the port of San José, the present capital of Costa Rica. One other good harbour occurs on this coast, Punta Culebra, which is formed by the rocky headland called Punta Catalina.

The surface of Costa Rica comprises for the most part a table-land with an elevation of upwards of 2000 feet above the level of the sea. From the range of the Cabeceras Mountains in Veragua, east of the plain of Chiriqui, which connects the table-lands of Veragua [NEW GRANADA] and Costa Rica, there stretches a considerable number of mountain peaks, many of them of considerable height, and a large part of them volcanic. Some of them attain an elevation of 10,000 feet; the Volcano of Cartago is said to be 11,480 feet high. Towards the Caribbean Sea the descent is for the most part abrupt, but terminating from 20 to 30 miles from the sea, between which and the base of the hills is a low, level, and marshy tract, covered with forests and subject to floods. Towards the Pacific the descent is more gradual; while the high land advances much nearer to the sea and descends to it in a series of terraces. A continuous range of volcanic hills extends from the north-western corner of the table-land of Costa Rica around the western side of the Lake of Nicaragua. The north-eastern extremity of the country subsides gradually into the plain of Nicaragua.

The only important river of Costa Rica is the San Juan, which is common to it and Nicaragua. It issues from the south-eastern extremity of the Lake of Nicaragua, and from that point to its outlet in the Caribbean Sea forms the boundary between the republics of Costa Rica and Nicaragua. It is a considerable stream and is navigable for some distance, but a large portion of its course is shallow or obstructed by sand-banks and rapids. From its commencement in Lake Nicaragua to its mouth, the distance following the windings of the river is 70 geographical miles. The width varies from 100 to 400 feet. The difference of level between the Lake of Nicaragua and the Caribbean Sea is 121 feet. It is by means of this river and the Lake of Nicaragua, with a canal from the lake to the Pacific Ocean, that it has been proposed to form the Nicaragua line of communication between the Atlantic and Pacific Oceans. At present the San Juan is only navigated by flat-bottomed barges. [NICARAGUA.]

The other rivers which enter the Caribbean Sea are very numerous, but all have very short courses, and none of them is navigable. The principal are the Matina, the Purissima, and the Tortuga. The great want of the state is a ready communication with the Atlantic, and this it is said might be met by forming a road about 66 miles long, from San José to the Sarapiquí, a feeder of the San Juan, and by improving the navigation of those rivers, thus enabling the produce of the republic to be shipped at the port of San Juan de Nicaragua. The rivers which fall into the Pacific have all a short course. The Estrella, the Arena, and the Baranca are among the more important. Several small lakes occur on the table-land.

Climate, Soil, and Productions.—The climate of Costa Rica is on the whole more regular and healthy than in other parts of Central America. There are a dry season, which commences in November and lasts until April, and a wet season which occupies the remainder of the year. The thermometer rarely rises above 85° or falls below 65°. In the rainy season thunderstorms of a very severe description are frequent.

The soil is of varied quality, but in many parts very fertile. On the more elevated districts there are few forests, but on the lower declivities, and especially along the eastern coast they are very abundant. A good deal of timber, especially Brazil wood, mahogany, and cedar is exported.

Around the town of Cartago and on the western and north-western parts of the country, wheat is cultivated to some extent. Maize is grown much more extensively, and is exported somewhat largely to Chili and Peru. Coffee is however the staple: it is of fine quality, and meets with a ready sale. Tobacco is raised to some extent on the table-land both for home consumption and exportation. Sugar is an important article in the agriculture of Costa Rica: it is chiefly grown on the western side of the country, and exported from Punta de Arenas. Cacao, indigo, &c. are also grown. All the articles peculiar to intertropical regions are produced abundantly except cotton, the vine, and cochineal, which are destroyed by the heavy rains. Agriculture however, though it is upon its agricultural produce that

Costa Rica is chiefly dependent, is in a very backward state, and the capabilities of the soil are very far from having been made fully available. The most common fruits are apples, pears, peaches, &c. Of vegetables the leguminous kinds, as peas, beans, lentils, &c., are the most common. There are some good pasture lands, and along the San Juan cattle forms an important part of the wealth of the country. Horses and mules are bred, but not in large numbers. Swine are raised in the low districts. Sheep are tolerably abundant on the table-land. Poultry are bred in great numbers.

Fish are very plentiful along the coasts and in the rivers. In the Gulf of Nicoya pearls and the pearl-shells are obtained; also a shell-fish which yields a purple dye.

Several metals are said to exist, but gold is the only one which is worked. The most important gold mines are those of Aquetno not far from the Gulf of Nicoya and Real del Monte. Coal is reported to have been found, but it is not worked.

The manufactures are confined to the coarser articles of home consumption. They consist chiefly of coarse cotton goods, common hats, coarse earthenware, furniture, wooden utensils, &c. The commerce appears to be steadily increasing. The exports consist of coffee, of which 150,000 cwts. were exported in 1848; hides, about 10,000 annually; with mahogany, cedar, Nicaragua wood, sarsaparilla, mother-of-pearl, and a small quantity of pearls. Grain, fruit, drugs, cattle, and poultry, and various miscellaneous articles likewise form a part of the exports. The total annual value is estimated at upwards of a million dollars. The imports amount in value to about three-fourths of the exports. The exports are chiefly made in British vessels. All the shipments are made from the Pacific ports, and mostly from Punta de Arenas. The exports are chiefly to the northern states of Central America, Chili, Peru, and the West Indies. The imports from Great Britain consist principally of cotton goods, woollens, hardware, and other dry goods. Crapes and other China goods are brought largely in American vessels, as well as coarse stuffs. Silks, braudica, and trinkets are brought from France; wines from Spain. A commercial treaty was made with England in 1850.

Divisions, Towns, &c.—Costa Rica is divided into six departments—San José, Cartago, Heredia, Alajuela, Guanacaste, and Punta de Arenas. The only towns of any importance are the capital, San José; Cartago, the former capital; and Alajuela and Villa Vieja on the western coast.

San José, the capital of the republic, population about 16,000, stands on the elevated table-land, 9° 46' N. lat., 84° W. long. Its site is said to be 4500 feet above the level of the sea. It is a modern city, having grown up since the declaration of independence; and though the seat of the government, legislature, and courts of justice, as well as of the bishop, it has no buildings of any beauty or importance. It is however a busy commercial town. It communicates by a cart-road 72 miles long with its port, *Punta de Arenas*, which is also a thriving place, being the principal port of Costa Rica.

Cartago stands at the base of the Volcano of Cartago, about 16 miles E. by S. from San José: population about 5000. It was once the capital of Costa Rica, and a place of some commercial as well as political consequence, but in both respects it has given way to San José. In 1841 it was almost entirely ruined by an earthquake, which destroyed seven out of its eight churches and nearly 3000 houses. It has never recovered from the calamity.

Alajuela, population, including the surrounding district, about 10,000, stands nearly midway between San José and Punta de Arenas, and is a place of some trade. A good deal of sugar is raised in the vicinity. *Villa Vieja*, about 7 miles W. from San José, is likewise a place of some trade. Curridabat, Assari, Paraiso, Heredia, Barba, and Esparza are other towns of more or less consequence.

Government, &c.—The government is in the hands of a president elected for six years, and a legislative assembly consisting of 12 deputies elected for three years. The revenue, derived principally from a duty on tobacco and spirits, land sales, stamps, &c., amounts to about 120,000 dollars. The state has no debt either foreign or domestic, and it has happily enjoyed internal and external peace for several years. The chief court of justice is the Tribunal of San José, which is presided over by seven judges. The militia consists of 5000 men, of whom 200 are called upon at a time to form the army or duty.

The white inhabitants of the republic are relatively more numerous in Costa Rica than in the other republics of Central America: the Indians, or mulattoes, are also numerous. They are chiefly settled on the western side of the table-land. The eastern side of the country is occupied by the Indians, who number about 10,000. The Roman Catholic is the established religion, but other forms of worship are permitted. The church is presided over by the Bishop of San José.

During the Spanish occupation of this part of America, Costa Rica formed a part of the kingdom of Guatemala. After the declaration of independence by the Spanish American colonies, September 1821, it remained for a short time united to the Mexican kingdom of Iturbide; but when the new federal union of the United States of Central America was established in 1823 after the model of the United States of North America, it formed one of the united states. On the dissolution of this short-lived union, Costa Rica became an independent republic, and has so continued ever since.

(Haeckins, *Central Amerika*; Byam; Baily, *Central America*, &c.)

COSTROMA, a province in the eastern part of Russia in Europe, forming a portion of Great Russia, and situated between 57° and 59° N. lat., 40° and 48° E. long. Its area is about 31,655 square miles: the surface is in general level, and the soil productive; the northern parts of the province are full of swamps, and the southern sandy. The Volga enters Costroma a little above Yaroslaf, in the south, and traverses it in a north-westerly direction: the Costroma and Unsha, or Ounya, as well as the Vetluga, which fall into the Volga on its left bank, drain the northern, eastern, and southern districts. There are several lakes; the largest, that of Galitsch, near the town of that name, is about 10 miles long and 5 miles broad; and the Tshuklonea, farther north, is upwards of 5 miles in diameter. The inhabitants are active agriculturists; though they import wheat, they grow more rye than they consume, together with much hemp and flax. The land is full of large forests, which are principally crown property. The bear, lynx, wolf, and fox are common. Little attention is paid to the breeding of cattle, but the fisheries are carried on vigorously, and yield salmon, sturgeons, &c., in large numbers. There are considerable manufactures in the province, particularly of linens, woollen cloths, cotton, Russia leather of superior quality, brandy, and mats; the majority are established in and about the capital. The population of the province was estimated in 1840 at 1,054,600. Two-thirds of the rural population are vassals of the nobility, who are the great land proprietors. In summer great numbers of mechanics leave their homes in quest of subsistence in other quarters. The province contains ten circles. It is an eparchate, or bishopric, styled the Eparchate of Costroma and Galitsch. The revenue derived from the province amounts to about 150,000*l.* sterling in the year. The principal towns, besides Costroma, the capital, are Galitsch (about 8500 inhabitants); Makariew, the town next in importance to Costroma for its trade (3000); Yurgowetz-Powolskoi (2600); Sol-Galitzkaja (3500); and Kinieschna (2500).

COSTROMA, the seat both of the civil government of the province and of the military government of Costroma and Vladimir, is agreeably situated at the confluence of the Volga and Costroma, or Kotorosla, in 57° 45' N. lat., 41° 12' E. long., about 325 versts (about 217 miles) N.E. from Moscow. It is said to have been built in the year 1152, and was united to the grand duchy of Moscow by Ivan Vassiljewitch I. A wall of earth, which has been converted into walks, surrounds it. The upper part of the town covers a height, on the summit of which stands a cathedral, a handsome edifice, surrounded by trees and showy buildings. Below this upper town, and above the lower town, is another quarter, built entirely of stone; and along the high banks of the Volga runs the third quarter, consisting of a long line of neat houses of wood and stone, relieved by the trees and gardens interspersed between the buildings. Costroma contains upwards of 50 churches and chapels, and two wealthy and spacious monasteries. One of these establishments, that of Ipatskoi, founded in 1330, is celebrated as having been the spot from which the Czar Michael Fedorowitch Romanoff, the founder of the present dynasty, emerged in 1613 to assume the sceptre of Muscovy. The Bishop of Costroma has his residence in this monastery, which is inclosed with a stone wall. There is a Tartar suburb and mosque outside the walls. Costroma is an affluent and thriving town; it contains about 14,000 inhabitants. There are here a bell-foundry, and manufactures of linens, Prussian-blue, sealing-wax, soap, leather, bells, &c. Costroma has several periodical fairs.

CÔTE-D'OR, a department in France, is bounded N. by the department of Aube, N.E. and E. by the departments of Haute-Marne and Haute-Saône, S.E. and S. by those of Jura and Saône-et-Loire, and W. by those of Nièvre and Yonne. It lies between 46° 55' and 48° 3' N. lat., 4° 2' and 5° 29' E. long. Its length is, from north to south 77 miles, from east to west about 70 miles. The area of the department, according to the official returns of 1851, is 3382·65 square miles; the population in the same year was 400,297, or 118·33 to a square mile, being 56·38 below the average per square mile for the whole of France.

Côte-d'Or is one of the four departments formed out of the old province of Bourgogne, and comprises the districts of Auxois, Auxonnais, Nuyton, Beunois, and La Montagne. The surface is crossed by a chain of hills which forms the connecting link between the Cévennes and the Vosges Mountains, and separates the basin of the Seine from that of the Saône. Leaving the Cévennes at the source of the river Dheune, which forms part of the southern boundary, the chain runs north-east to within a short distance of Dijon, where it is crossed by the road from Paris to Geneva, and by the Paris-Lyon railway; from this point it tends to the north-north-east, and joins the plateau of Langres (on the borders of Haute-Marne), which is connected at its north-eastern extremity by the Faucilles Mountains with the Vosges. That portion of the chain which extends from the neighbourhood of Dijon to the Dheune is properly called Côte-d'Or or 'Golden Slope,' in allusion to the richness, delicacy, and value of the wines produced on its eastern and southern declivities; but the name has been extended to the whole range, and hence to the department itself. From the southern extremity of the range, a chain runs north-west under the name of the Morvan Hills, and forms part of the watershed between the Seine and the Loire.

On the north-western slope of these mountains are the transverse

valleys of the Aube, the Ouree, and the Seine, separated from each other by wooded hills. Farther south is the valley of the river Armançon, which rising in the angle between Côte-d'Or and the Morvau Hills, flows north-west to the Yonne, a feeder of the Seine. From the southern slope of the Morvan Hills the Arroux flows south-south-west to join the Loire. The Ouche rises in the Côte-d'Or opposite the source of the Armançon, and flows north-east to Dijon, and thence east by south on its way to the Saône. The eastern slope of the Côte-d'Or stretches towards the Saône, which flows through a longitudinal valley of great extent and fertility, and is unavigable. At a little distance from the crest of the main chain the slope breaks up into ranges of calcareous hills, which however soon sink down into the valley of the Saône. Several rivers of short course and small volume enter the Saône from the right bank.

The Canal-de-Bourgogne, or Canal-de-l'Est as it is also called, has the greater part of its length in this department. It leaves the Saône at St.-Jean-de-Losne, and is carried by a tunnel 2 miles long through the mountains south-west of Dijon; from this point it runs first south-west along the right bank of the Ouche, then turning north-west it reaches its summit level at Pouilly, beyond which it runs along the Armançon to its junction with the Yonne in the department of Yonne. The Canal-du-Rhône-au-Rhin commences in this department, also in the Saône, a little above St.-Jean-de-Losne. By means of these canals, and by the Saône and the Canal-du-Centre (which leaves the Saône at Châlon) the department has water communication with the Mediterranean, the German Ocean, the English Channel, and the Bay of Biscay. The department is also traversed by nine state and fifteen departmental roads; and by the railroad from Paris to Lyon, which has a considerable part of its length in this department, passing through Montbard, Dijon, Nuits, and Beaune. A railway is projected to run south-east from Dijon through Dôle to Salins near the Swiss frontier.

The valleys and plains of the department are fertile, especially in the east and south, and they present a great variety of culture. The fields are very generally inclosed by hedges. Wheat, maize, rye, barley, and oats are raised in large quantities, so as to afford a considerable surplus for exportation. Hemp, flax, oleaginous plants, fruits, mustard, and all kinds of kitchen vegetables, are extensively cultivated. The ground is tilled in the plains by the plough, in which oxen and horses are used; but on the hills spade-culture is the system universally prevalent. A large portion of the department is laid out in grass-land. Considerable numbers of horses, sheep, and cattle are reared. Asses are partially used in farm labour. Pigs are very numerous. Bees are carefully tended, and a good deal of honey is made. Game and fish are plentiful. But the most important source of wealth to the department is its vineyards, especially those of the Côte-d'Or properly so called. This favoured district is divided into two parts—the Côte de Nuits or Côte Nuitonne, extending from Dijon to Nuits; and the Côte Beaunoise, from Nuits to the Dheune. The former is famous for its red wines, the most renowned of which are those called Romanée, Vougeôt, Chambertin, Richebourg, and Nuits; while the latter produces both red and white wines, which for flavour, delicacy, and perfume are not surpassed in the world; but they do not bear transport so well as those grown on the Nuitonne slope. Among the red wines of the Beaune the most famous are those called Volnay, Pomard, Beaune, La Peyrieure; and among the white, Meursault, Montrachet, and Goutte-d'Or. Besides these famous Burgundy wines, a good deal of wine resembling Champagne is manufactured in the department and sold as such. The annual produce of all the vineyards of the department amounts to 11,336,000 gallons. The Paris-Lyon railway, which skirts the eastern base of the Côte-d'Or south of Dijon, passes several of the most celebrated of these vineyards.

The department ranks the first in France with respect to the extent of its forests, in which oak, beech, and elm are the principal trees. The upper part of the Côte-d'Or mountains are covered with forests. The chestnut does not flourish. The extent of forest-land however is greatly diminished within the last fifty years, in consequence of so much timber being cut down to make charcoal for smelting purposes. The climate is bracing, pure, and healthy; the cold is sometimes very great in winter. The maximum summer heat is 86° Fahrenheit. The whole area amounts to 2,164,899 acres. Of this surface 1,129,530 acres are capable of cultivation, 155,608 are meadow and grass-land, 65,166 are under vineyards, 616,864 are covered with woods and forests, and 14,848 with orchards, nurseries, and gardens.

Iron, coal, marble, millstones, limestone, gypsum, potter's-clay, &c. are found. The iron-mines, which lie chiefly in the mountains in the north-east of the department, are amongst the most productive in France; the ore is converted into malleable iron and steel at 83 blast-furnaces and foundries chiefly by means of charcoal near the mine-mouth. There are 292 factories of various kinds in the department, the products being linen, woollen cloth, blankets, cotton and woollen yarn, beet-root sugar, brandy, vinegar, paper, seed-oil, beer, leather, and earthenware. The commerce of the department consists in the agricultural and industrial products already named, and in wool, hides, timber, oak-staves, hay, fuel-wood, nails, and whetstones. About 400 fairs are held annually.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Dijon	14	267	151,331
2. Beaune	10	202	124,266
3. Châtillon-sur-Seine	6	116	54,075
4. Sémur	6	143	70,655
Total	36	728	400,297

1. In the first arrondissement the chief towns are DIJON (the capital of the department) and AUXONNE. Among the other towns, all of which are small, the following may be named as they give names to cantons:—*Fontaine-Française* has blast-furnaces, breweries, and potteries; near it Henri IV. defeated the Duke of Mayenne in 1595. *Is-sur-Tille*, on the Igonn, has iron-works and a worsted factory. *St.-Seine-l'Abbaye* owes its origin to the abbey founded here by St. Seine in 586, and has one of the finest churches in the department. *Selongey*, on the Venette, a feeder of the Saône.

2. In the second arrondissement the chief town is BEAUNE. The other towns are:—*Arnay-le-Duc*, near the left bank of the Arroux, which is a place of some manufacturing industry, with a college and 2511 inhabitants. *Nuits*, a first-class station on the Paris-Lyon railway and a pretty little town 9 miles N.E. from Beaune, has 3175 inhabitants, who manufacture cloth, leather, and paper, but are chiefly engaged in the culture of the vine. *Sourre*, in a plain of great fertility on the left bank of the Saône, which has a college, oil and flour mills worked by steam, tanneries, a shawl manufactory, boat-building yards, and 3612 inhabitants, who trade with Alsace and Switzerland in corn, charcoal, wine, hay, &c. *St.-Jean-de-Loene*, on the right bank of the Saône, which trades in similar produce, and has a tribunal of commerce and 2134 inhabitants. *Meursault*, 5 miles by railway S. from Beaune; *Nolay*, the birth-place of Carnot; and *Pouilly*, near the source of the Armançon, are small places which give names to cantons.

3. In the third arrondissement the chief town is Châtillon-sur-Seine, the capital of La Montagne, which stands on the Seine, in a hilly country, and has tribunals of first instance and of commerce, a college, and 4966 inhabitants, including the whole commune. It is a well-built improving town, with clean well-paved streets. It formerly consisted of two towns separated by arms of the Seine. One was called Bourg, the other Chamont; each was inclosed by its own wall and ditches, and further defended by a castle: the castle of Chamont was called Châtelet, and still remains. The town-hall, which is surrounded with public gardens; the court-house, established in the old Carmelite convent; the church of St.-Nicolas, which dates from the 12th century; the church of St.-Vorlé; and the castle of Chamont, which is surrounded by a fine park traversed by the Seine, are the most remarkable buildings. The town has a library of 7000 volumes; blast-furnaces and iron-foundries; paper-mills; tanneries; breweries; corn, fulling, and bark mills, and brandy distilleries; it is a place of active commerce, being the centre of a very important iron district. The early dukes of Burgogne usually resided in Châtillon. *Aignay-le-Duc*; *Laigues*, at the source of the Laigne, a feeder of the Seine; and *Recey*, on the Ourec, are small places which give names to the other cantons, and, like most of the villages in this arrondissement, have iron-foundries and blast-furnaces.

4. In the fourth arrondissement the chief town is Sémur or Sémur-en-Auxois, which is built on a granite rock on the left bank of the Armançon, 35 miles W. from Dijon, and has 4355 inhabitants. The town, which is well built, is divided into three quarters—the Bourg, the Donjon, and the Châtean; and has four squares and three handsome promenades. The church, built in 1065 by Robert I., duke of Burgogne, is the most remarkable building; it contains many antiquities, and has been classed among the historical monuments of France. The town has a college; a library of 15,000 volumes; a small theatre; and manufactures of cloth, serge, woollen and cotton yarn; besides tanyards, bark and fulling mills, &c. In the environs, which are very pretty, the Armançon forms several cascades. *Montbard*, the birthplace of Buffon, at the junction of the Canal-de-Burgogne and the Brenne, a feeder of the Armançon, is a first-class station on the Paris-Dijon railway, and a place of some trade; population, 2215, including the whole commune. *Saulieu*, the birthplace of Vauban, 17 miles S. from Sémur, is a walled town with a tribunal of commerce, a college, and 2922 inhabitants, who trade in corn, hemp, wool, timber, fuel-wood, charcoal, oak-staves, &c. *Harigny*, east of Sémur; *Vit-teaux*, a pretty little town on the Brenne; and *Précéy-sous-Thil*, on the Serein, a feeder of the Yonne, give names to the other cantons.

The department forms the see of the Bishop of Dijon, and is comprised in the 7th Military Division, of which Besançon is headquarters.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

CÔTENTIN, or CÔTANTIN, an old district in France, which now forms the greater part of the department of Manche. It is identical with the ancient *Constantinus Pagus*, which took its name from its capital, *Constantia*, now Coutances. Côtentin is a peninsula, extending

northward from the neighbourhood of Granville into the English Channel, by which it is bounded on the north, the west, and east; on the south lies the district of Avranchin. It is watered in the south by the Soulle and its feeders, in the north by the Douve, and in the east by the Viro, which divides it from Bessin and the Bocage, which are now included in the department of Calvados. The strata are chiefly of granite and clay-slate, and the soil is fertile in grain and pasture. Much butter is made, and many horses of good breed are reared: poultry is abundant. The quantity of woodland is not great; there are no vineyards, but cider is made in considerable quantity. Hemp and flax are grown. The chief towns of Côtentin are—Coutances, the capital, Cherbourg, Granville, and Valognes. [MANCHE, Department of.]

CÔTES-DU-NORD, a department in the north of France, is bounded N. by the Bay of St.-Malo, an inlet of the English Channel, E. by the department of Ille-et-Vilaine, S. by that of Morbihan, and W. by that of Finistère. It lies between 48° 2' and 48° 53' N. lat., 1° 53' and 3° 35' W. long. Its greatest length is from east to west 76 miles, the breadth from north to south varies from 25 to 50 miles. The area according to the cadastral returns of 1851 is 2659 square miles. The population in 1851 was 632,613, giving 237.91 inhabitants to the square mile, which is 63.2 above the average population per square mile for the whole of France.

The department comprises the old diocese of St.-Brieno and a part of the diocese of St.-Malo (now forming the arrondissement of Dinan), which belonged to Middle Bretagne, and of almost the whole of the diocese of Tréguier, and a small portion of that of Quimper, which geographically and politically were dependencies of Lower Bretagne. It takes its name from its position on the 'northern coast' of France.

The coast line (which is very irregular), reckoning all its windings, is about 150 miles in length, and presents to the sea a bold wall of granite rocks, which inclose numerous bays and harbours, and form several bold headlands. The principal bay is that of St.-Brieuc. Of the headlands or points the following succeed each other from east to west:—Pointe St.-Cast, Cap Fréhel, Pointe d'Herquin, Pointe-de-Port-de-Pomme (these two are at the extremities of the Bay of St.-Brieuc), Pointe de Plouaze, Pointe de Minar, Pointe de Milfaut, Pointe du Sillon, and Pointe de Chien. The coast is studded with small islands and rocks; Ile d'Ember is near the Pointe de St.-Cast, Les Verdelcts in the Bay of St.-Brieuc, the Ile St.-Roui and the Iles de Brehat between the Pointe de Milfaut and the Pointe du Sillon, the Ile d'Er between the last point and the Pointe de Chien; the Ile de Guelat, Ile Thomé, the Iles Melban, Platte, Riouzo, and the others of the group called Les Sept-Iles (the Seven Islands), Les Triangons, the Ile Molènes or Molénoe, and Le Taureau, are to the west of Pointe de Chien.

A district called 'La Cincture Dorée,' or the Golden Belt, which extends along the coast and about 8 or 10 miles inland, is of great fertility, producing large quantities of wheat, barley, hemp, flax, clover, and all kinds of table vegetables. Sea-weed, which is found in great abundance on the sands at the foot of the rocks on the sea-shore, is commonly used for manure in this district.

The Armoric Hills, which cross the middle of the department from east to west, have a breadth from north to south of about 16 miles, and in their culminating point, Mount Menez, reach a height of about 1200 feet. From their highest summit these hills are sometimes called the Menez Mountains, sometimes also, in consequence of their barren heathy aspect, they are called Montagne Noires, or Black Mountains. The Armoric Hills are in general barren and stony; they are broken by narrow gorges here and there, and send forth numerous spurs to the north and south, which sink gradually down into two hungry sandy plains, the northern one of which extends to the southern border of the Golden Belt.

In the interior of the department, where the farmers have neither sea-weed nor lime to manure their land, agriculture is in a very backward state, and the people are steeped in poverty and misery, which are increased by the decay of the linen trade. Here rye and oats are grown; draught horses, horned cattle of inferior breed, and goats are reared; a good many sheep are kept, but as they are chiefly pastured on heathland they are small, wretched, and feeble in the extreme. The cider apple-tree is extensively cultivated throughout the department, to the neglect of all other trees. Among the Armoric Hills there are some good forests; but in general the range presents large tracts overgrown with broom, gorse, holly, evergreens, and other unproductive shrubs.

Among the wild animals of the department are wolves, foxes, badgers, roobucks, and wild boars; hares and rabbits are numerous; along the coast and in the adjacent islands the number of land and sea birds is prodigious. The deep-sea fishery affords employment to a great number of hands, and several vessels are fitted out from the coast towns for the Newfoundland fisheries, so that the department furnishes a large number of experienced seamen to the French navy.

Iron mines are worked, and a good deal of pig and bar iron is manufactured. Lead also is found; slates and granites are quarried. In the iron furnaces the ore is smelted and converted into malleable iron generally by means of charcoal; where coal is used it is imported from England or Belgium. Salt is made at several places on the coast.

The linen manufacture, introduced in the 15th century by the Baroness de Quintin, a Flemish lady, has since continued the staple trade of the department, and though it has declined of late years it is still considerable. Its former importance may be estimated from the returns for the year 1836, when the number of weavers employed amounted to 8539, who produced in that year 8,358,000 yards of linen cloth, representing a money value of 11,144,000 francs. Linen forms the clothing of the poorer classes of the population both winter and summer; and it is largely exported to Spain and South America. Other articles of export are cattle, horses, tallow, salt butter, honey, wax, &c. About 425 fairs are held in the year. The number of wind and water-mills amounts to 1822, of iron furnaces to 20, and of factories of various kinds to 460. Druidical remains and old feudal castles are numerous in this department and in all parts of Bretagne.

The principal river is the *Rance*, which rising in the south-east of the Armoric Hills, sweeps round to north-east through a gap in the range, and passing St.-Jouan-de-l'Isle, Évrans, and Dinan (where it begins to be navigable), enters the sea at St.-Malo. By means of the *Rance*, the *Vilaine*, and the *Canal-de-l'Ille-et-Rance*, which, running from Dinan to near Rennes, unites these rivers, the inland communication between the English Channel and the Bay of Biscay is completed. The *Aven* and the *Blavet*, which flow through the department of Morbihan, and the *Meu*, a feeder of the *Vilaine*, rise in the southern slopes of the same range. The rivers that flow into the English Channel are famous for lovely scenery; they are short and unimportant, except that at their mouths they generally form commodious harbours for small craft, and are navigable at high water a few miles inland. The chief of them, besides the *Rance*, are the *Guer*, the *Trioux*, the *Leff*, the *Gouet*, the *Ervron*, the *Guessau*, and the *Arguenon*. The coast district north of Lannion and Tréguier, and watered by the *Guer* and the *Jaudy*, is the chief scene of the exploits of King Arthur according to the Breton romance writers. The department is traversed by 7 royal and 14 departmental roads.

The surface of the department measures 1,701,738 acres, of which 1,016,576 are more or less capable of cultivation, 134,716 are natural pasture-land, 320,346 are heath and moorland, 13,770 are under orchards, nurseries, and gardens, and 100,177 are under woods and forests.

The department is divided into 5 arrondissements, which, with their population and subdivisions, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. St. Brieuc	11	97	180,275
2. Dinan	10	91	118,328
3. Loudéac	9	53	92,590
4. Lannion	7	63	114,737
5. Guingamp	10	73	126,683
Total	47	379	632,613

1. In the first arrondissement the chief town is *St.-Brieuc*, which is noticed under BRIEUC, ST. Of the other towns those that follow give names to cantons. The population given is that of the commune. *Châtelaudren*, W. of St.-Brieuc, is a small well-built town on the road to Morlaix. An elliptical walking-ground occupies the site of the ancient castle which gave name to the town, and which was demolished by Jean V., duke of Bretagne: population, 1400. *Lamballe*, a pretty town surrounded by old walls (population, 4206), stands on a hill above the *Gouessan*, and is said to be in the territory of the *Ambiliati*, mentioned by Julius Cæsar ('Bell. Gal.', iii. 9). There is an old castle of the dukes of Penthièvre here, with a fine promenade attached to it. *Lamballe* has a library; it is famous for its manufacture of parchment. The church of *Notre Dame*, situated on the top of the hill, was originally the castle chapel. *Lanvollon*, a little north of *Châtelaudren*, is a market-town with some curious old wooden houses, one of which dates from 1559: population, 1500. *Moncontour*, S.E. of St.-Brieuc, has linen and sail-cloth manufactures, and tanyards, and a population of 1678. *Paimpol*, at the mouth of the *Trioux*, has a good harbour, a tribunal of commerce, a naval school, and 2100 inhabitants. This town is built on the slope of a peninsular projection composed of clay-slate, and more than 200 feet above the sea. The isthmus that joins it to the mainland is flooded at spring-tide. The harbour is the best along the coast from St.-Malo to Morlaix. The quays are good and lined with pretty houses. Below the town on the shore are the fine ruins of the Abbey of *Notre Dame de Beauport*. Ship cordages, cotton-yarn, leather, beer, and salt are the chief industrial products of *Paimpol*. It trades in corn, hemp, flax-seed, flax, honey, wax, butter, fresh and salt fish, Norway timbers, &c. *Pléac*, 15 miles from St.-Brieuc, has 5343 inhabitants, who trade in yarn, hemp, butter, and cattle. *Plouha*, near the coast, is situated on a hill, at the intersection of seven roads, which form as many streets, and has a population of 4818. The parish church, a large and ancient structure, stands in the centre of a vast cemetery planted with cedars; the spire rises to the height of nearly 300 feet. On the sea-shore is the chapel of *St.-Engénie*. There is a large Druidical stone near the town. *Quintin*, in a pretty valley on the *Gouet*, has several fine linen factories, blast furnaces, iron foundries,

and paper-mills. It is the seat of a tribunal of commerce, and has 4112 inhabitants. The town-house and the old cathedral are remarkable buildings, the latter especially so, in consequence of all the pillars that support the roof being some feet out of the perpendicular. Behind the choir are five beautiful chapels. There are some Druidical remains near this town.

2. In the second arrondissement the chief town is *Dinan*, which stands on a steep hill on the left bank of the *Rance*, has a tide harbour for vessels of 90 tons, a tribunal of first instance, ecclesiastical and communal colleges, and 7732 inhabitants, including the commune. The town, which is surrounded by walls and entered by four gates, is generally ill built and ill laid out; the houses are mostly of wood. The church of *St.-Sauveur*, in which the heart of *Bertrand du Guesclin* is deposited, the church of *St.-Malo*, the old citadel now used as a prison, and the gate-entrances of the town are the most remarkable structures. Sail-cloth, linen, calico, woollens, leather, pottery, and sugar are manufactured; there is also an active trade in timber, planks, seeds, slates, Norway deals, salt, &c., by the *Canal-de-l'Ille-et-Rance*. *Dinan* is much frequented for its mineral waters. A steamboat runs daily to *St.-Malo* and back; the passage down the *Rance* is most picturesque. The population given with the following towns is that of the commune:—*Broons*, the birthplace of *Bertrand du Guesclin*, to whom a monument has been lately erected on the ruins of the castle of *Lamotte-Broons*: population, 2504. *Corseul* is built among the ruins of an ancient town, and is said to take its name from the Celtic *Curiosolites*: it has 4236 inhabitants. There are many fragments of ancient buildings here. The ruins of the castle of *Montafilan* cover a large space. *Évrans*, on the *Canal-de-l'Ille-et-Rance*, is a place of some trade, with a population of 4163. *Ploubalay* has a population of 2536.

3. In the third arrondissement the chief town, *Loudéac*, 30 miles S. from *St.-Brieuc*, has a tribunal of first instance, a consultative chamber of manufactures, a college, and 6229 inhabitants, who manufacture iron, paper, and linen, and trade in slates, cider, &c. This town is the centre of a large linen trade. The other towns are—*Mur*, near the left bank of the *Blavet*, population, 2767; *Plouguenast*, near the *Lié*, population, 3622; *Merdrignac*, 18 miles from *Loudéac*, has iron foundries, and a population of 2894; and *Uzel*, on a hill above the *Oust*, has a consultative chamber of manufactures, and 2100 inhabitants.

4. In the fourth arrondissement the chief town, *Lannion*, an ill-built place near the mouth of the *Guer*, has a tide-harbour, a tribunal of first instance, a college, and 6075 inhabitants, who trade in deals, Bordeaux wine, colonial produce, corn, and the productions of the department. The following places give names to cantons; the population given with each is that of the commune:—*La-Roche-Derrien*, formerly famous for the ancient castle of the counts of *Penthièvre*, which is often mentioned in the old tales of chivalry, is a small place 12 miles from *Lannion*. *Lezardieu*, at the mouth of the *Trioux*, which is here crossed by a wire suspension-bridge, has 2934 inhabitants. *Perros-Guirec*, on the coast, has a safe tide-harbour, sheltered by the *Isle of Thomé*, and contains a population of 2365. *Plestin*, in the north-western angle of the department, has 4355 inhabitants, who trade in iron, coal, timber, corn, &c., by the little harbour of *Toul-an-Héry*, about a mile and a quarter distant. *Plouaret*, a little S.E. of *Plestin*, has 5241 inhabitants. *Tréguier*, on the river *Tréguier* (which is formed by the junction of the *Gruindy* and the *Jaudy*, and is navigable for 9 miles from its mouth), is a well-built place, with an excellent deep harbour and roadstead: it has 3382 inhabitants, who are engaged in fishing and in the coasting trade. The town is built on the slope of a hill facing the sea. The old cathedral, which has been classed among the historical monuments of France, is a handsome gothic structure surmounted by a tower, and adorned with numerous sculptures. The adjacent cloisters are the largest and most elegant of those structures in France. They were built in 1461, and are pierced by 50 noble arches. In them are five stone sarcophagi, containing the remains of personages unknown. The cloisters and the space they inclose are now used as a market. The bishopric of *Tréguier* (*Trecoreium*) was founded in the 5th century; it was united to the see of *St.-Brieuc*. The tide rises 19 feet at neaps and 36 feet at springs in the harbour of *Tréguier*.

5. In the fifth arrondissement the chief town *Guingamp*, on the *Trioux*, was formerly one of the most considerable places in the county of *Penthièvre*. It is situated in a vast plain 21 miles W.N.W. from *St.-Brieuc*, and was once surrounded by walls, part of which remains. There are several good buildings in the town, which has a tribunal of first instance, and 6718 inhabitants, who manufacture linen, leather, hats, twine, &c., and trade in iron, brandy, wine, and the produce of the department. Amongst the other towns the following are given as they give names to cantons: the population however is that of the communes:—*Bégard*, N.W. of *Guingamp*: population, 3821. *Belle-Ile-en-Terre*, a small place near the *Guer*, in the centre of an iron district, has several important blast furnaces and foundries: population, 1740. *Bourbriac*, S. of *Guingamp* (population, 4114) trades in cattle and farm produce. *Plotzal*, 15 miles from *Guingamp*: population, 3107.

The department forms the see of the Bishop of *St.-Brieuc*, is under

the jurisdiction of the High Court of Rennes, and is included in the 16th Military Division, of which Rennes is head-quarters.

(*Dictionnaire de la France*; Balbi, *Géographie*; *Annuaire des Côtes-du-Nord*; *Annuaire pour l'An 1853*.)

COTI, RIVER. [BORNEO.]

COTRONE. [CALABRIA.]

COTSWOLD HILLS. [GLOUCESTERSHIRE.]

COTTBUS, properly KOTTBUS. [BRANDENBURG.]

COTTENHAM. [CAMBRIDGESHIRE.]

COUCY. [AISNE.]

COURCELLES. [HAINAULT.]

COURLAND, Kurland, or Kourland, one of the Baltic provinces of Russia in Europe, is composed of the former duchies of Courland and Semigallia, of the old bishopric of Pilten, and of Polangen, a district of Samogitia. It was until 1795 a possession of the Polish crown. Courland is bounded N. by the Baltic Sea, the Gulf of Riga, and the province of Livonia; W. by the Baltic Sea; S. by the province of Wilna, and Prussia; and E. by the provinces of Vitepsk and Minsk. Its area is 10,490 square miles; the population in 1846 was estimated at 553,300.

The surface towards the sea-coast is level, and presents a sandy plain about Mitau, Windau, and Goldingen, but its general character is undulating. It is intersected by two ranges of heights, one of which runs parallel with the Düna or Dwina, while the other takes a more westerly direction, and spreads its arms out in various directions. The most elevated points are the Huningberg, an agglomeration of sand, which is about 450 feet high, and the Silberberg. The coast is partly flat, and partly lined with sand-hills. The most northerly point is the dangerous promontory of Domes-Nüa, which is a continuation of the Blue Mountains, and stretches out between the Baltic and the Gulf of Riga. Two-fifths of the soil are covered with forests or underwood, and a considerable part by moors of peat; nearly 15,000 acres are covered with marshes, or occupied by the 300 lakes and ponds and 118 small streams and rivulets, which render the climate of Courland, though not unhealthy on the whole, raw, moist, and foggy. The largest of these lakes is the Usmaiten (in the western district of Goldingen, and about 15 miles north-north-east from the town of Goldingen), which has an area of 34 square miles; that of Saussen is 10 miles long, and nearly 2½ miles broad. The shore-lake of Angersk or Angerskoe is properly a bay or 'haff' of the Gulf of Riga, with which it communicates by a channel in the narrow tongue of land that bounds it on the east. This lake is famous for the quantity and quality of the amber found upon its shores. The principal river is the Düna, which skirts the eastern boundary of Courland, and of which the Aa or Buller-Aa, one branch of which flows into it by a north-westerly course from the Livonian frontier, is a tributary. Besides these two rivers, Courland is watered by the Windau (which, entering it from the province of Wilna, takes a northerly course, forms a fine cataract near Goldingen, and falls into the Baltic at Windau), the Libau, the Treider-Aa (which passes Mitau), the Anger, Barton, &c. The Windau is connected by a canal with the Niemen. There are sulphurous springs at Smoden, Baber, and Baldanen.

The soil of Courland is in general light and sandy, and rendered productive only by constant manuring; it is most productive on the side towards Livonia. In the moors and morasses blocks of granite are occasionally found imbedded. Agriculture is the principal occupation of the inhabitants, who raise large quantities of rye, barley, and oats, but less in proportion of wheat, and still less of peas and beans. Rye, which is the principal grain crop, grows very fast. It is sown in the end of April and reaped in July at night, as the dew then close the ears and prevent the heavy grain from falling out as it would do by day. After the harvest the grain is dried in a kind of oven in one end of a large building called 'rige,' the other end serves for a threshing-floor. The corn is thus rendered firmer, drier, and less liable to worms. This practice of drying corn by fire before threshing it is common also in all the neighbouring provinces of Rnesia. The crops of grain are more than adequate to the consumption.

Flax and hemp are extensively cultivated, and of excellent quality; the seed of the first, which is sown in June, yields a crop in eight weeks. A little tobacco is raised, and some fruit is produced; the ordinary sorts of vegetables are grown everywhere. Courland has not sufficient pasture land to make the rearing of cattle a common occupation. Horses and horned cattle are of inferior kinds, and the sheep yield but an indifferent quality of wool. The value of the fisheries along the coast is not important. The supply of game is abundant. The extensive forests are in general situated on marshy ground, and consist principally of pine, fir, birch, beech, alder, oak, and elm. The forest land covers one third of the area of the province. Large pines and oaks are said to be scarce now, owing to the immense consumption in the houses, ovens, baths, distilleries, and in the manuring processes of the province. Of minerals, Courland contains small quantities of bog-iron, lime, and gypsum. It has also coal and marble, but they have not hitherto been turned to much account. Amber is thrown up on the coast. The bear, which was formerly common in Courland, has quite abandoned the province. Wolves, foxes, elks, hares, and deer are found.

The population is of the same extraction as the Lithuanians, from

whom the native Courlanders differ in no other respects than that they are more advanced in civilisation, and use a slightly varied dialect. Independently of these native Courlanders there are several thousand Livonians, Lithuanians, Jews, Germans, Krewincks (a race of Finnish descent), Russians, and Poles, scattered throughout the province. The inhabitants are mostly Lutherans. The Jews number about 10,000; many of them are inn-keepers and small shop-keepers.

The land belongs principally to the Courland nobility, who are either Germans or Poles; they are possessed of peculiar rights, such as their own civil jurisdiction, exemption from taxation, and from military service. These rights, where not in direct opposition to the Russian laws, were confirmed to them when the partition of 1795 transferred their country to Russia. Courland, like all the other Baltic provinces, is divided (with the exception of the land near the great towns) into estates varying in size from 15 to 100 square miles, which are never divided but descend entire, population and all, to the eldest son. The number of these estates in the province is about 1126. The residence of a nobleman called a 'Hof' is usually built on a hill or on the bank of a river. Besides a dwelling-house of large extent, the establishment includes a building for domestics, stables, mills, breweries, inns, distilleries, &c., often amounting to twenty or thirty buildings, surrounded by gardens, parks, woods, and corn-fields. The peasants reside at some distance from the Hof, in little communities called 'gesinde' to each of these a piece of land is attached, which the serfs cultivate for their own profit. The towns are mostly inhabited by individuals of German extraction; they are free, and quite independent of the nobility. The peasant, though by law no longer bound to the soil (he may after half a year's notice quit the estate), yet in consequence of his being almost always in debt to his lord he is virtually a serf in the strictest sense, and in vassalage either to the nobility or the burghesses; he has no property which he can call his own, may be forced from the estate after half a year's notice from his lord, and is subject to the chastisement of his owner.

The wants of each estate are mostly supplied by the serfs themselves, part of whom are brought up to mechanical arts; the peasant makes his own clothing, furniture, and domestic utensils, and constructs his own humble dwelling; he buys no manufactures. There is a vast number of brandy distilleries, the only species of industrial establishments worth naming in the whole of the province.

Courland is under the general direction of the governor-general of the Baltic provinces, and the administrative duties devolve upon a civil governor, resident at Mitau; both are subordinate to the executive at St. Petersburg. The ecclesiastical affairs of the Protestants are conducted by the consistory of Mitau; the Roman Catholics and Greeks together possess but 19 churches, which are subject respectively to the Bishop of Samogitia and the Bishop of Pskof.

Courland is in general administered according to its own laws and usages; but in regard to fiscal and military affairs, it has been placed on the same footing as the other provinces of the empire. Dorpat is the university for this province; the only high school is the gymnasium at Mitau. The nobility assemble at diets, and have a permanent committee at Mitau. The province is divided into head-captaincies, and each of these into two captaincies, besides the district of Pilten. Courland Proper, or the northern parts, contain the captaincies of Tuckum, of which Tuckum (about 1300 inhabitants) is the capital; and Goldingen, of which Goldingen, with about 2400 inhabitants, is the capital. Semigallia, the southern part, is divided into the captaincies of Mitau and Seelburg; of the latter Jakobstadt on the Düna, with about 1800 inhabitants, is the capital. The district or bishopric of Pilten lies in the south-west, and is named from Pilten its former capital, which has about 600 inhabitants. This district is also known by the name of Hasenpoth, which is derived from that of the largest town in it, now become the capital; it has about 1100 inhabitants.

Mitau, the capital of the province of Courland, is situated in a flat marshy district on the left bank of the Treider-Aa, in about 56° 39' N. lat., 23° 43' E. long., and has about 10,000 inhabitants. The town is walled, well built, and from its favourable situation on a navigable river it is a place of considerable traffic. The houses are chiefly constructed with wood, which is painted green or reddish brown. The Gymnasium above mentioned as the most important of the few educational establishments of the province, has a library of 25,000 volumes. The town has also a casino, or club-house, which is patronised by all the Courland nobility. The most interesting building in the town is the old castle of the dukes of Courland, which is surrounded by canals from the river, and was built by Marshal Biron, the favourite of the empress Anne. Louis XVIII. resided in this castle for some time when travelling under the title of Count de Lille. There are coaches daily from Mitau to Riga. The walls of the town inclose large gardens. The streets are not well paved. Mitau contains nine churches, a synagogue, an observatory, and two public libraries; it has manufactures of linen, leather, and soap.

Courland has two shipping ports, Libau and Windau, both situated on its western coast. Libau is the principal shipping port of the province. The harbour, formed by a salt lagoon, has a bar across the entrance, but admits vessels of 12 feet draught at all times; larger vessels are loaded or unloaded one or two miles from the town by lighters. The imports are chiefly salt, coals, mill-stones, machinery

herrings, sugar, and other colonial produce; the exports consist of flax, hemp, corn, calf-skins, salt meat, hides, hristles, hones, timber, tallow, deals, &c. Ship-building and manufactures of various kinds are actively carried on: the population of Lihau is about 10,000. *Windau* stands at the mouth of the river *Windau*, down which a great deal of timber, the most important article of export, is floated: the population of *Windau* is over 2000. The inland trade is monopolised by the Jews.

COURSAN. [AUDE.]

COURTENHALL. [NORTHAMPTONSHIRE.]

COURTRAI (in Flemish *Kortryk*), a fortified and manufacturing town of West Flanders, in Belgium; 75 miles W. by railway (through Malines and Ghent) from Brussels, 32 miles by railway S. from Bruges; stands in 50° 49' N. lat., 3° 18' E. long., and has 21,500 inhabitants. The town occupies both banks of the river *Lys*, by means of which and by canals it has water communication with the principal towns of Flanders. The river is crossed by an old bridge flanked with towers. Courtrai existed in the time of the Romans under the name of *Cortoriacum* (afterwards written *Curtricum*), and as early as the 7th century enjoyed the privileges of a municipal city. The fortifications were begun in 1290; the castle was built in 1385 by Philip the Bold, duke of Burgundy. The works were enlarged and perfected chiefly by the French, who built the citadel in 1647. The Flemings in 1302, commanded by John count of Namur, defeated a French army under the Count of Artois near to Courtrai. After the battle about 700 gilt spurs were gathered on the field from the slaughtered French, and hung up as a trophy in the church of the convent of Groenangen, now destroyed. This circumstance caused the battle to be called the Battle of Spurs. A small chapel built in 1831 a little outside the Ghent Gate marks the centre of the field of the Battle of Spurs. The town was taken by the French successively in 1643, 1646, 1667, and 1683, and was restored to Spain by the peace of Ryswick. The French destroyed the fortifications in 1744; in 1793 they obtained a victory over the English near the town, of which they took possession a few days afterwards, and constituted it the capital of the department of the *Lys*.

The streets of Courtrai are wide and clean; the houses are well built. The town contains several fine buildings, among others the town-hall, the churches of St. Martin and of Notre Dame. The town-hall, a gothic edifice erected in 1526, stands in the market-place: it is disfigured by a modern front. The interior contains two remarkable carved chimney-pieces, representing the Virtues and the Vices, in bas-relief. St. Martin's church, originally founded by St. Eloi the apostle of Flanders about A.D. 650, is remarkable for its lofty tower, which commands a splendid view of the surrounding country, and for its beautiful tabernacle of carved stonework in the richest gothic style. The church of Notre Dame is a gothic structure founded in 1238 by Baldwin, count of Flanders and emperor of Constantinople. It has been modernised however and lined with marble. It contains Vandeyck's celebrated painting of {the}Elevation of the Cross. Both these churches are decorated with paintings and sculptures of more than ordinary excellence.

Courtrai contains an exchange, a college, and two asylums for orphans. A great part of the working population is employed in spinning flax and in weaving and bleaching linen and damask. The fine linens known under the name of Courtrai cloth are made in the surrounding districts, and sold unbleached in the weekly market held in the town, where the pieces are finished and prepared for sale to the consumers. A vast quantity of the finest flax is grown in the plain around Courtrai for the supplies of the manufactories of the town and for export. There are large bleaching-grounds in the neighbourhood. The waters of the *Lys* are said to possess very superior bleaching qualities. The dyers of Courtrai imitate with success the colour known as Turkey red. Thread-lace and silk-lace are among the other industrial products. The earliest of the cloth manufactures of Flanders was established at Courtrai in 1260.

(*Dictionnaire Géographique de la Province de la Flandre Occidentale; Statistical Papers of the Belgian Government; Handbook of Belgium and the Rhine.*)

COUSERANS, LE, or, as it was written in the last century, CONSERANS, a district of the former province of Gascoigne in France, was bounded E. by the county of Foix, N. and W. by the district of Comminges, and S. by the Pyrenees, which separate it from the province of Catalonia in Spain. It is a mountainous district; and is watered by several feeders of the Salat, which carries off the whole drainage of the district into the Garonne. Couserans is now included in the department of Ariège. [ARIEGE.]

The district derives its name from the *Consorani*, or *Consuarani*, one of the tribes of Aquitania or Narbonensis mentioned by Pliny. They are not noticed by Cæsar. Their chief town, *Austria*, or *Consorani*, assumed from one of its bishops its designation of St. Lizier. [ARIEGE.] Upon the downfall of the Roman empire Couserans came successively into the hands of the Visigoths and the Franks. In feudal times it ranked first as a county, afterwards as a vice-county. The bishopric in which this district was comprehended originated probably about the end of the 5th century: the bishop was a suffragan of the archbishop of Auch. St. Lizier was elected bishop about 693, and died 742.

COUTANCES. [MANCHE.]

COVENTRY, Warwickshire, a city, a municipal and parliamentary borough, manufacturing town, and the seat of a Poor-Law Union, in the hundred of Knightlow. Although in Warwickshire, it formed (until recently) along with some adjacent villages a separate county. In 1842 an Act of Parliament was passed which incorporated Coventry with the county of Warwick; and in 1843 an order in council was issued, which formed Warwickshire into two divisions, the Warwick division and the Coventry division, each having a separate commission of assize. Coventry lies on the right bank of the river Sherbourne, in 52° 24' N. lat., 1° 30' W. long.; 10 miles N.N.E. from Warwick, 91 miles N.N.W. from London by road, and 94 miles by the Loudon and North-Western railway. The population of the municipal borough in 1851 was 36,208; that of the parliamentary borough was 36,512. The borough is governed by a corporation consisting of 10 aldermen, one of whom is mayor, and 30 councillors; and returns two members to the Imperial Parliament. Coventry is divided into two parishes—St. Michael's, a vicarage, and St. John's, a rectory; they are in the archdeaconry of Coventry and diocese of Worcester. The Coventry Poor-Law Union is co-extensive with these two parishes.

Coventry is a place of great antiquity, but its origin is involved in obscurity. In the reign of Edward the Confessor, in 1044, Earl Leofric, a powerful lord of the large territory of Mercia, with his wife, the Lady Godiva, founded at Coventry a magnificent Benedictine monastery. The capacious cellar of the monks still exists, measuring 75 yards in length by 5 yards in breadth. After the Couquest the lordship of Coventry came to the earls of Chester. Leland and other writers speak of the walls, gates, and towers by which the city was defended, and of its streets, which were well built of timber. The walls were demolished by Charles II. in consequence of the active part taken by the citizens in favour of the parliamentary army. During the monastic ages Coventry had a large and beautiful cathedral. At the Reformation it was levelled to the ground by order of Henry VIII. Coventry was the seat of a Parliament held by Henry IV. in 1404, and of another by Henry VI. in 1459. It was the scene of the famous meeting for trial by battle betwixt the Duke of Norfolk and the Duke of Hereford, afterwards Henry IV.

From an early period Coventry was renowned for its exhibition of pageants and processions; and in the monastic ages it was remarkable for the magnificent and costly performance of the religious dramas called mysteries. Accounts are extant of these solemn shows as early as 1416. They were performed chiefly by the Gray friars, on moveable street-stages on the day of Corpus Christi. The subjects were the Nativity, Crucifixion, Doomsday, &c., and the splendour of the exhibitions was such that the king and the royal family, with the highest dignitaries of the church, were frequently present as spectators. An ample and exceedingly interesting account of these Coventry Mysteries will be found in a 'Dissertation on the Pageants or Dramatic Mysteries antiently performed at Coventry, and other Municipal Entertainments,' by Thomas Sharp, 4to., 1825. The plates in this work are extremely interesting, and the facts are valuable as illustrative of the state of society at that period. The following work also contains much curious information: 'The Pageant of the Company of Sheremeh and Taylors in Coventry, as performed by them on the Festival of Corpus Christi, with other Pageants at Coventry, on the Visit of Henry VI. and his Queen in 1455; of Prince Edward in 1474; of Prince Arthur in 1498, &c.; with the Verses recited in Character on those Occasions.' By W. Reader, Coventry. Other writers give descriptions of the costly pageants exhibited to Henry IV., Henry VII., and several other kings. Coventry was the favourite residence of Edward the Black Prince. Here also Queen Elizabeth delighted to see 'The game of Hock Tuesday,' which represented the destruction of the Danes by the English in 1002. The peculiar predilection of the people of Coventry for pageantry is still displayed in the notorious processional show at the great fair on the Friday in Trinity week, when many thousands assemble to see the representative of Lady Godiva. The legendary origin of this singular exhibition is as follows:—Earl Leofric had subjected the citizens of Coventry to a very oppressive taxation, and remaining inflexible against the entreaties of his lady for the people's relief, he declared that her request should be granted only on the condition that she should ride naked through the streets of the city; a thing which he supposed to be quite impossible. But the lady's modesty being overpowered by her generosity, and the inhabitants having been enjoined to close all their shutters, she partially veiled herself with her flowing hair, made the circuit of the city on her palfrey, and thus obtained for it those privileges which it from that time forth enjoyed. The story is embellished with the incident of Peeping Tom, an inquisitive tailor, who was struck blind for looking out as the lady passed. A figure styled his effigy is still to be seen protruded from an upper window in High-street, adjoining the King's Head tavern. In Gough's edition of Camden's 'Britannia' (vol. ii. p. 346) it is stated that Mathew of Westminster, who wrote in 1307, that is, 250 years after the time of Leofric, is the first who mentions this legend, and that many preceding writers who speak of Leofric and Godiva do not notice it: a similar legend is said to be related of Briavel's Castle. The Coventry procession, as at present exhibited, began only in the reign of Charles II., in 1677; it consists principally of St. George of

England on his charger; Lady Godiva, a female who rides in a flesh-coloured dress, with flowing hair, on a beautiful gray horse; then follow the wool-combers, knights in armour, Jason, Bishop Blaize, &c., all in showy dresses, with a great profusion of gay ribands, plumes of feathers, and accompanied by numerous bands of music. The whole of the city companies used, before the passing of the Municipal Corporations Reform Act, to accompany the procession. Many strong efforts have been made to suppress the unseemly exhibition, but hitherto without success.

The town is situated on a gentle eminence, rising in the middle of a valley which runs east and west. The river Sherbourne and the Radford brook unite within the town. For sanitary purposes the city is under the management of a Local Board of Health. The best streets are tolerably well paved. The town is lighted with gas.

The chief buildings of Coventry are the churches. There are three ancient churches, of which St. Michael's is by far the most remarkable for architectural beauty and ornament. It was originally built in 1133, in the reign of Henry I., and was given to the (Benedictine) monks of Coventry by Ranulph earl of Chester, in the reign of Stephen. The spire rises out of an octagonal base upon the tower, to an elevation of 303 feet from the ground. In the tower is a fine peal of 10 bells. The length of the entire structure is somewhat above 300 feet, and the breadth 104 feet. The interior is lofty and finely ornamented with rows of clustered pillars and arches, with a roof of curiously carved oak, and numerous windows of ancient coloured glass. It has been recently repewed. The organ in St. Michael's church is said to be one of the best in the kingdom. Trinity church is a gothic edifice, but heavier and less elegant than St. Michael's. The height of its spire is 237 feet. The Earl of Shrewsbury furnished a splendid stained glass window to this church in 1834. The building has been recently cased with stone on the west end and the north side. St. John's is a plain cruciform structure, founded by the Merchant's Guild in the reign of Edward III. Three churches have been built within the last twenty years. Christ church, erected in 1832, was built from a design by Rickman; attached to it is the fine old tower and spire of the Gray Friars church. The others are St. Peter's, built in 1841, and St. Thomas's, built in 1848. There are in Coventry four places of worship for Independents, and one each for Wesleyan and Primitive Methodists, General and Particular Baptists, Quakers, Unitarians, and Roman Catholics. Two other chapels are used by various denominations. The Roman Catholic church, rather a superior example of modern gothic architecture, was erected in 1843.

The Free school is a richly endowed institution founded by John Hales in the reign of Henry VIII. Here Sir William Dugdale and several other eminent men were educated. The income is about 950*l.* per annum; and the school has two fellowships at St. John's College, Oxford, one at Catherine Hall, Cambridge, and six exhibitions at other universities. The head master is also rector of St. John's; the second master is lecturer of St. John's. There are six Endowed schools—the Bablake school, founded 1560, having a revenue of about 900*l.* per annum, at which 50 boys are received at about 11 years of age, clothed, educated, and apprenticed: Baiker, Billing, and Crow's school, founded 1690, at which 50 boys are clothed, educated, and apprenticed; this school is under the management of trustees, chiefly of the Unitarian persuasion: the Blue-Coat Girl's school, which educates and defrays part of the expense of clothing 40 girls: Bayley's school, founded 1703, at which 40 boys are educated: Southern and Craner's school, at which between 30 and 40 children are educated: and Fairfax's school for 40 boys. There are National, British, and Infant schools. The Roman Catholics have a school near to their chapel. The Government School of Design, commenced in 1843, has been found of great benefit to Coventry in connection with the riband manufacture. There are a mechanics institute, a library belonging to the Religious and Useful Knowledge Society, a subscription library, and a savings bank.

One of the richest and most interesting vestiges of the ornamental architecture of the 15th century in Coventry, and perhaps in England, is a capacious building called St. Mary's Hall, erected in the reign of Henry VI. The principal room is 63 feet by 30 feet, and is 34 feet in height. Its grotesquely-carved roof of oak, the gallery for minstrels, the armoury, the chair of state, and especially the great painted window facing the street, help to furnish a vivid idea of the manners of the age in which Coventry was the favourite resort of princes. A tapestry made in 1450, measuring 30 feet by 10 feet, and containing 80 figures, is a curious and beautiful specimen of the drawing, dyeing, and embroidery of that period. This hall is the property of the corporation, and is used as a council-chamber and for civic festivities. In the market-place a richly-ornamented gothic cross, considered to be one of the finest in the country, erected in the 16th century, was taken down in 1771. It was hexagonal, 57 feet high, with 18 niches filled with statues of saints and kings. The hospital in Gray Friars-lane is very ancient, and richly ornamented with carved oak. The building called the 'Mayor's Parlour' is of the 16th century: it is used for judicial purposes.

In addition to the buildings already noticed, may be named the County Hall, a stone edifice erected in 1785, and the Drapers' Hall, which is elegantly fitted up for assemblies and other public entertain-

ments; the jail; the Coventry and Warwickshire Hospital; the Provident Dispensary; a convent of the Sisters of Charity; barracks, &c.

Besides the patronage of many important appointments, the corporation had formerly the distribution of charitable funds amounting to 7300*l.* per annum. The following are the principal institutions of this kind, which in Coventry are very numerous: Sir Thomas White's Charity, founded in the reign of Henry VIII., produces annually between 2000*l.* and 3000*l.*; the Bablake Meu's Hospital, of which an income of about 1500*l.* is devoted to the maintenance of poor and aged men, was founded by the will of Thomas Bond in 1506; the Bablake Boy's Hospital has an income of about 940*l.*, appropriated to the maintenance and education of young and poor boys. Besides these, there are 12 other considerable charities, and several minor ones. The Coventry Union-house contains some remains of the White Friars monastery, afterwards the seat of the Hale family.

The city is surrounded by about 1000 acres of Lammas and Michaelmas lands, and 246 acres of common land, over which the freemen of the city (about 3500 in number) and some few other persons have long possessed peculiar privileges, which have interfered with the appropriation of these lands for the general weal of the community.

In the time of the Edwards and Henrys the tradesmen of Coventry were famed for their affluence. In 1448 they equipped 600 armed men for the public service. Until the war between England and France in 1694, the staple manufacture was woollens, broadcloths, and caps; and previous to 1580 there existed a fustian manufacture of blue thread; the water of the small river Sherbourne, which passes through the city, being an excellent menstruum for dyeing this colour. During the 18th century there was a flourishing manufacture of tannies, camlets, shalloons, calimancoes, gauzes, &c., but it is no longer continued. At present the staple manufactures are ribands and watches. The riband manufacture was introduced about 1730, and is supposed now to give employment to about 6000 persons in the city; it is said that 20,000 are employed in riband-weaving in Coventry and the neighbouring towns and villages. The weaving has hitherto been almost entirely performed by the hand-loom, and the weavers are in general a poor class, but steam factories are probably now superseding the loom at the workmen's dwellings. The leaders of the trade are not the manufacturers, but a comparatively small number of wholesale firms in London and Manchester, whose agents attend at Coventry. Gimp and other trimmings are also made in Coventry, and there are large establishments for dyeing silk. The making of watches has been carried on here probably as long as the riband manufacture.

There are several guilds, or incorporated trading companies, some of which are possessed of considerable property, which they spend in charity and festivities.

The local position of Coventry is favourable for commercial operations, being nearly central between the four greatest ports of England—London, Bristol, Liverpool, and Hull; possessing great facilities of water communication by the Coventry and Oxford Canal, which opens into the Grand Trunk navigation, and having one of the main roads from London to Birmingham passing through its streets. The London and North-Western railway passes close to the town; and there are two branch lines, one turning northward to Leamington and Warwick, and another to Nunenton.

(Dugdale, *Antiquities of Warwickshire; History and Antiquities of Coventry*; Reader, *New Coventry Guide*; *Communication from Coventry*.)

COWBRIDGE, Glamorganshire, a market-town and borough, and conjointly with Bridgend the seat of a Poor-Law Union, in the parish and hundred of Cowbridge, is situated on the little river Daw, or Thaw, on the road between Cardiff and Swansea, in 51° 28' N. lat., 3° 27' W. long., distant 12 miles W. by S. from Cardiff, and 173 miles W. from London. The population of the borough and parish of Cowbridge in 1851 was 1066. The living is a curacy annexed to the vicarage of Llanblethian, in the archdeaconry and diocese of Llandaff. The town is governed by a mayor and two bailiffs, appointed in terms of a charter renewed in the time of Charles II. The borough is contributory to Cardiff in returning a member to the Imperial Parliament. Bridgend and Cowbridge Poor-Law Union contains 52 parishes and townships, with a population in 1851 of 23,369.

Cowbridge is a neat, cheerful town, consisting chiefly of one street, which is of considerable width. The town was at one period walled, and had three gates, one at each end of the main street, and another, which is still standing, on the south side of the town. The parish church is an ancient and commodious building. The Wesleyan and Welsh Methodists and Baptists have places of worship in Cowbridge. The Grammar school, an old foundation, connected with Jesus College, Oxford, through an endowment of Sir Leoline Jenkins, has an income from endowment of 20*l.* a year, and had 77 scholars in 1852. The school is free to five scholars, called pensioners, who receive 6*l.* a year for four years at school, and are eligible for exhibitions at Jesus College: ten other boys are admitted as free scholars. There are a National school, a mechanics institution, and a reading-room. The market day is Tuesday: a market is also held on Saturdays for provisions: five fairs are held in the course of the year.

(Cliffe, *Book of South Wales*; *Communication from Cowbridge*.)

COWES, WEST, Isle of Wight, Hampshire, a town in the parish of

Northwood and hundred of West Medina, is situated in 50° 45' N. lat., 1° 18' W. long., distant 4 miles N. from Newport, and 78 miles S.W. from Loudon. The population of the town of West Cowes in 1851 was 4786. There are two livings, which are perpetual curacies in the archdeaconry and diocese of Winchester.

The town of West Cowes is situated on elevated ground on the left bank and at the mouth of the river Medina. Henry VIII. built a castle at this place, and from that period the rise of the town is probably to be dated. The castle, which has a crescent-shaped battery, stands at the entrance of the harbour. The streets are narrow and inconvenient, but their position on the slope of the hill on which the town stands produces a picturesque and pleasing appearance. The upper part of the town is the most recently built, and contains many good houses and villas. Being much resorted to in summer for sea-bathing, there are numerous hotels and lodging-houses; there is also an assembly-room.

As Cowes is the port of the island and the point of communication with the mainland by way of Southampton, there is necessarily a large amount of traffic carried on in the place. Cowes is the head-quarters of the Royal Yacht Squadron, which has a club-house here; the annual sailing-match of the squadron usually attracts numerous visitors from a distance. There is constant communication with the mainland by steam-vessels.

Cowes harbour affords a safe and convenient haven. On December 31st, 1852, there were registered as belonging to the port of Cowes 119 vessels under 50 tons, with an aggregate burden of 2967 tons, and 51 vessels above 50 tons, with an aggregate burden of 5597 tons; and one steam-vessel of 21 tons. During 1852 there cleared inwards and outwards at the port of Cowes the following vessels, namely:—Coastwise, inwards, 146 vessels, 54,375 tons; outwards, 127 vessels, 10,295 tons: colonial and foreign, inwards, 55, tonnage 3638; outwards, 58, tonnage 3923: steam-vessels, inwards, 2, tonnage 2934; outwards, 2, tonnage 2133. Ship-building has been long carried on at Cowes, which has acquired celebrity for the construction of quick-sailing craft: of this the yachts made for the Royal Yacht Squadron are examples.

East Cowes, on the opposite shore of the Medina, may be regarded as a suburb of West Cowes: it is a small place, with several well-built houses, and is in considerable repute as a resort for bathing during the summer. The custom-house is in East Cowes. A large mansion, in a so-called gothic style, built by Nash, the architect of Buckingham Palace, as a residence for himself, is called East Cowes Castle. Osborne House, the marine residence of her Majesty, is a short distance from East Cowes.

(*The Land We Live In*, vol. ii.; *Parliamentary Returns*.)

COXWOLD. [YORKSHIRE.]

CRAKOW (Krakow), a part of the old kingdom of Poland, now of the empire of Austria, which from 1815 to 1846 existed as an independent republic under the protection of the states of Austria, Russia, and Prussia. Previous to 1809 Cracow was incorporated with Austria. By the Partition Treaty of 1809 it formed with western Galicia the Grand Duchy of Warsaw. At the Congress of Vienna in 1815 the three powers not being able to agree as to which of them should have Cracow, formed it into a republic, guaranteeing the perpetual neutrality and inviolability of its territory, except in case of its harbouring offenders against any of the protecting powers. When the Polish insurrection occurred in 1846, the insurgents seized the city of Cracow, but were dispossessed thereof and effectually crushed by the united forces of the three powers, who decreed on Nov. 16, 1846, that the territory of the republic should be re-incorporated with Austria; and this was done accordingly.

Cracow is in the north-eastern part of Central Europe. It lies between Austrian Galicia, Prussian Silesia, and the south-western part of Russian Poland, along the left bank of the Vistula, and contains an area of about 496 square miles. The surface consists of an undulating plain, broken by low hills and woods, and extends to the Vistula, which forms its southern boundary towards Galicia. The Vistula, which is the chief river of Cracow, receives within the confines of the territory the waters of several small rivers, and becomes navigable under the walls of Cracow. There are neither canals nor lakes in the country; at Krzeszowice there are warm sulphurous springs. The climate is moderate, though not genial enough to ripen the grape; it is however salubrious and agreeable, and milder than in the other parts of Poland. The soil is rich, but produces scarcely more grain than is sufficient for the consumption of the inhabitants. The vegetables and fruits are excellent. Its chief productions are corn, pulse, flax, wax, and honey. Oxen, sheep, swine, game, and fish are abundant. Coals, iron, marble, freestone, clay, &c. are found. The quantity of wood is inconsiderable.

Cracow contains only two or three manufacturing establishments, the chief of which are the ironworks of Krzeszowice. The peasantry spin and weave their own cloth, and there is little trade except in the capital. The population is about 146,000, of whom probably nine-tenths are of Polish extraction; the remaining tenth being almost all Jews. The principal towns are CRAKOW, the capital, Chrzanow, and Krzeszowice. *Chrzanow* is situated on the river Clichlo, about 27 miles W.N.W. from Cracow. There is a considerable trade. The population, about 4000, are chiefly Jews. *Krzes-*

zowice, where are extensive iron-works, is a station on the Cracow and Breslau railway, about 20 miles from Cracow.

CRAKOW (in Polish, Krakoo), the chief town of the territory of Cracow in the Austrian empire, is situated at the foot of Mount Krakus, or Wavel (699 feet above the level of the sea), in the delightful and extensive valley of the Vistula, and on the left bank of the river, at its confluence with the Radeva; in 50° 4' N. lat., 19° 50' E. long., distant about 158 miles S.S.W. from Warsaw. It is inclosed by three hills; the St. Bronislava, on which a monument 150 feet high, has been erected, in memory of Kosciusko; the Krakus, or Wavel, and the Wanda. It is united to the town of Podgorze by a bridge of rafts.

Cracow is surrounded with promenades, which have replaced the old ramparts. It consists of three distinct quarters, Cracow, Stradom, and Kazimierz, which last lies on an island in the Vistula, and is joined to the rest of the town by a bridge. It is the residence of the Jews, who have here a synagogue. The suburbs are likewise of some extent. The space between the city proper and the suburbs is laid out as a public garden with promenades. The site of the public garden was formerly occupied by fortifications.

This ancient capital of Poland, where its kings were crowned and buried, received its name from Krakus, duke of the Poles and Bohemians, or White Chrobatia, who is said to have founded Cracow about A.D. 700. It was wrested from the Moravians by Ziemowit, the Bohemian, and was taken from the Bohemians in 999 by Boleslaus the Great, who raised it to the rank of the capital of Poland. Its ancient limits were far more extensive, and its population about double the present amount. It had a flourishing commerce, and its numerous lofty towers and buildings still give to it, in the distance, the appearance of a large and handsome city; but this impression is destroyed on entering its dark, narrow, and deserted precincts. The town is however clean, and has a very spacious public square, surrounded with low miserable shops.

The cathedral of Cracow is a beautiful specimen of gothic architecture, and the finest in Poland; it was destroyed by fire, and rebuilt by Nanker, bishop of Cracow, in the year 1320. Here the kings of Poland were crowned, and its numerous chapels recall the events of the history of this kingdom, from Boleslaus to Kosciusko. It has 50 altars, above 20 chapels, and contains the tombs of most of the Polish monarchs, of Casimir, John III., Sobieski, St. Stanislaus, whose remains are inclosed in a silver coffin, Prince Poniatowski, Kosciusko, and Dombrowski, &c. There is a statue by Thorwaldsen of Count Vladimir Potocki, who was killed before Moscow in 1812. The archives and library preserved in this edifice contain many valuable manuscripts. Its bell, the largest in Poland, was cast in 1520.

The castle, called the Königsburg, on Mount Wavel, a very spacious gothic structure, the first building of which was, it is said, the work of Krakus about the year 700, suffered by two great conflagrations. It was restored to its pristine splendour by Augustus II. of Poland. It was fortified by Dumourier in 1768, and repaired when in possession of the Austrians, who converted it into barracks. Its subterranean vaults, which are excavated in the mountain, were formerly the depository of the royal regalia. Of the 76 churches which Cracow once contained, only 46 are now devoted to the purposes of divine worship. The finest of these are St. Mary's, which is second only to the cathedral, the church of St. Stanislaus, which is the oldest church in the city, the Protestant church of St. Martin, and many magnificent convents. The Episcopal palace is a spacious building of modern construction, with an historical museum for Sarmatian remains. The old town-hall is a quadrangular, tower-like structure, evidently built for defensive purposes. The Roman Catholic university, which was founded in 1364 by Casimir the Great, and in 1780 assumed the title of *Schola Regni*, is the oldest university in Poland. It contains a library of about 30,000 volumes, chiefly old books, and a collection of 5000 manuscripts, principally on theology; an observatory, situated in the suburbs of Wessola, and a cabinet of natural history. Cracow possesses also a gymnasium, in which 446 pupils are instructed under 23 professors, a school of arts, an academy of painting, a Piarist college, and normal and various elementary schools, several hospitals, an orphan asylum, &c. Under Sigismund I. Cracow had 80,000 inhabitants; in 1818 they had dwindled down to 24,556; the number of inhabitants is now about 43,000, of whom about one-fourth are Jews. There are no manufactures, except a few of cloth and woollens. The trade, which is principally in the hands of the Jews, is not extensive, although Cracow is the chief depôt of Hungarian wines, salt, and wax, and the central point of commerce between Poland, Galicia, and Hungary. In the neighbourhood of Cracow are extensive salt-mines.

Near the town is Lobzoff, a summer residence of the former kings of Poland, built by Casimir the Great. Cracow is connected by railway with Warsaw, Berlin, and Vienna, and by electric telegraph with Berlin and Vienna.

CRAIL, Fifeshire, Scotland, a royal burgh in the parish of Crail, is situated on the south-east coast of the county, in 56° 16' N. lat., 2° 37' W. long., about two miles S.W. from Cape Fife Ness, and about 30 miles N.N.E. from Edinburgh. The population of the burgh in 1851 was 1247. It is governed by two bailies and seven councillors,

one of whom is provost; and, with Cupar-Fife, St. Andrew's, Kilrenny, the Anstruthers, and Pitteuweem, returns one member to the Imperial Parliament.

Crail was made a royal burgh by Robert the Bruce, in 1306. The town consists of two good streets and a few lanes. It possesses a small and shallow harbour, which is frequented by a few boats. The old church is a pleasing specimen of pointed architecture. Besides the parish church there are a Free church, a United Presbyterian church, the Parochial school and a Burgh school. Near the burgh, and on a cliff on the coast are traces of a castle said to have been inhabited by David I. In A.D. 874, Crail was the scene of a skirmish with the Danes, who are believed to have built a wall or ridge from the ocean to the Frith of Forth, inclosing a part of this parish; a portion of the wall remains, and is known as 'the Dane's Dyke.' Stone coffins have been discovered in the parish. Freestone is found in all parts of the parish of Crail. Fireclay bricks and chimney cans are manufactured; the coals consumed are imported.

The parish of Crail, the south-eastern angle of the county, is sometimes called the east 'neuk,' or nook, of Fife. The Isle of May, in the Frith of Forth, about 6 miles S.E. from the harbour of Crail, is reckoned as an outlying part of the parish. It is about a mile long and nearly as broad, and is situated in 56° 1' N. lat., 2° 32' W. long. A few cattle and sheep are fed upon it, and a long haired kind of rabbit is found on the island. A lighthouse with a fixed light, visible at a distance of 21 miles, was erected in 1843-4.

CRANBORNE, Dorsetshire, a borough and market-town in the parish and hundred of Cranborne, is situated in 50° 55' N. lat., 1° 54' W. long.; distant 31 miles N.E. from Dorchester, and 93 miles S.W. by W. from London. The population of the parish of Cranborne in 1851 was 2737. The living is a vicarage with two curacies annexed in the archdeaconry of Dorset and diocese of Salisbury.

Cranborne is situated near the head of the small river Allen. The town contains some good houses. The country around is pleasant and fertile. The parish church, which was formerly the church of a religious house founded here about the close of the 10th century, is a commodious structure; it has a tower of the perpendicular style. The pulpit is of wood, richly carved, erected on a stone base. The population of Cranborne is chiefly engaged in agriculture. The market, held on Thursday, is small; two fairs and one great cattle market are held in the course of the year. On Castle-hill are the remains of an ancient circular fortification.

(Hutchins, *Dorsetshire*; *Communication from Cranborne*.)

CRANBROOK, Kent, a market-town and the seat of a Poor-Law Union, in the parish and hundred of Crauhrook and lathe of Seray, is situated in 51° 6' N. lat., 0° 32' E. long.; 30 miles S.W. from Canterbury, and 48 miles S.E. from London. The population of the town in 1851 was 1652. The living is a vicarage in the archdeaconry of Maidstone and diocese of Canterbury. Cranbrook Poor-Law Union contains 6 parishes and townships, with an area of 40,205 acres, and a population in 1851 of 13,069.

Cranbrook is the principal town in the Weald of Kent. It consists chiefly of two streets, the main street being about half a mile long. The houses are irregularly built; the streets are paved, and lighted with gas, and the sewerage is good. Cranbrook was at one time the centre of the clothing trade introduced by the Flenings who were induced to settle here in the time of Edward III. It is now a mart for the agricultural produce of the neighbourhood. A large amount of business is transacted in hops. The market-house is in the main street; the market, which is held on Wednesday, is chiefly for corn and hops. A market for cattle is held once a fortnight. Fairs are held on May 30th and September 29th. The parish church, a handsome and commodious edifice, in the perpendicular style, is situated on a small eminence near the centre of the town. The Baptists, Independents, and other Dissenters have places of worship in the town. Queen Elizabeth's Free Grammar school, for the gratuitous education of the sons of persons residing in the parish, has an income from endowment of 600*l.* a year, and had 36 scholars in 1852, of whom 18 were on the foundation. At Dence's school 16 boys, nominated by the trustees, are gratuitously taught; there is also a National school for boys and girls. Petty sessions are held monthly. In Cranbrook parish are the ruins of Sissinghurst, a fine mansion, which being used as a place of confinement for French prisoners in the last century, received the name of Sissinghurst Castle.

(Hasted, *Kent*; *Communication from Cranbrook*.)

CRAONNE. [AISNE.]

CRATO. [ALENTEJO.]

CRAYFORD. [KENT.]

CRÉCY. [AISNE; SOMME.]

CREDITON, Devonshire, a borough and market-town, and the seat of a Poor-Law Union, in the parish and hundred of Crediton, is situated in a valley on the banks of the small river Creedy, in 50° 47' N. lat., 3° 40' W. long.; distant 8 miles N.W. from Exeter, 180 miles S.W. from London by road, and 202 miles by the Great Western and Exeter and Crediton railways. The population of the town of Crediton in 1851 was 3934. The living is a vicarage in the archdeaconry and diocese of Exeter. Crediton Poor-Law Union contains 29 parishes and townships, with an area of 88,050 acres, and a population in 1851 of 21,727.

The manor of Crediton belonged at an early period to the bishops of Devonshire. A collegiate church is said to have existed here in the time of the Saxons. This church was made the cathedral church about 910; about 1040 the diocese of Crediton was enlarged by the addition of that of St. German's, which included Cornwall: in 1070 the see was removed to Exeter. The present parish church was formerly collegiate: it is cruciform, and the principal part of the building is late perpendicular. The tower, which rises from the intersection of the cross, is 100 feet high. The lady chapel is now used as a Grammar school. In the parvise is a library, chiefly theological, the bequest of a former vicar. There are places of worship for Baptists, Independents, Wesleyan Methodists, Plymouth Brethren, and Unitarians. National schools are supported partly by an endowment, but chiefly by subscriptions: about 60 of the children receive clothing from the institution. An Infant school is supported by voluntary contributions. The Free Grammar school, founded by charter of Edward VI., is endowed out of the tithes, with 100*l.* a year. The number of scholars in 1852 was 30. Each scholar pays 3*l.* a year head money. The school possesses 3 exhibitions of 60*l.* each, tenable for 4 years at either university. There are a mechanics institution, a public library, and a news-room.

Crediton sent representatives to the Parliament held at Carlisle in the time of Edward I. On the rise of the woollen manufacture in this part of the country, Crediton became one of the most important seats of that branch of industry. Hand-loom weavers now make some cloth in their own houses for manufacturers at Exeter and North Tawton. The principal occupation is shoe-making, which employs several hundred people. Crediton has at various periods been considerably injured by conflagrations. The town is divided into two parts, the East Town and the West Town. It is governed by a portreeve elected annually. Petty sessions and a county court are held. Under the provisions of an Improvement Act obtained in 1836, commissioners were appointed, whose jurisdiction includes the town and suburbs. A commodious market-place has been erected in the High-street. The town is lighted with gas. The market day is Saturday. Fairs are held in May, August, and September, and a great cattle market is held in April. Among the vestiges of ancient buildings may be mentioned St. Lawrence's chapel, at the west end of the town, with the remains of windows of triple lights in the early English style; it is now used as cottagers' dwellings.

(Polwhele, *Devonshire*; Murray, *Handbook of Devon*; *Route Book of Devon*; *Communication from Crediton*.)

CREFELD, or KREFELD, the chief town of the circle Crefeld, in the Prussian province of Düsseldorf, stands in a low marshy situation, in 51° 20' N. lat., 6° 32' E. long., about 10 miles by railway N.W. from Düsseldorf, and has about 23,000 inhabitants. The town is well and regularly built, and being encircled by gardens and country seats is one of the prettiest spots in this part of Germany. The town contains a Roman Catholic church, two Protestant churches, a synagogue, and a Mennonite chapel, an orphan asylum, hospitals, a house of correction, and a school for deaf-mutes. The manufactures to which Crefeld is indebted for its prosperity are silks and velvets; they are carried on both in the town and its immediate neighbourhood, and afford employment to upwards of 6000 hands. More than 900 hands are employed in the manufacture of ribands. The other branches of manufacture are cotton-yarn, woollen cloths and kerseymeres, flannel, stockings, linen, hats, gloves, thread, sewing and embroidering silk, pins, sugar, spirits, tobacco, soap and starch, iron and copper wares, leather, and felt hats. The trade of Crefeld is brisk and extensive, particularly in its own products; it has three good fairs in the course of the year.

CREIL. [OISE.]

CREMA. [LODI.]

CREMNITZ (properly *Kremnitz*), a mining town in Hungary, situated in a narrow gloomy valley closed in by seven high hills, is situated in about 48° 42' N. lat., 18° 53' E. long., and has 5000 inhabitants. It is a royal free town, and the place where the earliest mines in the kingdom were opened. The inner town contains the castle and only a few houses besides, but its suburbs are extensive. The population is mostly German and Slavonian; they derive their subsistence from the adjacent mines. Among the buildings of note are the archiepiscopal residence, the principal church with two lofty richly-gilt steeples and a coppered roof, built by the townsmen in 1461, four other churches, the chantry mint, town-hall, royal gymnasium, Roman Catholic high school, royal hospital for the minors, an hospital for the townspeople, and a convent. It is the seat of a subordinate board of mines, and here the Kremnitz ducats are coined. The royal mines in the neighbourhood produce gold (esteemed the finest obtained in Europe) and silver; and employ between 800 and 1000 workmen. The waters of these mines contain a large quantity of sulphate of iron. The smelting and washing works, which are supplied with excellent machinery, smelt not only all the ores found here but what the Schemnitz and Kleschlich mines yield. The produce of the Kremnitz mines has greatly fallen off of late years, amounting to no more than 15,000 marcs of silver and 250 marcs of gold annually. The town contains two paper-mills, manufactories of earthenware and red lead, and a vitriol factory. The town is supplied with water by an aqueduct.

CREMONA, a province of Lombardy, in Austrian Italy, is bounded N. by the Oglio and the province of Brescia, E. by the Chiase and the province of Mantua, S. by the Po, which divides it from the duchy of Parma, and W. by the Adda, which separates it from the province of Lodi. Its greatest length is about 45 miles, and its breadth about 15 miles; it contains 523 square miles, and had according to the returns of 1851 a population of 204,558. The surface is level, and the soil very fertile, yielding wheat, rice, maize, wine, oil, and flax. The white mulberry-tree is extensively cultivated for the production of silk. Cheese, wax, and honey are important articles of produce. Horses, horned cattle, and pigs are numerous. Although great facilities exist for irrigating the grounds, in consequence of the Po and the Oglio flowing within embanked channels considerably above the level of the adjacent soil, yet the system of irrigation does not prevail nearly to such an extent as in the Milanese. The chief manufactured fabrics are silks, calicoes, and linen; cream of tartar is prepared. The embankments of the Oglio and the Po require constant vigilance, and are kept in repair at considerable expense, in order to prevent the disasters that would occur from the inundations to which these rivers are subject. The principal towns besides CREMONA are:—*Casal Maggiore*, on the left bank of the Po, a place of some commercial importance, with a population of 5000; *Pizzighetone*, a strong fortress on the Adda, which has a population of 4000, including the suburb of Gerra, on the right bank of the Po; and *Castelleone*, in the north-west of the province, which has 4000 inhabitants. Pizzighetone was originally built in 1125 as a defence against the Milanese. Francis I. was detained here after the battle of Pavia. It is defended by a bastioned wall and ditch, and entered by two gates. Elementary education is universally diffused among the inhabitants of the province.

CREMONA, the capital of the province of Cremona, and a bishop's see, is situated 45 miles S.E. from Milan, on the north bank of the Po, and is surrounded by walls flanked with towers and wet ditches. A navigable canal which joins the Oglio to the Po passes through the town. The Po is navigable for large boats from Cremona to the sea. The town, which is well built, with regular and wide streets, is five miles in circumference, and has a population of about 37,000. Cremona has many good buildings, such as palaces and churches, all of which are adorned with frescoes and paintings by native artists, the most noted of whom are Boccacino and the two Campi. The façade of the cathedral, which is a gothic building, is ornamented with curious sculptures representing the signs of the zodiac and the rural labours of the various seasons. The interior is rich in paintings and sculptures; some of the latter are by Sacchi, a Cremonese artist of the 13th century. The other remarkable churches are San Nazario, which contains some master-pieces of the brothers Campi, San Pietro al Po, Sant' Abbondio, San Lorenzo, Santa Pelagia, Santa Agatha, and Santa Margherita, which is attached to the episcopal seminary and was built under the direction of Girolamo Vida. The Circumcision in the church of Santa Margherita is by Giulio Campi, and is said to unite the beauties of Raffaele, Titian, and Correggio. At Santa Pelagia are two inscriptions in honour of Girolamo Vida, a distinguished prelate of the age of Leo X., who was a native of Cremona. The town-house in the great square, the Campo Santo near the Duomo, the new market, the theatre, and some of the gates of the town are worthy of notice. But the famous Torrazzo, or belfry-tower, ending in a spire, which is one of the loftiest in Italy, is the wonder of Cremona. It stands close to the Duomo, but detached from it; there are about 500 steps to ascend up to the bells. The spire is a conspicuous object for many miles around in the plains of Lombardy. About a mile outside of the town is the church of San Sigismondo, rebuilt in the 15th century as it now stands by Francisco Sforza I., duke of Milan, who married here Bianca Visconti: it consists of a nave surrounded by twelve chapels, and is adorned by fine paintings and bas-reliefs. There are in Cremona several private galleries of paintings. Cremona is the residence of the delegate or governor of the province. It has civil, criminal, and commercial courts, a lyceum, a gymnasium, a school of the fine arts, and several infant schools. It is also the first city in Italy where infant schools were established in 1829 through the exertions of a priest named Aporti. There are also holiday schools at Cremona and in various parts of the province, in which boys above twelve years of age who have left the elementary schools receive instruction, especially in the branches of knowledge connected with the mechanical arts, drawing, &c. These schools are open at certain hours on Sundays and other holidays which are kept in Catholic countries.

Cremona carries on a considerable trade in agricultural produce by means of the Po and the various canals communicating with that river. It has manufactures of silks, cottons, porcelain, earthenware, and chemical products. It was formerly celebrated for its violins and musical strings, which branch of industry was hereditary in families, the most famous of which was the family of the Amati, who flourished from 1704 to 1739, and whose instruments are still in great repute. The high road from Milan to Mantua and Venice passes through Cremona. A large fair is held in the town at the end of September in each year.

Cremona was in the territory of the Galli Cenomani. It was colonised n.c. 219 by the Romans under the consuls T. Sempronius

and P. Cornelius, who at the time when Hannibal was marching against Italy (Tacitus, 'Histor.' iii. 34) settled 6000 men in Cremona as a place of defence against the Gauls and other enemies from the north. In the following year it afforded shelter and winter quarters to Scipio after the battle of Trebia. It was besieged by the insurgent Gauls led by Hamilcar, but held out till the arrival of L. Furius, who routed the Gauls in a great battle under the walls of Cremona b.c. 200. A colony of 3000 new families were settled in the city b.c. 190, and henceforth relieved from the pressure of wars it soon became a populous and flourishing town. In the civil wars of the triumvirate it took the side of Brutus, and was consequently plundered by the soldiers of Octavianus, who divided its fertile fields among his veterans, the former owners being driven away, a calamity pathetically alluded to by Virgil ('Ecl.' i. 3; ix. 28). Virgil was born at Andes, between Cremona and Mantua, and according to Donatus received his early education in Cremona. In the war between Vitellius and Vespasian the citizens sided with the former, upon which the victorious army of Vespasian under Antonius Primus having entered the town plundered and burnt it. Tacitus ('Hist.' iii. 15-34) has given a fearful account of that catastrophe. The only building that escaped the conflagration was the temple of the goddess Mefitis, or Mephitis, whose worship shows that the low marsh lands about Cremona were unhealthy in ancient as they are in modern times. Cremona was rebuilt by Vespasian, but it never recovered its former prosperity. After the fall of the empire it was taken and a second time utterly destroyed by the Lombard king Agilulfus A.D. 605. In the middle ages however it had risen again to prosperity and became a large and populous city. It suffered severely at the hands of Frederick Barbarossa, was afterwards distracted by the Guelph and Ghibeline factions, had its petty tyrants, and at last fell under the dominion of the Visconti of Milan. The only remains of antiquity at Cremona are a few inscriptions, one of which refers to the worship of Mephitis, mentioned by Tacitus.

CRÉPY. [AISNE.]

CRESSY, or CRÉCY. [SOMME.]

CREST. [DRÔME.]

CRETAN SEA. [ÆGEAN SEA.]

CRETE. [CANDIA.]

CREUSE, an inland department of France, deriving its name from one of the rivers by which it is watered. The department is of a compact form, approaching to oval, having its greatest length north-west and south-east 68 miles, and its greatest breadth at right angles to the length 50 miles. It lies between 45° 39' and 46° 26' N. lat., 1° 24' and 2° 36' E. long., and is bounded N. by the departments of Indre and Cher, E. by those of Allier and Puy-de-Dôme, S. by Corrèze, and W. by Haute-Vienne. The area, according to the cadastral returns of 1851, is 2150 square miles, and the population, according to the census taken in that year, was 287,075, or 132.83 to the square mile, being 41.83 below the average population per square mile for the whole of France.

The department is formed out of the districts of Combrailles and Haute-Marche, and small portions of the Limousin and Berri. The surface is almost entirely covered with hills, and contains no valleys or plains of large extent. A great portion of the eastern boundary is formed by that offset of the Auvergne Mountains which separates the basin of the Cher from that of the Allier, while the southern boundary is formed by the crest of another range that forms the watershed between the Loire and the Dordogne. [CORRÈZE.] From the mountain mass in the angle between these two ranges, a chain runs due north into the centre of the department, whence it turns north-east, separating in its whole length the waters of the Cher from those of the Creuse. Another chain, springing from the mountains on the southern border, runs for a considerable way along the western bank of the Creuse, and then diverges into numerous lines of hills which cover the west and north-west of the department. The spaces between these ranges of mountains and hills are in many instances occupied by isolated or irregularly grouped elevations, which are locally called 'puys,' and of which the basalt and scoriæ found near them clearly attest the volcanic origin. The mountains generally consist of granite and clay-slate; none of them rise to any great height, perhaps not more than 660 feet at most above the general level of the department; but it must be remembered that the department of Creuse is on the watershed between the Gironde and the Loire. Many of their crests are naked and barren, but their sides are clothed with forests of timber-trees and chestnuts. The valleys are narrow, and each of them is watered by a clear stream or river flowing over a gravelly bed. The situation of the department on the northern slopes of the Auvergne Mountains, and the extent of surface covered with mountainous plateaus, rivers, and ponds, render the climate cold, moist, and variable. A great deal of rain falls; storms are frequent; the winter is long and rigorous; autumn is the only fine season.

The *River Creuse*, which gives name to the department, springs from the mountains on the southern border, and flows through a narrow valley first northward as far as Auhusson, and thence north-west, dividing the department into two nearly equal portions. Entering the department of Indre, it passes Argenton, a little below which it turns west as far as Le-Blanc, where, resuming its original

north-western direction, it divides for several miles the departments of Vienne and Indre-et-Loire, passes Gueroche and La-Haye, and enters the Vienne on the right bank a few miles north-west of the latter town. Its whole length is about 130 miles, only 51 of which are navigable. It is subject to floods, which frequently rise to the height of 30 feet in the narrow valley drained by it in this department; but in summer it is in many places almost dry. The western slope of the department is drained by the Maude and the Thorion, feeders of the Vienne, and by the Gartempe and the Sedolle, feeders of the Creuse. The eastern part is drained by the Cher (which has its source here) and its tributary the Tardes, which is itself fed by the Vouize. The *Petite-Creuse* rises in the department of Allier, a little beyond the eastern border of Creuse, and flowing west at the base of a range of hills which stretches along the northern boundary, enters the Creuse on the right bank near the north-western angle of the department. None of these rivers is navigable in this department; loose timber is floated down most of them.

The department contains 1,376,007 acres, of which area 592,560 acres are capable of cultivation, 827,036 acres are natural pastures, 81,840 acres are covered with woods and forests, and 297,800 acres consist of wild moors covered with heath, gorse, fern, and broom. Rye is the chief object of cultivation; huckwheat, oats, potatoes, and turnips are also raised. Agriculture is in a very backward state; the consumption exceeds the produce. The best land is in the basin of the Cher in the east of the department; in the other parts the soil is poor. Chestnuts, walnuts, and cherries are very generally grown; the canton of St.-Feyre is famous for its apples. Horned cattle and horses are numerous, but small in size; the sheep are much esteemed for their flesh, but they are small, and their wool is bad. Great numbers of pigs are reared, and when fattened these animals form the most important export of the department. Asses and mules are commonly used as beasts of burden. Honey of good quality is gathered, and game is plentiful. The farms are in general divided by quickset hedges, in which are planted trees of different kinds, so that the country has in many parts a very pleasing appearance. The spring and summer pasture on the hills is particularly good.

Iron, copper, manganese, antimony, and lead are found; coal mines are worked; granite and building stone are quarried, and potter's clay of good quality is raised. The department is famous for the manufacture of tapestry and carpets. Coarse calicoes, worsted and cotton yarn, leather, and paper are also made. Great numbers of the inhabitants emigrate yearly, and are to be met with in most parts of France, as stone-masons, tilers, sawyers, hemp and wool combers, flax-dressers, carpenters, &c. A large part of the human hair supplied to the hairdressers of the capital comes from this department, the young women generally hartering their hair for silk handkerchiefs, shawls, and other articles of dress temptingly exposed for sale at the doors of the *peruquiers'* shops during fair-time. About 275 fairs are held in the year. Roadway accommodation is afforded by six state and nine departmental roads, the total length of which is 496 miles. The department contains several hundreds of wind and water-mills, one iron foundry, 57 factories of different kinds.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Guéret	7	77	98,286
2. Aubusson	10	113	106,616
3. Bourgaucuf	4	49	42,673
4. Boussoac	4	57	39,497
Total	25	296	287,072

1. In the first arrondissement the chief town is *Guéret*, formerly the capital of Haute-Marche, but now of the department of Creuse. It is situated on the slope of a hill between the Creuse and the Gartempe, and has a tribunal of first instance, a college, public library, and 4446 inhabitants, including the whole commune. Guéret has some trade in cattle and hutter. It grew up around a monastery built here in A.D. 720. The town became the residence of the counts of La-Marche who fortified it and built a castle here, part of which still remains. Charles VII. occupied the castle in his war against the Dauphin, afterwards Louis XI. Guéret has neat clean streets, in which are several fountains. Among the other towns the most important are the following: the population given is that of the commune. *Ahun*, 10 miles N. from Guéret, is a district famous for cattle and dairy produce, and near a large coal-field, has 2212 inhabitants. *Bonnat*, in which there are several Roman remains, has a population of 2330. *Salagnac*, on the left bank of the Gartempe, has 2301 inhabitants. *La-Souterraine*, an ancient town on the Sedelle, takes its name from a large cavern near it, in which there is a stream that turns a mill; it has linen factories, and 3092 inhabitants. *St.-Vaulry*, 6 miles N.W. from Guéret, has a population of 2522.

2. Of the second arrondissement the chief town is *Aubusson*, which stands on the Creuse in a wild rocky defile, 20 miles S.E. from Guéret; it is an ill-built but improving town, with a tribunal of first instance, and 5196 inhabitants, who manufacture carpets, tapestry, coarse woollens, and calicoes. The town also has woollen and cotton

yarn factories, dyo-houses, and tan-yards. The town of Aubusson sprung up in the 8th century round a strong castle, part of which still remains bearing marks of Roman construction. The lord of the castle afforded protection to a party of Saracens who escaped from the defeat of Abderrahman by Charles Martel (A.D. 732); they settled here, and established the wool-lying and tanning trades, to which the town owes its prosperity. *Évaux*, formerly the capital of Pays-de-Combrailles, stands in a well-cultivated plain between the Cher and the Tardes; it is a walled town, and has a population of 2698. In a narrow valley about half a mile north of the town are hot springs and baths, which appear from some constructions about them to have been known to the Romans. The two hottest springs, called *Cæsar's Wells*, have a temperature of 152° Fahr. There are several other springs here, the temperature of the coldest is indicated by 86° Fahr. These waters are frequented from May to the end of September; they are used both as drink and for baths, and are advantageous in cases of insular rheumatism, old ulcers, acrofulous tumours, and all cutaneous diseases. *Fellein*, on the right bank of the Creuse, is an ancient town with a college and 3814 inhabitants, who manufacture cloth, coarse cottons, excellent carpets, worsted, paper, leather, &c. *Chenevailles*, 10 miles N. from Aubusson, formerly a fortified town, now a small place of 1100 inhabitants, deserves mention on account of the great number of Roman remains, funeral urns, and medals found near it.

3. The third arrondissement takes its name from its chief town *Bourgaucuf*, which is prettily situated on an eminence near the left bank of the Thorion, and has a tribunal of first instance, some paper and porcelain factories, and 3095 inhabitants. In the priory of Bourgaucuf, which was then a commandery of the Knights of St. John of Jerusalem, Zizim, the elder brother of the Sultan Bajazet II., found an asylum. A lofty tower, solidly built with cut stone, is said to have been erected by that prince, and is called by his name. There is a large coal-field near Bourgaucuf, and some iron mines are worked. *Royère*, 10 miles from Bourgaucuf, has a population of 2451, *Bénévent* (formerly called *Segunzelas*), and *Pontarion*, near which are extensive caverns and the remains of a Roman bridge over the Thorion, are small places that give names to the other cantons.

4. The fourth arrondissement is named from *Boussac* or *Boussac-Ville*, once an important fortress situated in a mountain gorge at the junction of the Veron and the Petite-Creuse. The town stands on a steep rock and is surrounded by walls flanked with towers. It is commanded by an old castle situated on the summit of a lofty rock above the Petite-Creuse. This castle is still in good repair, and its ramparts and towers form perhaps the most interesting structure of the kind in the department. Near Boussac is Boussac-Bourg; the united population of the two places is 2212. *Chambon*, in the fork between the Tardes and the Vouize, which meet below the town, has a tribunal of first instance, some Celtic and Roman remains, and 2125 inhabitants. According to Barailouin in his 'Recherches Historiques sur le Département de la Creuse,' Chambon marks the site of the chief town of the Camhiovicenses, named in the 'Peutinger Tables.' *Auzance*, in a marshy district near the source of the Cher and *Chatelus*, W. of Boussoac, are villages which give names to the other cantons.

The department of Creuse, together with that of Haute-Vienne, forms the see of the Bishop of Limoges. It is comprised in the jurisdiction of the High Court of Limoges, and belongs to the 21st Military Division, of which Limoges is head-quarters.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

CREUTZ. [CROATIA.]

CREUZNACH, properly KREUZNACH, a town in the administrative government of Coblenz, in the Prussian province of the Rhine, is situated on the banks of the Nabe, which is here traversed by a stone bridge, in the centre of a rich and delightful country, in 49° 51' N. lat., 7° 53' E. long., 40 miles S. from Coblenz, 6 miles S. from Bingen, and has about 9000 inhabitants. It is supposed to have been the site of a Roman castrum. It is built in the old style, without any regular plan, and the streets are narrow and crooked; it has two Roman Catholic and two Protestant churches, a synagogue, a gymnasium, and an hospital. The town has some trade in corn, wine, cattle, salt, flax, &c., and manufactures of leather, woollen cloth, brandy, tobacco, snuff, and soap. There are important salt-works close to the town on the banks of the Nabe. The environs of the town abound in beautiful scenery and interesting sites. Kreuznach has recently risen into great repute as a watering-place.

CREWE, Cheshire, a town in the parish of Coppenthal and hundred of Nantwich, is situated in 53° 5' N. lat., 2° 25' W. long., distant 24 miles S.E. by E. from Chester, 166 miles N.W. from London by road, and 157½ miles by the London and North-Western railway via Trent Valley. The population of the town of Crewe in 1851 was 4491. The living is a perpetual curacy in the archdeaconry and diocese of Chester.

The town of Crewe owes its erection entirely to the formation of the London and North-Western line of railway. The inhabitants consist chiefly of persons in the employment of the railway company, with their families. The houses and shops are well built; the streets are wide, and the footpaths are laid with asphalt. The town is lighted with gas, and well supplied with water, a powerful steam-pump supplying at once the engines in the extensive workshops of

the company, the locomotive engines, and the houses in the town. The water intended to be used by the inhabitants passes through two filtering processes before reaching the houses. Baths are also provided at a cheap rate. The town of Crewe has a council for the management of the affairs of the community; two-thirds of the council are elected by the workmen and inhabitants, and one-third by the directors of the railway company. A church has been erected by the company: the Wesleyan, Primitive, and New Connexion Methodists, Independents, Scotch Presbyterians, Baptists, and Roman Catholics have places of worship. Schools for boys, girls, and infants have been provided by the company, and a library and a mechanics institution are supported by subscription. Medical attendance and medicine are secured for the workmen and their families on payment of a small weekly rate, the highest charge (that for a married man with a family) being 2d. per week. A field in the neighbourhood is used for cricket-playing. The railway station at Crewe is very spacious. From this place branch off five lines of railway, affording ready means of communication with all parts of the country. The workshops and machinery of the North-Western Railway Company at Crewe are on a very extensive scale. Railway carriages and locomotive engines are manufactured and repaired. The number of carriages of all kinds maintained at Crewe amounts to about 700, of which 100 at a time are usually under repair. Crewe Hall, the seat of Lord Crewe, is in Crewe township, about one mile from the railway station.

(Head, *Stokers and Pokers*; *Communication from Crewe.*)

CREWKERNE, Somersetshire, a market-town in the parish and hundred of Crewkerne, is situated in a valley watered by the rivers Parret and Isle, in 50° 47' N. lat., 2° 47' W. long., distant 46 miles S. by W. from Bristol, and 132 miles S.W. by W. from London. The population of the town in 1851 was 3303. The living is a perpetual curacy in the archdeaconry of Taunton and diocese of Bath and Wells.

At the time of the Domesday Survey, Crewkerne belonged to the king; the name was then written Cruche. The market-house stands in a spacious market-place in the centre of the town. The streets are paved; the houses are in general well built, and the town is lighted with gas. The parish church is cruciform, and has an embattled tower rising from the intersection of the nave and transepts. The Methodists, Baptists, and Unitarians have places of worship. The Free Grammar school has an endowment of about 300*l.* a year, and several exhibitions, which are open to the competition of the scholars. The number of scholars in 1851 was 56. There are Day and Infant schools, of which two have small endowments. The principal manufacture of Crewkerne is that of sail-cloth and sacking; some dowlas and stockings are also made. The market, chiefly for corn, is on Saturday: a fair is held annually on September 4th.

CRICH, Derbyshire, a town formerly possessing a market, in the parish of Crich, and hundred of Morleston and Litchurch, is situated in 53° 5' N. lat., 1° 27' W. long.; distant 12 miles N. from Derby, and 126 miles N.N.W. from London by road: Ambergate station of the Midland railway, which is near Crich, is 142½ miles from London. The population of the parish of Crich was 3670 in 1851.

The town is built on a lofty limestone hill. The parish church, from its position, is a very conspicuous object; it is an ancient structure, and its lofty spire serves as a landmark for miles around. The Wesleyan and Primitive Methodists and General Baptists have places of worship. There are a National school and a lending library. The inhabitants are chiefly engaged in working lead-mines, in quarrying of limestone, and in burning it to lime. Frame-work knitting is carried on in dwelling-houses. Attempts have been made on several occasions to revive the market formerly held at Crich, but these attempts were unsuccessful. Two fairs for cattle and pedlery are held in the course of the year. From Crich Cliff are obtained views of scenery of surprising extent and varied beauty.

(*Land We Live In*, vol. iii.; *Communication from Crich.*)

CRICKHOWELL, Brecknockshire, a market-town, and the seat of a Poor-Law Union, in the parish and hundred of Crickhowell, is picturesquely situated on the river Usk, in 51° 52' N. lat., 3° 8' W. long.; distant 13 miles S.E. from Brecknock, and 157 miles W. by N. from London. The population of the parish of Crickhowell in 1851 was 1403. The living is a vicarage in the archdeaconry of Brecon and diocese of St. David's. Crickhowell Poor-Law Union contains 10 parishes and townships, with an area of 44,198 acres, and a population in 1851 of 21,674.

Crickhowell is nominally a borough. The parish church is of early English style, erected about the 14th century; the side aisles are modern. The Wesleyan Methodists, Welsh Calvinistic Methodists and Baptists have places of worship. There are three parochial church schools, a dispensary, and a savings bank. A county court and petty sessions are held in the town. The town-hall has underneath it the market-house. The market-day is Thursday; five fairs are held in the course of the year.

Crickhowell is much resorted to by tourists in the summer. In the upper part of the town is a fine gatehouse of the time of Henry VII. There are some remains of Crickhowell Castle, erected by Edward I. In the neighbourhood are Llangatock Park, a residence of the Duke of Beaufort, and Glanash Park, the seat of J. Bailey, Esq., M. P. Druidical remains have been found near the

town. A cairn was recently discovered at Llangatock Park, in which were found human bones and charcoal, also several coins of the reign of Constantine.

(*Communication from Crickhowell.*)

CRICKLADE, Wiltshire, a parliamentary borough, formerly a market-town, and conjointly with Wootton Bassett the seat of a Poor-Law Union, is situated in a level tract of country on the right bank of the Thames, in 51° 38' N. lat., 1° 50' W. long.; distant 26 miles N. by E. from Devizes, 84 miles W. by N. from London. The population of the parish of St. Mary in 1851 was 431, that of St. Sampson was 1475; the population of the parliamentary borough (which includes a large agricultural district) was 35,503. The borough returns two members to the Imperial Parliament. The livings, a vicarage and a rectory, are in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Cricklade and Wootton Bassett Poor-Law Union contains 14 parishes and townships, with an area of 44,348 acres, and a population in 1851 of 11,406.

Cricklade appears to be a place of considerable antiquity. The ford over the Thames was often contested in the Saxon times. In the year 905 the town was plundered by the Danes, and Canute in 1016 crossed the river here with his army. A priory was founded here in the reign of Henry III. The hospital, supposed to have belonged to the priory, now affords dwellings for the poor. The parish church of St. Mary is ancient; some portions are of Norman architecture; a gothic cross with canopied niches stands in the churchyard. The church of St. Sampson's parish is a spacious cruciform edifice. It has a lofty embattled tower surmounted with pinnacles, and highly ornamented with niches and pedestals. Three chapels for Dissenters are in the town; and two National schools are supported by voluntary contributions. There are several parochial charities. A weekly market formerly held on Saturday has long been discontinued: a market for cattle held on the third Tuesday of every month is well attended. Petty sessions are held. Cricklade has sent representatives to Parliament since the reign of Edward I. The Thames and Severn Canal passes near the town, and a branch canal passes through it, forming a junction at Swindon with the Wilts and Berkshire Canal.

(*Hoare, Wiltshire*; *Communication from Cricklade.*)

CRIEFF, Perthshire, Scotland, a manufacturing town beautifully situated near the left bank of the river Earn, in 56° 23' N. lat., 3° 48' W. long.; distant 17 miles W. from Perth, and 50 miles N.W. from Edinburgh. The population of the town in 1851 was 3824.

Crieff is built on a rising ground at the foot of the Grampians, and is much resorted to in summer by invalids for its mild climate. The houses are in general well built. There are two churches of the Establishment, and chapels for United Presbyterians, the Free Church, Scottish Episcopalians, English Episcopalians, and Roman Catholics. The town is well supplied with water, and lighted with gas. The town-house, in which is the jail, has a spire. There are a savings bank, a subscription reading-room, three public libraries, a mechanics institution, a Freemasons-hall and a Weavers-hall. Several fairs are held at Crieff in the course of the year. In addition to the parish school there is an academy called Taylor's Institution, endowed by Mr. Taylor of Cornton, and founded about ten years ago.

A curious old cross stands near the town-house. Cotton goods and a slight linen fabric called Silesias are manufactured at Crieff. A considerable number of the inhabitants are weavers for Glasgow manufacturers. There are a woollen-mill and a tan-works. Tambour-working and other similar occupations are pursued by the females. Over the river Earn is a handsome bridge of four arches, which connects Crieff with the village of Bridgend. In the vicinity of Crieff is Glen Almond, the strath or vale of the Almond, much admired for its scenery. Trinity college, in connection with the Scottish Episcopal Church, and under the management of its prelates, was opened in Glen Almond in 1847. There are a public school department and a theological students department. In 1852 there were 12 students in the theological classes, and 63 scholars in the public school. Various bursaries or exhibitions have been founded for the students. The extensive parks of Drummond Castle and Ochertyre are within view of the town.

(*New Statistical Account of Scotland*; *Communication from Crieff.*)

CRIMEA, or KRIM TARTARY, the ancient *Taurica Chersonesus*, a peninsula in the south of European Russia, lies between 44° 20' and 46° 10' N. lat., 32° 40' and 36° 30' E. long., and forms the southern part of the government of Taurida. The peninsula of Crimea forms a quadrilateral figure, the sides of which are respectively directed to the north-east, north-west, south-west, and south-east, and the angles to the cardinal points. At the northern angle it is connected with the continent by the isthmus of Perekop, which is about twenty miles in length. From the eastern point a small peninsula stretches out between the Sea of Azof and the Black Sea, terminating on the west shore of the Strait of Yenikalé. On three sides the Crimea is inclosed by the Black Sea; on the north-east it is washed by the Sea of Azof. Its area may be about 8600 square miles. At Perekop (called Or Kapi by the Tartars), at the northern end of the isthmus, there still remains a strong rampart erected by the Turks, which extends from the Black Sea to the Siwash or Putrid Sea, an arm of the Sea of Azof. It consists of a deep trench about 12 fathoms wide

and 25 feet deep, and of a double wall built of freestone, which however has been somewhat injured by the effects of time. Five batteries are erected along this line. Perekop stands on or near the site of the ancient *Taphros*, which took its name from the 'trench' or fosse which in the remotest times formed part of the defences of the isthmus.

The isthmus of Perekop and three-fourths of the peninsula (being the northern part) form an arid plain or steppe, which is occasionally diversified with deeper spots of ground or hollows. The soil for the most part consists of sand or sand combined with clay. Towards both seas there are numerous salt-lakes, some of which are from 15 to 20 miles in circuit. The plain declines imperceptibly towards the lakes, and is destitute of water and wood; but in some parts it is covered with a grass sward. There are here very few inhabitants.

Along the south-eastern shores a mountainous tract extends from Cape Khersonese to Kaffa; hence to the Strait of Yenikalé it is hilly. The mean width of this tract is about 20 miles, and its whole extent probably about 2000 square miles. That portion of this region which is to the west of the harbours of Sevastopol and Balacava forms a peninsula called by the Greeks the Hæraclæotic Chersonesus, from having been colonised by settlers from Hæraclæia in Asia Minor. From Cape Khersonese the country gradually rises in a sloping plain, occasionally diversified with hills. The coast presents an interesting appearance, the hill-slopes being occupied by numerous Tartar villages, vineyards, and country seats. Among the mansions scattered along this coast the principal are Livadia, the seat of Count Potocki; and Alupka, the residence of Count Woronzoff. Alupka is a mansion of palatial splendour, built under the superintendence of Mr. Hunt, an Englishman, from the designs of Mr. Blore. To the east of Balacava the heights attain the elevation of mountains, which run like an immense wall from that town to Alushta. The coast here consists of cliffs generally several hundred feet in height, and forming numerous headlands and dreadful precipices. At a distance of from one to two miles from the coast the mountains attain a height of 2000 feet and upwards. From this rapid slope a few torrents descend, the beds of which are filled by heavy rains or the melting of the snow. The summit of the mountains consists of extensive flats, which sometimes extend several miles. These mountain table-lands, called by the Tartars 'Yailas,' are only visited by them during hot summers on account of the rich pastures which they supply for cattle; some of them are covered with snow till the latter end of May. North of the Yailas the mountains gradually descend, forming numerous but narrow lateral ridges, which inclose delicious and sometimes wide valleys. The ridges by degrees sink down into hills, which terminate in the northern plain.

West of Alushta is the Babngan Yaila, which is nearly as high as the Chatyr-Dag, or Tent Mountain, which stands to the north-east of it and is separated from it by a considerable depression. A like depression occurs on the east, and divides the Chatyr-Dag from Temirdshi Yaila, which is much less elevated. Thus the Chatyr-Dag with its flat summit appears like an immense table, and on that account is probably called by Strabo *Trapezus* (vii. 309, Casaub.). On its flat summit rise several eminences like tents, from which the name is derived which is given to the mountain by the Tartars. These summits, which rise 5040 feet above the level of the sea, are the highest mountains in the Crimea. The Chatyr-Dag and the eastern chain, which extends to Kaffa from the Temirdshi Yaila, are more distant from the coast than the western chain, and a number of small streamlets descend from the heights and drain some fine valleys along the sea-coast. Towards Kaffa the mountains decrease in elevation, and terminate about a mile from the western shores of the open bay on which that town is built.

The country between the Bay of Kaffa and the Siwash or Putrid Sea is a plain very slightly undulating, but eastward of Kaffa the surface presents considerable variety of elevation; near the shore of the Strait of Yenikalé at Kertsh the country is traversed by several ridges running nearly south and north, on which numerous craggy points rise to 300 or 400 feet above the sea. Near Kertsh, and between it and Yenikalé, the peninsula terminates with a rocky though not an elevated shore. This peninsula between the Black Sea and the Sea of Azof is remarkable for its mud volcanoes, of which Pallas particularises the hill called D'shtube, situated nearly in its centre. In some parts naphtha or petroleum is found.

From the western end of this peninsula, at the point where Arabat is situated, extends in a north-north-west direction a narrow strip of land which divides the Siwash or Putrid Sea from the Sea of Azof. It is on an average hardly 300 yards wide, upwards of 70 miles long, and very low; it consists towards the south of shelly sand, in which some scattered plants thrive with luxuriance, but farther on the soil exhibits only common sand, more or less consolidated, and of a saline nature. It contains several small salt-lakes, and along its low beach heaps of salt are thrown out by the sea. This narrow tongue, called the Isthmus of Arabat, is divided from the Nogay-Steppe by a narrow strait called the Strait of Ienitshé or Tonke, and is inhabited only by a few innkeepers: the peasants of Eastern Russia bring provisions along this tract to Kaffa, and take back fish.

Numerous rivulets descend from the northern declivity of the mountains and form several rivers, as the Katschka, Alma, and

Salghyr, all of which have very broad beds, though in summer they contain very little water and run slowly; but when the snow melts on the Yailas they become rapid, broad, and deep rivers.

The winters are cold and the summers hot. In very severe winters the mercury sometimes sinks 9° below zero, and not only the whole Sea of Azof, together with the Strait of Yenikalé, but also a great part of the Bay of Kaffa is covered with ice strong enough to support men on foot and on horseback. The climate is so unsettled, that it often varies six or eight times in twenty-four hours. The winds are very variable, and bring rain from the west and south-west, mild air and frequent mists from the south, serene dry weather from the east, and cold from the north. In spring the weather is settled, the heat moderate and refreshing, and the nights cold and serene; there is seldom any rain, especially during the prevalence of violent east winds, in which case, unless a considerable fall of rain happens in April and May, an unproductive harvest frequently follows. In summer the thermometer frequently rises to 100° and even 102°. On the same day however it falls sometimes 20 or even 30 degrees. Droughts frequently prevail for several successive years, and dry up the wells and brooks. Few summers pass in which the verdure on the hills is not parched up. Thunder-storms rarely occur, but when they do they are tremendous and sometimes accompanied by hail-stones and destructive water-spouts. In spring and summer rainy weather seldom continues so long as twenty-four hours. In autumn bilious fevers prevail. Cold days occur in the middle of October, and are generally accompanied with night frosts, but afterwards the weather again becomes pleasant, and frequently continues mild till December and January.

The crops cultivated in open fields are wheat, rye, barley, oats, maize, spelt, millet, chick-peas, flax, and tobacco. In the gardens are raised melons, water-melons, cucumbers, gourds, artichokes, cabbages, onions, garlic, leeks, broccoli, celery, parsley, carrots, and red beets. The numerous and extensive orchards in the valleys produce pears, apples, quinces, plums, cherries, peaches, apricots, almonds, nuedlars, figs, pomegranates, mulberries, and nuts. Some of these trees grow also wild on the declivities of the mountains. The forest-trees, which cover a great portion of the declivities of the mountains, especially on the northern side, are oak, beech, elms, poplars, lime-trees, maples, ash, and pines (*Pinus maritima*). Honey of excellent quality is obtained. Much attention has been paid to the cultivation of the vine. The wine however is inferior to that produced in Hungary and France. Of the camel with two humps there are several thousands in the country. Great attention is paid by the Tartar noblemen to the breeding of horses. Those of the mountainous districts are small, but uncommonly hardy and sure-footed. The horned cattle are of a middling size in the plains, but small in the mountains. There are three varieties of sheep, all of which have a long tail, which for half its length is overgrown with fat and covered with coarse wool. One variety, which pastures on the plain lying along the Black Sea between Koslow and Perekop, produces the celebrated Crimean lamb-skins, of which more than 30,000 are sometimes annually exported to Poland and Germany. Of black lamb-skins more than 50,000 or 60,000 are annually exported. The mountain sheep are smaller, but celebrated for their soft fine wool.

Sturgeons are taken on the shores of the Sea of Azof, in the Strait of Yenikalé, and in the Bay of Kaffa. Caviar is made, and a little isinglass. Salt, the only mineral that is abundant, is found at the bottom of the salt lakes during the summer heat. Salt in great quantities is exported to Southern Russia, and much is also shipped to Anatolia and Turkey from the ports of Kertsh, Kaffa, and Koslow.

The population of the Crimea is about 200,000. More than two-thirds of its inhabitants are a mixture of Mongols and Turks, and are called Tartars. Those who live on the plain show in their features their Tartar origin; but those in the northern valleys display a strong mixture of Turkish blood, especially the noblemen ('murses'), in whom the Tartar features are entirely obliterated. Besides the Tartars, Russians and Germans are found, who have been transplanted in modern times as colonists; and Greeks, who seem to have always formed a portion of the population, but have considerably increased in latter times.

In the interior, at the northern extremity of the hilly country, is the town of *Simferopol*, or *Akmesheh*, the capital, not far from the sources of the river Salghyr, with 8000 inhabitants. The town contains a cathedral, several churches, mosques, barracks, an hospital, a Tartar school, and many good dwellings. The houses are in general painted green, and adorned with rows of columns. About 25 miles E.N.E. from Simferopol is the town of *Karasubazar*, with 15,000 inhabitants, and some manufactures of morocco leather, candles, soap, pottery, and tiles. It contains a Greek church, two Roman Catholic churches, and a synagogue. Considerable trade is carried on. A weekly market and an annual fair are held. In the mountains is the town of Baktchesarai, the ancient residence of the Khans of the Crimea. [BAKTCHE SARAI.]

The most frequented harbours are on the south-western coast. *Koslow* or *Eupatoria*, with 7000 inhabitants, mostly Tartars and Jews, a fine mosque, a Tartar school, an hospital, and a custom-house; exports salt to Anatolia and Turkey. *Scastopol*, formerly Akthiar, is the principal station of the Russian fleet in the Black Sea. Only vessels of war are admitted to the port. Including the soldiers and

marines forming the garrison the population is about 30,000. The town possesses a fine cathedral. There are here five extensive docks, constructed for the Russian government by Colonel Upton the distinguished civil engineer. The centre dock will accommodate a first rate ship of the largest size: two docks are for 74-gun ships, and two for frigates. The five docks occupy two sides of a quadrangular basin. Into this basin ships are introduced by three locks, each having a rise of 10 feet, so that the surface of the water in the basin is 30 feet above the level of the sea. The bottom of each dock is 3 feet above the sea level. Water is supplied to the dock basin by a canal from the Tcherney-Ruilka (the Black River). A reservoir is connected with the canal for the purpose of supplying the docks in case of the failure of water in the rivulet. The ground over which the canal passes is rough and uneven; and the works include an embankment, three aqueducts, and two tunnels. The docks are constructed of freestone and granite, the granite being employed at the gates and where extra pressure is likely to be felt. The capstans and all the machinery of the locks are of English manufacture. Three forts, named respectively Alexander, Constantine, and Nicholas, defend the approach, the entrance, and the interior of the harbour. The expense of the works was about five or six millions of rubles. With the exception of the docks, the fortifications, and the cathedral, there is little to notice about Sevastopol. The town is (or was recently) undefended on the land-side. Sevastopol possesses a very fine harbour. The depth of water will allow the largest line-of-battle ships to lie close to the shore. In winter the Russian fleet is laid up here, and the crews go into barracks. A short distance east from Sevastopol is Inkerman, at which are several chapels and chambers cut out of the freestone rocks. These chambers are said to have been used by the Arians as a place of retreat from persecution. There is a good carriage road from Sevastopol to Baktesarai. BALACLAVA and KAFFA are described in separate articles. On the Strait of Yenikalé is *Kertsh* or *Kiertsh*, a thriving place, with about 4000 inhabitants. There is here an interesting museum containing a large collection of medals, Greek vases, gold ornaments, and other antiquities dug up from the tumuli in the vicinity of the town. The museum includes also a few Roman remains. *Kertsh* roads are generally crowded with shipping, as vessels proceeding to the Sea of Azof must perform quarantine here. *Kertsh* is a free port. It exports salt, corn, hides, salted fish, and caviar. In its neighbourhood are the extensive ruins of the ancient town of Panticapæum, once the residence of Mithridates. *Yenikalé*, at the entrance of the strait, is a small fortress, with 1700 inhabitants, who are almost all of Greek descent. *Alusha*, on the south-east coast, at the eastern extremity of a pass which leads across the Chatyr-Dag from Simferopol, has become a commercial town of some importance. In the time of the Genoese it was a populous place, and under the Byzantine emperors it was the seat of a bishop. There was a large fortress here built by the emperor Justinian. The town however has little to show except the ruins of former grandeur. The neighbourhood of the Chatyr-Dag renders the scenery peculiarly interesting. The fortress of *Perekop*, on the isthmus, has 900 inhabitants, many of whom are Jews. In the fortress are a palace, barracks, a mosque, and a Greek church.

Manufacturing industry is confined to the preparation of leather and morocco in Baktesarai, Karasubazar, and Koslow, and to cutlery and saddlers' and shoemakers' work at Baktesarai. In some places coarse earthenware is made. The Greeks in the neighbourhood of Kaffa extract soda from saline plants.

The chief exports of the Crimea by sea are salt, wheat, soda, butter, and hides: the imports, raw and manufactured cotton of different kinds; silk stuffs of various patterns and in the eastern fashion; wines of the Archipelago and the Strait of Constantinople; brandy, Turkish leaf-tobacco, and a variety of fresh and dried fruits. To Russia are sent, chiefly by the way of Perekop, salt, gray and black lamb-skins, sheep's and hullocks' hides, wool, camels' hair, leather, hare-skins, vines, walnuts, fruits, together with the dry fruits imported from other parts, and fish. The imports are grain, provisions, iron, and different manufactured goods of Russia.

The Greeks became early acquainted with this peninsula, probably soon after the Ionian Greeks and especially the inhabitants of Miletus had begun to form settlements on the northern shores of Asia Minor, about six centuries before the Christian era. Panticapæum is called by Strabo a colony of the Milesians. Beside this place they built Theodosia, now Feodosia or Kaffa, and some other places on the peninsula forming the west side of the Strait of Yenikalé. They preferred this part of the peninsula, from its containing a large tract fit for agriculture, and producing very rich crops—Strabo says thirty times the seed. It was at one time considered the granary of Greece, especially of Athens, whose territory being of small extent and of indifferent fertility, was unable to maintain its great population by its own produce. At one time Athens annually imported from the Crimea between 300,000 and 400,000 medimni of grain, as Demosthenes informs us, in his Oration against Leptines (c. 9). Strabo says, that in one year the Athenians received 2,100,000 medimni from Theodosia, but the text is evidently corrupt. [BOSPORUS; BYZANTIUM.] (Strabo, vii.; Pallas; Oliphant; Lyall, *Travels in Russia*; Captain Jones, *Travels in Norway, Sweden, Finland, Russia, and Turkey.*)

CRINAN CANAL, Argyleshire, a canal connecting the Lochgilp

branch of Lochfyne with the Sound of Jura, and constructed for the purpose of enabling vessels of small burden to dispense with the rather dangerous passage round the Mull of Cantyre. The project of forming this canal was first started about sixty years back with the co-operation of the then Duke of Argyll. Sir John Rennie having surveyed the ground and reported favourably an Act of Parliament was obtained, a company was formed in 1793, and the works were forthwith commenced. The canal was opened in 1801. The canal although not more than 9 miles in length has been of great service to the coasting trade of the west of Scotland and the Highlands; the original shareholders of the canal company however have never received any return for the outlay of their capital. The number of locks in the Crinan Canal is fifteen; the average breadth is 24 feet, and the depth of water 10 feet; if found necessary 12 feet depth of water could be maintained. Since 1813 the canal has been under the management of the Commissioners of the Caledonian Canal, with the navigation of which it is intimately connected; together these canals form an important portion of the inland passage between Glasgow and Inverness. Vessels of 200 tons burdeu cau pass through the Crinan Canal.

CROATIA (Horvath Orszag), a former province in the south of Austria, now forms with Slavonia a crownland of that empire. It lies between 44° 5' and 46° 25' N. lat., 14° 20' and 17° 25' E. long., and extends in a north-easterly direction from the shores of the Adriatic to the banks of the Drave and Save. It is bounded N. by Lower Styria and Hungary, E. by Slavonia, S. by Turkish Croatia and Dalmatia, and W. by Illyria and the Adriatic. The whole crownland is divided into six palatinates, which are named from the chief town in each, and of which the area and population, according to the cadastral returns and census of 1850 and 1851, are as follows:—

Palatinates.	Area in Square Miles.	Population in 1851.
Agram	1936	234,540
Fiume	476	86,816
Kreutz	653	82,446
Warasdin	990	204,624
Essegg	2030	192,456
Posega	951	67,574
Total	7041	868,456

Besides the area here given, a wide zone, comprising no less than 7500 square miles and containing a population of 670,655 under a military form of government, extends along the south of Croatia and Slavonia, and constitutes a part of the defensive barrier which Austria has established against Turkey under the name of the Military Frontier. Under this head [MILITARY FRONTIER] the peculiar institutions of this district and its towus will be noticed, but the present article contains a notice of the physical character of the whole crownland.

Croatia is divided into two distinct parts by the Save, which receives the Kulpa and the Unna on its right bank and the Illova on the left. To the north of the Save the surface presents some rather extensive plains, bounded N. by the Reka Mountains, an offset of the Carnic Alps, of no great elevation, which here forms the watershed between the Save and the Drave. Between the Reka Mountains and the Drave, which separates the crownland from Hungary, the country is level. Near the eastern boundary, between the Illova and its feeder the Longa, there is a mountain mass called Mount Garik, which is but slightly connected with the Reka Mountains on the north, and rises to about 2500 feet in height. The principal rivers of the country have been already named; they are all navigable with the exception of the Illova, and all of them are subject to floods which inundate the plains through which they flow, and in some places form largo marshes.

Besides the principal rivers just named, Croatia is watered by many other rivers and streams, most of which rise within its confines; such as the Krapina, Korana, Odra, &c., nearly all of which flow into the Dravo or Save; the Zermanya and Fiumara, which fall into the Adriatic.

Many of the valleys, especially on the southern ridge, are entirely closed, and the streams which traverse them not having a vent, find their way to different rivers by subterranean channels, and often inundate the surrounding country. Some of these valleys are inhabited by a half-savage race, and abound in picturesque waterfalls. The Szluinichicza forms above forty beautiful cascades.

South of the Save the country is very mountainous. The Julian Alps enter the crownland on the west and terminate in Mount Kleck (nearly 7000 feet high), whence the Kapella Mountains run from north-west to south-east, connecting the Julian with the Dinaric Alps, which separate Croatia on the south-east from Bosnia. The highest parts of the Kapella Mountains and of one of its principal offsets to the eastward called Plissivitzta, do not exceed 5800 feet above the sea level. The eastern and north-eastern parts of these mountains are furrowed by innumerable dells, ravines, and valleys, traversed by rapid streams, all feeders of the Kulpa. About

Carlstadt, where many of these tributaries join the Kulpa, the country is level; it is tolerably level also between Carlstadt and Agram, and along the lower Kulpa, which joins the Save a little east of Petrinia, a town of the Military Frontier with about 6000 inhabitants.

Southward from Mont Kleek another and somewhat loftier and steeper range runs at but a little distance from the Adriatic shore: in the northern part this range is called the Merzivaditza Mountains, and further south to the river Zermagna, where it terminates, the Velibitch or Wellibitz Mountains. The two ranges just noticed as springing from Mont Kleek, inclose a high cold plateau of considerable extent, watered by the Licoa, the Gaczka, and other streams, which have no visible outlet, but lose themselves in the limestone rocks of which all the mountains noticed are principally composed. The road called Luisen-Strasse, which runs from Carlstadt to Fiume, crosses the barren region of the Karst, as the mass of the Julian Alps north of Mont Kleek is locally called. The limestone range traversed by the road is bare, rugged, and barren; the hills are scored by ravines, the surface is strewed with shattered fragments of rock, and the rocky plateau is everywhere penetrated with funnel-shaped hollows like craters. The land here is little cultivated, owing to the poverty of the soil. In the Karst, and all along the high plateau between the Kapella and the Velibitch Mountains, the fearful Bora rages with all its fury, sweeping everything before it; large stones, carriages, and passengers are sometimes swept by it over the precipices that flank the Luisen-Strasse. The engineering works along this road, the zigzags, terraces, and slopes cut out of the rocks, are not inferior to anything of the kind on the great roads over the Alps. On the southern side of the mountains it passes down to Fiume by a terrace or shelf cut in the eastern side of the precipice that forms one of the walls of the ravine of the Fiumara. This ravine is called the Porta Hungarica, or 'Gate of Hungary.'

The greater part of the mountains consists of limestone, with various kinds of beautiful marble, porphyry, serpentine, &c., which furnish excellent materials for building; all the bridges and parapets of the Luisen-Strasse, and most of the houses at Fiume, Segna, and Porto-Ré, are constructed with this stone. The most common is a blackish-gray marble, which emits a fetid smell on being rubbed. Croatia contains many mineral springs. Its minerals comprise copper, iron, lead, coal, and salt; gold is obtained from the sand of several of the rivers, especially the Drave.

The climate of Croatia varies considerably in different parts. The southern and more sheltered districts, and the narrow tract between the Merzivaditza Mountains and the Adriatic coast, from Fiume to Segna, enjoy an Italian climate, and produce the olive, fig, grape, and almond. Here the vintage takes place in August, but in the western highlands beyond the Kulpa the harvest does not commence till the end of August or beginning of September, when the snow begins to fall, which does not melt till April or May. On the higher summits it frequently lies the whole summer. But even in the southern regions the winter is very severe, owing to the vicinity of the high Alps. Several islands in the Gulf of Quarnero lie off the coast of Croatia; the principal of them are—Veglia, Arhe, Cherso, Lossini, and Pago. Between the islands and the mainland stretches the long narrow channel of Morlacca.

The scourge of this country is the wind called Bora, which blows from the north or north-east, and generally sets in between seven and eight A.M. and ceases at four or five P.M. It is accompanied by excessive cold, and blows with such violence that large stones are rolled by it to a great distance.

The eastern and northern parts of Croatia, which are more level and less mountainous, and especially the parts watered by the Drave and Save, are very fertile in various kinds of grain, particularly barley, maize, and oats; the soil is also very favourable for fruits, among which the Damascene plum furnishes the favourite drink of the Croats. Croatia has immense forests of oak and beech, and the great rivers just named in many parts of their course roll along under the shadow of primeval forests. Flax, hemp, and tobacco are only grown in sufficient quantity for domestic consumption. The vine is cultivated, and a good deal of wine is made. Horticulture and gardening are very little attended to; the same may be said of the rearing of horned cattle and horses, except in the palatinates of Agram and Warasdin. The flocks are neither numerous nor of choice breeds. Considerable herds of swine are reared, for which the forests afford plenty of food. The fisheries of the rivers are very productive; much wax and honey are collected. Only a very small portion of the inhabitants is engaged in manufactures, and these are of the rudest description. As Croatia does not raise more produce than suffices for its inhabitants, its commerce is chiefly confined to the transit trade. Besides the great road already mentioned, a road runs from Carlstadt to Agram and to Laybach in Illyria; another, the Josephine, leads to Segna on the Adriatic, whence a road runs along the Litoral (or narrow strip of land that intervenes between the Morlacca channel and the mountains) to Fiume. South of Segna the mountains lie close upon the coast, and the road runs into the interior on the eastern side of the Velibitch Mountains down to the valley of the Kerka, in Dalmatia; it then turns to the coast and terminates at Zara. Through Warasdin there is a road up the valley of the Drave to Klagenfurt.

The inhabitants are Roman Catholics and Greek Catholics. The former are under the Bishop of Agram, and the latter have their own bishop, who resides at Creutz. The public system of education is that of the national schools, which are divided into elementary, head, and normal. There are two gymnasia at Agram and Warasdin, and a superior academy or college at Agram, which has also a seminary of theology for candidates for orders in the Roman Catholic and Greek-Catholic Church. Although brought into more regular discipline by the Austrian government, the Croats still retain their taste for war. Those who live at some distance from the Turkish frontiers have adopted more industrious habits. Their untutored state is accompanied by many traits of virtue and generosity, and great fidelity to their sovereign. Notwithstanding their revolt against Austria in 1755, on account of certain innovations, their despair was indescribable when they found themselves united to France in 1800. Their dwellings are merely large barns, without either window or chimney, where the family and the swine lodge under the same roof.

Slavonia, the eastern part of the crownland, is separated from Hungary by the Drave and the Danube, from Turkey by the Save, and it has the Illova on part of the western frontier towards Croatia. The territory thus bounded is divided into two parts, the province of Slavonia, and the Slavonian Gränzend, or Borderland. The province of Slavonia is divided into the two palatinates of Posega and Esseg or Eszek; the latter includes the former county of Sirmia. A chain of high mountains coming from Croatia traverses the country. Where this chain enters Slavonia the valleys are narrow, but they gradually become more open, and form near Posega a wide plain bounded by lofty mountains, which is called the Posega Valley; but at the eastern frontier of this palatinate the branches of the mountains again join in one principal chain, reaching the height of 2800 feet, which covers all the northern part of the county of Sirmia. This chain is covered with vast forests. The remaining part of Slavonia consists partly of fertile eminences planted with vines and fruit-trees, and partly of beautiful and extensive plains. But as many tracts of land on the Save and Drave are very low, they are subject to be frequently overflowed, and there are several large and small pieces of stagnant water and extensive marshes near those rivers. Along the right bank of the Danube there are forests in many places; and the course of the Save is densely shrouded with them. These forests contain a vast quantity of excellent oak timber. The country produces corn of all kinds, hemp, flax, tobacco, and great quantities of liquorice. There are whole forests of plum-trees; chestnut, almond, and fig-trees are likewise common, and the white mulberry abounds. Slavonia is rich in useful domestic animals. The horses are small, and sheep are not numerous. Of wild animals, the bear, wolf, fox, polecat, and vulture are common. Swarms of mosquitoes and other troublesome insects are bred in the marshes, and a long continuance of southerly winds sometimes brings locusts. The only minerals of which there are considerable quantities are sulphur, limestone, coal, salt, and iron. It may be said that there are no manufactures in Slavonia. The peasant makes all his farming implements—his cart, his plough, &c.; and his wife and daughters weave cloth and knit stockings for the family. In so fertile a country agriculture and the breeding of cattle are the most profitable occupations of the inhabitants. The culture of silk is flourishing. The quantity of wine produced is very large; the county of Sirmia, where the vine was planted in the 3rd century by the soldiers of the emperor Probus, alone produces about 6,000,000 gallons annually. The wines, both red and white, are spirituous, and not well-fitted for export. The exports are corn, tobacco, spirits distilled from plums, raw silk, honey, wax, liquorice, gall-wax, madder, raw hides, oak staves, hoops, salt, oil, and fruit; oxen and swine are exported in large numbers. The trade is chiefly with Austria and Turkey. The chief imports are iron, salt, and oil. Steamboats ply on the Drave, Save, and Danube.

The Croatian language is a dialect of the Slavonian; it resembles the Bohemian and Moravian, and bears a great affinity to the Polish.

Towns.—In the palatinate or county of Agram the chief town is AGRAM, the capital of the crownland, and the residence of the Ban or Viceroy, and of the commandant of the Military Frontier. *Carlstadt*, or *Karlovec*, at the junction of the Kulpa and the Korana, 34 miles S. by W. from Agram, has 4400 inhabitants. It is strongly fortified, and further defended by a baronial castle. Besides the fortress there is an outer town and a suburb. The three roads to Fiume, Segna, and Karlopago on the Adriatic, and the Kulpa, which is navigable from this town, facilitate the communication with the rest of the crownland. Carlstadt has an active transit-trade, some good public buildings, and manufactures of rosoglio. At the junction of the Kulpa with the Save are the remains of an old Roman town, *Siscia*, now called *All-Szizek*.

In the palatinate or county of Warasdin the chief town is *Warasdin*, which stands about two miles from the right bank of the Drave; it is surrounded by walls, is well built, and contains many fine edifices, among which are several churches, a synagogue, county-house, and a bishop's palace. The town has a gymnasium, several schools, and a population of 9000. Good wine and tobacco are produced in the environs.

In the palatinate or county of Kreutz or Creutz, lying east of the two preceding, the chief town is *Creutz*, which stands between the Longa and the Glogovnicza, feeders of the Save, 30 miles N.E. from Agram; it is the seat of a Groek-Catholic bishop, and has above 3000 inhabitants. *Kopreinitza*, in the valley of the Drave, is strongly fortified, and has 3200 inhabitants.

In the palatinate of Fiume, formerly called the Litorale, the chief town is *Fiume*, the principal port of the crownland, which is described in a separate article. [FIUME.]

Of the palatinate or county of Posega, which comprises the west of Slavonia, the chief town, *Posega*, stands on the Orlawa, a feeder of the Save, and has a gymnasium, and 7000 inhabitants. Tobacco, silk, and wine are the chief products of the Posega Valley.

The palatinate of Esegg includes the former counties of Verovicz and Sirmia. The county of Verovicz occupies the northern slope of the Rcka Mountains, extending along the right bank of the Drave to its junction with the Danube. Its chief town is *Eszek*, or *Eszek*, which is noticed in a separate article. [ESZEK.] *Diacovar*, S. of *Eszek*, a small place of about 3000 inhabitants, and the seat of a bishop; *Verovicz*, or *Verócze*, in the north-west of the province, is a market-town, with a castle, and a population of 3200; and *Dallja*, or *Dallya*, a village on the right bank of the Danube, with about 3000 inhabitants partly engaged in the sturgeon fisheries; are the only other places worth mentioning.

In the county of Sirmia, which lies east of the other two, and is traversed by the chain of hills that forms part of the watershed between the Danube and the Save, the soil is very fertile, except in the mountains south of Karlowitz. It contains the towns of *Vukovar*, at the mouth of the Vuko, population 6000; *Illok*, or *Ujtak*, a steam-packet station farther down the Danube, here a mile wide, population 3500; *Kamenitz*, 2 miles from Peterwardein, population about 2000; *Ireg*, in a fine wine country on the south slope of the Karlowitz Mountains, population 5000; *Ruma*, 5 miles S. from Ireg, 38 miles W. by N. from Belgrade, on a small affluent of the Save, population 6200.

A small portion of Slavonia stretches north of the Danube along the right bank of the Theiss to the point where this latter river is joined by the Frauens Canal. This district is noticed under the head MILITARY FRONTIER. The towns Karlowitz, Peterwardein, and Semlin will be given also under that head or in separate articles.

The ancient inhabitants of Croatia were the Pannonians, after the conquest of whom by Augustus it became a province of Illyria. The Goths took possession of it A.D. 489, then the Avars or Abares, and in 640 the Croats, a tribe of the Wends from Bohemia, who were anciently called Horvather, Irovathes or Chrobates, settled in it, and gave their names to the country. They subdued the former inhabitants of Illyria and Noricum, and being reinforced by bodies of their countrymen, they founded the Duchies (or in their idiom 'Zupanies') of Carinthia, Friuli, Liburnia, or Croatia Proper, Jadra in Dalmatia, Slavonia, &c. These small states submitted to Charlemagne, but they generally allied themselves with the Greek emperors, although they continued to acknowledge the supremacy of the Church of Rome. Their first archizupan of whom history makes mention is Cresimer, who lived in the 10th century, and whose son, Dircislav I., took the title of king of Croatia, which then extended also over the western part of Dalmatia and Bosnia; its capital, called Biograd, appears to have been situated on the shores of the Adriatic, according to some at the place called by the Venetians Zara Vecchia; other authorities fix upon the modern Biograd, Belligrad, or Bielgrad, on the small river Pliva, as its site. Towards the year 1100 Croatia was incorporated with Hungary.

After the middle of the 15th century it suffered greatly from the incursions of the Turks, but the Croats being a warlike people, ravaged in their turn the Ottoman territories, and returned to their villages laden with spoils. Croatia was afterwards annexed to the Austrian empire, and together with Slavonia, Dalmatia, and some parts of Hungary, was governed by a special board at Vienna under the common title of States of Illyria. More recently Croatia has preserved the name only of a kingdom, having been incorporated with Hungary. Since the insurrectionary movements of 1848 Croatia has been severed from Hungary.

CROMARTY, Scotland, a parliamentary burgh, market-town, and port, in the parish of Cromarty, in the united counties of Ross and Cromarty, is situated in 57° 41' N. lat., 4° 3' W. long., on a low peninsula on the south side of the Frith of Cromarty, near its entrance from the sea; it is about 16 miles N.E. from Dingwall, the county town, and about 180 miles N.W. from Edinburgh. The population of Cromarty in 1851 was 1988.

Cromarty was anciently a royal burgh, but was disfranchised in 1672, and accounted only a burgh of barony. It now unites with Kirkwall, Wick, Dornoch, Tain, and Dingwall, in returning one member to the Imperial Parliament. The affairs of the burgh are managed by a town council consisting of six members. The town is irregularly built, exhibiting in its older streets and lanes the homely Flemish style of architecture characteristic of the old towns of the north. The chief buildings are a plain parish church, a Gaelic chapel, and a town-house; the last a substantial building with a hall in the upper story and a

prison in the lower, and surmounted by a dome or clock-tower. There are places of worship for the Free Church and the United Presbyterians. In the parish are some remains of ancient chapels. The harbour, formed by a pier, is near the extremity of the point on which the town stands. Vessels of 400 tons can come up to the quay. There are a hempen-cloth manufactory and a brewery. A considerable trade is carried on in salt provisions. Some of the population are engaged in the herring and white fishery. Ship-building is carried on. There are a weekly corn-market on Tuesday, and fairs in April, August, October, and November. At the mouth of the Cromarty Frith, and not far from the town, is Cromarty Point, a headland on which stands a light-house with a fixed light. The north and south headlands at the entrance of the Frith are known as the 'Sutors of Cromarty.'

(New Statistical Account of Scotland.)

CROMARTYSHIRE. [ROSS AND CROMARTY.]

CROMER. [NORFOLK.]

CROMFORD. [DERBYSHIRE.]

CRONSTADT (*Kronstadt*), a town, fortress, and port, in the Russian government of St. Petersburg, is built at the south-easterly extremity of Cotliu-Ostrof, an island in that part of the Gulf of Finland called the Bay of Cronstadt, 18 miles from the mouth of the Neva, 21 miles W. from the city of St. Petersburg, in 59° 59' 46" N. lat., 29° 46' 33" E. long., and has in summer a population of about 55,000, including the garrison and the marine. During the winter months, from November to April, the port is ice-bound and nearly deserted. The island of Cotliu-Ostrof, formerly called *Rétouzari* by the Finlanders, is 7 miles in length and about 1 mile in breadth. At the entrance of the harbour, on an island opposite the citadel, lies the fortress of Cronschlott, built by Peter the Great. The passage between this fortress and Cronstadt is 2000 paces in width, and has ample depth for the largest vessels. Cronstadt is the great naval station of the Russian fleet and the harbour of St. Petersburg. All vessels proceeding to that port are searched here, and their cargoes sealed, and such as are too large for the shallow waters of the Upper Neva unload their cargoes at Cronstadt, and transport them in smaller craft.

The town, which is built in the form of an irregular triangle, is strongly fortified on all sides. It has three harbours lying to the south of the town, all strongly defended by ramparts and bastions. The outer or military harbour, which is a rectangle, is entirely surrounded by a massive and strongly fortified mole, and is capable of containing, besides smaller vessels, above 35 ships of the line. The middle harbour is intended for the fitting-out and repairing of vessels. The hulls are generally built at St. Petersburg and brought here for equipment. It contains the slips, a powder-magazine, a manufactory of pitch, tar, &c. The third and innermost harbour, which has space for 1000 vessels, and runs parallel with the middle harbour, admits only merchantmen, for which there is besides an excellent roadstead immediately outside of the port, which is defended also by the citadel, constructed on a rock in the middle of the Bay of Cronstadt. All these harbours are well secured, but in consequence of the freshness of the sea-water no vessels can be preserved in them above twenty years. They are besides detained a great part of the year by the ice in the Bay of Cronstadt, which usually prevents vessels from entering after November, or leaving before the end of April, or sometimes even later. Vessels are repaired and built in the large canal of Peter the Great, which runs directly into the town between the middle and merchant's harbour, and receives ten large ships at once. The basin is 2160 feet long, and 26 feet deep. It is built with granite, and by means of a steam-engine can be laid dry in two days, and filled again by means of sluices in six hours. Near it are the various docks, in which ten ships can be repaired at once; the foundry, which supplies annually 1200 tons of bombs, balls, &c.; the admiralty rope-walk; tar-works; and excellent wet-docks. By the new Catharine Canal, commenced in 1782, which is 1880 fathoms long, government vessels are enabled to take their stores, munition, &c., directly from the store-houses. The quays of the canals and of the three harbours are all constructed of granite on a very grand scale; they were erected by the emperor Nicholas. The town is very regularly built, and contains many fine, straight, and well-paved streets, and several public squares. The houses however, with the exception of those belonging to government, are chiefly of one story, and built of wood. There are five Russian churches, one Lutheran, one Anglican, and one Catholic church.

The Bay of Cronstadt is shallow, the average depth hardly reaching 12 feet, and the bar at the mouth of the Neva has not more than 9 feet upon it in ordinary times.

The city has three gates, and is divided into two parts, the Commandant and Admiralty quarters, which are subdivided into four districts. Between the Peter's and Catharine Canal is the old Italian palace built by prince Menschikof, who took this island from the Swedes in 1703. It is at present occupied by the school for pilots, a large establishment, where above 300 pupils are educated for the naval service, and 20 for the merchant service. The naval hospital is a large and well-regulated institution, with accommodation for 2500 patients, and a separate building for officers of the navy. Among other public buildings may be mentioned the admiralty,

exchange, custom-house, barracks, club-house, and the house of Peter the Great, where he resided for some time: but with the exception of a few old oaks, which he is said to have planted with his own hands, there are no remains of the former garden.

The permanent population of Cronstadt, exclusive of the garrison, the pupils of the naval school, workmen, and sailors, perhaps does not exceed 12,000. The inhabitants derive their chief support from the fleet, trade, and shipping. The town presents an appearance of great bustle and activity during the summer, but in winter all is dead and stagnant. The bay is then entirely frozen, and its surface is for six months traversed by great roads marked out by signal-posts, and leading to the capital and other places on the Gulf of Finland.

The town and port were laid out and the buildings far advanced by Peter the Great, who founded Cronstadt in 1710; but it did not receive its present name ('The Town of the Crown') until the year 1721. At the northern extremity of the island are Fort Alexander and the Battery of St. John; the latter is built on piles.

CRONSTADT (*Kronstadt*), the capital of a county of the same name in Transylvania. The county lies immediately north of the Carpathians, which separate it from Wallachia, and is watered by the Alt and its feeder the Burze, whence the county is also called Burzenland. The Burzenland is in that part of Transylvania called 'the land of the Saxons'; its surface is traversed by the lofty chain of the Butchescht, an offset of the Carpathians, which reaches in its highest summit an elevation of above 8000 feet. The climate is extremely cold in winter. The valleys and lower slopes of the mountains are well adapted for agricultural purposes. All sorts of corn and pulse, maize, millet, flax, hemp, fruits, &c. are grown. Among the minerals are gold, silver, porcelain-clay, &c. Game, fish, and bees abound. Horned cattle are very numerous. The mountain sides are clothed with fine forest timber. The population is about 100,000, composed of descendants of German settlers, Hungarians, Wallachs, Greeks, Armenians, and some Kallibassi.

The capital, Cronstadt, the largest and most populous town of Transylvania, is also called Kruhuen, Krünnic, and Krohne, and in ancient records Brassó. It stands near 45° 36' N. lat., 25° 33' E. long., 70 miles E.N.E. from Hermannstadt, in a narrow valley, inclosed by mountains, at an elevation of 1896 feet above the level of the sea. It is defended by a strong castle on the bank of the Parkas. The inner town, which has the form of a rectangle, is well built, and surrounded with towers, walls, and ditches; it contains about 615 houses, and has a population composed entirely of Saxons or their descendants. It was built in the beginning of the 14th century, when it was called Corona. There are three suburbs, the Altstadt, the Bolonnya or Brassovia, and the Upper Town, or Bolgár, which consists of 1500 houses partly built on hills amidst orchards and gardens, and inhabited chiefly by Wallachs. Including these suburbs, Cronstadt has above 3400 houses and about 36,000 inhabitants. The inner town has 5 gates, 6 principal streets which are straight and regular, and a spacious market-place with 2 fountains. Among the chief buildings are the Protestant church, a striking edifice erected in 1383 in the gothic style. It is 112 paces long, 59 paces broad, supported by 22 Tuscan columns, and surmounted by a tower 138 feet high, in which is a bell 6½ tons in weight. The Roman Catholic church of St. Peter and St. Paul was built in the Italian style in 1766-82. The remaining buildings of note are the town-hall, in the market-place, with a handsome tower; the old Lutheran church of St. Bartolouew; the Gymnasium; and the great mart, or Kaufhaus, which was erected in 1545. This mart was until lately the general place of rendezvous for German, Hungarian, Armenian, Greek, Turk, Wallach, Jew, Gipsy, and Bulgarian traders, who assembled here to expose their goods, while Turkish money-changers were seated outside and around the market-place for the exchange of Austrian and Turkish coins; but the trade of Cronstadt has recently much declined.

Cronstadt contains a Lutherau gymnasium with a library, a town-hall, barracks, two Greek and two Roman Catholic churches, a Calvinistic church, a Roman Catholic high school, a military academy, a normal school besides various elementary schools, two hospitals, a house of correction, and a house of industry.

The inhabitants manufacture linens, cottons, coarse woollens, stockings, and woollen bobbins. There are a paper-mill and two wax-bleaching grounds. Cronstadt was the first place in Transylvania where a paper-mill and printing-press were established; the earliest works issued from the latter were the 'Augsburg Confession' and the writings of Luther.

Cronstadt carries on a considerable transit trade in Austrian and Turkish produce; cattle and wine from Wallachia; manufactured goods; corn, salt, &c.

CROOKED ISLANDS. [BAHAMAS.]

CROOM, county of Limerick, Ireland, a small town and the seat of a Poor-Law Union in the barony of Coshma, is situated on the river Maigue, in 52° 32' N. lat., 5° 43' W. long., distant about 11 miles S.S.W. from Limerick. The total population in 1851 was 1357. Croom Poor-Law Union contains 20 electoral divisions, with an area of 83,323 acres, and a population in 1851 of 27,209. The town is very ancient, and derives its name from Croom, the Celtic god of thunder. There are some Druidical remains and a ruined round tower in the neighbourhood. At Croom is an old castle of the Fitzgeralds, which

furnished a branch of that family, now represented by the Duke of Leinster, with their war-cry and motto 'Croom-a-boo' (Croom for ever). This castle has been partially repaired, and is now inhabited. Petty-assizes are held in Croom. There are here a bridewell and a dispensary. Fairs are held on May 3rd, June 22nd, September 1st, and December 8th.

CROSNO. [GALICIA.]

CROTON, or **CROTONA.** [CALABRIA.]

CROWLAND. [LINCOLNSHIRE.]

CROYDON, Surrey, a market-town and the seat of a Poor-Law Union, in the parish of Croydon and hundred of Wallington, is situated on the river Wandie, in 51° 22' N. lat., 0° 5' W. long., 9 miles S. from London by road, and 10 miles by the London and Brighton railway. The population of the town of Croydon in 1851 was 10,260. The parish is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry of Maidstone and diocese of Canterbury. Croydon Poor-Law Union contains 11 parishes and townships, with an area of 33,559 acres, and a population in 1851 of 31,901.

The name Croydon, which in Domesday Book is Croiedone, appears to be derived from the locality of the town on the edge of the chalk (*croic*, chalk, and *dune*, bill). The situation, from its contiguity to the Banstead Downs, is pleasant and healthy. At the Norman Conquest the manor of Croydon, with a royal palace, was given to Lanfranc, archbishop of Canterbury. This palace during a long period was a chief residence of the succeeding primates. It was built of timber, and was in 1278 in its original state. No part of the present structure is older than the 14th century, and large portions of it were rebuilt by archbishops Wake and Herring. In 1780 it was sold and became a calico manufactory, and the gardens were used for bleaching grounds; to which use the buildings and grounds are still applied. The old chapel is now used as a school of industry for girls. The present summer residence of the Archbishop of Canterbury is three miles and a half from Croydon, at the mansion in Addington Park, which stands on the site of a hunting seat of Henry VIII. On a hill towards Addington is a cluster of twenty-five tumuli; and on Thunderfield Common is a circular encampment inclosing with a double moat an area of two acres. Gold coins of Domitian, Valentinian, and other Roman emperors have been found in the neighbourhood.

The town of Croydon consists of a principal street about a mile in length, forming part of the main road to Brighton, the houses in which are rather neat and well built; and of an 'old town,' which lies on the west of the main street, and consists of a few narrow streets of mean houses. The town-hall and the jail are commodious and substantial stone buildings; the barracks have extensive accommodation for artillery. The parish church of St. John's, erected in the 15th century, is one of the largest and finest churches in the county. It is built of freestone and flint, with a lofty embattled tower at the west end, surmounted with pinnacles. The interior contains several magnificent monuments of the archbishops there interred; those of Sheldon and Whitgift may be especially noticed. Two other churches have been recently erected. The Independents, Baptists, Wesleyan Methodists, Quakers, and Roman Catholics have places of worship. There are National, British, and Infant schools; a literary and scientific institution with a library; a dispensary; and a savings bank. There are several ancient charitable foundations, the principal of which are the hospital or almshouse of the Holy Trinity, built by Archbishop Whitgift in 1598, and well endowed, for the maintenance of 34 decayed housekeepers; and a school for girls, founded by Archbishop Tension. The East India Company's College of Cadets, at Addiscombe House near Croydon, has 14 professors and masters, and about 140 students. The summer assizes are held at Croydon alternately with Guildford. A county court is held in the town. Saturday is the market-day; fairs are held on July 6th and October 2nd. The October fair is noted for the sale of walnuts. Shirley Park, the residence of Lord Eldon, is in the neighbourhood of Croydon.

(Manning, *Surrey*; Brayley, *Surrey*; Lysous, *Environs of London*; *Communication from Croydon*.)

CRUMLIN. [ANTRIM.]

CRUZ, SANTA. [SANTA CRUZ.]

CRUZ, VERA. [VERA CRUZ.]

CSONGRÁD, a market-town in Hungary, gives name to a county, and is situated on a neck of land opposite the confluence of the Körös and Theiss, in 46° 43' N. lat., 20° 9' E. long. It is well-built, and had in 1845 about 14,000 inhabitants, who live chiefly on the produce of their vineyards, rearing cattle, and trading with other parts of Hungary. The old castle is fallen into complete decay. The county court is now held at Szegedin.

CTESIPHON, a large city of Assyria, situated on the left bank of the Tigris, 18 or 20 miles from the present Baghdad, was the winter residence of the kings of Parthia. (Strabo, p. 743 c; Tacitus, 'Ann.' vi. 42.) They preferred Ctesiphon in the winter on account of the mildness of the climate; in summer they resided at Ecbatana or in Hyrcania. The town appears to have been founded by Vardanes, but who he was or when he lived is unknown. (Ammianus Marcellinus, xxiii. 20.) It was a place of little consequence however till the establishment of the Parthian empire, and it then rose to eminence on the decay of the neighbouring city of Seleucia. Ammianus ascribes the embellishment of the city to Pacorus, son of Orodes. It

long remained a place of considerable importance especially after the restoration of the Persian empire under the Sassanidæ. Ctesiphon was taken by the emperor Severus, A.D. 198, and it must then have been very large, for Severus carried off 100,000 prisoners from it alone. Its walls rendered it a strong place down to the times of Julian and Gallienus. Its later history is unknown. Near this place are some remains, called *Tak Kesra*, or Arch of Khosroes, which has been described by Ives and other travellers, and which it is conjectured formed part of a palace of one of the Sassanidæ. The site of the city is now called by the Arabs *Al Madain*.

CUBA is the largest of the islands which constitute the Columbian Archipelago, and now the most important colony of Spain. The most eastern point, Cabo Maysi, is in 74° 11' W. long., and the most western, Cabo San Antonio, 84° 58' W. long. Cabo de Cruz, the most southern point, is 19° 47' 16", and Cabo de Guanós, east of Matanzas, the most northern point, 23° 9' 27" N. lat. The length of the island from Cabo Maysi to Cabo San Antonio, along the curved line, is 793 miles. It is widest near the meridian of 77°, where between Punta Maternello on the northern coast, and the mouth of the Rio de la Magdalena, near the Pico Tarquino, it is 127½ miles across. Between Puerto Principe and the Havana, which tract comprehends about four-fifths of the island, it is only 52 miles wide on an average. The western extremity is still narrower, the isthmus between the Havana and the port of Batabano being only 28 miles across. The area of Cuba alone is 42,383 square miles; and the islands which are inclosed within the numerous reefs that surround it have an area of about 1000 square miles. The population according to the latest census, 1841, was 1,007,624; of whom 418,291 were whites, 88,054 free-coloured persons (mixed races), 10,974 coloured slaves, 64,784 free negroes, and 425,521 negro slaves.

Coast-line, Surface, &c.—The coast-line of Cuba is above 2000 miles, but hardly one-third of it is accessible to vessels; the remainder is surrounded by banks, reefs, and rocks. The coast from Cabo de Cruz to Cabo de Maysi is quite free from danger; and that from Cabo Maysi to Punta Maternello has only a few rocks. At Punta Maternello commence the numerous keys of the Old Bahama Channel, which extend for more than 300 miles to Punta de Icaos. In this part, or more precisely opposite the Cayo Cruz and Cayo Romano, the Old Bahama Channel is narrowest, being only from 15 to 20 miles across. Between the keys and Cuba is an open sea, which may be navigated by small vessels. From Punta de Icaos to Bahía Honda, west of Havana, the coast is again free from keys and rocks. To the west of Bahía Honda commences the series of shoals and rocks called Los Colorados, which extend to Cabo San Antonio. Thence to Punta de Piedras or Llana Punta, the high coast is free from shoals and rocks; but the keys and shoals commence again to the west of the Isla de Pinos, and extend to Cabo de Cruz, under the names of Jardiniños, Cayo Breton, Cayos de Las Doce Leguas, and Bancos de Buena Esperanza. Only the coast between Cochinos Bay and Puerto Casilda, near Trinidad, forms an exception, being free from banks and rocks. In the Bay of Xagua, about 30 miles east of the Jardiniños, a spring of fresh-water is said to rise in the sea with such force that boats cannot approach it without danger. It is visited by the manati. In the sea between the northern coast of Cuba and the Florida Reef, the Gulf Stream commences, but here its current is not strong, and sometimes is hardly perceptible.

Only the south-eastern part of Cuba, that which lies between Cabo de Cruz, Cabo Maysi, and the town of Holguin, is mountainous. This mountain group is called Sierra or Montañas del Cobre (Snake Mountains), and probably in its highest parts rises more than 7200 feet above the sea. On the southern coast the Pico Tarquino also rises to a considerable height. From the Pico Tarquino group a chain of hills of moderate elevation runs in a west-north-west direction, between Puerto Principe and Villa Clara, approaching at first nearer to the southern, but afterwards more to the northern shore. To the north-west of Trinidad stand the Lomas de San Juan, which terminate in peaks and needles, and rise to about 1800 feet above the sea. The elevations of the hills seem to decrease as we advance westward. To the west of the meridian of Matanzas there is only one summit that attains 1200 feet. In this part the surface of the island is slightly undulating; rising in general only to from 250 to 350 feet above the sea. Along the southern coast large tracts of low country occur. The whole space between Batabano and Xagua is nothing but a low swamp, which extends three or four miles inland.

There are no rivers of any size or importance in Cuba. Some are navigable a few miles inland for small boats; others are used for irrigating the adjacent fields. The internal traffic, formerly greatly impeded by the badness of the roads, has been much facilitated by the introduction of railways, of which there are now nearly 900 miles in operation.

Geological Character.—Calcareous rocks of varied kinds and quality are the prevalent and characteristic formations of the island. But granite occurs in the south-eastern part; and schistose rocks occur about the middle of the northern coast. Carboniferous strata are found at the western end of the island. Clays and clay-slates are met with in several places.

Of the metals, copper is that which appears to be of most value. In the Eastern Intendencia, where it is now worked largely by

English capitalists, it has hitherto proved most profitable. The ore has also been found near Matanzas, Cienfuegos, Villa Clara, and elsewhere. Gold has been found in the Sierra del Cobre, and in the sand of many of the mountain streams. Lead, said to be rich in silver, has also been discovered. Coal is worked in the neighbourhood of Havana, and occurs in some other places. Marble of much beauty is quarried; and crystal, flint, and clay of a kind very serviceable in the arts, are obtained.

Climate, Soil, and Productions.—Cuba partakes in some measure of the climate of the temperate zone, as is proved by the sudden changes of the temperature, in which it in some degree resembles the United States. Humboldt mentions a change of 15 degrees in the course of three hours. The mean annual heat at the Havana is 77°, that of the hottest month (July) 84°, and that of the coldest 70°: the thermometer rarely rises to 94°, or sinks to 55°. In the interior of the island thin ice is formed after the long prevalence of northerly winds, at places about 300 feet above the sea. No snow is ever known to fall, either on the Lomas de San Juan, or on the Sierra del Cobre. Hailstorms are rare; they occur only once in fifteen or twenty years, and always with south-south-westerly winds. Hurricanes are less frequent in Cuba than in Jamaica and the other Antilles. Sometimes none occur for six or eight years. They vent their fury more on the sea than on the land, and happen, as in Jamaica, more frequently on the southern than on the northern coast. They occur mostly in October, but sometimes in August and September. But Cuba, though not often experiencing their ravages, is exposed to the boisterous north winds (los nortes), which blow particularly during the cold months. The division of rainy and dry seasons is not applicable to this island. No month of the year is free from rain, but the greatest quantity falls during May, June, and July. Earthquakes frequently occur.

The soil throughout the island is mainly formed from the decomposition of calcareous rocks, and is generally of very great fertility. The cereals of Europe are little cultivated in any part of Cuba, and a great quantity of flour is consequently imported from the United States for the consumption of the white inhabitants. The slaves and people of colour live principally on mandioc, yams, bananas, maize, rice, potatoes, sweet potatoes, &c. The articles raised for consumption and exportation are chiefly sugar, coffee, tobacco, with some cotton, cocoa, and indigo. Oranges, lemons, pine-apples, and various other fruits are largely grown. As immense tracts are not cultivated, but only used as pasture-ground, the number of cattle is very great, it is said nearly a million and a half; hides form an article of exportation, but dry meat (*tasajo*) is imported from Venezuela. The surface under cultivation probably does not exceed one-twelfth: the uncultivated part contains large prairies or savannas, on which the cattle pasture, but the greatest part is overgrown with large forest-trees, some of which supply excellent timber for ship-building.

Commerce.—About 1730 the exportation of Cuban produce amounted to little more than two millions of Spanish dollars in value. In 1842 the exports had increased to upwards of 26 millions of dollars, and the increase has since been still greater. The chief articles of export are sugar, coffee, and tobacco. In 1760 the produce of sugar and coffee together amounted to 5 millions of pounds: in 1847 the quantity of sugar exported alone amounted to 575,232,000 lbs., and the subsequent removal of the sugar duties in England has greatly stimulated this branch of Cuban commerce. Of leaf and cut tobacco and cigars the quantity annually exported amounts to several millions of pounds. Of coffee the present average exportation is upwards of 35 millions of pounds annually. Cotton is also a considerable article of export. The other exports are molasses, rum, cocoa, mahogany, cedar, hides, fruit, &c.

The chief articles of importation are provisions, particularly flour, rice and maize, butter and cheese, *tasajo* and hams, and salted fish and cod. Brandy and the wines of Spain, France, Portugal, and Germany also form a considerable branch of importation. As Cuba has no manufactures besides those of sugar and cigars, with a small quantity of rum, it imports to a large amount cotton stuffs, woollen goods, linens and silk stuffs, hardware, mill-work, and machinery.

The total amount of customs duties received in 1850 was 6,729,685 dollars; in 1851 it was 8,462,834 dollars.

Within the last few years England from holding but a subordinate has risen to take a leading share in the commerce of Cuba, or at least in its export trade; America still holds the first place in the import trade. Spain comes next to England and the United States. Having lost all her colonies on the continent of America she endeavours to turn to advantage her possession of Cuba, to which she sends her wines, oil, and fruits. The Hanseatic towns of Germany exchange their manufactured goods (linens, paper, glass, &c.) for sugar, coffee, and tobacco. France sends great quantities of wines and some manufactured goods; and Italy sends oil, olives, and fruits.

The total value of the exports from Cuba averages about 7,000,000; that of the imports is generally somewhat greater. The value of the imports into Cuba from the United States in 1853 is stated to have been 6,562,582 dollars; that of the exports 12,076,408 dollars. The value of the imports from Great Britain into Cuba in 1851 was 1,164,177; in 1852 it was 1,033,396. The chief English imports in 1851 were;—Linen goods, 369,181; cotton goods, 345,549; woollen

goods, 33,523*l*.; hosiery, 38,100*l*.; silks, 19,168*l*.; machinery, 79,290*l*.; iron and steel (unwrought), 68,826*l*.; hardware and cutlery, 57,233*l*.; brass and copper manufactures, 27,243*l*.; earthenware, 23,255*l*.; coal, 20,035*l*.; beer and ale, 14,349*l*. The chief exports to Great Britain in 1851 were:—Sugar, 830,385 cwts.; molasses, 222,177 cwts.; rum, 51,096 gallons; tobacco (unmanufactured), 472,769 lbs.; manufactured tobacco and cigars, 278,505 lbs.

HAVANNA is by far the most important commercial town. Matanzas, Santiago, and some other places also carry on a considerable export and import trade.

Cuba, as we have already mentioned, has no manufactures besides those of cigars and sugar, which are carried on upon an extremely large scale, and of rum, which is prepared only to a limited extent. The Cuba cigars, and especially those of Havanna, have as is well known the highest value in the market, and the manufacture employs a very large number of hands. We do not however possess any reliable details of recent date.

Divisions, Towns, &c.—The island is divided into three intendencias, the titles of which sufficiently indicate their relative positions; they are as follows (the population of the towns is that of 1841):—

1. The Western Intendencia comprises an area of above 10,300 square miles, and contains numerous tobacco, sugar, and coffee plantations, and a great deal of pasture land, on which large quantities of cattle are reared. Besides the capital, HAVANNA, it contains the towns of *Guanabacoa*, on the other side of the Cay on which Havana is built, with about 9000 inhabitants; and *Matanzas*, or *San Carlos de Matanzas*, which contained 18,991 inhabitants. Matanzas is next to Havanna the most important commercial town in the island. The town is well built and the harbour is well sheltered. The sugar exported from Matanzas averages nearly 4 million dollars in value. Molasses, rum, brandy, and coffee are also exported. To this intendencia belongs the *Isla de los Pinos*, 900 square miles in extent, with a mountain on it rising to more than 3000 feet high. It contains from 200 to 300 inhabitants; fine forests, in which much mahogany is cut; and valuable marble quarries.

2. The Central Intendencia has an area of upwards of 17,100 square miles, has many plantations of sugar and coffee, and breeds large herds of cattle. It is the most fertile portion of the island, especially about Santo Espiritu, and has greatly increased in population and agriculture since the ports have been opened to foreign commerce. The most populous places are inland, namely, *Santa Clara*, with 6132 inhabitants, and *Santo Espiritu*, with 9484 inhabitants. The capital, *Santa Maria de Puerto Principe*, population 24,034, is also at some distance from the shore, but carries on a considerable commerce by means of its port Nuevitas. It is the seat of the supreme court of justice for all the Spanish colonies in America. There are besides, on the northern coast the harbour of *San Juan de los Remedios*, with 4313 inhabitants; and on the southern *Trinidad de Cuba*, with 12,718 inhabitants, and *Fernandina de Xagua*.

3. The Eastern Intendencia has an area of above 14,800 square miles: it has a large number of coffee and sugar plantations, but breeds much fewer cattle than either of the other Intendencias. *Santiago de Cuba*, the ancient capital, has a good harbour and 24,753 inhabitants. The town is well built, the houses are chiefly of stone, and the streets are wide. It is the seat of the archbishop and of the governor and authorities of the intendencia, and contains a cathedral, several churches, convents and schools, a college, and an hospital; but the public buildings, as well as the dwelling-houses, were greatly injured by a severe earthquake which occurred August 20, 1852 and several succeeding days. There are also three other harbours, which are much frequented by vessels: *Manzanillo*, north-east of the Cabo de Cruz, population 3299; *Baracoa*, population 2605, near Cabo Mayri, from which a considerable quantity of tobacco is exported; and *Gibara*, farther west. Gibara is the port of Holguin, a small town in the interior.

Government, Laws, &c.—The civil and military government of the island, subject of course to the authorities in Spain, is entrusted to a captain-general. In civil matters however the eastern and central intendencias are presided over by governors, who are nearly independent of the captain-general, whose civil jurisdiction is mainly confined to the western intendencia. There are also military chiefs of the three intendencias, but they are directly subordinate to the captain-general. The laws are administered by a royal court ('real audiencia'), which has the superior jurisdiction in all civil and criminal cases; by provincial 'ayuntamientos;' and in the country districts by a kind of police courts.

The revenue averages upwards of 12 millions of dollars. About three-fifths of it are derived from customs duties, which are levied at a fixed ad-valorem rate on almost all articles imported, and on the principal articles exported. The remainder is derived from the sale of crown-lands, stamps, lotteries, tithes, licences, &c. The average expenditure does not exceed 8 million dollars: the surplus receipts are transmitted to Spain.

Religion, education, and morals are invariably spoken of by travellers as being in a very low state. The church has its prelates, and other dignitaries, and is supplied with an ample number of priests, but they appear to be very generally capable of great improvement, both in learning and conduct. There are in the island two

colleges, various literary societies, and elementary schools; but these last are neither sufficiently numerous nor well enough conducted to be adequate to the duty of instructing the juvenile population.

The aborigines who inhabited Cuba in the time of Columbus were annihilated before the year 1560, though the Spaniards settled in this island only in 1511. The present population consists of whites, negroes, and mixed races. Their relative numbers have been already given. For a long period Cuba has been notorious for the extent to which the traffic in slaves has been carried on in its several ports. The English government, after long continued efforts, at last succeeded, about the middle of 1853, in inducing the Spanish government to pledge itself to adopt measures for the suppression of the slave-trade in Cuba; but it would seem, if the most recent accounts from America (received March 1854) are to be depended upon, that though the captain-general appears to be anxious for its suppression, the trade is still carried on with scarcely the pretence of an effort being made by the local governors to check it.

The population is very unequally distributed over the island, nearly four-fifths of which are very thinly inhabited, especially the southern coast, except the country between Xagua and Trinidad, and that which is east of Cabo de Cruz; there are also large tracts in the interior which are only used as pasture-ground, and contain hardly more than two individuals to a square mile. The most populous portion is between the lines from Bahia Honda to Batabano, and hence to Matanzas, where nearly the half of the whole population is concentrated, and where perhaps there are 70 or 80 persons to each square mile.

The political importance of Cuba rests even more than on its extent and productiveness on its position with respect to the common routes of navigation. This route is marked out by the trade-winds and the Gulf Stream. Vessels returning to Europe from Jamaica, or the coast of South America, by sailing directly eastward, have to contend against the united force of winds and currents, and are scarcely able to make either the Windward or Mona Passages, which are situated respectively at the western and eastern extremities of the Island of Hayti. They are therefore under the necessity of doubling Cabo San Antonio and proceeding to Europe by the Gulf Stream. Thus the possession of Cuba gives an absolute control over the trade between Europe and all countries lying about the Caribbee Sea and the Gulf of Mexico, and consequently a great portion of the United States of America. The maritime powers have for many years seemed to hold a tacit agreement to leave Spain in the possession of Cuba, because, being the least powerful of them all, there could be no apprehensions of any attempts on her part to interrupt the free navigation of these seas. An influential party in the United States has however declared the acquisition of Cuba to be a prominent feature of its foreign policy, and to this policy the present president of the United States, in his Inaugural Speech, in 1853, gave official countenance.

Cuba was discovered by Columbus on his first voyage in 1493; in 1511 the Spaniards formed the first settlement: since that time the island has remained in their possession. In 1762 the English took the Havanna, but it was restored to Spain by the peace of 1763.

(Humboldt; Ramon de la Sagra; Turnbull; *Real Sociedad Economica de la Habana*; *Memorias*; *Parliamentary Papers*, &c.)

CUCKFIELD, Sussex, a market-town and the seat of a Poor-Law Union, in the parish of Cuckfield, hundred of Buttinghill, and rape of Lewes, is situated on the old road between London and Brighton, in 51° 0' N. lat., 0° 8' W. long.; 13 miles N. from Brighton, 38 miles S. from Loudou by road, and about 40 miles by the Loudou and Brighton railway. The population of the parish in 1851 was 3196. The living is a vicarage in the archdeaconry of Lewes and diocese of Chichester. Cuckfield Poor-Law Union contains 15 parishes and townships, with an area of 59,485 acres, and a population in 1851 of 15,607.

Cuckfield is a neat clean-looking town. The church is spacious and handsome, of early English and decorated styles. It has an embattled tower with a lofty spire, and contains numerous monuments. In Cuckfield are chapels belonging to Independents and Baptists; also a National school and a savings bank. The workhouse has been recently rebuilt on an enlarged scale. The market is held on Friday. Fairs for cattle and horses are held on the Thursday in Whitsun-week and September 16th. Stone for building purposes is quarried near Bolmere and elsewhere in the parish. Leigh Pond, by Hurstperpoint, covers an area of more than 40 acres.

(Dallaway, *Sussex*; Horsfield, *Sussex*; *Communication from Cuckfield*.)

CUDDALORE, a town in the Carnatic province, on the western shore of the Bay of Bengal, in 11° 44' N. lat., 79° 50' E. long., is built on both sides of the Pannair River. The houses on the left bank are modern, and many of them handsome. The streets on the right bank of the river, called the Old Town, are many of them spacious, and contain many good residences.

Cuddalore was taken from the French by the army under Colonel Coote in April, 1760, and remained under the government of the Nabob of Arcot until April, 1782, when it was taken by the Raja of Mysore, assisted by a body of French troops. In June, 1783, the town was attacked by a British force under General Stuart, which suffered great loss in attempts to carry the place by assault. The last

of these attacks, in which the besiegers lost 600 men, occurred only two days before the arrival of the news of peace having been concluded between France and England: this event of course put an end to hostile operations. Cuddalore, with the remainder of the province, came into possession of the English by treaty in 1801, and has so continued. [CARNATIC.]

(Rennell, *Memoir*; Mill, *History*.)

CUDDAPAH, or Kirpa, a corruption of the Sanscrit word *Cripa*, signifying mercy. This division of the Balaghaunt territory, ceded to the English by the Nizam in 1800, is situated between 13° and 16° N. lat., and between 77° and 80° E. long. [BALAGHAUTS.] Cuddapah has been constituted a collectorate by the English, and contains seven subdivisions, namely, Cuddapah, Cummum, Dupand, Gandicotta, Gurrumcondah, Punganoor, and Sidout: each of these subdivisions is named after its capital town. Throughout this collectorate, salt-petre, soda, and common salt are found abundantly, and to this cause it is owing that, except in the rainy season, the water is generally brackish.

The town of *Cuddapah*, in 14° 32' N. lat., 78° 54' E. long., stands 507 feet above the level of the sea, on both sides of the river Cuddapah, a small stream which rises in the hills to the south-east of the town, and is 153 miles N.W. from Madras, and 220 miles N.E. from Seringapatam, travelling distance. This town was long the capital of an independent Patan state, and so continued for some time after the destruction of the kingdoms of the Deccan. The palace of the former nabobs has been converted into a court of justice and a prison. In the country surrounding the town a considerable quantity of sugar is made. The celebrated diamond mines of Cuddapah are about 7 miles north-east of the town, on both sides of the Pennair River. These mines have it is said been worked for several hundred years with various success. The places in which diamonds have hitherto been found consist either of alluvial soil or of rocks of the latest formation. The mines are pits of small depth. Dr. Heyne, who carefully examined these mines, has given in his statistical tracts the following description of one:—"The uppermost, or superficial stratum, consists of sand or gravel mixed with a small proportion of loam. Its thickness scarcely exceeds a foot and a half. Immediately under it is a bed of stiff blueish or black mud, similar to what are seen in places that have been inundated; it is about five feet thick and contains no stones. The diamond bed comes next, and is easily distinguished from the incumbent bed by the great number of large rounded stones which it contains. It is about two feet or two and a half feet thick, and is composed of large round stones, pebbles, and gravel connected together by clay." The contents of this bed are washed out and then carefully examined several times. At first the large stones are picked out; in the subsequent examinations the smaller gravel is carefully turned over by hand, while the persons employed "watch for the spark from the diamond, which invariably strikes the eye."

Cummum, the capital of the subdivision of that name, is in 15° 37' N. lat., 79° 10' E. long., 56 miles N.W. from Ongole. *Dupaud* stands in 15° 58' N. lat., 79° 23' E. long. Dupaud division, which is traversed by the Gondigam River, contains copper ore of good quality. The town and fort of *Gandicotta* are in 14° 51' N. lat., 78° 23' E. long., 43 miles N.W. from the town of Cuddapah. This was formerly considered a place of much strength; it is now of but little importance. There is a diamond mine in the neighbourhood. *Gurrumcondah*, near the verge of the Eastern Ghauts, is situated in 13° 46' N. lat., 78° 34' E. long., about 130 miles N.W. from Madras. The district is well watered by several mountain streams, and is very productive. *Punganoor* is a fortified town, in 13° 21' N. lat., 78° 3' E. long., 47 miles N.W. from Vellore. *Sidout* is a fortified town, in 14° 30' N. lat., 79° 2' E. long., 12 miles E. from Cuddapah. It is surrounded by high stone walls in good repair, within which are ramparts; the fort is commanded by some of the neighbouring hills. It was taken by Hyder, who carried away the family of the nabob, and placed them in confinement. The town has much declined in population since the occupation of the country by the English, and the removal of the government offices to Cuddapah. The entire population of the collectorate of Cuddapah does not probably much exceed one million. The great bulk of the inhabitants are Hindoos.

(Rennell, *Memoir of a Map of Hindustan*; Heyne, *Statistical Tracts on India*; *Parliamentary Papers*.)

CUENCA. [CASTILLA-LA-NUOVA.]

CUERS. [VAR.]

CULLEN, Scotland, a royal and parliamentary burgh and sea-port in the parish of Cullen, on the northern coast of Banffshire, in 57° 42' N. lat., 2° 50' W. long., about 13½ miles W. from Banff. The population of the parliamentary burgh in 1851 was 1697, that of the royal burgh was 3165. The town is built on the western acclivity of a hill which slopes to the margin of the sea, and is nearly in the centre of the Bay of Cullen. The burgh is governed by 19 councillors, including a chief magistrate, three bailies, and a dean of guild; and with Elgin, Banff, Inverury, Kintore, and Peterhead, returns one member to the Imperial Parliament.

Cullen consists of two parts, the New Town which stands on an elevation, and the Sea Town or Fish Town, which is situated on the shore and inhabited chiefly by fishermen. In New Town the houses

are good and the streets are regularly laid out and lighted with gas. The Sea Town is a collection of mean irregularly built houses. The harbour is good, though the depth of water at the pier head is only 8½ feet at neap tides. A few vessels belong to the port varying from 40 to 100 tons. Besides the parish church, which is of considerable antiquity, there is another church of the Establishment, and a Free church. The Cullen hotel is a large building, to which are attached the assembly-room, a court hall, used for the sheriff and Justice of Peace courts, and the council chamber of the burgh. One third of the inhabitants of the town are engaged in the fisheries. The deep-sea fishing for cod, skate, and ling commences in February and ends in May. The June fishings are for haddocks, which are dried into speldings; the herring fishing occupies July and August. In the bay is a salmon fishery. The principal imports are coals, salt, and staves, with barley for distillation at a distillery in the neighbourhood; the exports are herrings, dried fish, oats, and potatoes. Boat building is carried on to a considerable extent. There is a parochial library. Cullen was erected into a royal burgh by Robert the Bruce, though traditionally its corporation privileges are said to be derived from Malcolm Canmore. The town was burned down in 1645 by Montrose. The Earl of Seafield is landlord of the whole parish.

(*New Statistical Account of Scotland*.)

CULM, or KULM. [MARIENWERDER.]

CULMBACH (Kulmbach), a walled town in Upper Franconia, in the north of Bavaria, is situated in a fertile and agreeable country on the left bank of the White Main, in 50° 5' N. lat., 11° 27' E. long., and has about 5000 inhabitants. It is a well-built town, with three churches, a Latin school, hospital, infirmary, several breweries, potteries, earthenware manufactory, tile-works, tanneries, &c. In the neighbourhood much potter's clay is raised; and on a mass of rock close to the town stands an old castle, the Plassenburg, at present used as a house of correction, the prisoners in which are employed in weaving carpets and coarse woollens, and spinning yarn. The out-works of the castle were razed by the French in 1808. Culmbach is a station on the railway from Nürnberg to Hof. It is 24 miles N.E. from Bamberg and about the same distance E. from Lichtenfels, both of which are on the same line.

CULROSS, Perthshire, Scotland, a royal burgh in the parish of Culross, is situated on the northern shore of the Frith of Forth, in 56° 4' N. lat., 3° 37' W. long., 23 miles N.W. by W. from Edinburgh, and 6 miles W. from Dunfermline. The population in 1851 was 605. The burgh is governed by two bailies and seven councillors, of whom one is provost. Culross, with Stirling, Dunfermline, Inverkeithing, and South Queensferry, returns one member to the Imperial Parliament.

The town consists of a few irregular streets, the houses in which are built on the face of the hill rising from the shore. At the time of its erection into a royal burgh by James VI. (James I. of England), in 1588, the town was very prosperous owing to coal-works in the neighbourhood, the produce of which was exported to Holland. The manufacture of 'girdles,' or iron plates, for baking oaten cakes, of which Culross had a monopoly by patent, was also a flourishing trade, but it has been superseded by the cheaper productions of the Carron iron-works. Some of the inhabitants are employed in the cotton and linen manufactures. There is a small pier for fishing and passage boats, which cross the Forth to Borrowstouness.

The abbey or monastery of Culross was founded in 1217, and considerable remains of it still exist. The former chapel of the abbey now forms the parish church. It is a cruciform building, with a massive western tower, and stands in a commanding situation in the higher part of the town. At the east end of the town are the ruins of St. Mungo's Chapel, near which it is said the saint was born. Of the former parish church some ruins still remain in the parish burial-ground. The town-house is an old building. Culross parish is separated from Perthshire by a part of Clackmannanshire, and is politically united to Clackmannanshire and Kinross-shire. There are two clergymen in the charge, which is collegiate. An endowed school is in the burgh, in addition to the burgh school and the parish school.

CUMÆ (Κύμη), an ancient town on the coast of Campania, about 10 miles W. by N. from Naples, which has been long since totally ruined. Strabo describes it as a joint colony from Chalcis in Eubœa and from Kumê in Æolis, named after the latter but always styled as a colony of the former. It is certain that it was one of the earliest Greek colonies on the coast of Italy. A colony from Cumæ originally founded Zancle, afterwards Messene, in Sicily (Thucyd. vi. 4), in the 8th century B.C. Cumæ seems to have rapidly attained great wealth and importance through its maritime trade, and at the period of its greatest prosperity, about B.C. 700—500, it was the first city in this part of Italy, and had extended its sway over the greater part of Campania. The Etruscans are said by Dionysius to have sent an army against Cumæ, which however was defeated near the banks of the Vulturnus. Athenæus (xii.) describes from older writers its former splendour and the wealth of its citizens. According to Livy (viii. 22), the people of Palearopolis (afterwards Neapolis) were also a colony from Cumæ. The story of the Sibylline books being offered to Tarquin, attributes them to a Sibil or prophetess who at some remoter period resided at Cumæ. The same Tarquin the Proud, after vain attempts to recover his sovereignty, died at Cumæ, where he had

sought an asylum under Aristodemus, who, himself an exile from Messenia and driven away by the Lacedæmonians, had come to Cumæ and usurped the sovereign power. The city was taken in B.C. 420 by the Samuites, who pillaged it, slew the male inhabitants or sold them as slaves, and settled a colony in the city. From this time Cumæ ceased to be a Greek city, and became a second-rate Campanian town. At the end of the Latin war Cumæ was included in the general peace with Capua and other towns of Campania. (Livy, viii. 14.) During the second Punic war Cumæ was still independent and had its own senate, which, instead of siding with Hannibal like the Campanians, took part with Rome, and by its timely information to the consul Sempronius Gracchus enabled him to surprise the Campanians while offering their sacrifices, and to kill a great number of them. Upon this Hannibal hastened from his camp on Mount Tifate to attack Cumæ, which was defeated by Gracchus, who repulsed the Carthaginians with great loss. (Livy, xxiii. 35, 37.) Cumæ gradually declined from its former importance owing to the superior attractions of Baiæ. Juvenal ('Sat.' 3) speaks of it as comparatively depopulated. Under the empire Cumæ was celebrated for the manufacture of red earthenware. It suffered afterwards in the wars between the Goths and Narses, who availed himself of the Sibyl's grotto to undermine the citadel, without however effecting the capture of the fortress, although he destroyed or disfigured the Sibyl's abode. Cumæ was at one time a bishop's see, but the town being completely destroyed by the Saracens at the beginning of the 13th century the see was incorporated with that of Naples. The town lay partly on the hill which is rocky and steep, and partly on the sea-shore. There are the remains of an amphitheatre in the plain towards the south. The Temple of Apollo stood in the Acropolis on the hill which is now called Rocca di Cumæ. The ground is here strewn with prostrate columns, capitals, and fine marble slabs with Greek inscriptions, half-covered with aromatic herbs, wild flowers, and the leaves of the vine-trees, which grow here luxuriantly. A farm-house on the hill is still called the House of the Sibyl, and the people pretend to show her baths, which are now converted into wine-presses, and her grotto, which is an excavation in the rock (on which the citadel of Cumæ stood) leading to several subterranean galleries half-filled with rubbish, and said to extend as far as Averno and Baiæ. Many statues have been found in this neighbourhood. From the summit of the rock there is an extensive view extending on one side over the wide expanse of the Mediterranean, and on the other over the lakes of Fusaro, Licoli, and Patria, and the lowlands of the coast as far as Gaeta; while to the east the Mons Gaurus separates it from the coast of Pozzuoli and the Bay of Naples. The plain is strewn with the ruins of temples, villas, baths, and sepulchres. Many farm-houses are scattered about, for the country is fertile though unwholesome in summer. The road from Pozzuoli to Cumæ passes under a fine arch or gateway, inclosed between two rocks, through which the road has been excavated. This arch, probably a work of the Roman period, is now called Arco Felice. Petronius Arbiter, the discarded favourite of Nero, put himself to death at Cumæ in the manner related by Tacitus. ('Annal.' xvi. 19.) Excavations made at different periods have brought to light numerous architectural fragments, statues, and vases, many of them of the best period of art. The Prince of Syracuse has recently been most assiduous in exploring the ground, and he disinterred many 'wonders of art' in 1853. Among them is mentioned a temple of Diana, 345 palms in length, the architecture and embellishments of which are said to equal anything that remains of the Parthenon. In the same year more than 150 tombs of the necropolis of the ancient city were explored, and a variety of antiquarian treasures, such as vases, rings, articles in coloured glass, &c., were found. These interesting discoveries are described in the correspondence of the 'Athenæum' for 1853.

CUMANA. [VENEZUELA.]

CUMANIA, or KUMANIA, Great and Little, two privileged districts in Hungary.

Great Cumania lies between 47° and 47° 40' N. lat., 20° 30' and 21° 10' E. long., independently of a small district on the right bank of the Körös, and another on the left bank of the same river. The whole surface is a low plain, containing an area of about 424 square miles, one half of which is a swampy bog. The upper part was reclaimed to a great extent by the construction of an immense dam in the year 1786. Such portions of the soil as admit of cultivation are extremely productive, and yield plentiful crops of wheat, barley, melons, &c. The meadows and pastures afford excellent fodder and hay, and the rearing of cattle is carried on extensively. The land is full of bulrushes, which, with straw and dung, supply the place of fuel. The inhabitants are a robust race, very fond of rural pursuits. There are no large landed proprietors, or feudal lords, as in most parts of Hungary; the people have independent jurisdictions of their own; and used to send representatives to the Hungarian Diet. Great Cumania contains one market-town (*Kardozog Uj Szállás*, 47° 20' N. lat., 20° 55' E. long., which has about 11,100 inhabitants, and is a thriving mart for the grain, fruit, wine, and cattle, which the exuberant fertility of the surrounding country enables the people to raise) and 5 villages.

Little Cumania, situated south of the preceding, and on the right bank of the Theiss, consists of two large and three small tracts of country. The larger tracts adjoin the county of Csongrád on

the east, and the counties of Bacs and Csongrád on the south; their northern boundary is the county of Pesth: two small tracts lie to the east of them, the one, next to the county of Heves, consisting of two prædia, or privileged settlements; and the other, of Latzláza, with its small territory and two prædia, on the Danube, between Ratzkévý and Bugyl. With the exception of a few sand-hills, the whole of Little Cumania is a complete level. Its area is altogether about 1008 square miles, and its population about 53,000. The country is full of swamps and sheets of water, but has no running streams. A great part of the surface is occupied by these swamps, or with sand; but the available surface contains fine tracts of rich loam, and is fertile in grain. Besides grain, Little Cumania produces tobacco and melons; cattle, sheep, and horses are reared on its pastures. The Palatine of Hungary is the immediate governor both of Great and Little Cumania; the chiefs of districts, and justices of circles, are subject to his authority. The people of Little Cumania are as independent, robust of make, and rich, as their brethren in Great Cumania. Little Cumania contains 3 market-towns, 5 villages, and 37 prædia. The towns are *Hatal*, on the banks of the *Halastó*, a large sheet of water, in 46° 36' N. lat., 19° 32' E. long. It has a population of about 10,000, and a considerable trade in grain and wine. *Felegyháza*, between Ketskeunét and Szegedin, has 12,970 inhabitants, and is embellished with a handsome edifice, where the Cumanians have their courts of justice and keep their archives. Near this place several Roman urns have been dug up. There is an extensive traffic here in grain, fruit, wine, and cattle. *Kun Szent-Miklós* lies on the Baker, to the south of Pesth, and has about 4300 inhabitants.

CUMBER. [DOWNSHIRE.]

CUMBERLAND, one of the northern counties of England, lies between 54° 11' and 55° 12' N. lat., and 2° 17' and 3° 37' W. long. It is bounded N. by the Solway Frith and Scotland, S. by Westmoreland and Lancashire, E. by Northumberland and Durham, and W. by the Irish Sea. The extreme length of the county is about 74 miles, and its greatest breadth 34 miles. Its area is 1565 square miles. The population of Cumberland in 1841 was 178,038; in 1851 it was 195,492, being an increase of nearly 10 per cent.

In consequence of the cultivation of extensive commons and waste lands, the aspect of the county has been completely changed. Within the last sixty years more than 250,000 acres have been inclosed. Many of the commons which previously afforded only a scanty pasturage to a few half-starved sheep and cattle, are now covered with fertile corn-fields and profitable herbage, and have hawthorn fences, good roads, and commodious farm-buildings.

Surface, Hydrography, and Communications.—The east and south-west parts of the county are very mountainous, rugged, and uneven; the north and north-west parts are low and flat, or gently undulating. Hills, valleys, and ridges of elevated ground occupy the midleud part. To a traveller, the mountainous district in the south-west is the most interesting. This part contains Saddleback, Skiddaw, and Helvellyn, and the lakes of Ullswater, Thirlmere, Derwent-water, and Bassenthwaite. This magnificent assemblage of lofty mountains and beautiful lakes annually attracts tourists from all parts of the kingdom, from the continent, and from America. Several of the other districts, though not mountainous, are hilly, and present an endless variety of landscape; some of the valleys are traversed by rivers, and afford perhaps a greater variety of delightful scenery than any other county. Besides the lakes already mentioned, there are several of smaller size, equally celebrated for their diversified and picturesque scenery. Buttermere, Crummock-water, Lowes-water, Ennerdale, West-water, and Devoek-lake, are frequently visited by travellers in their excursions. There are also several mountain-tarns, or small pieces of water, the chief of which are Over-water, not far from Uldale; Burn-moor-tarn, at the head of Miterdale; Tarn Wadling, near High Hesket; Talkin-tarn, in the parish of Hayton; and Martin-tarn, in that of Wigton.

The following is a tabular view of the principal lakes of Cumberland:—

Lakes.	Nearest Market-towns.	Length in miles.	Breadth in miles.	Depth in feet.	Height in feet above the sea.
Ullswater . . .	Penrith	9	1	210	460
Thirlmere . . .	Keswick	2½	1	108	473
Derwent-water.	Keswick	3	1½	72	222
Bassenthwaite .	Keswick	4	1	68	210
Buttermere . . .	Keswick	1½	½	90	
Crummock . . .	Cockermouth	3	½	132	260
Lowes-water . .	Cockermouth	1	½	64	
Ennerdale . . .	Whithavea	2½	½	80	
West-water . . .	Ravenglass	3	½	270	160

All the lakes are well stocked with fish, particularly with trout, pike, and perch. Ullswater, Ennerdale, Crummock, and Buttermere contain char. Tarn Wadling produces some of the finest carp in the kingdom. There are several picturesque waterfalls, of which the following are the principal, with their respective situations and heights:—

Scale Force, near Buttermere	190
Barrow Cascade, two miles from Keswick	124
Lowdore Cascade, near Keswick	100
Sour Milk Force, near Buttermere	90
Airey Force, Gowbarrow Park	80
Nunnery Cascade, Croglin	60

The following are the names and altitudes of the principal mountains, and the districts in which they are situated:—

	Feet.
Seaw-fell (high point) Eskdale	3166
Helvellyn Keswick	3055
Skiddaw Keswick	3022
Bow-fell Eskdale	2911
Cross-fell Alston	2901
Pillar West-water	2893
Saddleback Keswick	2787
Grassmere-fell Keswick	2756
High Pike Heskett New Market	2101
Black Comb Duddon Mouth	1919
Dent Hill Egremont	1110
Selly Bank Whitehaven	500

The offsets of the western or Skiddaw range of primitive and transition mountains extend within five miles of Carlisle, and four miles of Wigton. Those of the secondary (Cross-fell, or Penine chain) do not reach quite so far north as Tindale-fell, near Brsmpton.

The principal rivers in Cumberland are the Eden, the Esk, the Derwent, and the Duddon. The *Eden* enters the county on the south, where it unites with the Eamont, runs to the east of Penrith, and passes Kirkoswald, Armathwaite, Corby, Warwick-bridge, and Carlisle, receiving in its progress the Croglin and the Irthing on the right bank, and the Peteril and the Calder on the left bank. The Eden discharges itself into the Solway Frith, near Rockliff, where it forms a fine estuary. The scenery along the course of the Eden in this county, which is about 35 miles, is very varied and beautiful. The mansions and pleasure-grounds of Skirwith Abbey, Edon Hall, Nunnery, Armathwaite, Low House, Corby Castle, Warwick Hall, and Lickerby, adorn its banks. The *Esk* enters Cumberland from Scotland, and passes Kirk-Andrews and Netherby, flowing through a beautiful valley in a south-west direction to Longtown. After receiving the Liddell, which rises in Scotland, and for about eight miles forms the boundary between Scotland and Cumberland, and the Line, which is formed by the junction of two streams arising near Christenburgh Crag, called Black Lino and White Line, it falls into the Solway Frith near Rockliff Marsh. Its course in this county is about 10 miles. The *Derwent* takes its rise from Sparkling-tarn, among the crags at the head of Borrowdale, passes through Styhead-tarn, and forms the lake of Derwent-water, at Keswick, where it is joined by the Greta. It then pursues its course to Bassenthwaite and Cockermouth. At Bassenthwaite it forms Bassenthwaite-water, and at Cockermouth it receives the Cocker. After running about 33 miles and passing many pleasant seats and villages, it falls into the sea near Workington. The *Duddon* rises on Wrynose-fell, near the junction of Cumberland with Westmoreland and Lancashire, and in its course to the sea of about 20 miles, forms the boundary between Cumberland and Westmoreland. The Duddon discharges itself into the sea at Duddon Sands.

Of the smaller rivers the following may be named:—The *Sark* runs between Cumberland and Scotland for about six miles near Solway-mocks, and finds its way into the Solway Frith. The *Wampool* rises in Brocklebank-fells, at Dockray joins the Wiza, and runs past Gamblesby to the sea, which it enters near Kirkbride. The *Waver* has its origin in Brocklebank and Caldbeck-fells, and takes a similar course to the estuary. The *Ellen* rises from Caldbeck-fells, and enters the sea at Maryport after a course of about 18 miles. The *Nent* rises in the south-eastern extremity of the parish of Alston, and joins the South Tyne near the town of Alston. The *South Tyne* has its source in a swamp or bog-ground about 7 miles E. by S. from the summit of Cross-fell, and a little below Alston enters Northumberland. The *Tees* rises in the same swamp, about a mile from the source of the South Tyne, and for nearly four miles forms the boundary between Cumberland and Westmoreland. The larger rivers abound with salmon, trout, branding, and various other kinds of fish, and the smaller streams with trout and eels. Salmon-fishing commences in the Eden, January 1st; in the Solway Frith and Esk, March 10th: it closes on the 25th of September in all the Cumberland rivers except the Derwent, in which it continues from the 10th of February to the 10th of October. Game, especially grouse, is sent in great quantities to the south of England.

The ship canal from Carlisle to the Solway Frith is the only canal in Cumberland. [CARLISLE.] Two important turnpike-roads cross the county: one passes from east to west and the other from south to north; the latter, one of the principal roads between London and Glasgow and Edinburgh, enters the county near Penrith. It passes through Carlisle and then through Longtown to Edinburgh; previously giving off a branch 3 miles north of Carlisle to Glasgow, by Gretna, which crosses the Esk by a cast-iron bridge. The road from east to west extends from Newcastle to Carlisle, 56 miles, and from Carlisle to Whitehaven 41 miles. A turnpike-road extends from Brampton to Longtown, 11 miles: there is also one from Keswick to Ambleside,

16 miles, which passes through a pleasant and picturesque country. There are several other turnpike-roads. The Lancashire, Kendal, and Carlisle railway enters the county near Penrith and proceeds in a northerly direction past Carlisle, quitting the county at Springfield, about 10 miles from Carlisle: its total length in Cumberland is about 30 miles. The Newcastle and Carlisle railway proceeds eastward from Carlisle; its entire length in the county, which it quits near Denton, is about 20 miles. The Carlisle and Maryport railway proceeds from Carlisle in a south-westerly direction to Maryport, 28 miles, whence it is continued along the coast past Workington and Whitehaven, by the Whitehaven and Furness junction to Broughton, 38 miles. From Workington a branch, 8½ miles long, is carried on to Cockermouth.

Geology, Mineralogy, &c.—Cumberland is situated in the red marl district which lines the western base of the great chain of mountains denominated the British Apennines (the Back-Bone of England), extending from the Tweed into Derbyshire. This district extends in a northerly direction from the north-west corner of the Cheshire plain, along the western coast of Lancashire into Cumberland and the south of Dumfriesshire. White and red sandstone, but chiefly the latter, may be found almost everywhere within the limits described. St. Bees' Head is entirely composed of new red-sandstone. At Whitehaven the red marl formation is seen reposing on the coal formation, covered by the marl-beds containing gypsum: the same formation is seen filling up the great space between the Cumberland group of mountains and the British Apennines at Cross-fell. At Newbiggin and Coat-hill, near Carlisle, gypsum is found lying in red argillaceous marl between two strata of sandstone: the former quarry is much wrought, and gypsum is exported in great quantities from Carlisle. At Barrock, 3 miles to the south of Newbiggin, is a large rock of greenstone, much used on the public roads. A trap or basaltic rock is also observed near Berrier, at the hill called Binsey, and also on the north side of the Derwent, near Cockermouth. The primitive and transition groups of the Cumbrian mountains consist of granite, sienite, hypersthene, greenstone, slate, old red-sandstone, and mountain limestone. A gray kind of granite is found in the bed of the Caldew, on the north-east side of Skiddaw; and also in a branch of the river Greta, between Skiddaw and Saddleback. Sienite is met with at Irton-fell, Muncaster-fell, and Nether Wasdale; and hypersthene, in conjunction with quartz and felspar, commonly referred to the class of sienite, at Carrock-fell. A reddish felspar porphyry is found on Ambroth-fell and on both sides of St. John's Vale, near Keswick. Varieties of slate, intersected by dykes of trap or greenstone, constitute the great mass of Skiddaw, Saddleback, and the adjaent mountains. The common stone of the Keswick district is called blue rag, schistic earth, or whintin. At Borrowdale, Eskdale, and Patterdale, Seaw-fell and Helvellyn, and some adjacent places, gray slate is associated with hornstone, amygdaloid, and argillaceous porphyry, constituting the towering crags and lofty precipices of these districts. Many of the cataracts of the lakes fall over rocks of this description. Quartz, garnets, calcareous spar, chlorite, epidote, and sometimes agate, opal, and chalcedony, are found in these rocks. The old red-sandstone occurs near Melmerby. Metalliferous limestone, productive of lead ores, abounds in the mountains of the east and also of the west of the county. Boulderstones, from the granite rocks of Dumfriesshire, occur in the eastern parts of the county; and some of the grauite of Caldew and of the sienite of Carrock is found near Carlisle. Shap-fell boulders are found on the shores of the Solway Frith; and boulders from the sienite of Buttermere and Ennerdale are met with on the west coast of the county.

The minerals are silver, copper, lead, iron, plumbago, limestone, and coal. The principal lead-mines are situated at Alston, and are almost exclusively the property of Greenwich Hospital, to which institution they were appropriated by Act of Parliament on the attainder of the Earl of Derwentwater. Silver and copper are found in some of the mines in the same veins with the lead-ore. Silver and lead are got in abundance at Greenside and Eagle-crag in Patterdale. Veins of lead-ore have been found and worked between Skiddaw and Saddleback, in Buttermere, Newlands, and Thornthwaite. There are copper-mines at Alston, Caldbeck, and at Wythburn. There is one also below the level of Derwent-water, and another in the parish of Lowes-water. Iron-ore is raised in great abundance near Egremont; the thickness of the band of ore, which is hard solid metal, is said to be between 24 and 25 feet. The quantity of iron-ore shipped from Ulverston and Barrow is very great. The ore of this county produces upwards of double the quantity of metal that is got from iron-ore in general. Coal is worked to a large amount at Whitehaven, Workington, and in the vicinity of Maryport, whence it is exported to Ireland and the west of Scotland. The eastern part of the county also abounds in coal, particularly Tindale-fell, Talkin, and Blenkinsop, which produce the chief supply for Carlisle, Brampton, Penrith, and the intermediate country. Some of this coal is now exported at Port Carlisle to Ireland and Scotland. There are collieries at Gilerux, Arkleby, Oughterside, Bolton, and Hower-hill. Limestone is very abundant in many parts of the county. In some places it is burnt in great quantities for exportation, particularly to the west of Scotland. At Catlands the limestone is overlaid by the coal-measures on all sides. Plumbago, or black-lead, is found in irregular masses in a rock of gray felspar porphyry at Borrowdale near Keswick. A little

cobalt has been got at Newlands, and antimony near Bassenthwaite. Lapis calaminaris, small quantities of manganese, galena, iron pyrites, and spar of various kinds and of different colours and forms are found in several places. Slate of a pale-blue colour and of the finest quality is plentiful in Cumberland, particularly in the neighbourhood of Keswick and Ullswater.

Climate, Soil, Agriculture.—In consequence of the great extent of coast and the numerous high mountains, the climate is various. The mountains and high grounds are cold and piercing; the lower parts are mild and temperate: the whole county is exposed to wet and variable weather, particularly in the autumn, yet it is healthy, and many instances of longevity occur. The annual mean quantity of rain at Carlisle is about 30 inches; at Wigton, 34 inches; at Whitehaven, 50 inches; and at Keswick 68 inches. April on an average is the driest month of the year. July, August, September, and October are wet months: about twice as much rain falls in each of these months as in the month of April; and about one-third less rain falls in the first six months of the year than in the last six months. The soil of this county varies much; it often differs in the same parish, and sometimes even in the same field. The mountainous districts are bleak and barren; the most prevalent soil being mossy or dry gravel covered with heath. They are chiefly used as sheep pastures and preserves for moor-game. Some good land of dry brown loam is found in the valleys and on the sides of some of the smaller mountains. On the margins of the rivers is much valuable ground, consisting of rich brown loam. On the coast the soil is light, sand or gravel. The lowland country, extending from Carlisle in every direction for many miles, is fertile, though a considerable portion of it is cold wet loam and black peat earth; this land has been much improved by draining, which is now carried to a very great extent. There is a good deal of fertile clayey loam in the neighbourhood of Wigton. Sand and light loam prevail near Brampton, and likewise near Penrith. In the west of the county there is some wet soil on a clay bottom, and also some hazel mould. The subsoil in many places is a wet sterile clay. The agriculture of the county has improved considerably of late years, and great quantities of corn and produce of various kinds are now exported. The chief exports are from Port Carlisle, Whitehaven, Workington, and Maryport, and consist of cattle, sheep, poultry, grain, potatoes, butter, bacon, &c. The land being divided into small farms, the dairies are necessarily on a small scale, though their produce is excellent, and bears a high price in the market. Many of the farms do not exceed 100 acres, and some are not more than 30 or 50 acres. They are possessed on verbal or written contracts, or on very short leases. There are few farms let on leases of 14 or 21 years. Many persons, provincially called 'lairds,' or 'statesmen,' occupy their own lands, which in some instances have passed for several centuries in a regular line of descent in the same families. Some of these persons have an air of independence which forms a peculiar trait in their character. A small part of the land, in some places, lies in open town fields, which cannot have the benefit of the common improvement in husbandry. This land usually lies in ridges of variable width, upon which the grazing cattle that are herded do frequent injuries to the crops. In other places there are certain common lands that are annually stocked with cattle and horses, on a fixed day, by the owners or occupiers. These lands are always in grass. In high and mountainous districts the chief object of attention on the part of the farmers is their sheep stock, though of late years a considerable quantity of high-lying land has been brought into cultivation, which, on account of the steep declivities, is very laborious. In some of these places the climate is cold, the corn backward, and the harvest late. The valleys and low ground are cultivated chiefly for grain, and produce excellent crops of wheat, barley, and oats; these are alternated with turnips and potatoes or fallow. Some of the lands that are well supplied with water are kept as meadows or pastures for dairies, and for rearing and fattening cattle.

Candlemas is the usual time for entering upon farms, and the rents are paid half-yearly, in equal portions, at Lammas and Candlemas. The modern farm-houses have a handsome appearance, being generally built of stone, and roofed with blue slate. The old farm buildings and cottages have clay or mud walls, and are thatched with straw. There is a great variety of cattle and sheep. A peculiar breed of sheep, called 'Herdwicks,' from their being farmed out to herds at a yearly sum, is met with on the mountains, at the head of the Duddon and Esk rivers. The ewes and wethers and many of the tups are polled; their faces and legs speckled, and the wool short and coarse. They are lively and hardy little animals. The tups are in great request to improve the hardness of other flocks. There are several agricultural societies and cattle shows in the county, which give a stimulus to agriculture, and encourage improvements in the breed of live stock, by distributing rewards and premiums. At Carlisle, Whitehaven, and Penrith are horticultural and floral societies, which are well supported, and are of service in exciting attention to the cultivation of fruits and flowers.

Cumberland farmers are in general temperate, social, and intelligent people. They are strong and robust, and in their usual modes of life frugal and industrious. They rise early and labour hard. They wear cloaks and coarse plain dresses, take oatmeal porridge for breakfast, and often bacon and salt meat to dinner. Their bread is commonly made

of barley, or of barley and rye. In some places, oaten bread formed into thin cakes, and 'seons,' or unleavened cakes, are chiefly used. Milk, potatoes, and skimmed milk cheese are universally consumed. Tea, wheat bread, and animal food are now fast superseding these simple articles of diet. About 60 years ago the farmers wore kilt cloth, which was of a gray colour and home spun, and hence the name of 'gray-coats,' which the Cumbrians received. Home-spun clothes are now only worn by a few persons in the mountain districts. The peasants pay great attention to the education of their children. In some rural districts, where the quarter pay is not adequate to support the master, he is allowed a 'whittle-gate,' or the privilege of dining in rotation with the parents of his pupils—a custom which formerly prevailed also in some places with the poorer clergy. Farm-servants are hired at Whitsuntide and Martinmas, at the fairs held in the large market-towns. They stand in the market-places, and are distinguished by having a piece of straw or green branch in their mouths. After the hiring is over, the remainder of the day is dedicated to mirth and festivity. Cumbrian peasantry have various festive meetings, called the 'kirk,' or harvest-home, sheep-shearing, merry nights, and upshots. Bridesmaids and bidden-weddings are still held in some parts of the county. Wrestling, running, and leaping are the favourite amusements and athletic exercises of the peasantry.

Divisions, Towns, &c.—This county is divided into five wards, or hundreds, known by the names of Allerdale above Derwent, Allerdale below Derwent, in the northern extremity of the county, Cumberland, Leath, and Eskdale wards. It contains one city, CARLISLE; the parliamentary boroughs of COCKERMOUTH, and WHITEHAVEN, and 15 market-towns, namely, ALSTON, BRAMPTON, EGREMONT, HARRINGTON, HESKET-NEWMARKET, IREBY, KESWICK, KIRKOSWALD, LONGTOWN, MARYPORT, PENRITH, RAVENGLASS, WIGTON, and WORKINGTON. Harrington, Heskett-Newmarket, Ireby, Kirkoswald, and Ravenglass we notice here; the other towns will be found under their respective names.

Harrington, population of the parish 2169 in 1851, is a small flourishing sea-port about 3 miles S. from Workington. The houses are mostly modern and well built. The harbour is well constructed, and the trade steadily increasing. Coal and lime are exported. In the coal trade, which is carried on chiefly with Irish ports, upwards of 40 vessels are employed; and in the lime trade, which is chiefly carried on with the opposite coast of Scotland, there are several hundred sloops. Here are a yard for ship-building, a rope-walk, and a vitriol and copperas manufactory. The parish church is a plain structure without a tower. There are chapels for Wesleyan and Primitive Methodists, a British school, and a clothing society. There is here a station of the Whitehaven Junction railway. Iron-stone and fire-clay are found in the vicinity.

Heskett-Newmarket is a small but neat town, situated on the banks of the Caldew, 13 miles S.W. from Carlisle: population of Caldbeck parish, in which Heskett is situated, 1667. The Wesleyan Methodists and Quakers have places of worship. It has a small weekly market on Friday; and there are several fairs which are well attended.

Ireby, population of the parish 505 in 1851, is 16 miles S.S.W. from Carlisle, on the left bank of the little river Ellen, which issues from Over-water and falls into the sea at Maryport. Ireby is a very old town, having had a market granted to it 600 years ago. The church is small. There is a school with a trifling endowment. Clea Hall, Whitehall House, and Suittegarth are in this neighbourhood.

Kirkoswald, population of the parish 925, is situated in a beautiful vale on the small river Raven about half a mile above its junction with the Eden, 15 miles S.E. from Carlisle. The church was dedicated to St. Oswald, the celebrated martyr and king of Northumberland. The tower, in which are three bells, stands about a furlong eastward from the church on an elevated site. Near the town are the remains of an ancient castle and a mansion called the Colledge. The town is amply supplied with water. There are a paper-mill, a saw-mill, a mill for carding and spinning wool, corn-mills, a brewery, and coal- and lime-works. The weekly market is on Thursday, and there are great markets on Thursday before Whitsuntide and August 5th.

Ravenglass, population of the parish of Muncaster in which it is situated 623, is a small market-town and sea-port, situated along the coast at the confluence of the Esk, Mite, and Irt. There is a fair held here with very singular customs and ceremonies on August 5th. It has a market on Friday, a large workhouse, and an endowed school. Near this place are Muncaster House and the ruins of Walls Castle. Oysters abound on the coast between this town and Bootle. Ravenglass possesses a small coasting trade, chiefly in corn, timber, and coal.

The following are some of the more important villages, with their population in 1851 and a few other particulars:—

Abbey Holme, or *Holme Cultram*, about 6 miles W. by N. from Wigton, near the mouth of the river Waver: population of the parish 3212. The parish church was formerly the chapel of a Cistercian monastery, which was founded by King Henry I. At the west end is an elaborate Norman doorway. The Wesleyan Methodists and Quakers have places of worship. Fairs are held on October 29th and on the Tuesday before Whitsuntide. *Allonby* is on the sea-coast, 5 miles N.E. from Maryport: population of the chapelry 749. Allonby is a favourite resort for sea-bathing during the season. The village contains some good houses and has a neat appearance. The

herring fishery formerly employed the inhabitants, but is now of little consequence. There are here a chapel of ease and a place of worship for Quakers. *Aspatria*, about 6 miles N.E. from Maryport: population of the joint township of Aspatria and Brayton, 1123. The parish church has many interesting architectural features. The Independents have a place of worship in Aspatria. A small market is held on Thursdays. *St. Bees*, a village near the sea-coast, about 4 miles S. from Whitehaven: population of the township, 971. The parish church was formerly a part of the monastery of St. Bega: the building is cruciform and has a massive tower. The nave only is used for public worship. The chancel is occupied by the Clerical College and School of Divinity, established in 1816 by Dr. Law, late bishop of Chester, for the instruction of young men intended for holy orders. Nearly 1000 clergymen have been educated at St. Bees' College. The number ordained in 1851-52 was 34. There were 115 students attending the college in 1852. The Grammar school, founded at the close of the 16th century by Archbishop Grindall, has an income from endowment of about 1200*l.* a year. The provost of Queen's College, Oxford, has the appointment of the head and second masters. There were 167 scholars in 1852. The school has some presentations to fellowships and scholarships at both Oxford and Cambridge. *Brigham*, about 2½ miles W. from Cocker-mouth: population of the township, 446. The parish is extensive, having as its boundaries the lakes of Baseenthwaite, Buttermere, Crummock, and Lowes-water, and the river Derwent. The parish church, dedicated to St. Bridget, is an ancient edifice, possessing some fine windows; it is situated on an eminence on the left bank of the Derwent, about half a mile from the village, in a position which commands an extensive prospect. *Borrowdale*, a township in the parish of Crothwaite; the name is also applied to an extensive and exceedingly picturesque district: population of the township, 425. The celebrated mines of plumhago or black lead are at the head of the valley of Borrowdale, about 9 miles from Keswick. Borrowdale chapel, which is near Rothwaite, was rebuilt and somewhat enlarged about twenty years back. Borrowdale formerly belonged to the abbey of Furness. The people of the district are chiefly employed in mining and agriculture. A sheep fair is held on the first Wednesday in September. *Bowness*, 12½ miles W. by N. from Carlisle: population of the township, 503. The village is built on a cliff on the shore of the Solway Frith. The site of the Roman station Tunnocelum was in the parish of Bowness; many coins and other Roman remains have been found here. Bowness is much frequented by summer visitors for bathing. Although Bowness is 7 miles from the head of the Solway Frith, at the mouths of the rivers Esk and Sark, and the distance to the coast of Scotland is about 2 miles, the sands are traversed at low water, when travellers are conducted across by guides between Bowness and Annan in Dumfriesshire; at high water the channel is navigable for ships of large burden. The parish church, dedicated to St. Michael, is a small building of ancient date. There is here a Free school founded in 1785. About a mile E. from Bowness, at a place called the Binnacle, the ship canal from the city of Carlisle opens into the Frith. [CARLISLE.] *Burgh*, in the parish of *Burgh-by-Sands*, a village about 5 miles N.W. by W. from Carlisle, and about 2 miles from Port Carlisle at the mouth of the Eden: population of the township, 541. The ship canal from Carlisle passes the village of Burgh on the north side. The parish church of St. Michael is an ancient building, constructed evidently for purposes of defence as well as of worship. *Buttermere*, a small village in the parish of Brigham, about 8 miles S.W. from Keswick, situated between Buttermere-water and Crummock-water: population of the chapelry of Buttermere, 78. The village consists of a few small cottages and farm-houses. The chapel is a small building erected at the expense of the Rev. Vaughan Thomas. The chapel which formerly occupied the same site was of very diminutive size, probably the smallest chapel in England. Buttermere-water or lake attracts many visitors on account of the picturesque beauty of the lake itself and the grandeur of the surrounding scenery. *Caldbeck*, 12 miles S.S.W. from Carlisle: population of the parish, 1667. The parish church, dedicated to St. Kentigern, was repaired in 1818; the date of its erection is said to be 1112. The Independents and Quakers have places of worship. Caldbeck possesses a woollen manufactory for blankets, flannels, dufls, and stocking-yarns; a fulling-mill, tile-works, bleach and dye-works, and a brewery. About three miles south from the village are lead-mines. *Calder Bridge*, 10 miles S.S.W. from Whitehaven: population of the parish of St. Bridget Beckermeth, 664. The village, which is situated on elevated ground on the banks of the river Calder, is much visited on account of the picturesque ruins of Calder Abbey, which stand on the right bank of the river, about a mile above the village. The abbey was founded in the 12th century for monks of the Cistercian order. Part of the abbey church remains, with a tower supported on pillars, from which spring beautiful pointed arches. *Dalston*, on the left bank of the river Caldow, about 4 miles S.S.W. from Carlisle: population of the township, 1022. A small market is held here. The parish church, dedicated to St. Michael, was rebuilt about a century ago: there are two Free schools. Rose Castle, an ancient building, a residence of the Bishop of Carlisle, and supposed to have been the principal episcopal residence from the early part of the 13th century, has received a thorough remodelling at the hands of the present

bishop. Water-power is applied from the Caldew to work several cotton-mills, a flax-mill, and a flour-mill. There is a manufactory of agricultural implements. *Dearham*, about 2 miles E. from Maryport: population of the township, 1209. Coal is extensively raised in the neighbourhood, and there is an earthenware manufactory. The church has an ancient font with curious carvings. The churchyard contains a sculptured cross of considerable antiquity. *Egremont*, population of the parish 2049, about 6 miles S.S.E. from Whitehaven, is pleasantly situated on the banks of the Ehen, the stream flowing from Ennerdale Lake. The parish church is an ancient structure, with a low tower. The Wesleyan Methodists have a place of worship. There is a National school. The ruins of Egremont Castle, a fortress erected in the 12th century, stand on an eminence at the west end of the town. Egremont cent members to Parliament in the time of Edward I., but the expense of paying their representatives being too great for the town, the privilege was, on petition, taken away. A small market is held on Saturday, and there are fairs in February, May, and September. *Ellenborough*, about a mile S.E. from Maryport: population of the joint township of Ellenborough and Ewanrigg, 969. This place was the site of an important Roman station named Glanaventa. Many Roman remains, including altars and inscribed tablets, have been found here. The Free school is under the superintendence of trustees. *Garrigill*, in the parish of Alston, near the eastern border of the county, adjoining the county of Durham, population of the chapelry 1443, is situated near the river Tyne, a few miles from its source, and is distant about 27 miles E.S.E. from Carlisle. The Independents and Wesleyan and Primitive Methodists have places of worship. Garrigill is conjointly with ALSTON the seat of a Poor-Law Union. *Gosforth*, about 5 miles N. by W. from Ravenglass: population of the parish, 1116. The village is of considerable size, but rather irregularly built. The parish church is a small but neat building. The churchyard contains a stone column, which was formerly surmounted by a cross. Cattle fairs are held here on April 25th and October 18th. *Greystoke*, about 18 miles N. from Carlisle: population of the township, 345. A few broken towers are all that remain of the ancient castle; the present castle was built about the middle of the 16th century, and was improved by the late Duke of Norfolk; around the castle is an extensive park, stocked with deer. The parish church is a spacious edifice of the decorated style. In the parish are collieries and slate quarries. *Hesket*, 9 miles S. by W. from Carlisle; High and Low Heeket form one township, the population of which was 806. The parish church, which was repaired in 1760, is a commodious edifice. There is an Endowed school, which had 80 scholars in 1852. Quarries of gypsum are worked to a considerable extent. In this parish the Court of Inglewood Forest for the disposal of manorial business is annually held on St. Barnabas Day under a thorn-tree by the road side. *Millom*, near the mouth of the Duddon, 6 miles S. by E. from Bootle, population of the townships of Upper and Lower Millom, 980, was formerly a market-town; it is now a place of no consequence. There is here a small fishery, and there are mines in the neighbourhood. The church is ancient, and contains some curious monuments. The remains of a castle are used as a farm-house. *Nenthead*, 4½ miles E. by S. from Alston, population of the chapelry, 1964, is a somewhat busy place; it has a small customary market on Thursday. The church, a handsome building, of which all the seats except six are free, was erected by subscription in 1845. There is a Wesleyan Methodist chapel. The market-house is a convenient structure with a clock tower. The London Lead Mining Company have extensive smelting-works here: they maintain a surgeon for their workmen and miners, and have founded a school for the education of the miners' children. *Seaton*, about a mile and a half N. from Workington, population of the township 835, is a thriving place owing to extensive iron-works and collieries in the neighbourhood. Some remains of an old fortress are standing, which are known as Burrow Walls. *Sebergham*, 10 miles S. from Carlisle, population of the parish 855, is a picturesque little village on the right bank of the Caldew, which is here crossed by a bridge. The church is small but rather handsome. In the parish are extensive coal-mines and limestone-quarries. *Wetheral*, 4 miles E. by S. from Carlisle, population of the township 635. There are here the remains of a Benedictine monastery. The church is a rather superior building of the perpendicular style. In the parish are mills for cotton spinning and the manufacture of checks and ginghams. The Newcastle and Carlisle railway has a station at Wetheral.

Divisions for Ecclesiastical and Legal Purposes.—The whole of the county is in the diocese of Carlisle, with the exception of the ward of Allerdale-above-Derwent in the diocese of Chester, and the parish of Aleton in that of Durham. There are 3 deaneries, Carlisle, Penrith, and Wigton; 1 archdeaconry; 104 parishes; 41 rectories; 23 vicarages; and 59 perpetual curacies and chapelries. According to the 'Census of Religious Worship' taken in 1851, it appears that there were then in the county 389 places of worship, of which 161 belonged to the Church of England, 96 to the Wesleyan Methodists, 24 to Independents, 23 to Primitive Methodists, 20 to Quakers, 17 to the Wesleyan Association, 17 to Scotch Presbyterians, 9 to Baptists, 8 to Roman Catholics, and 14 to smaller bodies. The number of sittings provided in all was 101,608. By the Poor-Law Commissioners Cumberland is divided into 9 Unions: Alston with Garrigill Bootle,

Brampton, Carlisle, Cockermouth, Longtown, Peurith, Whitehaven, and Wigton. These Unions include 200 parishes and townships, with an area of 833,864 acres, and a population in 1851 of 194,935.

Cumberland is comprehended in the province of York, and in the northern circuit. The *assizes* are held at Carlisle twice a year. The Midsummer and Christmas quarter-sessions are held at Carlisle, and the Easter and Michaelmas sessions at Cockermouth. County courts are held at Alston, Carlisle, Cockermouth, Keswick, Penrith, Whitehaven, and Wigton. The county returns four members to the Imperial Parliament; two for the eastern and two for the western division. Carlisle sends two members, the borough of Cockermouth two, and Whitehaven one.

History and Antiquities.—The earliest inhabitants of Cumberland of whom we have any account were the Brigantes, a bold and warlike people, conquered by the Romans about A.D. 121, when the famous Roman or Picts' Wall was erected by Hadrian, to prevent the ravages of the Caledonians, who bore an inveterate hatred to the Romans. [BRITANNIA.] This barrier was formed of earth, and connected a chain of forts erected by Agricola in 78: being found insufficient, Severus, in 210, built one of stone, from near the mouth of the Tyne to the Solway Frith. The last was strengthened by an outward ditch, and guarded by towers and a chain of forts and stations. Remains of both walls, but particularly of that of Severus, may still be traced in several places. At a very early period the inhabitants, who were the true and genuine Britons, were called *Cumbri*; and hence probably the name of the district, Cumberland. In almost every part of the county are remains of British and Roman antiquities. About three miles from Kirkoswald is a Druidical temple, consisting of a circle of 67, or according to some accounts 72, unheaved stones, called Long Meg and her Daughters. Another and more entire circle of 48 rude stones is situated a mile and a half south-east of Keswick. This county has been a perfect magazine of Roman antiquities. The remains of Roman garrisons or stations are still distinctly observable at Maryport, Old Carlisle, Old Penrith, and Bewcastle. Several altars, inscriptions, coins, instruments, utensils, &c. have been discovered at these places. After the retreat of the Romans, the country was laid waste and the city of Carlisle reduced to a complete state of ruin by the Scots and Picts. The country had also to endure the ravages of the Danes. During the Saxon Heptarchy it was joined to the kingdom of Northumberland, but was governed by its own chieftain under what was called the Danish law, until the Norman Conquest. In 945 Cumberland was granted to Malcolm king of Scotland, and was for a long time the scene of war and bloodshed between the two crowns, being sometimes under the dominion of the kings of England and sometimes under that of the kings of Scotland. At the time of the Conquest the county was in such a state of poverty and desolation that it was not rated in the Domesday Book, William the Conqueror having remitted all its taxes. Walter, one of his countrymen, laid the foundation of a priory at Carlisle, which was afterwards converted into an episcopal see. In 1237 Cumberland was finally annexed to the crown of England by Henry III. at a conference held at York; but the feuds between the two kingdoms continued for more than three centuries afterwards, and this county, situated on the borders, and containing the 'debateable land,' was often the scene of contention, rapine, and bloodshed. In 1307 Edward I. died, on an expedition towards Scotland, at Burgh Marsh, near Carlisle, where a monument has been erected to his memory. The inhabitants of the county at various times suffered many cruelties and deprivations, had several towns burnt and monasteries destroyed, and were not relieved from hostile attacks and inroads until the union of the two crowns by the succession of James I. Even after this time, outrages and robberies were frequently committed. During the civil war between King Charles and his Parliament, and also during the time of Cromwell, Carlisle was besieged, and the inhabitants were much harassed and distressed. This county was the scene of hostilities in the rebellion of 1715; and again in 1745, when Carlisle was taken possession of by Charles Stuart and his followers, and was retaken by the king's forces under the Duke of Cumberland.

There were formerly several monasteries and ancient hospitals in Cumberland. The Augustine monks had a priory at Lanercost and another at Carlisle. The Benedictines had priories at Wetheral, St. Bees, and Seaton. The Cistercians had an abbey at Holme Cultram and another at Calder. There was a convent of Gray friars at Peurith; one of Black friars and another of Gray friars at Carlisle. There were religious houses of ancient foundation at Carlisle, St. Bees, and Decre. A nunnery is said to have been founded at Carlisle by David, king of Scotland, at which place there was a hospital for thirteen lepers, dedicated to St. Nicholas. At Wigton, an hospital and free chapel were dedicated to St. Leonard. Many of the old churches exhibit remains of the Norman and early gothic architecture. Specimens of the Norman style may be seen in the churches of Aspatria, Torpenhow, and Kirklinton; and of the pointed gothic in the abbeys of Lanercost and Holme Cultram. The west end of the last-mentioned abbey is a good specimen of the later perpendicular style. The churches of Burgh-by-Sands, Newton Arlosh, and Great Salkeld have strongly-fortified towers, which probably served as places of refuge for the inhabitants of these

villages in the time of an invasion. Cockermouth church, one of the finest churches in the county, was destroyed by fire, on the night of Friday, Nov. 15th, 1850, but has since been replaced by a neat and commodious building, erected by subscription. In 1851 the county possessed seven savings banks, at Alston, Carlisle, Cockermouth, Keswick, Maryport, Whitehaven, and Workington. The total amount owing to depositors on the 20th of November, 1851, was 280,775*l.* 16*s.*

CUMBRAE, or CUMBRAY, *Big or Great*, Buteshire, Scotland, an island and parish in the Frith of Clyde, about 3½ miles in length from N.E. to S.W., 2 miles in breadth, from 10 to 11 miles in circumference, and containing about 5120 acres. It lies between 55° 45' and 55° 49' N. lat., 4° 52' and 4° 56' W. long., 4 miles E. from the island of Bute and 2 miles W. from the coast of Ayrshire. The population in 1851 was 1266.

The name *Cumbræ*, derived from the Gaelic, signifies a steep coast rising from the sea, an appearance which the island may at one time have presented, though the level of the ocean having sunk, the sea has now left a flat space along the whole shore to the base of a range of hills which run from south to north, and extend nearly the whole length of the island, reaching about the middle an elevation of 500 feet. The shore is in some places sandy, in others gravelly and clayey, but in general it is rocky. The temperature of the island is mild; the prevalent winds are from the south and west, and are frequently accompanied by rain; the north and east winds are cold, but the cold is rarely severe or of long continuance. The brown whinstone forms the base of the hills, and is used for making the roads. Freestone is quarried in abundance. The beds of this stone are generally intersected by the whin. Limestone is found in considerable quantities. The soil along the shore is light and sandy. In the valleys it is a rich black loam, bedded on clay, and producing good crops, while on the high grounds and hills it is light and thin, and covered with heath. There is not much wood on the island. Three-fifths of the soil is under cultivation. The island abounds with excellent spring water.

The island of *Cumbræ* belongs to the Earl of Glasgow and the Marquis of Bute, Lord Glasgow holding about two-thirds of the soil. The land is divided into large farms, the houses and buildings of which are generally good. Grain of all kinds is raised, though the pasturage of black cattle and sheep is the principal agricultural employment.

The village of *Millport* is situated in the south-east corner of the island, in 55° 46' N. lat., 4° 54' W. long. It is much resorted to in summer for sea-bathing. There is an excellent harbour, capable of affording complete protection from every storm to a large number of vessels. A fine pier was erected several years ago by Lord Bute. The inhabitants of the village are occupied in weaving. There is daily steam communication between Millport and Glasgow, Ayr, and the various towns on the Frith of Clyde, and a ferry at all times from the island to the Ayrshire coast. Several small vessels, chiefly sloops, from 15 tons to 50 tons burden, belong to the harbour. Besides the parish church the village contains a Free church, a parochial library, a friendly society, and a savings bank. There is another small village on the island called *Newton*.

(*New Statistical Account of Scotland.*)

CUMNER. [BERKSHIRE.]

CUMNOCK. [AYRSHIRE.]

CUNEO. [CON.]

CUNNINGHAM. [AYRSHIRE.]

CUPAR ANGUS, or CUPPAR ANGUS, Perthshire and Forfarshire, Scotland, a town, and formerly a burgh of royalty, in the parish of Cupar Angus, is situated in 56° 33' N. lat., 3° 15' W. long., on a small rivulet falling into the river Isla, near the point at which the Isla falls into the Tay, about 16 miles N.E. from Perth, and 61 miles N. by W. from Edinburgh by the Edinburgh and Northern and the Scottish Midland railways. The part of the town south of this rivulet is in Forfarshire, the remainder and larger part in Perthshire. The population of the town in 1851 was 2004. The town is neatly built, with clean and well-lighted streets. In addition to the parish church there are chapels for Episcopalians, the Free Church, United Presbyterians, Original Seceders, and Independents. A tower which occupies the site of the old prison serves the double purpose of a town-house and a jail. The town contains a reading-room, a savings bank, and several charitable societies. Lnen-weaving, tanning, and bleaching are carried on. There are several fairs in the course of the year. Near the town are the vestiges of a Roman camp, upon the site of which a monastery was erected and richly endowed by Malcolm IV. in 1164. Of the monastic buildings scarcely any remains are now left.

CUPAR FIFE, Fife-shire (so named in contradistinction from the small towns of Cupar Angus and Cupar Grange in Perthshire), the county town, and a royal and parliamentary burgh, is situated in 56° 19' N. lat., 3° 0' W. long.; nearly in the middle of the peninsula of Fife, at the confluence of the small streams Eden and Lady or St. Mary's Burn; having on the south a range of high hills, and on the north a fertile country, diversified with hills and numerous woods. The town is 32½ miles N. from Edinburgh, by the Edinburgh and Northern railway, and the ferry on the Forth, and 14½ miles E. from Dundee. The population of the burgh in 1851 was 4005, that of the

parliamentary burgh was 5686. Coujntly with St. Andrews, Crail, Anstruther Easter and Wester, Kilrenny, and Pittenweem, Cupar Five returns one member to the Imperial Parliament. Cupar was made a royal burgh by David II, in 1363: it is now governed by 3 bailies and 15 councillors, of whom one is provost.

The site of the town is about 25 feet above the level of the sea, from which the distance is about 6 miles; the climate is comparatively mild. The burgh consists principally of one long street, extending from west to east, with a cross street leading north and south. The public buildings, of which the most noticeable are the town hall and the county hall, are neat and convenient. Besides the parish church and St. Michael's church, there are a Free church, two chapels for United Presbyterians, and one for Scottish Episcopalians. The town has a respectable appearance, and the vicinity is ornamented with some neat villas. A good supply of water is obtained from springs and wells. The streets are lighted with gas and well-paved. There are two reading-rooms and a subscription library. A large Grammar school on the Castle Hill was formed by the union of the ancient burgh schools with one of Dr. Bell's foundation. There are weekly corn markets; and several annual fairs for grain and agricultural stock, produce, and utensils, which are well attended. The chief manufactures are of coarse linens; leather, candles, and snuff are made. On the river Eden are hreweries and flax-mills. Bricks and coarse earthenware are made from clay beds in the vicinity of the town; and there are several quarries of white sandstone.

On the mound called the Castle Hill, there formerly stood the fortress of the chiefs of the family of Macduff, the feudal earls or thanes of Fife. At the foot of the Castle Hill was a convent of Dominican monks, or Black friars. A green esplanade before the castle, still called the Play Field, was in ancient times used for the performance of the religious shows called 'mysteries' and 'moralities;' and here was acted the famous drama of 'Sir David Lindsay of the Mount,' called the 'Three Estates,' a popular satire on the priesthood, which is believed to have promoted the subsequent religious revolution. Cupar was represented in the Scottish Parliament by Sir David Lindsay, whose estate is not far from the town.

(*New Statistical Account of Scotland.*)

CURAÇOA, or CURAÇAO, an island in the Caribbean Sea, lying to the east of the peninsula of Paraguana, the most northern point of Venezuela, in 12° 6' N. lat., and 69° 3' W. long. Its length from north-west to south-east is 35 miles, and its breadth 6 miles. The surface is hilly. The hills on the west side are seen from a considerable distance at sea. The island is wholly dependent upon rain for water, and the soil so wanting in fertility that the inhabitants are partly supplied with provisions imported from other places. Sugar, indigo, tobacco, and maize are the chief products. The shores are so bold that vessels of considerable size may sail round the island within a cable's length. There are several harbours; the principal one, Santa Anna, is on the south-west side of the island. The entrance is very narrow; on the eastern side of it is Fort Amsterdam, and on the opposite side of the harbour is the town of Curaçoa or Willemstad, said to be one of the handsomest in the West Indies.

Curaçoa was settled by the Spaniards early in the 16th century; it was taken in 1632 by the Dutch, and was captured by the English in 1798, but restored to Holland at the peace of Amiens. It was again taken by the English in 1806, and finally given up to Holland at the general peace in 1814.

CURDISTAN. [KURDISTAN.]

CURIA MURIA ISLANDS are situated on the southern coast of Arabia, and afford protection to a bay called Curia Muria Bay, which is extensive, and has good soundings throughout. They lie in the direction of the eastern continuation of Ras Noss, a very elevated headland, and between 55° 20' and 66° 10' E. long., and near 17° 30' N. lat. They are five in number, called from west to east Hasik, Soda, Hallanny, Karzawet, and Jebeliya. A long reef is said to extend from Hallanny to Soda, so as to render it very dangerous, if not impossible, for any vessel to pass between them; but between Soda, Hasik, and the mainland, the channels are good. Hallanny is the only one of the islands that is inhabited: the anchorage and village are at the northern extremity, where water may be obtained, but it is brackish. Its mountains are high, and apparently of volcanic origin. (Captain Owen, *Voyages*; *London Geographical Journal*, xi. xv.)

CURISCHES HAFF, a lagoon, or shore-lake, of the Baltic, on the coast of East Prussia, supposed to have originated from the throwing up of the sand and the retiring of the waters of the Baltic. From Labiau, in the south, to its opening into the Baltic at Memel, it is about 60 miles in length; at its greatest breadth, between Crazukren and Juwendt, nearly 23 miles: it contains altogether 588 square miles. Its confluence with the Baltic is formed by what is called the 'Memel Deepa,' which are from 800 to 1200 feet in width, and 12 feet deep. It cannot properly be called a part of the sea, inasmuch as its waters are fresh, like those of the other Haffs in this quarter. It is separated from the Baltic by a very narrow neck of land, called the 'Curische Nehrung,' formed by a series of low sand banks, almost destitute of vegetation, about one to two miles in breadth—except where they taper to a point as they approach Memel—and about 70 miles in length. On this neck of land there are a

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few villages. The bed of the Haff is unequal and variable, and the navigation is therefore very precarious; hence the only description of vessels used here is a peculiar kind of large flat boats, and even these are unable to land along many parts of the coast. In stormy weather the navigation is very dangerous. The Dange, the Minge, and the Memel, or Niemen, discharge their waters into this Haff.

CURNOU'L, a principality formerly governed by an independent chief, and now forming one of the subdivisions of the Balaghaut ceded districts. It came into possession of the English in 1841, previous to which the country had been subdivided into a great number of petty jaghires, and the government of the principality was so badly administered, that a great part of the lands were allowed to revert to a state of nature, and were overgrown with rank weeds and jungle. It has since been much improved.

CURNOU'L, the capital of the province of the same name, is a populous town on the south side of the Toombuddra, in 15° 44' N. lat., 78° 2' E. long., about 279 miles N.W. by N. from Madras, and 127 miles S.S.W. from Hyderabad. It is surrounded on all sides by the rivers Toombuddra and Henday, which at the town are from 700 to 800 yards wide. Some strong works have been erected on the western side of the town; but in 1815 the place held out against the assaults of the English only one day, after which it was surrendered at discretion. The buildings in the town are partly of stone and partly of mud. (Rennell, *Memoir of a Map of Hindustan*; *Parliamentary Papers.*)

CURZOLA, in Slavonic *Karkar*, the ancient *Corcyra Nigra*, or Black Corcyra, so called from the dark colour of its pine woods, is an island in the Adriatic, comprised in the circle of Ragusa in the Austrian crownland of Dalmatia. The channel of Curzola separates it from the peninsula of Sabioncello. Curzola contains one town, a market-town, and about 6500 inhabitants. The total area is 57,180 acres, of which 43,471 acres are covered with woods, which furnish good ship-timber; the vineyards annually yield about 80,000 hogsheads of wine, and the fisheries on the coast are productive; but little grain is raised, and the fresh-water is scarcely fit for use. Curzola, the chief town, is situated on a neck of land upon the channel or caual of Curzola, in 42° 57' N. lat., 16° 50' E. long.; it is surrounded by walls, and has a cathedral, two monasteries, and about 800 houses. It gives title to a bishop: its inhabitants build vessels, and traffic in the produce of the island.

CUSHENDALL. [ANTRIM.]

CUSSETT. [ALLIER.]

CÜSTRIN, properly KÜSTRIN. [BRANDENBURG.]

CUTCH, a principality lying between 22° and 25° N. lat., and between 68° and 72° E. long., is bounded N. by the Great Sandy Desert, E. and S. by the Gulf of Cutch, and W. by the Koree or eastern outlet of the Indus. The country is naturally divided into two portions, of which that towards the south is an irregular hilly tract; the northern part, called the Runn, is an extensive salt morass, 160 miles long from east to west, and varying in breadth from 4 to 60 miles. During the rainy season the Runn is completely covered with water, and the country to the south is quite insulated. During the dry monsoon the waters retire, and the Runn assumes a diversified appearance. In some parts it is still an impassable salt swamp; in other parts there are great banks of dry unproductive sand covered occasionally with saline incrustations, while other parts afford tolerable pasture. During the rainy season the Runn can be traversed with difficulty, and only in certain parts by horsemen.

The soil of the habitable part of the country is for the most part clay covered with about five inches of deep sand. Towards the east the soil is loamy, and near the hills the surface is covered with volcanic matter, and abounds with specimens of metallic scoria. A range of hills named the Lakh, running east and west through the centre of this part of Cutch, divides it into two nearly equal portions. These hills are one continuous mass of rock, destitute of soil and of water except during the rainy season, when the water forms channels for itself, through which it rushes to the plain on each side. A high bank of sand extends along the shore the whole distance from the Indus to the Gulf of Cutch. But little wood is found in the principality. A few common trees have been planted about the villages, and among them are date-trees, which yield fruit of good quality. The cultivation of cotton is carried on extensively, and the produce is exported in return for grain, which is procured from Gujerat and Sinde. Iron-ore occurs throughout the country, and coal of an inferior quality is found in abundance.

The horses of Cutch are much esteemed; the oxen are not reckoned of much value. Goats and sheep are numerous. The wool of the sheep is of long staple but coarse, answering well for the manufacture of blankets and carpeting: the weight of the fleece averages from four and a half to five pounds. Coarse woollen cloths are made by the inhabitants for home use. Towards the north, and near the Runn, wild asses are very numerous, and are met with in herds of sixty or seventy together. This animal is larger and stronger than the tame ass. It is fierce and untamable in its nature, and when unable to procure pasturage in the desert lands advances into the inclosed country, and does much damage to the grain crops: the flesh is said to be good eating.

The principal towns of Cutch are ANJAR, Bhoj the modern capital,

Luckput Bunder, Mandavee, Rohur, and Tahrah. *Bhoj* was founded about 200 years ago by Rao Bharra; it stands on the south-west side of a hill in 23° 18' N. lat., 69° 50' E. long. The fortifications are extensive, but not well planned. The town contains several mosques and pagodas of white masonry interspersed with plantations of date-trees, and from a distance presents a handsome appearance, but on a nearer approach there are found to be a large proportion of mean dwellings. The palace of the rao is a large and well-built structure, covered with a kind of white enamel, which adds to its beauty. *Luckput Bunder*, formerly called *Bustabunder*, but which obtained its present name in 1793, when the fort of Luckput was built, stands near the east side of the Korea, in 23° 47' N. lat., 68° 50' E. long., 75 miles N.W. from Bhoj. The town is built on the brow of a hill which rises from a swampy plain; it contains about 2000 inhabitants, and is principally important as being on the high road from Bhoj and Mandavee into Sinde. Previous to the great earthquake of 1819 the communication from this town to the head of the estuary of the Korea was by means of a small shallow creek navigable only by small boats, but the effect of the convulsion was to deepen the water to eighteen feet and effectually to open the navigation; it is however not a place of much trade. *Mandavee*, the principal sea-port of Cutch, situated on the shore of the Indian Ocean on the north side of the entrance to the Gulf of Cutch, in 22° 51' N. lat., 69° 34' E. long., is the most populous place in the principality, and contains 50,000 inhabitants, who are principally Bhattias, Banyans, and Brahmias. The port is an open roadstead with a creek. There are 250 vessels belonging to the place, which carry on a very considerable trade with Zanguebar and the whole east coast of Africa, with the Red Sea and Arabia, with the Persian Gulf, Mekran and Sinde, and with India as far as Ceylon. The vessels employed in this traffic vary from 25 to 200 tons burden; they carry a large lateen sail, and have two masts, but are never decked; they are navigated by native pilots, who have acquired the use of the quadrant and steer by charts. The most valuable branch of the trade of Mandavee is that carried on with the eastern coast of Africa, a distance of 3000 miles, whence the merchants of Cutch procure ivory, rhinoceros hides, and other valuable articles. The principal article of export is cotton. *Rohur*, also a sea-port, is situated in the Gulf of Cutch opposite to Wumania on the Gujerat peninsula, and is in 23° 2' N. lat., 70° 21' E. long., about 12 miles from Aujar: the depth of water in this part of the gulf does not admit of any but small vessels. The chief trade of Rohur is carried on with Gujerat. *Tahrah*, a populous place inhabited principally by Hindoos, is a fortified town about 30 miles S.E. from Luckput Bunder, on the road between that place and Mandavee.

The population of Cutch may amount to about 500,000, about one-half of whom are Mohammedans, and of the remaining half the greater part are Hindoos. The Jharejah tribe of Rajpoots, who were estimated in 1818 to amount to 12,000, are believers in the Koran, and at the same time adhere to many Hindoo observances. This tribe, the chief of which is the rao or sovereign prince of Cutch, is remarkable for the almost universal practice of female infanticide, a practice which the English government has vainly endeavoured to suppress. The morals of the tribe are in other respects said to be very degraded; they are ignorant, indolent, and almost universally addicted to indulgence in the use of intoxicating liquors: their wives are necessarily procured from among other tribes. Cutch is held by the Rao of Cutch under British protection, the annual subsidy payable to the East India government being 20,000.

(Hamilton, *East India Gazetteer*; *Parliamentary Papers*.)

CUTTA'CK, a district in the province of Orissa, bounded E. by the Bay of Bengal, N.E. by the province of Bengal, W. by various Maharatta states, and S.W. by the Northern Circars. Its length from north-east to south-west is 180 miles, and its average breadth 110 miles. The area of the district is about 16,929 square miles. The population is estimated at 761,805. On the coast, and for 20 miles inland, the country is low, and covered with wood, and being subject to inundation at spring-tides is very marshy. Beyond that distance the country rises considerably, and the soil is dry and fertile. Still farther inland it swells into hills, and is well wooded; some of the trees are valuable for cabinet work, and others are used in dyeing. The forests are infested with wild beasts. The region thus lying beyond the marshy delta is called the Mogulbundy. Beyond this is a third region, which is hilly, and extends westward as far as Gundwana. This region is parcelled among 16 hereditary Zamindars, who are under the protection of the English, and pay a subsidy at the rate of about one-tenth of the net produce of their estates. The country is subdivided under these Zamindars into a great number of estates, which are also held by hereditary succession. Iron and a great variety of minerals are found in this hilly country.

Cuttack is watered by numerous streams, which during the rainy season become large rivers. The principal of these are the Mahanuddy and its numerous branches the Bhaminee, the Byturnee, and the Subunreka. The *Bhaminee* rises in the mountains of Gundwana, and flowing first to the south and then to the east, traverses the district of Cuttack; uniting with the Beroopali, a branch of the Mahanuddy, it joins the sea near Point Palmyra. The *Byturnee* rises among the mountains of Chuta Nagpore in Bahar, and flows south through Gangpore in Gundwana; on entering Cuttack it turns to the

south-east, and afterwards to the east, and falls into the Bay of Bengal in 20° 48' N. lat. The *Subunreka* also rises in Chuta Nagpore, and flows in a south-easterly direction, with a very winding course, for 260 miles, and joins the Bay of Bengal, forming the southern boundary of the province of Bengal. These rivers abound with fish.

In Cuttack the rainy season does not begin so early as in Beugal, but it continues from September to November with so much violence as to cause the different rivers to overflow their banks. In November the weather becomes fine. From April to June the heat is very oppressive, and would be hardly supportable but for occasional thunder-storms, accompanied by rain. At other times the climate is more temperate, but the thermometer seldom sinks below 60°.

The manufacture of salt is carried on along nearly the whole of the coast; the produce is very white and pure, and is considered to be the finest manufactured in India: the manufacture yields a large revenue. There is little other trade. The Mogulbundy produces rice and other grains, pulse, spices, dyeing stuffs, and sugar. Maize and wheat are the chief products in the hilly country farther inland. During the periodical rains, when the rivers are full, a good deal of teak and other timber is floated down to the coast. The forests in which this timber is cut are very unhealthy, and for that reason can be visited only at certain seasons of the year.

The principal towns of the district are Cuttack, Balasore, and Juggernauth, or Juggernatha. [CUTTACK; BALASORE; JUGGERNAUTH.] The other towns, or rather large villages, deserving of mention, are Buddruck, Soroli, and Piplly. *Buddruck* is 33 miles S.S.W. from Balasore, in 21° 7' N. lat., 86° 26' E. long. It is this village and its neighbourhood that furnish most of the people who are known in Calcutta as Balasore bearers. *Soroli* is about 23 miles S.W. from Balasore; it contains two fine tanks and the ruins of a mud fort. *Piplly* is 27 miles S. from the town of Cuttack, in 20° 5' N. lat., 85° 58' E. long. The district contains a great number of small villages. A great part of the circulating medium of the district is composed of cowries, supplies of which are obtained every year from the Maldiv Islands in return for grain. A considerable amount of bullion is carried into Cuttack by pilgrims, but the greater part of it generally finds its way to Calcutta.

The district of Cuttack, including Balasore and other dependencies, was ceded to the East India Company, in full sovereignty, by the Raja of Benar in December 1803; the fort and town of Cuttack were taken by the English army in the month of October preceding. The salt monopoly was partially introduced soon after the acquisition of the territory, but was first legally recognised by the government in 1814. The measures at first pursued operated rather to restrict the supply than to subject the article to taxation, and much distress was thereby occasioned to the people. The too rapid introduction of a new revenue system led to numerous sales of land for arrears of rent, so that in the course of eleven years more than one-half of the settled lands in the Mogulbundy passed from the original possessors. A very serious revolt, which was in consequence attempted in 1817, was not fully quelled until two years after, causing a considerable sacrifice of lives. After this insurrection arrangements were made for supplying the district with salt by an extended system of local sales, at fixed prices, below those of the auction-sales at Calcutta, and by this means a much larger quantity was sold for consumption within the district, the revenue was improved, and the people were relieved from a severe oppression.

(Rennell, *Memoir*; *Parliamentary Papers*.)

CUTTA'CK, the capital of the district above described, is situated in 20° 27' N. lat., 86° 5' E. long., about 251 miles S.W. by S. from Calcutta, and 902 miles S.E. from Delhi, travelling distances. The town is built on a tongue of land between two branches of the Mahanuddy River. During the rainy season it is completely insulated, and the town itself would be subject to periodical inundations but for large and solid embankments faced with hewn stone, which effectually keep out the water. The river during the rains is a mile and a half broad, and from 30 to 40 feet deep at this part, but during the dry season it is a narrow stream with a depth of only 3 feet.

The Sanscrit word 'catak,' from which the name of the town is derived, signifies a royal dwelling. While the province of Orissa preserved its independence, Cuttack was the residence of the Gajapati, or superior raja, at whose court the military chiefs of Orissa performed feudal service. The town contains a very well-built street, with houses of stone two and three stories high, a large market-place, and several mosques; in one of these is exhibited a stone brought from Mecca, and bearing an impression of the foot of Mohammed. Cuttack is said to be one of the healthiest and pleasantest towns in India. The fortress of Barabnttee, which was built in the 14th century, stands about a mile north-west from the town.

(Rennell, *Memoir*; *Parliamentary Papers*.)

CUXHAVEN, a harbour on the left bank of the Elbe, at its entrance into the German Ocean. It is situated in 53° 53' N. lat., 8° 44' E. long., 59 miles from Hamburg, to which city it belongs. It affords a secure shelter against this dangerous sea in the winter months, or to ships waiting for fair winds. The town or village of Cuxhaven contains about 1000 inhabitants, chiefly pilots and fishermen; it has a lighthouse and bathing establishments. Vessels lie in the

harbour waiting for favourable winds. In winter, when the Elbe is frozen over, the Hamburg steamers ply from Cuxhaven.

CUZCO, a town in South America, in the republic of Peru, in 13° 31' S. lat., 72° 4' W. long., and at a distance of about 300 miles due E. from Pisco Bay, in the Pacific, has above 40,000 inhabitants. Before the arrival of the Spaniards it was the capital of the extensive empire of the Incas, and is said to have been built by the founder of the empire, Manco Capac, in the 10th or 11th century. In the year 1534, when it was taken by Pizarro, the Spaniards were astonished at the magnificent buildings which it contained, especially the Temple of the Sun. Of this temple there remain at present only some walls of singular construction, upon which stands the magnificent Dominican convent. The town is built at a height of above 11,000 feet above the sea, and at the foot of some hills in the middle of a wide valley, which has an undulating surface. This valley extends eastward to a mountain stream, the Quillabamba; in the lower part it is well cultivated, the fields having the advantage of irrigation. The houses of Cuzco are built of stone, covered with red tiles. Many of them still retain their original walls. The great size of the stones used in their construction, the variety of their shapes, and the excellent workmanship which they display, give to the city an interesting air of antiquity. The cathedral, the convents of St. Augustin and of La Merced, are very large buildings, inferior in architecture to few in the Old World. Upon a lofty hill, a little north of the city, are the ruins of a great fortress, many parts of the wall of which are in perfect preservation. They consist of stones of extraordinary size and of polygonal shape, placed one upon another without cement, but fitted with such nicety as not to admit the insertion of a knife between them. This stupendous work was erected by the Incas for the protection of their capital. A great part of the population is composed of Indians, who are distinguished by their industry; they manufacture cotton and woollen goods and leather. Their embroideries and carved furniture are much valued. The town has a university, two colleges, a mint, and several hospitals. The great high road of the Incas extended from this town northward as far as Quito, and southward probably to the southern extremity of the valley of the Desaguadero to the neighbourhood of Oruro, or from the equator to 20° S. lat. (Ulloa; *Memoirs of General Miller.*)

CYCLADES. [ARCHIPELAGO.]

CYDNIUS, RIVER. [ANATOLIA.]

CYPRUS, called by the Turks Kibris, an island in the Mediterranean, lying near the coasts of Syria and Asia Minor. The principal part of the island, in shape an irregular parallelogram, is about 110 miles long from east to west, between Cape della Grega (the ancient Pedalium) and St. Pifano, or Hagios Epiphanius (the ancient Cape Akamas). The breadth of this part of the island varies from 30 to 50 miles, its most southern point being Cape delle Gatte (the ancient Curias), and its most northern point Cape Kormachiti (the ancient Crommyon), which is 45 miles distant from Cape Anemur in Cilicia. The rest of the island forms a horn-like projection, extending for about 20 miles in length with a breadth of from 2 to 5 miles, terminating in Cape Andrea (the ancient Dinaretum), off which lie two small islets called Kleides, or 'the keys of Cyprus.' This part of the island, which is rugged, mountainous, and rocky, takes a north-eastern direction, and lies nearly in a line with Cape Khanzir, the most southern point of the Amanus Mountains on the coast of Syria. The distance from Cape Andrea to Cape Khanzir is about 75 miles; but the nearest part of the Syrian coast, in the neighbourhood of Latakich, is only about 60 miles distant from Cape Andrea. The island is about 230 miles north from the Damietta mouth of the Nile. A range of mountains runs through the island in the direction of its length, keeping closer to the north than to the south coast. These mountains, called Olympus by the ancients, now Stavro-Vuno and Santa-Croce, are according to some more than 7000 feet, to others more than 10,000 feet above the sea. On Mount Santa-Croce, 18 miles north of Larnaka, is a church said to have been founded by Helena, the mother of Constantine: another summit, 5 miles from Zerini, or Ghirneh, near the north coast, has a monastery and an old castle upon it, from which there is a splendid view. The northern slope of these mountains is bold and rugged: the southern side is still more so, presenting a deeply-serrated outline with thickly-wooded steeps, diversified by precipitous masses of limestone and deep picturesque valleys, in which grow the narcissus, the anemone, and the ranunculus. The most extensive plain, called Messarea, is in the south-east part of the island, and is watered by the river Pediceus, which is however nearly dry in summer, like all the other rivers of the island. Another level tract, watered by the Tretus, lay to the south of the former, near the ancient city of Citium.

Strabo (Casaub., 632, &c.) gives the following enumeration of the towns of Cyprus in his time. On the north coast, east of Cape Akamas, were Arsinoë, Soli, with a harbour founded by Phalerus and Acamas of Athens; Limenia, inland; then east of Cape Crommyon, Lapathus, built by the Lacedaemonians; next Agidus, Aphrodisium, and Carpassia; east of the last was a mountain and cape called Olympus, with a temple of Venus upon it, which women were forbidden to enter. Turning thence towards the south was Salamis, at the mouth of the Pediceus, one of the principal cities of the island, said to have been built by Teucer, an emigrant from the island of Salamis. Near

the mouth of the Pediceus was Ammochostos, the name of which remains in the corrupt form of Esmagosta. Proceeding southward was another Arsinoë, with a port; next came Leucolla, near Cape Pedalium, a lofty table-land, called the 'Table of Venus.' West of Pedalium was Citium, with a harbour that could be closed. Citium was a large town, and the birthplace of Zeno the Stoic. West of Citium was Amathus. Inland was Palæa, and another mountain called Olympus. Sailing round Cape Curias to the west was the tow of Curium, with a port, built by the Argivi. Here the coast turns to the north-west, looking towards Rhodes, and had the towns of Treta, Boosoura, and Old Paphos (Palæpaphos); then Cape Zephyrium; and next to it another Arsinoë, with a port, temple, and sacred grove; and New Paphos, built by Agapenor, 60 stadia by land from Old Paphos. [BAFFO.] The north-eastern part of the island was called the Akte of the Greeks, from the tradition that Teucer landed upon it with his colonists. [ACTIUM, vol. i. col. 59.]

Most of the above towns, and others which Strabo has left out, have long since disappeared. The present towns of Cyprus are the following:—*Lefkosia*, vulgarly called *Nikovia*, the capital of the island, and the residence of the Turkish governor, which is near the site of the ancient Letra, or Leucotra. Its population is not more than 16,000. The town stands in the centre of the island, in a plain surrounded by mountains. Lefkosia was the residence of the kings of Cyprus of the Lusignan dynasty, and was then much larger than at present: the Venetians destroyed part of it in order to strengthen the remainder. It is now three miles in circumference. The church of St. Sophia, a fine gothic building, is converted into a mosque: the monuments of the Lusignans in it are sadly mutilated. There are also a fine bazaar, a khan for travellers, several Greek churches and convents, a Roman Catholic church, and the palace of the governor, on the portal of which is still seen the Venetian lion in stone. The bastioned walls erected by the Venetians still stand. The streets are narrow and dirty, and many of the fine old mansions are crumbling to decay. Carpets, cotton priuts, and morocco leather are the chief industrial products; there is some trade in raw cotton and wine. The Greek archbishop of Lefkosia is metropolitan of the whole island. *Famagosta*, on the east coast, a few miles south of old Salamis, and not far from the site of the ancient Tamassus, once famous for its copper mines, is a town once strongly fortified by the Venetians, but now much depopulated and decayed. The Venetian palace and most of the churches are now in ruins, and the fortifications are now insignificant. *Larnaka*, or *Larnika*, near the site of old-Citium, near the south coast, and 24 miles S. from Lefkosia, is a thriving place, being the residence of the European consuls and factors, and the seat of the chief trade. The port of Larnaka is at Salines, about a mile and a half from it. A Greek bishop resides at Larnaka, and there are also some Catholic churches in the town. The houses are built chiefly of clay, and only one story high above the ground-floor, on account of the earthquakes to which the island is subject. The interior of the houses however is comfortable, the apartments are paved with white marble, and almost every house has a garden, of which the Cypriotes are very fond. The principal exports consist of cotton, wine, the best of which is produced near Limasol, salt, corn, opium, turpentine, silk, and fruit: population about 3000. *Limisso*, or *Limasol*, near the ancient Amathus, 42 miles S.W. from Larnaka, has a good harbour, but the town is a heap of ruins: in the country heresabouts the vine and other fruit-trees flourish; carob-trees are especially abundant. *Baffo*, or *New Paphos*, has been already noticed. [BAFFO.] On the north coast is *Zerini*, or *Ghirneh*, the ancient Cerinia, with a fort and a small harbour, from which there is some traffic with the opposite coast of Caramania. Besides these, there are a few Greek villages and several monasteries scattered about the island.

The soil of Cyprus is naturally fertile; formerly under the Venetians it maintained a population of nearly 1,000,000; but the number of inhabitants in 1850 was only 140,000, about 100,000 of whom are Greeks, and 30,000 Turks, and the remainder Catholics and Maronites. From neglect and oppression, the inhabitants are in a state of the greatest misery. Many districts of the island are uninhabited and of course uncultivated wastes or clothed with heath, thyme, and other aromatic plants. Cotton of the finest quality, excellent wine, and all kinds of fruit are produced; but agriculture is in a most backward state. The average annual yield of corn is about 112,000 quarters. Besides the productions just named, madder, opium, colocynth, oranges, lemons, pomegranates, hemp, tobacco, &c., are grown. The carob-tree (*Ceratonia Siliqua*) abounds in some districts; its succulent pods are exported to Egypt and Syria, while the pulp, which is called St. John's Bread, and resembles manna, is used as an article of food. Other products are olive-oil, pitch, wool, cheese, raisins, and silk. On the mountains are forests of fine timber. One of the most important plants of the island in respect to its economical uses is the *Ferula Græca* (the ancient *ῥαβδῆ*, and still called *Narthëka*): of the stalks the Cypriot forms a great part of his household furniture; and the pith is used instead of tinder for conveying fire from one place to another, as taught by Prometheus of old. (Æschylus, 'Prom.' 109-111.) Sheep and cattle thrive. In ancient times Cyprus was famous for its valuable copper mines as well as for gold, silver, and precious stones, including the diamond, emerald, jasper, opal, and agate. Copper, asbestos, talc,

rock-crystal, and various other minerals are now known to exist, but no mines are allowed to be worked. Salt is made on the sea-shore to the amount of about 10,000 tons annually. Game and fish are plentiful. The island is infested with snakes, tarantulas, and venomous spiders; and sometimes almost every green herb and leaf is devoured by clouds of locusts from the neighbouring continent. The climate is cold in winter, owing to the winds that blow from the mountains of Asia Minor and Syria. In the plains the heat of summer is excessive, but it is moderated by the sea breezes; rain is very rare in summer, and as irrigation is neglected of course there is then very little verdure. Some districts are unhealthy, from want of drainage, and the consequent malaria. The total value of the exports in 1841 was 56,595*l.*, and of the imports, 25,327*l.*

Cyprus appears to have been colonised by the Phœnicians at an early period, and the island, or a portion of it, seems to have been subject to them even down to the time of Solomon. Their chief town *Citium* is supposed to have been the most ancient city in Cyprus, and to be the *Chitium* mentioned in the Old Testament. Its ruins are seen between Larnaka and its port Salines. Phœnician inscriptions have been found in the foundations of a fort, which defended a large basin or harbour now nearly filled up. Lieutenant Leycester ('London Geographical Journal,' vol. xxii.) found in Cyprus inscriptions of the earliest times—Cuneiform and Phœnician. Ethiopians are also mentioned as forming part of the population, but it is difficult to say exactly who are designated under this name. Greek colonies afterwards settled on the coast. According to Strabo it was divided among several petty tyrants, who were at times at war with and sometimes allied to the neighbouring powers of Asia Minor and Greece. Amasis, king of Egypt, invaded Cyprus and took *Citium* ('Herod.,' ii. 162), and it was probably he who introduced the Ethiopian or African settlers. The island became subject to the Persians ('Herod.,' v. 108), and afterwards submitted to Alexander the Great, upon whose death it fell with Egypt to the share of Ptolemy the son of Lagos. It continued under the Ptolemies, sometimes united with Egypt, and sometimes under a separate prince of the same dynasty. The last of these princes, brother to Ptolemy Auletes, king of Egypt, incurred the enmity of P. Clodius Pulcher, who being taken prisoner by the Cilician pirates, sent to the king of Cyprus for money to pay his ransom. The king sent a sum which was too little. Clodius having recovered his liberty by other means, when he became tribune of the people obtained a decree to be passed for reducing Cyprus to a Roman province. (Strabo, 684; and Dion, xxxviii. 30.) M. Cato was sent to take possession of it. The king on hearing of this design put himself to death before Cato's arrival. Cato seized upon the treasury, which was well filled, and sent a large booty to Rome. Cyprus thus became a Roman province. On the division of the empire it fell to the lot of the Byzantine emperors, and after several vicissitudes became a separate principality under a branch of the Comneni. Richard of England took it in 1191, and sold it to the Templars, whose oppression drove the people to revolt. Richard resumed the sovereignty, and gave it to Guy of Lusignan, the expelled king of Jerusalem, in 1192. The Lusignans retained it for nearly three centuries, which was a flourishing period for Cyprus. John III. of Lusignan died in 1458, leaving the kingdom to Charlotte, his only legitimate child, who married her cousin Louis, count of Geneva, second son of the Duke of Savoy and of Anna of Cyprus. She was solemnly crowned at Lefkosia in 1460, but was soon after expelled by her natural brother James, assisted by the Mamelukes of Egypt. James married Catharine Cornaro, the daughter of a Venetian merchant, who brought him a dowry of 100,000 gold ducats. On this occasion the Venetian senate adopted Catharine Cornaro as daughter of St. Mark, and the marriage was celebrated in 1471. In 1473 James died, and his wife soon after was delivered of a son, of whom the republic of Venice assumed the guardianship, and Venetian troops were sent to garrison the towns of the island. The child dying while an infant, the senate persuaded Catharine, in 1489, to abdicate the sovereignty in favour of the republic, and to retire to Asolo near Treviso, where she lived the rest of her days in a princely style on a liberal pension. Meantime Charlotte Lusignan had retired to Rome, where she died in 1487, bequeathing her claims to Charles, duke of Savoy, in consequence of which the sovereigns of that dynasty assume to this day the title of kings of Cyprus and Jerusalem. The Venetians kept possession of Cyprus till 1570, when Selim II. sent a powerful force to invade the island. The Turks took Lefkosia by storm, and massacred about 20,000 people. They then laid siege to Famagosta, which was long and gallantly defended by the provveditor-general, Marcantonio Bragadino. At last, in August 1571, the Venetians were obliged to capitulate, on condition of being sent safely home. The pasha Mustapha signed the capitulation, but when Bragadino with the other Venetian officers repaired to his tent to deliver the keys, he had them all seized and put to death, except Bragadino, whom after some days he caused to be led naked to the square of Famagosta, where in the pasha's presence the executioner began to flay him alive. Bragadino expired in the midst of the torments, which he endured to the last with the greatest constancy. His skin was filled with straw and hung-up to the yard-arm of the admiral's vessel, in which Mustapha returned to Constantinople. Venice raised a monument to the memory of Bragadino in the

church of San Giovanni e Paolo, and his relatives after a time ransomed his skin, which was placed in the monument. From that time the Turks have remained in possession of Cyprus. Cyprus now forms a pashalic in the Eyalet of the Djizairs, or islands which are governed by the Capitan Pasha.

(Mariti, *Travels*; Paruta, *Histoire Venetiane*; Botta, *Storia d'Italia*; Macgregor, *Commercial Statistics*; Dictionary of Greek and Roman Geography.)

CYR, ST., a village near Versailles, in France, celebrated for its royal abbey, an institution founded by Louis XIV., at the desire of Madame de Maintenon, for the education of young ladies of noble birth. Previous to the foundation of this establishment, St. Cyr was composed only of some peasants' cottages, with the château of the lord of the village. The institution was for 250 young ladies who could show a noble descent of four generations on the father's side: they were received between the ages of seven and twelve years, and maintained, instructed, and furnished with everything till they reached the age of twenty. The girls were instructed by about forty nuns. On quitting the establishment they received a dowry of a thousand crowns. The buildings of the abbey were designed by Jules Hardouin Mansard, the architect of Louis XIV., and consisted of twelve principal piles of building, forming five courts, with extensive gardens attached. The buildings were commenced in 1685 and completed in a year; 2500 workmen were engaged in the work. Louis XIV. was in the habit of visiting Madame de Maintenon in a pavilion in the garden; and in the buildings of the institution the young ladies used to perform the 'Æther' of Racine, whose 'Athalie' was also written for them, though only performed by them twice, and that without dresses, and not in their theatre. Madame de Maintenon passed the close of her life at St. Cyr, and dying there in 1719, was buried in the choir of the church, where a long epitaph, in French and Latin, was inscribed to her praise.

This establishment was suppressed at the Revolution, and the buildings were at first devoted to the purpose of a military hospital, subsidiary to the Hôtel Royal of Paris. In 1814 Napoleon transferred hither the military school of Fontainebleau, and the restored Bourbons sanctioned the change. The pupils, who are admitted after passing an examination, amount to 350. They enter between the ages of sixteen and twenty, and about 140 leave the institution every year, who are appointed to regiments as vacancies occur.

CYRENAÏCA, a region of North Africa, comprehending the country between the Great Syrtis and the Gulf of Platea, now Bomba. The western limits between Cyrenaica and the Carthaginian dominions were fixed at the Philænum Aræ at the bottom of the Great Syrtis, and its eastern limits towards Egypt seem to have been about the Catabathmus Major. Cyrene, Teuchira, and Hesperis were the earliest Greek colonies. Barca was a colony of Cyrene, mixed with Libyan aborigines. Afterwards, under the Ptolemies, Teuchira took the name of Arsinoë, Hesperis was called Berenice, and the port of Barca became the city of Ptolemais, and drew to it most of the inhabitants of Barca itself. The port of Cyrene, called Apollonia, became also an important town. From these five cities, Cyrene, Apollonia, Ptolemais, Arsinoë, and Berenice, the country was sometimes called Pentapolis. The interior was peopled by Libyan tribes. There were also other towns mentioned as having existed in this country in the Roman period, such as Darnis, Hadriana, Neapolis, Thintis, &c.; but their site is not well ascertained, except Darnis, which is believed to have been where Derna is now. [BARCA.]

As the traveller approaches Bengazi from the south, leaving behind the sandy tracts of the Syrtis, which continue to spread inland in an eastern direction, he enters a new region of hills and plains fit for cultivation, and covered with vegetation. The coast stretches to the north-east, forming a curvilinear projection which advances into the Mediterranean, between the Great Syrtis to the west and the Gulf of Bomba to the east. The chord of this curve from Bengazi to Bomba is about 150 miles, but the sweep of the coast is above 200 miles. A ridge of mountains from 800 to 1100 feet high begins to the south-east of Bengazi, and extends to the north-east in a diagonal direction to the shore, being distant from Bengazi about fourteen miles, from Teuchira five miles, from Ptolometa about two miles, and then comes close to the sea at Ras Sem, continuing along the coast to Apollonia, and as far as Derna. Farther inland is another range, nearly 2000 feet above the sea, which forms the plateau on which Cyrene stood, and which declines gradually towards the east, and blends with the lower one near Cape Bujehara. It then joins the mountains of Akabah el Kebir, the Catabathmus Major (Greater Acclivity) of the ancients, which run through Marmarica in a south-east direction to the Oasis of Siwah. To the south and south-west the mountains of Cyrene slope gradually to the level of the Libyan Desert and of the sandy tract which borders the Great Syrtis. According to Pacho, the greatest breadth of the hilly region from north to south is between seventy and eighty miles. Towards the north both the higher and lower ridges are frequently broken by deep wads, or chasms, through which the winter torrents rush to the sea. In these chasms or valleys grow a vast number of pine-trees, generally small, though some are large enough for top-masts of a man-of-war. The largest of these chasms is near Cape Ras Sem, with a perennial stream running through it, which is supplied from the fountain of Cyrene. Clusters of date-

trees are seen near Bengazi and Derna. The road from Bengazi to Tocra or Teuchira and Ptolemeta lies through a very fertile and beautiful country, though a comparatively small part of it is cultivated. It is a plain, thickly covered with wood and flowering shrubs, stretching from the sea to the foot of the mountains, and narrowing every mile as we proceed towards Ptolemeta, where the high land comes very close to the sea. The whole length of the plain from Bengazi to Ptolemeta is 65 miles. The sides of the mountains also are thickly clothed with wood, chiefly pine of various kinds, and numerous shrubs, among which the juniper abounds. Ravines whose sides are covered with wood and verdure cross the road very frequently in their course from the mountains to the sea, most of which must be impassable in the rainy seasons, as there is nothing like a bridge over any of them. Open spaces, some of considerable extent, also occur occasionally in the woods; they were probably once cultivated, but are now thickly covered with grasses of various kinds, among which oats grow spontaneously, as well as a species of wild artichoke, which is eaten raw by the Arabs. Several towers of very solid construction are scattered along this road.

Of the five towns of the Pentapolis, Bengazi is generally believed to occupy the site of the ancient Hesperis, afterwards called Berenice, of which there are hardly any remains above ground. [BENGAZI.] In the neighbourhood of Bengazi there are some curious chasms or pits sunk in the rock 60 or 70 feet below the plain, with excellent soil at the bottom covered with trees and rich vegetation, and which seem to answer the description which Scylax gives of the gardens of the Hesperides. The next town on the coast is *Tocra*, the ancient *Teuchira*, afterwards called *Arsinoë*, which although totally deserted is still completely inclosed, except on the sea or north side, by walls of uncommon solidity and thickness, strengthened at intervals by quadrangular towers, twenty-six in number, and is entered by two strong-built gateways placed opposite to each other on the east and west sides of the walls. The circuit of Teuchira is about a mile and a half. It is situated on a plain about four miles from the foot of the mountains. The interior of Teuchira has been utterly destroyed, and the few remains, among which are those of a handsome Christian church, are not distinct enough to give an idea of the former buildings. The line of some of the streets however is distinctly traced. We know very little about the history of Teuchira or of the epoch of its final destruction. The walls were repaired by Justinian, in doing which blocks of stone and marble have been introduced, many of them bearing Greek inscriptions, which evidently formed part of much older buildings. A number of quarries with excavated tombs are seen outside of the city walls. There is no appearance of a port at Teuchira, and the position of the coast is such as not to afford shelter to vessels. *Ptolemeta*, or *Tolmeta*, the ancient *Ptolemæis*, is also ruined: several of the buildings however are partly standing, such as a lofty gateway, an amphitheatre, two theatres, a palace or large building, the inner court of which retains its tessellated pavement; several columns are still erect, and a number of others are thrown down in heaps. Though the walls of Ptolemeta have been thrown down their line can be traced in many places, but nowhere do they rise more than a foot above the ground. Ptolemæis was originally the port of Barca, which latter is mentioned as one of the five cities of the Pentapolis, though it was inhabited by a mixed Greek and Libyan race. Ptolemæis and Barca have been confounded by some geographers, but Ptolemæus distinguishes them, and Scylax says that Barca was 100 stadia from the sea. Under the Ptolemies of Egypt the port of Barca assumed the name of Ptolemæis; and in the vicissitudes of the country the Greek population of Barca withdrew to Ptolemæis, which flourished through its maritime trade. Pomponius Mela mentions Ptolemæis, and not Barca, among the cities of Pentapolis. [BARCA.] Ptolemeta lies in a delightful position at the foot of the hills, and on a slope stretching to the sea between two romantic wads, wadys, or ravines. Its extent as far as can be traced was about one square mile; but the whole space is now overgrown with wild vegetation, with patches of corn here and there among the ruins. The Arabs sow the corn and leave it to the winter rains, and they return at harvest time to cut and carry it off. There are several large cisterns in good preservation, which were restored by Justinian, and now afford a supply of good water.

The road from Ptolemeta to Cyrene leads up a romantic valley, the sides of which are thickly clothed with pines, olive-trees, and various kinds of laurel, interspersed with clusters of luxuriant honeysuckles, myrtle, arbutus, juniper, and a variety of wild roses, and then opens into the plain of Merdje, a large and fertile tract about five miles in breadth, on the summit of the first range of mountains, with pools and small lakes formed by the waters from the upper ridge. The Arabs encamp here, and partly sow the ground with corn and use the rest as pastures. From the plain of Merdje the path follows the track of the ancient road in a north-east direction, leading through a succession of hills and fine valleys to *Ghrennah*, the Arab name for *Cyrene*. On approaching Ghrennah the country becomes more clear of wood, the valleys produce fine crops of barley, and the hills afford excellent pasture for cattle. A plant three feet high, perhaps the silphium of the ancients, and resembling in shape the hemlock, grows here in great abundance. The position of Cyrene is one of the finest that can be imagined, being on the edge of the upper range of hills,

about 800 feet above the lower range. Below the town the hill slopes down towards the north, forming several natural terraces one below the other, and terminating with a fine sweep of table-land, which forms the summit of the lower range, and which is covered with wood, with scattered tracts of corn and verdant pastures. Ravines whose sides are overgrown with trees intersect the country in various directions, and form the channels of mountain streams. This table-land extends east and west as far as the eye can reach, and to the north after stretching about five miles it descends abruptly to the sea. The slope of the lower ridge, which runs along the coast of Cyrenaica, is here thickly covered with wood. Its height is about 1000 feet, so that Cyrene is about 1800 feet above the sea, of which it commands an extensive view. The ledges or terraces of the upper ridge afforded room for roads or drives sweeping along the sides of the mountain, and the tracks of the chariot wheels are still impressed upon the rock. The remains of Cyrene occupy a vast extent of ground, but they have been sadly disfigured by the hand of man. Innumerable tombs either built of stone or excavated in the rock encircle the town, and are ranged on each side of the avenues leading to it. In some of these excavations paintings have been found in good preservation, representing funeral games, hunting parties, several sketches of private life, and allegorical subjects. The costumes are beautifully rendered, and the colours very brilliant. Within the precincts of the ancient town are the remains of a bath built of brick, of which some parts of the vaulted work are still left, some towers or forts, a very large hypogeum picturesquely situated on the extremity of the only grove that is found on the plateau, several large temples of the Doric order, two small excavated temples of the Roman period with Christian emblems, two theatres, an amphitheatre, and an aqueduct, but all sadly damaged; in fact the whole of the existing remains are at present little more than one mass of ruins, and the tombs afford the most perfect examples of Grecian art now remaining in Cyrene. A quantity of prostrate columns, statues, capitals, rilievi, and inscriptions are scattered about the ground, but the statues are mutilated, and many of them want their heads, which the Arabs have cut off. There are two copious springs, from one of which, supposed to be the Fountain of Apollo, the water flows into a subterraneous channel, and then issues out on the other side of the mountain.

The country around Cyrene must have been in the time of its splendour a complete garden, and it is easy to conceive how the people of such a country became so much addicted to luxury and pleasure as they are reported to have been. Even now in its wild state "the rich ochrish red soil, watered by rivulets gushing on every side, brings forth a rich vegetation which pierces the mossy rocks, clothes the hills, extends in rich pastures, or develops itself in forests of dark juniper, green thaya, and pale olive-trees. The modern name of the Cyrenaica, 'Jebel Akhdar,' that is, the Green Mountain, expressly indicates its rich and smiling aspect." (Pacho.)

Cyrene was governed by kings, from its foundation by Battus, who died about B.C. 591, to about B.C. 450, when the government appears to have changed to a republic. (Aristoteles, 'Politic,' vi. 4.) The subsequent history of Cyrene seems to have been a series of changes and internal troubles till after the time of Alexander, when it became subject to Egypt in the reign of the first Ptolemæus, and so it continued till Ptolemæus Physcon, whose natural son Apion being in possession of the chief power, gave it into the hands of the Romans about B.C. 97. Strabo says (837, c) that in his time the kingdom of Cyrene, with Crete, formed a Roman province. Cyrene appears to have gradually declined under the Romans as the maritime towns of the Pentapolis rose in importance. It afterwards suffered greatly, and was in a great measure ruined during the insurrections of the Jews under the reigns of Trajan and Hadrian; the province was depopulated when Hadrian colonised it afresh, at which time it is probable that many of the buildings of Cyrene were restored, for there is a variety of Greek and Roman style observable in them as well as in the sculptures. The Jews were at one time very numerous in Cyrenaica; they had settled in it in the time of the Ptolemies, and chiefly resided at Berenice, where they formed a distinct community governed by two archons.



Coin of Cyrene.

British Museum. Actual Size. Gold. Weight, 68 grains.

In the 4th century Synesius, bishop of Ptolemæis, one of the most eloquent of the early fathers, deplored the ruin and depopulation of Cyrene, hastened by the oppressions of the Byzantine governors. It was in his time that Cyrene was destroyed by an invasion of some barbarous hordes of the interior of Libya, whose women were armed as well as the men, who destroyed all before them, and only spared the male children to recruit their ranks. (Synesii, 'Opera,' p. 300.) Those of the inhabitants of Cyrene who escaped took refuge at

Ptolemais. The barbarians besieged Ptolemais, in which Synesius had remained faithful to his flock, and they were repulsed. In the early part of the 7th century the Persians under Khoaroo Purveez, after overrunning Egypt, invaded the Pentapolis and depopulated the country. The Saracens afterwards completed the work of the Persians, and the towns of the Pentapolis have remained in ruins ever since. Now the nomad Arabs wander about the whole region, which is nominally subject to the beys of Bengazi and of Derna, who are dependents of the pasha of Tripoli. *Apollonia*, afterwards *Sozysa*, and now called *Marsa Sousa*, was the port of Cyrene, from which it is about 12 miles distant. The ancient road leading to it still remains. *Apollonia* lies at the bottom of an open bay, protected however by two small islands in front of the town. The town is ruined, but the greater part of the wall is standing, and there are remains of two Christian churches (the columns of which are of fine marble), of a basilica, a fort, &c. The Oasis of Aujilah, to the south of the desert of Barca, was reckoned part of Cyrenaica.

(Pacho, *Voyage dans la Marmarique et la Cyrénaïque*; Della Cella, *Viaggio da Tripoli alle Frontiere di Egitto*; Beechey, *Expedition to the North Coast of Africa*.)

CYRUS. [ARAS; KUR; BENDAMIR.]

CYTHERA. [IONIAN ISLANDS.]

CYZICUS (also called *Cyzicum*), an ancient town of Asia Minor, built on an island in the Propontis near the coast of Mysia, which was joined to the mainland by two bridges. An isthmus gradually formed itself, and the island became a peninsula. It is said to have been a Milesian colony, formed in the 8th century a.c. Strabo (Casaub., 675) speaks of Cyzicus as worthy of being numbered among the first cities of Asia for its size, beauty, and splendour, and for the goodness of its laws. It became early allied to Rome, and remained faithful in its alliance. It withstood all the power of Mithridates who besieged it, and the brave resistance of the citizens gave time to L. Lucullus to come up with his army and drive him back into Pontus. The Romans, grateful for the fidelity of Cyzicus, not only respected its liberties, but gave it an increase of territory, which extended, according to Strabo, to the east, as far as the lake Dascylitis, and to



Coin of Cyzicus.

British Museum. Actual size. Bronze. Weight, 229 grains.

the west, beyond the *Æsepus* into *Troas* as far as *Adrasteia*. To the south it reached *Miletopolis*. The town of Cyzicus was built partly on the sea-coast and partly on a hill; its site is now covered with cherry orchards and vineyards; there are some remains, and among others a theatre, an amphitheatre, and some massive substructions. On the same island, or peninsula, west of Cyzicus, was another Greek colony called *Artaco*, the site of which is now occupied by the miserable town of *Erdek*. The island, or peninsula, was also called *Cyzicus*. (Pococke; Sestini; Leake, *Asia Minor*; Hamilton, *Researches*.)

CZEGLED, a large market-town in the county of *Pesth* in Hungary, and circle of *Ketskemét*, stands near the point 47° 10' N. lat., 19° 48' E. long. A station on the *Vienna, Pesth, and Szolnok* railway, is called after the town, and is 47 miles S.E. from *Pesth*; but *Czegled* lies a little way south of the station so called. It has a Roman Catholic and a Calvinist church, several handsome buildings, and contains about 13,000 inhabitants, or 16,500 including the commune. The country around it is well cultivated, and produces much grain and a great quantity of common red wine. The breweries are considerable. The town is about 20 miles N. from *Ketskemét*, or *Keeskemét*.

CZERNAGORD. [MONTENEGRO.]

CZERNIGOF (pronounced *Tschernigof*), formerly part of the *Ukraine*, now a government or province of *Little Russia*, lying between 50° 20' and 53° 20' N. lat., 30° 10' and 34° 40' E. long., is bounded N. by *Mohilev* and *Smolensk*, E. by *Orel* and *Kursk*, S. by *Poltava*, and W. by *Kiev* and *Minsk*. The government contains an area of 21,157 square miles, and had an estimated population in 1846 of 1,430,000.

The general character of the surface is a level, occasionally interrupted by hills, and rising into high land as it approaches the elevated banks of the *Dnieper*, its south-western boundary. With the exception of some sandy tracts, the subsoil is clay, which is well covered with rich loam, and presents a succession of luxuriant arable and pasture lands. On the banks of the *Dnieper* the chalk, slate, and clay alternate, but slate predominates. Most of the streams which

water *Czernigof* empty themselves into the *Dnieper*. The *Ipout* drains the north-western district, and enters the *Soj*, a feeder of the *Dnieper*, in the government of *Mohilev*, at *Nov-Bielitza*. But the principal river of the interior of *Czernigof* is the *Desna*, a navigable stream, which entering the province in the north-east from *Orel*, traverses it nearly in its whole length in a south-westerly direction, and enters the *Dnieper* a few miles above the city of *Kiev*. The waters of the *Desna* are increased by those of the *Snof*, *Ostre*, *Seim*, and *Sudost*. *Czernigof* abounds in small streams, and in natural sheets of water, none however large enough to be called lakes.

The climate is dry, mild, and salubrious; but the crops sometimes suffer from locusts. Agriculture and grazing constitute the principal pursuit of the inhabitants; corn of all kinds, particularly rye, barley, and oats, are grown, and the yearly produce is estimated at three millions of quarters, of which upwards of two millions are consumed in the country itself. Hemp in large quantities, flax, tobacco, peas and beans, linseed, and hops are also raised. Melons and the commoner sorts of fruit are plentiful, but the grape does not ripen sufficiently for wine. There is here a peculiarly fine species of the cherry, called *Tsherasun*, from which brandy and sugar are obtained. The woods and forests yield an abundance of excellent timber, charcoal, potash, and tar. Horses and cattle are reared in great numbers; the horse is of the small, active, and hardy breed of the *Ukraine* and well adapted for the use of light cavalry, and some fine studs are kept by the nobility. The ox is of a fine breed, and is here used for the plough exclusively. Large herds of sheep and swine are kept. Bees are very numerous, and much honey and wax are gathered. Of minerals *Czernigof* possesses iron, alum, saltpetre, porcelain earth, potter's-clay, chalk, and slate.

There are scarcely any serfs in this government. The Greek is the predominant form of faith, and ecclesiastical affairs are directed by the archbishop of *Czernigof* and *Neshin*.

The inhabitants generally make their own clothing and utensils. Manufacturing industry increases slowly in the province; the principal products of this kind are linen, broadcloths, leather, glass, and beetroot sugar. The fondness of the people for ardent spirits has occasioned the establishment of a great number of distilleries here as in other parts of *Russia*. There is some internal trade, which mostly centres at *Neshin*, where four large fairs are held in the course of the year. The exports, consisting principally of horses, cattle, swine, tallow, wool, skins, bristles, grain and meal, honey and wax, potash, hemp and hempeed, and brandy, are considerable.

Czernigof is one of the privileged governments, the ancient prerogatives of the nobility having been confirmed to them in 1802, and the *Cossak* inhabitants enjoying the privilege of distilling brandy in any spot they please, without its being deemed an infringement on the crown monopoly. The province is placed under a civil governor, who is a councillor of state, and resides at *Czernigof* the capital.

The government is divided into 12 circles. The capital, *Czernigof*, is noticed in the next article. Among the other towns we notice the following:—*Neshin*, *Nejin*, or *Nieshin*, stands on the *Oster*, and has 15 churches and 16,000 inhabitants, who carry on a large trade in soap, leather, preserves, and liqueurs. The town is surrounded by walls, and has a cathedral, several convents, an hospital, and a college. *Gluckof*, on a feeder of the *Seim* near the eastern boundary, is surrounded by an earthen wall, and has 12 churches and about 9000 inhabitants. *Novgorod-Seversk*, on the *Desna*, has 8000 inhabitants, and an active trade in corn, hemp, and lime. *Starodub*, on the *Babinza*, has about 4500 inhabitants. *Mglin*, on the *Sudenka*, a feeder of the *Ipout*, has 4 churches and about 5000 inhabitants. *Baturin* is noticed in a separate article. [BATURIN.] *Oster*, at the junction of the *Oster* and the *Desna*, 40 miles S. from *Czernigof*, has a population of 4000.

CZERNIGOF, the capital of the government of *Czernigof* in *Russia*, is situated on the elevated banks of the *Desna*, in 51° 27' N. lat., 31° 15' E. long., about 80 miles N.N.E. from *Kiev*, and has about 10,000 inhabitants, many of whom are Jews. It is surrounded by a rampart of earth, which is converted into walks. It was built in the year 1024, and is accounted the oldest town in *European Russia*. In its centre stands a high hill with a castle on its summit; it has several churches, among which is the cathedral, a well-built edifice, in which the remains of *St. Theodosius* are deposited. There are also four monasteries, a gymnasium, an ecclesiastical seminary, with a printing establishment attached to it, an Imperial Orphan asylum, a riding-school, a mechanics school for 400 pupils, and several establishments for the indigent. The inhabitants are chiefly employed in retail trade and mechanical pursuits, and manufacture small quantities of woollens, linens, leather, and soap. Four markets are held here in the course of the year. *Czernigof* is the residence of the archbishop of the diocese and of the governor of the province.

CZERNOWICZ. [BUKOWINA.]

CZIRKNITZ (*Zirknitz*), a market-town in the Austrian crownland of *Carinthia*, lies on the *Brohitzza*, and contains about 1500 inhabitants, who are occupied in fishery and in salt and tile-making. Near it is the *Laka* of *Czirknitz*, inclosed within limestone mountains of very grotesque outlines. The lake in dry seasons is from 12 to 15 miles in circumference, and when quite full about 24 miles; its entire area is then about 63 square miles. Its form however is made very

irregular by numerous bays, capes, and islands. At the foot of the Javornik, which rises on its southern bank, the peninsula of Dervoseck stretches far into the lake; on the west is the island of Vorneck, on which is the village of Ottock. While passing over the more shallow parts the rocky bottom of the lake presents a very dark appearance, occasioned by numerous funnel-shaped cavities of various dimensions, and all distinguished by significant names. Its general depth compared with other lakes is inconsiderable: the cavity of Rescheto, the deepest part of the whole lake, is only 56 feet deep below the mean surface of the lake. The lake is remarkable for great variation in the height of its water, which is owing to the nature of the limestone rocks. The bottom of the lake, especially of the funnels, is full of clefts and fissures, through which the water passes at forty different openings into subterranean caverns and channels, and re-appears under the

form of the Bistriza and Baronniza in the valley of Laibach. During the dry season, which generally occurs in autumn, the bottom of the lake is covered with luxuriant herbage, which is made into hay. Only a very small portion of the lake however is susceptible of cultivation; millet and buck-wheat are sown, which ripen in six weeks; but as the waters of the lake frequently do not subside for three or even more years, the sowing and harvest are of course very irregular. In January 1834 the waters left the lake and did not return till March 1835. During the interval grain and vegetables were sown and gathered, and cattle grazed on the bottom of the lake—an occurrence which, for the long cessation of the waters, is said to be unprecedented. The lake abounds in pike and other fish; it is also frequented by numerous aquatic fowl.

CZORTKOV. [GALICIA.]

D

DACCA JELALPORE (*Dhaka*), one of the districts into which the province of Bengal is divided, lies between 23° and 25° N. lat., and between 90° and 91° E. long., and is bounded N. by the district of Mymensingh, E. by Tipperah, S. by Tipperah and Backergunge, and W. by Rajshahy and Jessore. The limits of this district were much more extensive before the year 1800 than they are at present, reaching as far south as the sea, and as far north as the Garrow Mountains. It then contained an area of more than 15,000 square miles, but it is now reduced to somewhat less than 6000 square miles. The surface of this district is uniformly low and level, and being intersected by the Ganges and Brahmaputra, a great part of the soil is periodically covered with water by the overflowing of those rivers during the rainy season. At these times the villages which are built on artificial embankments have the appearance of small islands. The deposits left by these inundations fertilise the soil. The lands are only partially cultivated: towards the north and west are very extensive tracts of jungle; in these are great numbers of wild elephants which cause much loss to the neighbouring farmers, and prevent the extension of cultivation. Towards the south and the east nearly seven-eighths of the land are under cultivation, producing rice, betel-nut, hemp, cotton, and sugar. The abundance of the rice harvests has caused the district to be called the Granary of Bengal.

Dacca is principally known in Europe for its manufactures of cotton goods. The striped and figured muslins of Dacca were long celebrated throughout the world for the beauty and delicacy of their fabric. The productions of Paisley and Manchester have however almost entirely displaced the Dacca muslins.

The ruins of ancient mosques and Hindoo temples are spread all over the country; and in many places are seen the remains of fortresses constructed to oppose the invasion of the Mughls. The settled estates are mostly parcelled out into small talooks, or zamindaries, and these are divided and subdivided into very insignificant farms. The principal towns are DACCA, Rajnaghur, Narraingunge, Furreedpore, and Soonergoug. *Rajnaghur* stands on the left side of the Puddah, the grand outlet of the Ganges, in 23° 20' N. lat., 90° 25' E. long., 23 miles S. by W. from Dacca; *Narraingunge* stands on the right side of a branch of the Brahmaputra, about 8 miles S.E. from Dacca, in 23° 37' N. lat., 90° 35' E. long. This town contains more than 15,000 inhabitants, and is one of the greatest inland places of trade in Bengal. Salt, tobacco, indigo, and grain are the principal articles of this trade. Numerous indigo factories are established on the banks of the river where the soil is favourable for the growth of the indigo plant. On the opposite bank of the river is a Mohammedan mosque, to which great numbers of devotees resort from the neighbouring towns to see what is described as the footmark of the prophet of Mecca. Similar footmarks are shown in several other places in India, and impart a peculiar sanctity to the buildings in which they are placed. *Furreedpore* is situated on the right side of the Puddah, or Great Ganges, 5 miles from its banks, and 40 miles from Dacca: it is the residence of the principal civil and judicial officers for the district. *Soonergoug* stands on one of the branches of the Brahmaputra, in 23° 39' N. lat., 90° 43' E. long., about 13 miles S.E. from Dacca. This is said to have been in ancient times a large city, and the seat of government before the building of the town of Dacca; it is now little more than a village; it was long celebrated for its manufacture of beautiful cloths, some of which are still made in the village.

DACCA, the capital of the district just described, is situated on a branch of the Ganges, called the Booree Gunga (Old Ganges), about 100 miles above the mouth of the river, in 23° 43' N. lat., 90° 28' E. long. Dacca is comparatively a modern town. In 1608 the seat of government was removed to it by Islam Khan, then governor of Bengal; in compliment to the emperor, the name of the place was then changed from Dacca to Jehangire Nuggur. In the reign of Aurengzebe the town of Dacca exhibited a considerable degree of splendour. Its former limits contain the ruins of many magnificent mosques, and palaces, bridges, and other buildings, but their sites

are now for the most part overrun with jungle. The streets are narrow and crooked, and the houses are for the most part mean. The native population in 1801 was estimated at about 200,000, rather more than one-half of whom were Mohammedans and the rest Hindoos. Several Portuguese, Greek, and Armenian merchants are settled in the place. The city contains about 120 Hindoo places of worship, and about 180 Mohammedan; the Roman Catholics, Armenian and Greek Christians, and Protestants, have also places of worship in Dacca. There are a government college, several mission schools of the Baptist Missionary Society, and schools for children of Hindoos and Mohammedans. The government offices, the jail, the native hospital, the lunatic asylum, and the military orphan asylum, are among the public buildings. There are twelve bazaars. The manufacture of gold ornaments, musical instruments, necklaces, and idols forms extensive sources of employment. The country around Dacca is low and level, and in the wet season is flooded. Rice is largely cultivated.

DA'CIA, the ancient name of a country north of the Danube, bounded E. by the Euxine, or Black Sea, W. by the Tibiscus, now the Theiss. The ancient Dacia comprehended Transylvania, the Banat of Temeswar, Hungary, east of the Theiss, the Bukowina, Wallachia, Moldavia, and Bessarabia. When Dacia was made a Roman province it extended from the Theiss to the Hierasus (the Peretos of Herodotus and the modern Pruth), the Carpathians, and the Danube; Bessarabia therefore was not included in the province. The Daci were anciently called Davi, according to Strabo (p. 304, c), and hence, he adds, the name Davus was commonly applied to a slave in Attica, many of the Athenian slaves being imported from the countries about the Danube. This appears from the plays of Terence, which were founded on a Greek model. The country was inhabited by the Daci and the Getæ: the Daci occupied the part towards Germany and the source of the Danube; the Getæ occupied the part towards the east and the Euxine. (Strabo, p. 304, c). Both the Getæ and Daci spoke the same language. (Strabo, p. 305, a). The Getæ were better known to the Greeks in consequence of their frequent migrations to the banks of the Danube. The Latin name Daci included the Getæ. The principal river of Dacia is the Tibiscus, which, with its tributary the Marisus (Maros), falls into the Danube. There are several small rivers besides—the Aluta (the Alt), the Aravus, and others, which also fall into the Danube. Alexander the Great found the Getæ on the north bank of the Danube, where he defeated them and took their town, B.C. 335. In B.C. 292, Lysimachus having penetrated into the heart of their country, was surrounded, and obliged to surrender with his whole army in the plains of Bessarabia. Gold coins with the name of Lysimachus have been found in great numbers at Varhely, a village of Transylvania, which occupies the site of Sarmizegethusa, the Dacian capital, whither they were carried by the conquerors among the plunder, or as part of the ransom of Lysimachus and the other prisoners. In B.C. 10, the Romans made an expedition up the Maros against Cotiso, king of the Daci, but without results. Ovid, who was exiled among the Getæ, has described the people and the climate. Domitian celebrated his pretended exploits against the Dacians by assuming the title Dacicus. (Juvenal, 'Sat.' vi. 204). The first expedition of the emperor Trajan against the Daci was in A.D. 101. The Daci were led by their king Decebalus, and the war, which lasted nearly five years, ended in their submission (Dion Cassius, lxxviii.) to the Romans. Their chief town Sarmizegethusa, afterwards called Ulpia Trajana, in memory of the victory which was gained, was situated near the Iron Gate Pass into Transylvania, near the head of the valley of the Temes. The Column of Trajan in Rome records the leading events of these expeditions. To consolidate his conquest Trajan erected the famous bridge across the Danube below the Iron Gate (some remains of it are still seen below the village of Seala Gladova), and constructed three great roads from the Danube—one from the mouth of the Karasch at Uj Palanka to Tiviscum (Temeswar); a second from Orsova up the valleys of the Czerna and the Temes through the Iron Gate Pass, and along the Maros to the border of Moldavia; and the third

from the famous bridge eastward to the Aluta, along that river and through the Rothenburg Pass in the southern Carpathians, down to Karlsburg on the Maros, where it joined the second road. The Romans abandoned Dacia to the Goths in the time of Aurelian. The Goths in their turn gave way to the Huns about A.D. 376. After the death of Attila, Dacia was seized by the Gepidæ Goths, whose kingdom was destroyed by the Longobards and Avars A.D. 566. The next invaders were Scythians or Slaves, who, governed by their 'Chagans,' or Khans, held sway over the country till the time of Charlemagne. Finally, the Magyars overran Dacia, and settled in it during the 9th century. The sculptures on Trajan's column establish the identity of the Dacians with the modern Wallachs in stature, feature, and dress.

(Paget, *Hungary and Transylvania; Dictionary of Ancient Geography.*)

DAGENHAM. [ESSEX.]

DAGHESTAN, a country situated on the western shores of the Caspian Sea, between 41° and 43° N. lat. It is a mountainous country as its name implies, with the exception of a narrow plain that skirts the Caspian shore, and is traversed by the road from Baku to Derbend. Though forming a part of the Russian government of Georgia, the different tribes which inhabit the valleys on the eastern declivities of Mount Caucasus are governed by independent petty sovereigns; only those which possess the low and hilly country towards the sea are subject to the Russians. Corn of different kinds, hemp, tobacco, and madder are grown in the valleys. Cattle breeding is the chief occupation of the inhabitants. The chief town is Derbend, by which name the province of Daghestan is also sometimes designated. [DERBEND.] *Kuba*, a town built by the Russians since their occupation of the country, stands about 50 miles south from Derbend, and has 5000 inhabitants. It has straight, wide, and regular streets, like most Russian towns, and is strongly fortified. The old town of Kuba, which was the seat of a Khan, was abandoned by the Russians on account of its unhealthy situation in the lower grounds on the coast. *Tarki*, about 70 miles N.N.W. from Derbend, and a few miles from the coast of the Caspian, has a population of 10,000. It was formerly called *Semender*. It is built on the slopes of three hills, the highest of which is crowned by the Russian citadel. [GEORGIA.]

DAGHO, or DAGO, an island at the entrance of the Gulf of Finland, about 41 miles long, and varying from 27 to 37 miles in breadth, lies between 58° 4' and 59° N. lat., 22° 20' and 23° 8' E. long. It is comprehended in the Russian province of Esthonia, and is divided by a small channel called the Sele Sund, from the island of Oesel which lies to the south. Its area is 434 square miles. The inhabitants, about 10,000 in number, are Esthonians; they are employed in husbandry, grazing, and fishing. They also carry on a little trade by the port of Tewenhaven, which lies on the western side of the island near Cape Dagherort. The coasts are clifly, and shoals render the approach dangerous. There is a lighthouse near the village of Dagherort. The Swedes, to whom the Danes ceded Dagho in 1645, ceded it in their turn to Russia under the treaty of Nystadt, in 1791.

DAHOMY, a celebrated and for some time powerful negro kingdom of Western Africa, lying inland from the part of the coast of Guinea called the Slave Coast. It is bounded west by Ashantee, from which it is divided by the river Volta, and extends east to the Niger. Its southern boundary is the sea, the principal port being Whydah, but Lagos, Porto-Novo, Badagry, the Popoes, and the Nert, have petty kings of their own; and it extends to the base of the Kong Mountains. From east to west the territory extends about 180 miles, and from Whydah on the coast to the northern boundary nearly 200 miles. Its capital, Abomey, is placed in 7° 59' N. lat., and in about 1° 20' E. long. The city contains about 30,000 inhabitants, which number is greatly increased at the periods of the festivals being held. It is about eight miles in circumference, surrounded by a ditch, and entered by six gates, formed of a clay wall, through which are two openings, one for the king exclusively, the other for the people; each opening is ornamented with skulls, and inside them are piles of skulls of men and beasts. In the town are several batteries, and on the coast-road about a mile from the town are two 32-pounder carronades, all uselessly placed for purposes of defence. There are no shops, but two large and several small markets. There are three royal palaces, and several large houses for the ministers, all surrounded by high red clay walls, inclosing large spaces for parks or gardens. The houses are only of one story, with the exception of two in the royal palaces. There are no streets, as each house stands within its own inclosing brick wall. There are barracks, a pottery, and a dye-house, and numerous fetish houses. Within the town there is much waste land and some farms under cultivation. A great drawback on the town is the insufficient supply of water, which is only to be procured from some small cozy reservoirs at some distance on the plain, and from rain-water collected in pits smeared with palm-oil.

Even the name of Dahomy may almost be said to have been unknown in Europe till some time after the beginning of the last century. Danma, which was thought to be the same kingdom, is indeed mentioned by Leo Africanus along with several others, of which he merely says that they lie south of Nigritia; and that name

is found placed where Dahomy lies in several maps published towards the end of the 16th century. It occurs so placed even in the 'Maps of Sir Jonas Moore's Mathematics,' published under the care of Dr. Halley in 1681; but in another map published by Halley in 1700 it is omitted, and it does not again appear for a considerable time. The most recent accounts indeed now represent the whole of that part of Africa as occupied by other states. The Dahomans for the first time made their appearance on the coast where the European establishments were in the reign of their king Trudo Andati, or, as other accounts call him, Gadjá Trudo, who is said to have succeeded to the throne in 1708. This prince, who appears to have been a person of remarkable talent as well as of inordinate ambition and warlike ferocity, having determined upon securing to himself a share of the European commerce, in forcing his way to the coast captured in 1724 the chief town of the kingdom of Ardra, the most powerful state that lay between him and the sea. Here he found a Mr. Bulstrode Lamb, who resided in the place as factor for the English African Company. Lamb was detained in captivity for nearly three years, but was treated with extraordinary kindness and consideration by the black monarch, who till now had never set his eye upon either a white man or the sea. We believe the earliest account of Dahomy that exists is a very curious letter written by Lamb after he had been for some months in captivity to his superior, Mr. Tucker, governor of the English fort at Whydah (the Juida of the French and Fida of the Dutch). It is dated from Abomey in November 1724, but did not appear in print till it was published at the end of a 'New Voyage to Guinea' by William Smith, Esq., which appeared at London in 1745. Smith had been on the Slave Coast in the beginning of March 1727, when he found that only a few days before his arrival the king of Dahomy had effected the conquest of the state of Whydah, lying along the coast, and had laid in ruins the English, French, and Portuguese forts situated at its capital, Sabi. We have the continuation of the narrative in the 'Full Account of some Part of Guinea,' published at London in 1734 by Captain William Snelgrave, who arrived at this part of the African coast only a few weeks after Smith, and while the king of Dahomy and his troops still occupied the territory. The narrative of Snelgrave, who visited the Dahoman camp, is exceedingly curious. In 1729 he made a second voyage to the same coast. In the interval the king of Dahomy and the governors of the French and English forts had again come into collision; and just before Snelgrave's arrival Mr. Testefole, the English governor, who had imprudently endeavoured to excite the people of Whydah to an insurrection against their Dahoman masters, had been seized by the latter and put to death. Snelgrave has from the information of others brought down his account to the end of March, 1732, at which time a new quarrel had ended in the destruction of the Dutch, English, French, and Portuguese forts at the town of Jaquin, the only other part of the Slave Coast where there were any European establishments. Gadjá Trudo died this same year, and was succeeded by his son Bossa Ahadee. A work entitled 'Memoirs of the Reign of Bossa Ahadee, with an Account of a Journey to Abomey in 1772,' was published in 1789 by Mr. Robert Norris of Liverpool, a person who had been engaged for eighteen years in the African trade. It was reprinted, with many corrections and additions by the author, in 'The History of Dahomy, compiled from Authentic Memoirs, by Archibald Dalzel, Esq., Governor of Cape Coast Castle,' 4to, London, 1793. This last-mentioned work brings down the history of Dahomy through the reigns of Ahadee, a detestable tyrant, the scourge of his own subjects and the torment of all his neighbors, for forty years; of his son Adahoonzou II, by whom he was succeeded in 1774, and who continued his oppression and his ferocious wars; and of the first years of that of Adahoonzou's son and successor Wheenoohew, who mounted the throne in 1789. The continuation of the history of Dahomy for some years farther is given in a little work entitled 'A Voyage to Africa, with some Account of the Manners and Customs of the Dahomian People,' by John M'Leod, M.D., 12mo, London, 1820. Mr. M'Leod visited this part of Africa in 1803. At that time Dahomy seems to have exercised sovereignty over all that part of the coast of Guinea. The reigning king was a younger son of Wheenoohew, the elder having been set aside because one of his toes overlapped another. The name of the present king is Gézo. In 1849, when Lieutenant Forbes went to Abomey on a mission to procure the abandonment of the slave-trade, he found the system of the slave-hunts in full vigour; nor could he prevail in his visit, as the king fairly told him he could not afford it, as the greater part of his revenue was derived from that source. The population of the kingdom, owing to its devastating wars, he estimates at not more than 200,000; the regular army amounts to about 12,000, of whom 5000 are Amazons, but this is increased to about 24,000 when the king takes the field, and the camp-followers more than equal the army in number. These Amazons are supposed not to marry. They live in barracks within the precincts of the palace, and are under the care of eunuchs; they have long distinguished themselves by their fearless bravery, and not less by their sanguinary ferocities. The wars, or rather slave-hunts, are annual, commencing in November or December; and are decided upon at the customs, when the assembled people demand to be led against some town or nation which they name. At the custom or festival in June 1850, an expedition was demanded, for a second time, against Abehekcutah, one of the Amazons saying, "We are no longer women;

we are men. By fire we will change Abeahkeutah." This was undertaken in 1851, and was unsuccessful; the Dahoman army was defeated, and a great number of the Amazons were killed. [ABEAHKEUTAH.] Since that event the Dahoman power appears to be broken, and they have remained quiet.

The region in which the kingdom of Dahomy is situated is a vast plain rising by a very gentle ascent from the sea. No river worth notice falls into the sea between the Volta and the Brass River, or Niger. The soil is a rich reddish clay, on which scarcely a stone is to be found of the bigness of a walnut. All who have visited the coast, especially before the devastations of the Dahomans, describe it as a scene of matchless beauty and luxuriance. Its vegetable productions comprise maize and other farinaceous crops; yams, potatoes, pine-apples, melons, oranges, limes, guavas, and other tropical fruits; a singular fruit said to possess the property of communicating a sweet taste to the strongest acids and bitters; indigo, cotton, sugar, tobacco, Shea butter, palm-oil, spices, &c. Lieutenant Forbes says the Dahomans have considerable agricultural knowledge, but are very indolent. The land though rich is highly manured, and in the portions they cultivate they rival the Chinese, the men, unlike most Africans, labouring in the fields, the women only bringing water. They grow corn and beans intermixed, and in the palm-plantations are grown corn, yams, and ground-nuts. Their chief food is yams and cassada, with messes of meat and vegetables mixed with palm-oil and pepper, and corn-cake. Their houses are of clay or palm-branches thatched with grass. The country abounds with lions, tigers, leopards, hyænas, elephants, the patakoo or African wolf, monkeys, buffaloes, deer, sheep, goats, hogs, both wild and tame, and several varieties of poultry. It is also infested by boa snakes of immense size, and other kinds of serpents; and there are alligators and hippopotami. White ants and mosquitoes are an abundant source of annoyance. Granite, sandstone, chalk, and iron are found in the country. The government of Dahomy is as absolute a despotism as has anywhere existed, and authority is maintained by the shedding of blood at a rate which has been approached nowhere but in Africa. The customs or festivities held at the court of the monarch on occasion of the annual receipt of duties or tribute, are of the same ferociously sanguinary character with those that take place at Ashantee. The most important are held in March and June. The regular season appears to be in April or May, but instances are mentioned of their lasting for three months, and in these cases they seem to begin earlier in the year. The chief ornament of the royal residence is human skulls, of which, when a number was wanted to pave a court or decorate a ceiling, it was not an unusual process to have some scores of persons massacred for the purpose. The principal trade formerly carried on with Dahomy and the subject states on the coast was in slaves; and since the abandonment of that trade on the part of the principal European powers which used to resort to this part of Africa, the commercial intercourse which these kingdoms hold with other parts of the world has become quite insignificant. The only money of the Dahomans consists of cowry-shells, of which a thousand are stated to represent half-a-crown English. Their language is the same with that of the people of Whydah and the other nations of the coast. (Lieutenant Forbes, R.N., *Dahomy and the Dahomans*; and the works named in the article.)

DAILLY. [AYRSHIRE.]

DAIMIEL. [CASTILLA-LA-NUOVA.]

DALE. [PEMBROKESHIRE.]

DALECARLIA, properly DALARNE (the valley country), a former province of Sweden, which now constitutes the Falun Län, extends from 60° 55' to 62° 12' N. lat., 12° 30' to 16° 40' E. long. Its surface is 12,210 square miles, and its population in 1845 was 145,333. It borders N. on Herjedalen, E. on Gestrkland, S. on Westmanland, Nerike, and Vermland, and W. on Norway. It consists chiefly of the river-basins of the Wäster-Dal and Oster-Dal, which unite a few miles west of Falun to form the Dal. The Dal or Dal-Elf runs first south-east and then north-east to the Gulf of Bothnia. [SWEDEN.] About six or seven miles from its mouth it forms the cataract of Elfcarleby, the rival of the famous cataract of Schaffhausen in height and beauty. The Lake Siljan or Siljar, which is traversed by the Oster-Dal above its junction with the Wäster-Dal, is 28 miles long and 15 miles broad, where widest. It contains several fine islands. The Lake Runn, further east on the left bank of the Dal-Elf, is 10 miles long and 5 miles wide.

The mountain ridge which divides the sources of the two rivers Dal-Elf from Lake Fämund in Norway, rises to between 3000 and 4000 feet above the sea. It is a southern offset of the Kölen range, and from it there branch off three ridges of considerable elevation. These ranges subside into hills before they reach the meridian of the Lake of Siljar. The country about this lake presents a pleasant intermixture of hills, valleys, and plains, and may be compared to the lower parts of Switzerland for scenery. But the whole country still preserves a considerable elevation, the surface of Lake Siljar being about 560 feet above the sea. The eastern districts are also uneven, but the heights are rather round-backed hills than mountains, and are usually covered with wood. Numerous lakes of different size lie between them. It is only on the borders of Gestrkland that plains of any extent occur.

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The winter in this province is long and severe, the summer short and hot. Wheat does not succeed, but rye and barley and potatoes are raised. The produce however is insufficient for the demands of the population, and the tender bark of pines is mixed with the bread, and also used as fodder for cattle and hogs. The usual domestic animals are reared, but hogs are rather scarce. Game is abundant. Wolves and bears frequent the numerous and extensive forests. Fish abounds in all the lakes, except those near Falun. The forests consist of birch, ash, aspen, pines, and fir, but they seldom grow up to timber-trees.

Near Falun are found copper, silver, gold, and brimstone. The copper-mines west of Falun have been worked for more than 600 years; they formerly yielded 3000 tons of copper annually. The ore is smelted at large works in Falun. The fumes from the metal destroy all vegetation in the vicinity of the town, although these are said not to be injurious to animal life, and are supposed to have protected the town from the ravages of cholera. Porphyry, quarried on the Oester Dal-Elf, is made into vases, candlesticks, &c.

Except in the neighbourhood of Falun, to which place they are attracted by the mines, the population is dispersed over the country in villages, some of which are of considerable size. The Dalecarlians are distinguished by their stature, courage, spirit of independence, and frankness of character. The part which they took under Gustavus Vasa (who worked in the copper-mines of Falun) in liberating their country from the tyranny of Christian II. is always fresh in their memory, and makes them feel proud of their name. Many of them emigrate to Stockholm during the summer, and manufacture fancy basketwork, clocks, watches, &c.

Falun is the chief town. [FALUN; SWEDEN.]

DALGETY. [FIFESHIRE.]

DALKEITH, Edinburghshire, Scotland, a market-town and burgh of barony in the parish of Dalkeith, 6 miles S.E. from Edinburgh by road, and 8 miles by the Edinburgh and Hawick railway. The population of the town was 5086 in 1851. The affairs of the burgh are administered by 15 trustees. The town stands on an elevated piece of ground, between the rivers North Esk and South Esk, and consists of one principal thoroughfare, and several small streets. The town is clean and generally well built; it is lighted with gas, and well supplied with water. Felt and beaver hats, straw hats, and woollen stuffs are manufactured, and there are corn-mills, a brewery, and a tan-work. The corn market held here is one of the most important in Scotland. The parish church is an old gothic building in the principal street. Attached to it is an ancient chapel containing the recumbent statues of an Earl of Morton and his lady. Adjoining this choir is the mortuary chapel of the Buccleuch family. A splendid new church, in the early English style of architecture, was built in 1840 by the Duke of Buccleuch. It is cruciform, and has a steeple 167 feet high. An elegant episcopal chapel is situated within the grounds of Dalkeith palace. The Free Church, United Presbyterians, and Independents, have places of worship. In the town are two libraries and a savings bank. Dalkeith palace, the seat of the Duke of Buccleuch, is an extensive structure, surrounded by a splendid park and grounds. The mansion contains many fine paintings. The North Esk and South Esk unite their waters in the park, a little way beyond the palace, which is situated on an elevated peninsula formed by the two streams. The regality of Dalkeith belonged to the Grahams in the reign of David II. It afterwards passed into the hands of the Earls of Morton, and about two centuries ago was purchased by an ancestor of the Buccleuch family. Charles Edward spent two nights at Dalkeith after the battle of Preston Pans, and the palace has been visited by George IV. and Queen Victoria.

DALMATIA, the Kingdom of, the most southern possession of the crown of Austria, consists of a narrow maritime tract and numerous islands, forming part of the eastern boundary of the Adriatic, and lying between 42° and 45° N. lat., 14° and 19° E. long. It is bounded N. by Croatia, E. by the Turkish sandshak of Iskenderin, S. and W. by the Adriatic. The circle of Ragusa was disjoined from the rest of Dalmatia by two tongues of land, the Klek on the west, and the Sutorina on the east, which were held by Turkey; but these, after having long been a matter of dispute between Turkey and Austria, were ceded to the latter power in 1853, and the whole territory now belongs to Austria. The area, inclusive of the islands, is about 6000 square miles. The population in 1850 was 393,715, exclusive of course of the inhabitants of the two narrow tongues of land then held by Turkey.

Surface.—Dalmatia is divided into four circles, Zara and Spalato, which constitute Old Dalmatia, and Ragusa (the territory of the former republic of that name) and Cattaro, which form New Dalmatia. The whole surface of Dalmatia is a series of mountain ranges, some of which extend even into the Adriatic, and form islands with their loftier summits. With the exception of the Vellebich (5439 feet high) on the Hungarian border, which belongs to the Julian Alps, all these ranges are continuations of the Dinaric Alps. The loftiest summits among them are the Dinara, which is 5669 feet high, and gives its name to the main chain, the Svilaya, east of Dornis, 4750 feet high, Mount Mosor, 4210 feet high, Mount Marian, on the peninsula next Spalato, and the Biokovo, near Macarsca, which is 5520 feet high. To the south of these lie the ranges of Ragusa and

Cattaro, among which is the Dubovizza, the most southern mountain in the Austrian dominions. The Montenegrin heights encircle the Gulf of Cattaro. In general character the Dalmatian mountains are bleak and bare: they are full of fissures, ravines, and chasms, and in many places altogether without soil. Limestone is the prevailing rock. The numerous islands which line the coast have originated in the breaking up, by some violent action, of masses of clay and sandstone, while the limestone masses, being of firmer composition, have been left standing. The whole line of coast is barren and naked, except along the narrow tract between the Adriatic and the base of the mountains; forests and underwood lie interspersed at their feet; the background is formed by a continued line of dreary precipitous heights, seldom less than 2500 feet in elevation. The coast is indented in numerous points, and affords a succession of excellent harbours. The interior of the country is furrowed by glens and valleys, many of which are stony and sterile; even the plain extending from Novogradi to the Kerka is covered with stones. On the whole, there is no part of the Austrian empire which has so wild and desolate an aspect as Dalmatia.

Dalmatia is rich in minerals, particularly limestone, gypsum, coal, pitch, asphaltum, and sea-salt. No precious metals have been discovered, although Pliny (iii.) reports that the Dalmatian mines yielded as much as 50 lbs. weight of gold per diem in Nero's time. These mines however cannot have been within the limits of the present territory of Dalmatia.

Hydrography, &c.—Few countries are so poorly supplied with water, many parts being destitute of water fit even for the use of cattle: the islands in particular suffer greatly. The Dalmatian rivers run mostly from east to west into the Adriatic. Among the larger streams are the *Zermanya* (anciently the *Tedanius*), which enters from the Hungarian military frontiers, and after a course of about 27 miles falls into the bight of Morlach, near Novigrad. The *Kerka* (anciently the *Titius*), which rises above Knin, issuing from a grotto, and forms several cascades and five magnificent falls, particularly that by Scardona, in its course of about 51 miles; after receiving the *Cicola*, it flows into the Adriatic near Sebenico. The *Cettina* (*Tilurus* or *Nestus*), which springs from the foot of the *Yerebiza*, near Vrilo, has two falls in its course of about 60 miles, one of which, near *Velika-Gubowicja*, is from 90 to 100 feet in height: the banks of this river are extremely wild, and generally precipitous, until it reaches a fine valley near *Amissa*, where it enters the Adriatic. The *Narenta* (*Naro* of the ancients), the broadest river in Dalmatia, enters it from Turkey, and after watering it for about ten miles, parts into two channels at Fort *Onus*, and reaches the canal of *Narenta* through ten arms. Its waters are saltish until it receives the *Norin* at *Torro di Norin*. Among the smaller rivers are the *Sinkotina* and *Ombia*.

The islands along the Dalmatian coast form several fine channels, which are sheltered from the stormy waves of the Adriatic: they are here called canals, and take their names from the adjacent islands; such are the canals of *Morlach*, *Quarnerola*, *Zara*, and *Pasman*, *Mezzo*, *Spalato*, *Lissa*, *Curzola*, *Narenta*, &c.

Dalmatia has numerous lakes, all of which become more or less dry in hot weather, except the *Vrana*, to the south-east of *Zara*, which is separated from the Adriatic by a narrow tongue of land, contains an area of about 8570 acres, and has brackish water. The lakes of *Novigrad*, *Yezero* (the dry bed of which is at times cultivated), *Narin*, *Kadin*, *Trocklian*, *Prolosaz*, &c., become dry at certain seasons from the want of natural springs. None of the numerous mineral springs have yet been turned to account, except the warm sulphureous springs at *Spalato* and *Salona*.

The roads are generally pretty good. There are no railways.

Climate, Soil, Productions.—No other part of the Austrian dominions is so hot as Dalmatia. In the lowlands the date-bearing palm, the American aloe, and the *Cactus opuntia* thrive in many districts in the open air. The almond blossoms in January. Among the mountains, where the snow sometimes continues till May and even June, the climate is much bleaker. Near the coasts of *Zara*, about the canal of the *Narenta*, and elsewhere on the Adriatic, the exhalations which arise from extensive swamps render the climate very unhealthy. Winter is characterized by six weeks of uninterrupted rain.

The arid character of the soil renders Dalmatia on the whole unsuited to agriculture. But there are parts of the country, such as the districts around *Derna*, *Muk*, and *Sign*, which might be cultivated with success but for the indolence and ignorance of the people. The want of water and sheltering woods is another obstacle to cultivation. Turkey and Hungary supply the constant deficiency in the crops of grain, which do not furnish more than six or at most eight months' consumption. The whole amount of arable land in 1846 was only 348,025 English acres, of vineyards 109,216 acres, meadows 30,378 acres, olive grounds 38,407 acres, while there were 1,361,405 acres of pasture-land and 1,105,811 acres of woodlands. The quantity of grain grown in the same year was, in English quarters—wheat 46,039, rye 6109, barley 85,751, oats 9818, and maize 30,984. Of potatoes 28,747 bushels were grown.

Figs may be termed almost the staple produce of the country: they grow without cultivation all along the coast, and upwards of three-quarters of a million of pounds are annually exported. The oil is of superior quality, and is used by the natives instead of butter; yet

above 20,000 barrels are annually exported. Much wine of a strong quality is made; the deeper the colour the more powerful the liquor: the *Vino Nero*, a red wine, is nearly black, and the white wine as deep in colour as *Malaga*: the *Marzenin del Teodo* is the best. The quantity of wine made in 1850 was 7,947,720 gallons. About 1,000,000 gallons are retained for home consumption; the rest is exported to *Fiume*, *Trieste*, and *Venice*. Almonds, dates, dried currants, citrons, pomegranates, oranges, and other fruits are exported. The country abounds in timber, but being in the interior it is of comparatively little value. The coast fisheries employ about 8000 hands: the staple kinds of fish are the sardine and the tunny, both of which are exported in a dried or salted state. The rivers too are well supplied, particularly with the salmon-trout, which attains an enormous size. At some spots the coral fishery is productive, especially near *Sebenico*. The *Morlaks* convert the fat of the frog into an oil, which they employ for various purposes. Honey and wax are produced in some quantities.

The rearing of cattle is on a limited scale: the breeds are inferior and small: the whole stock of oxen and cows is under 100,000; of sheep about 700,000, goats 400,000, horses and mules 20,000. Swine are not numerous. Poultry, except geese and ducks, are plentiful.

Of wild animals, Dalmatia possesses the chagho, or wild dog, wolf, fox, and hare, but it has no deer. Swans, pelicans, falcons, vultures, owls, turkeys, and other wild fowl are abundant.

Manufactures, Commerce, &c.—The manufacturing industry of this country is very small, and scarcely adequate to supply its common wants: it is confined to the townspeople, and its main branches are shipbuilding and the distillery of spirits, among which the liquor called *Maraschino-Rosoglio* has obtained European celebrity. Here and there a little flax and cotton are spun; and small quantities of woollen cloth, coverlids, house-linen, tape, and coarse cottons, twine, cordage, and nettings, soap, vinegar, leather, and hats are made. For every other article of necessity or comfort Dalmatia is dependent on other countries. Coals and graphite are worked to some extent.

Favoured as Dalmatia is by its situation and numerous ports, its commerce is comparatively small. The principal countries with which it trades are the maritime provinces of Austria, Italy, and Turkey. To the first two countries it exports wine, olives, oils, brandy, figs, salt, pitch, bark, salted fish, hides, wool, wax, honey, fruit, &c., and to Turkey the same products, besides foreign produce and manufactures. It has also some transit-trade. Its returns from Turkey consist of horned and fatted cattle, cheese, wools and hides, corn, wood for fuel, drugs, &c. The declared annual value of the exports averages somewhat under 500,000*l.*, of the imports about 400,000*l.* The Dalmatians are well known in the Adriatic and Mediterranean as excellent mariners. The best ships are constructed along the coast of Cattaro. The vessels belonging to Dalmatia in 1847 amounted to—5 ships, with an aggregate burden of 1350 tons; large coasting vessels, 246, of 7876 tons; small coasting vessels, 1121, of 8220 tons; and 668 fishing-vessels, of 1769 tons: in all 2035 vessels, of 19,215 tons.

Number of vessels entered at Dalmatian ports in 1847.

	Inwards.				Outwards.			
	Laden.		In Ballast.		Laden.		In Ballast.	
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
Ships in Per. trade . . .	347	46,844	66	11,302	307	45,803	103	12,003
Large Coast. Vessels . . .	1231	42,883	213	0,627	873	31,320	522	16,544
Small Coast. Vessels . . .	4164	46,491	2127	18,405	2747	33,083	3608	31,722
	5762	135,718	2406	36,334	3927	110,302	4233	60,269

Divisions, Towns, &c.—Dalmatia is divided into four circles, named after their respective capitals *Zara*, *Spalato*, *Ragusa*, and *Cattaro*: and these circles are subdivided into 26 districts. The circle of *Zara* comprises the *Quarneria*, *Dalmatian*, and *Canladio* Islands; that of *Spalato* the islands of *Zirona Grande*, *Bna*, *Solta*, *Lissa*, *Brazza*, and *Lesia*; and that of *Ragusa* the islands of *Canlamotta*, *Meleda*, *Lagosta*, *Curzola*, and *Pelagosa Maggiore*. Dalmatia contains 9 municipal towns, 14 market-towns, and nearly a thousand villages.

The towns of *RAUGUSA* and *SPALATO*, or *SPALATRO*, will be noticed under their respective titles: the other more important towns we notice here:—

Zara, the capital of the circle of *Zara* and of the kingdom of Dalmatia, situated in 44° 8' N. lat. and 15° 15' E. long., lies in the form of an oval, on a narrow tongue of land which is separated from the continent by a deep moat, over which there is a drawbridge. The city is divided by a straight main street and a cross street into four quarters; the other streets are straight, but narrow, ill-paved, and without sewers; the town is very badly supplied with water. It has two large squares, and, including the suburbs ('*Borgo intorno*' and '*erizzo*,' or *Albanian Village*), about 8000 inhabitants, most of whom speak Italian. Of the six churches (in which there are many good paintings) the most worthy of notice are the cathedral, founded by *Henry Dandolo*,

doge of Venice, which is a rather fine example of the Lombardic style, and that of St. Simeon, the patron saint of the city, whose remains are deposited in it. Zara is strongly fortified; the harbour is of considerable size, but shallow; vessels of 800 tons have to lie in the open sound. The principal trade is the import of manufactures from Trieste, and the export of maraschino, anchovies, almonds, and the other products of the district. Zara is the seat of the government of the province, of a court of appeal, and various subordinate offices; and the residence of a Roman Catholic archbishop. Among the public institutions and establishments are a lyceum, a gymnasium, an archiepiscopal seminary, a normal high school, a public school for females, a school of midwifery, a lying-in and a foundling hospital, a civil and military hospital, a naval and military arsenal, a theatre, a casino, &c. There are several distilleries of rosoglio, which is highly esteemed. Most of the inhabitants however derive their subsistence from the fishery among the neighbouring rocky islets (scoglie), on several of which a little flax is grown.

Cattaro, the capital of the circle of the same name, stands at the foot of a steep mountain, at the south-eastern extremity of the Gulf of Cattaro, 42° 25' N. lat., 18° 46' E. long.: population about 3000. The town is defended by walls and a fort. The streets are narrow and gloomy. The principal buildings are the religious edifices, consisting of a cathedral, a collegiate church, seventeen other churches, and six convents, all belonging to the Roman Catholics; there are also two Greek churches, an hospital, a gymnasium, the residences of the governor and the bishop, and some government buildings. The bazaar, or market, is outside the eastern gate; it is supplied with provisions by the Montenegrins. The harbour is one of the best in the Adriatic, but is little frequented by shipping.

Curzola stands on the north-east coast of the island of the same name, population about 2000: the whole island contains 4208 inhabitants, chiefly employed in fishing and maritime occupations, or in the cultivation of the vineyards and the making of wine. The town is the seat of a bishopric. It is surrounded by a wall, and contains a cathedral and two monasteries. There is a good harbour. *Macaraca*, 84 miles S.E. from Spalato, population about 1700, is a small town with some coasting and fishing trade; it was once the capital of a republic. *Perasto*, on the bay of the same name, 6 miles N.N.W. from Dalmatia, is a small sea-port town of about 1800 inhabitants. *Sebenico*, population with the suburbs about 5000, is situated on a bay of the same name, which is formed by the river Kerka, before it falls into the sea. The bay, which forms a large and excellent harbour, is connected with the sea by the channel of St. Antonio, a narrow strait between lofty rocks. The town is built on the declivity of a mountain, rising amphitheatrically from the sea, and has a striking appearance; but the streets are uneven and irregular, and the ascent to some of the higher parts of the town is by steps. The walls of the town are old and decayed, but there are two forts which lie above and command it, and the harbour is defended by the new and strong fort St. Nicolo, built on a rock at the mouth of the canal. Sebenico is the see of both a Roman Catholic and a Greek bishop. The large cathedral, of Lombardic architecture, is accounted the handsomest in the whole country. There are two Roman Catholic churches and one Greek church, three monasteries, and two nunneries. The adjacent country produces abundance of wine and oil. The inhabitants have distilleries of maraschino, and are reckoned excellent sailors. The coral fishery in the neighbouring seas is now abandoned. *Trau* is the chief town of a district of the same name, in the circle of Spalato: population about 3000. Trau is built on a small island, which is connected with the continent by a wooden bridge 50 paces in length. On the other side there is a channel 350 feet broad between it and the island of Bua, with which it is connected by a mole, with a drawbridge to allow ships to pass, the numerous coasting vessels preferring this channel to the open sea. Trau is an old ill-built town, with narrow crooked streets. It is the seat of a bishopric, has a handsome cathedral, several other churches, three convents, and an hospital. The ancient citadel and fortifications are now in ruins. There is a small pretty good harbour, which is now not much frequented. The inhabitants have a rather considerable trade in the produce of the country,—wine, olives, figs, almonds, and other fruits; these fruits are produced on the island of Bua, which is five leagues in length, in great abundance.

Government, Education, &c.—The general administration of affairs in Dalmatia is vested in the Gubernium, or government-board, established at Zara, which receives its instructions from the Chancery and minister of the Home Department in Vienna. Each circle is divided into districts; each district into 'Haupt-gemeinden,' or head communities; and each of the latter consists of 'Unter-gemeinden,' or subordinate communities. At the head of each circle, in civil matters, is a 'Pretoria;' of each head community, a 'Podesta,' or 'Sandako;' and of each subordinate community, a 'Capo-villa,' or 'Casnazzo.' In each circle is a court for the trial of civil and criminal cases, appeal from these courts being allowed to the supreme court at Zara.

The revenues of Dalmatia arise from the imperial domains, the regalia, which include the monopoly of salt and tobacco; the direct and indirect taxes.

The majority of the inhabitants are descendants of the Slavonian hordes, who invaded these parts in the 7th century and drove out

the old inhabitants. The language of the country is the Herzogovine dialect of the Slavonian, but Italian is the prevalent tongue among the well-educated classes, and is used in the public offices and courts. The remainder of the population is composed of Italians, who are spread throughout the maritime towns and sea-coast; Bosnian Greeks and Servian Morlaks, both of whom took refuge here from persecution in the 14th century; and a few Germans, Jews, Greeks, and gipsies. The Morlaks or 'Moroflachi,' that is, Servians, who dwell next the sea ('Moro'), inhabit the mountain-districts of Zara and Ragusa and some of the islands: the wild Montenegrin is of this race. The population of Dalmatia increases but slowly: in 1808 it was 805,671, in 1825 it was 323,112, and as already stated in 1850 it was 893,715. In general the Dalmatian is of good stature, muscular, robust, hardy in his habits, and frugal in his diet; he lives much in the open air and under tents. The poorest man drinks his wine, and eats his salad, fig, and melon; he is hospitable and talkative, but unning, and addicted to lying and theft.

The Roman Catholic (which is the established) religion is professed according to the last census by 331,692 of the inhabitants. The ecclesiastical establishment consists of the archbishop of Zara and the 5 bishops of Spalato, Ragusa, Sebenico, Lesina, and Cattaro. The inhabitants who profess the Greek faith, 73,858 in number, are in church-matters subordinate to a bishop resident at Sebenico and the vicar-general at Cattaro. The number of Protestants of all sects returned in the census was only 23; of Jews 410.

The Austrians found the country in a wretched state of ignorance, for the Venetians had done nothing whatever for its intellectual improvement. The Austrian government has extended to Dalmatia the system which prevails through a large part of the empire. [AUSTRIA.] A normal seminary and school for girls have been opened at Zara; national schools of a superior class have been established at Spalato, Macaraca, Ragusa, Cattaro, Sebenico, and Lesina, independently of the schools attached to the convents. And for the more affluent classes, gymnasia have been instituted in Zara, Spalato, and Ragusa, and a lyceum or species of university at Zara, in which town there are likewise an ecclesiastical seminary, an obstetrical school, and a college for educating 37 pupils at the public expense. In 1847 there were in Dalmatia 5 theological academies, 3 schools of philosophy, 26 gymnasia, and 1 special school; in all 35 upper schools. The popular-schools, 252 in number, consisted of 7 head, 182 lower, 35 girls, 1 infant, and 27 adult schools. Of the 224 common schools for children 52 were 'akatholische,' or not under the superintendence of the Roman Catholic clergy: 57 of the schools were Italian only, 58 were Servian (Serbisch), and 119 were mixed. The principal benevolent institutions are the hospitals and foundling asylums at Zara, Sebenico, Spalato, Lesina, and Cattaro, and the infirmary at Ragusa.

Dalmatia derives its name from the Dalmatine, a small district between Sebenico and Scordona. Its territory in former days was much more extensive than at present. The Dalmatians long resisted the Romans, but Augustus brought them under the Roman dominion. (Strabo, p. 315.) After the fall of the western empire, the country became a prey to the Goths and Avari successively; and the Avari maintained possession of it until the beginning of the 7th century, when they were driven out by swarms of Slavonians. This people erected it into an independent sovereignty, which endured until overthrown in the early part of the 11th century by Ladislaus, king of Hungary, who annexed the whole of it, the maritime towns only excepted, to the dominions of the Magyars. These towns, among which was Zara, the most important of them, had long been under the special protection of Venice, which availed itself of the connexion to extend its sway over other parts of the country, and bring the greater part of Dalmatia under subjection. That portion which lay on the right bank of the Zermanya, and which Hungary retained, lost the name of Dalmatia altogether; and the same occurred with regard to the portion which forms part of Bosnia, and fell into the hands of the Turks, by whom it was erected into the sandshak of Hersek. The Austrians acquired the Venetian part of Dalmatia in 1798 under the treaty of Campo Formio. Dalmatia was seized by Napoleon in 1805, and in 1808 the republic of Ragusa was by him suppressed, and the territory added to Dalmatia. On the fall of Napoleon in 1814 the Austrians held possession of Dalmatia, including Ragusa, which they have since retained.

(Blumenbach; Von Lichtenstern; Hassel; Stein; Roprer; *Die österreichische National-Encyclopädie; Uebersichts-Tafeln zur Statistik der österreichischen Monarchie*, Wien, 1850; Paton, *Highlands and Islands of the Adriatic*; Sir John G. Wilkinson, *Dalmatia; Gotha Almanac*, 1854.)

DALMELLINGTON. [AYRSHIRE.]

DALMENY. [LINLITHGOWSHIRE.]

DALRY. [AYRSHIRE.]

DALRYMPLE. [AYRSHIRE.]

DALSTON. [CUMBERLAND.]

DALTON-IN-FURNESS. [LANCASHIRE.]

DAMAN (pronounced Damaun, 'the border'), a district formerly of Afghanistan, now of the British territories in India, extends along the right bank of the Indus between 31° and 33° N. lat., and includes the tract of country comprehended between the Salt rango, the

Suliman range, the Indus, and Sungur in Upper Scinde. The nature of this district is described under the head *AFGHANISTAN*, vol. i., col. 86. *Dera-Ishmael-Khan*, the capital of the district, stands on the right bank of the Indus, in 31° 50' N. lat., 70° 55' E. long., and is inclosed by a wall of unburnt bricks about a mile and a half in circumference. It has a population of about 8000, composed of Beluchis, Afghans, Hindus, and Juts. Cotton tissues are extensively woven here. The town has some trade, and is connected by a road along the Indus and through the Kohat Pass, with Peshawar.

There is a town called *Daman*, or *Damaun*, in the west of Hindustan, on the Gulf of Cambay, about 60 miles S. from Surat. It belongs to Portugal, and has several churches, a Parsee temple in which the fire has been kept burning (it is said) for above twelve centuries, and a population of about 6000, who carry on some trade and build coasting vessels.

DAMASCUS (*Damas*; *Es Scham*), the capital of Syria, both in ancient and modern times, is situated in a fertile plain at the east base of the Antilibanus, about 180 miles S. by W. from Aleppo, and 60 miles from the Mediterranean, in 33° 27' N. lat., 36° 25' E. long. It is one of the most ancient towns in the world, being mentioned as existing in the time of Abraham. (Genesis, xiv. and xv.) It is one of the very few places which have maintained a flourishing existence in all ages. Though often taken and devastated it has always risen again, and has always been mentioned as one of the most delightful situations in the world. It appears to have been in the time of David or of Solomon (1 Kings, xi. 24) the capital of an independent kingdom, which afterwards under the name of the kingdom of Syria was engaged in wars with the Jews. It was subsequently annexed to the empire of Assyria, afterwards to that of Persia; it then fell into the hands of the Macedonians, the Romans, and lastly of the Arabians, A.D. 634, when it was taken by the lieutenants of the kalif Abu-Bekr after the defeat of the forces of the emperor Heraclius in its neighbourhood. In the annals of the Church, Damascus is noted for the conversion and first preaching of St. Paul. It became for a time the residence of the kalifs, and after other vicissitudes was taken by the Turks under Sultan Selim. In the late war between the Porte and Mehemet Ali, pasha of Egypt, Damascus was taken by the troops of the latter, to whom it was formally ceded in 1833, but was restored to the Porte in 1840.

The pashalic of Damascus extends from north to south, from Hamah on the Orontes down to the deserts of Arabia Petraea, south-east of the Dead Sea, a length of about 4 degrees of latitude; and it comprehends the country of Haouran, and the other districts on the east side of the Jordan, the Lake of Tiberias, and the Dead Sea, besides the greater part of Judaea west of the Jordan, including Jerusalem and Nablous. It is bounded E. by deserts, which divide it from the valley of the Euphrates, N. by the pashalic of Aleppo, and W. by the pashalic of Acre. Corn, hemp, flax, madder, tobacco, cotton, silk, and cochineal are the chief products. Live stock are numerous. Except in the west the surface is level, and the cultivable land is extremely fertile. The total population exceeds half a million, exclusive of the Beduins.

The view of Damascus from the neighbouring mountain of Salecyh, an offshoot of the Antilibanus to the north-west of the city, is very impressive: it comprises the town, with its numerous domes and minarets; the extensive woods, orchards, and gardens with which it is surrounded, clothed in perpetual verdure of various hues; and beyond it the vast level plain stretching to the east farther than the eye can reach, and bounded to the south-east by the distant mountains of Haouran, the ancient Auranitis. The rivers Barada and Phegê, respectively the Abana and Pharpar of the Old Testament, descending from the mountains furnish the city and the plain of Damascus with a constant supply of water. The water of the Barada, which is not good for drinking, is distributed into numerous canals for irrigation, and is the main cause of the extraordinary fertility of the country. The Phegê however has delicious water, which is conveyed by aqueducts and pipes to all parts of the city. The two streams rise at the eastern base of the Antilibanus. The scanty surplus of their waters below Damascus forms a small lake called Bahr-el-Merj. The town is about six miles in circumference, is surrounded by old brick walls falling to ruin in several places, and contained in 1843 a population of 111,552, of whom about 12,000 were Christians and 5000 Jews. The rest are Mohammedan Syrians, Arabs, and Turks. Outside the walls are extensive suburbs. The streets are narrow, and many of them have a gloomy, dilapidated appearance, being lined with dead brick walls, which are entered by small doors that open into the courts of the respective houses. Many of these houses are splendid in the interior, the courts being paved with marble and kept cool by fountains. There are no carriages in Damascus, and but few carts; camels, horses, mules, and asses constituting the means of conveyance. The Mohammedans of Damascus are the most fanatical and intolerant in Turkey, as they have proved by their frequent massacres of the Christian inhabitants.

The city contains many handsome mosques, the principal of which, originally a Christian cathedral dedicated to St. John, is 650 feet long and 150 feet wide; three Franciscan convents, in which the archbishops of the Armenian, Melchite, and Syrian Catholics respectively reside; several Christian churches belonging to the

Greeks, Maronites, Syrians, and Armenians; eight synagogues; an extensive khau; numerous bazaars all well supplied with goods; various hospitals and schools; a large serai, or fortified palace, in which the pasha resides in the centre of the city; and an extensive citadel. The great khan is a sumptuous building, the masonry being formed of alternate layers of black and white marble. The spacious square court within has a handsome fountain in the middle, and is surrounded by a fine arcade of pointed arches, enriched with mouldings. On the ground-floor are the entrances to chambers and magazines, and a staircase and gallery lead to another series of apartments above.

Damascus is a place of great trade, which is carried on by caravans to and from Baghdad, Mecca, Aleppo, &c.; there is caravan communication daily to Beirut, Tripoli, and Acre. British and European goods are imported to a considerable amount. In 1835 (according to Messrs. Michaud and Poujoulat, 'Correspondence d'Orient'; there were in Damascus 129 tanners' shops, 22 establishments for printing stuffs, 75 dyers of stuffs, 120 dyers of silk, 34 houses of silk-winders, 748 merchants of damask cloth, 211 grocers, 68 tobacco manufacturers, 72 saddlers, 11 tent merchants, 47 copper-smiths, 50 ironmongers, 54 farriers, 70 fur-merchants, 98 lacemen, 24 corn-merchants, 148 bakers, 53 millers, 122 coffee-houses, 32 confectioners, 59 public baths, 129 butchers, 71 tailors, 43 shops for pipes, 6 watchmakers, 200 haberdashers' stores, 4 glass-manufactories, 19 armourers, 4 soap-factories, 143 weavers, and more than 400 public cooks. The manufacture of Damascus blades, once so famous, has declined long since: hut good sabres are still made. Saddles and bridles, both rich and highly finished; fine cabinet-work, inlaid with ivory and mother-of-pearl; and rich jewellery, are among the articles of Damascene industry. The city is the seat of a triennial of commerce. About 4000 looms were employed a few years ago in the manufacture of silk and cotton goods. The bazaars are better lighted, and have a more elegant appearance than those of Cairo or Constantinople. Every class of commodities has its own street or bazaar: in one they sell nothing but shoes, another is occupied by the goldsmiths, &c. The town is well supplied with snow and ice, from the neighbouring mountains; ice-water, mixed with the juice of figs or currants, is a favourite beverage. The best coffee-houses of Damascus are situated in the suburbs, on a branch of the Barada; they are built of wood, and are cool and well shaded from the sun, which is their chief attraction.

Beirut is the port of Damascus. The exports and imports are given under that head. [BEIRUT.] The great Hadji caravan, consisting of from 50,000 to 60,000 pilgrims from various parts of Turkey, goes every year from Damascus to Mecca. Foreign consuls reside in Damascus.



Coin of Damascus. Imperial Greek.

British Museum. Actual size. Copper. Weight, 217½ grains.

DAMIETTA, a town of Lower Egypt, on the right bank of one of the principal branches of the Nile, and about six miles above its mouth, the ancient Phatniticum Ostium, in 31° 25' N. lat., 31° 49' E. long. Old Damietta (Thamiatis) stood about four miles farther north, and near the sea, which however has now receded from it: its scanty remains are seen near the village of Esbê, about two miles from the shore. Thamiatis was a small town in the time of Stephanus Byzantinus, but it increased gradually from the decay of Pelusium, and drew to itself the trade of the latter. It was taken by the Saracens, who surrounded it with strong walls and made it one of the most commercial and wealthy towns of Egypt. It was frequently taken by the early crusaders. In 1249 Louis IX. lauded with a large armament, and took Thamiatis; but having advanced inland, he was defeated and taken prisoner at Mansoura. The sultans of Egypt, in order to prevent further attacks in that quarter, choked up the mouth of the Nile by sinking large barges, filled with stones, and thus formed a dangerous bar, which prevents large vessels from entering the river. They also razed Thamiatis to the ground, and removed the inhabitants farther inland. From these occurrences arose New Damietta.

Damietta has a population of about 28,000. It has some fine mosques, several bazaars, and baths adorned with marble; many of the houses have pavilions on the terraces for enjoying the cool breeze. But in general the town is ill built. It now carries on merely a coasting trade with the Levant, its general trade having been attracted to Alexandria. The merchant-ships had to remain at anchor outside of the bar, and load and unload by means of boats. Rice and dried fish are the chief articles of exportation. The country around is a complete garden, irrigated by numerous canals, and planted with all kinds of fruit-trees, such as orange, lemon, fig, tamarind, pomegranate, &c.

The great marshy Lake Menzaleh begins two or three miles east of Damietta, and extends about 40 miles in length to near ancient Pelusium. It communicates with the sea by several mouths, and with the Damietta branch of the Nile by canals. The fishery of Lake Menzaleh is very productive; various kinds of water-fowl are also caught upon it.

DANUBE (in German *Donau*) is the second of European rivers, being inferior only to the Volga. The root-syllable (Dan or Don) of the name means 'water'; and this is probably the case also with the root-syllable of *Ister*, which is said to be the Celtic name of the river. Its course is about 1770 miles, and the surface drained by it and its numerous tributaries probably exceeds 300,000 square miles.

In its long course from west to east it traverses nearly twenty-two degrees of longitude (from 8° 10' to 30° E. long.); the most northern part of its basin falls only a little north of 50° N. lat., and the most southern does not reach 42° N. lat. But though the countries drained by it do not extend over eight degrees of latitude, they differ greatly in climate and production, a circumstance owing to the different elevation of the three great plains which are traversed by this river. The most western, the plain of Bavaria, is between 1100 and 1200 feet above the level of the sea; the central plain, or that of Hungary, about 300 feet, and the lower plain, or that of Wallachia, from the Iron-Gate to its mouth, probably less than 100 feet.

The Danube rises from two springs, the Brig or Brigach and the Brego, on the eastern declivity of the Black Forest, in Baden, about 24 miles from the Rhine, near the point 48° 6' N. lat., 8° 9' E. long., at an elevation of 2850 feet above the sea. The waters of the two springs unite and form a mountain torrent. A third stream, originating in a spring in the palace garden of Donaueschingen, joins the infant river, which henceforth takes the name of Donau. Its general course at first is to the east, but afterwards it declines to the north-east, in which direction it continues till it reaches Ratisbon. From this place to Efferding, some miles west of Linz, it runs south-east by east, and from Efferding its general course is east. At Ulm, where it is joined by the Iller from the south, the river becomes navigable for large barges; its surface is here 1255 feet above the level of the sea, and at Donauwörth, where it enters the plain of Bavaria, 1160 feet. Before it enters that plain it runs for the most part of its course along the southern base of the dry and sterile table-land called the Rauhe Alp, which rises to an elevation of 2000 feet and upwards above its level, and contributes to it only a few rivulets. On the south numerous offsets from the Alps approach the river, forming hills of moderate elevation with gentle declivities, and inclosing charming valleys of great fertility. The affluents which descend from these valleys to the Danube are numerous.

The Danube runs through the Bavarian plain from Donauwörth to Passau, changing nearly in the middle of its course from north-east to south-east. At Ingolstadt it is 1140 feet, at Ratisbon 1050 feet, and at Passau 800 feet above the level of the sea. That portion which lies south of the river is an extensive plain, which reaches to the very foot of the Alps, and on which comparatively few hills and rocks are dispersed. It is traversed in a diagonal line by the Isar, which rises in the northern districts of Tyrol, and runs north-east to the Danube, which it joins between Ratisbon and Passau. Timber and fire-wood are floated down the Isar. On the eastern boundary of the plain runs the Inn, which has been noticed under AUSTRIA (vol. i. col. 719). The plain north of the Danube has a much more uneven surface, rising frequently into gentle hills, which however nowhere attain the height of mountains. This plain extends beyond the boundary of the basin of the Danube, to the very banks of the Mayn, and even to the north of this river. Across this plain runs the Ludwiga Canal, which joins the Danube to the Mayn, and is noticed under BAVARIA (vol. i. col. 936). Besides the Altmühl this plain is traversed by the Naab and the Regen, two other considerable affluents of the Danube.

The third part of the upper course of the Danube is that between Passau and Pressburg. At Linz its surface is 650 feet, at Vienna 421 feet, and at its entrance into Hungary 417 feet above the level of the Black Sea. Through all this distance it runs between the steep offsets of the Böhmer Wald, and the northern ranges of the Alps of Salzburg and Styria, which here in some places attain a great elevation (from 3000 to 5000 feet). The level country on the banks of the river is of small extent, except as we approach Vienna, where the mountains recede so far as to leave a considerable plain on both banks. In this part of its course the Danube receives the Traun, the Enns, and the Morava [AUSTRIA, vol. i. col. 719], and divides in several places so as to form islands, especially above and below Linz, and in the neighbourhood of Vienna. But the current of the river here, as well as in the Bavarian plain, is so rapid that it can be navigated by barges only downwards: the barges must be tracked up the river. It has no rapids, but several dangerous whirlpools. The regular steam navigation of the river commences at Linz; but steamers also ply up to Ratisbon, and even to Donauwörth.

In its middle course the Danube first traverses the Lesser Hungarian plain. At Presburg it is 401 feet, and at Buda, which lies in the Great Hungarian plain, 348 feet above the sea. In its course through the lesser plain the current of the river is still rapid, though much diminished. It divides into numerous branches, which inclose

islands, among which the largest is the island of *Schütt*, which is upwards of 50 miles long, and from four to nine miles across. As the adjacent country consists of very soft alluvial soil, the river frequently changes its course. In this plain the Danube is increased by the waters of the Leitha and Raab from the south, and the Waag and Gran from the north.

Between Gran and Waitzen the river flows between two mountain ridges. That on the south is the northern extremity of Mount Bakony, and on the north an offset of the Carpathians, called the Neograd range. At Waitzen it issues from the mountain defile, and changes its eastern into a southern course. In this direction it flows with a slow current and numerous windings through the greater plain of Hungary for nearly three degrees of latitude, till it meets, after its junction with the Drave, the Sirmian range, or Mount Werdnik, which again deflects it towards the east. It then skirts the Hungeriau plain on the south, dividing it from the hilly Slavonia and Servia, till it arrives near Moldova, where it again passes through a mountain valley. During its course through the Hungarian plain its waters are increased by those of the Sarvitz, Drave, and Save from the west, and Theiss and Temes from the north. [AUSTRIA, vol. i., cols. 720, 721.] At Buda its surface is 348 feet, at Zambor 272 feet, and at Moldova probably not much more than 200 feet above the level of the Black Sea. Its average breadth between Waitzen and the mouth of the Drave is 600 yards, and its depth varies from 5 to 20 feet.

The mountain valley of the Demir Kapi (the Iron Gate) is formed on the north by the Banet range, an offset of the Transylvanian Carpathians, and on the south by a lateral range of Mount Balkan: it extends from Moldova in the Banet to Tcherniz in Wallachia. In entering this narrow valley the rapidity of the river gradually increases. About four miles below New Orsova, is the Demir Kapi, where a ledge of rocks runs across the bed of the river, over which the water rushes with great noise, producing below it a number of dangerous whirlpools. Vessels drawing not more than 2½ feet could not until lately descend it except in time of floods; but by blasting the rocks a channel has been cut by which steamers now ply from Vienna to Gelatz without a portage as formerly. Before these improvements in the bed of the river were accomplished, passengers and luggage were sent down the rapids in cutters, or conveyed by a good road from the station of Drenkova to Orsova, where they were shipped in another steamer on the Lower Danube. At the Demir Kapi the Danube leaves the Austrian dominions and enters Turkey. A few miles lower down it issues from the valley, the country to the north sinks down to a flat, and the current of the river becomes slow and gentle.

On the mountains and hills which inclose the valley of the Demir Kapi on both sides are some Roman antiquities, the most interesting of which are the ledges and shelves that supported the Via Trajana on the Servian side of the defile, and the inscription on the rocky wall of the same side in honour of Trajan. The limestone rocks on each side of the defile abound in caves and fissures in which the gnats and mosquitoes, the scourges of this part of the Danube, take refuge in cold or wet weather. The remains of the bridge built by Trajan over the Danube are a short distance below the rapids of the Demir Kapi.

Along the lower course of the Danube the country on the south below the Demir Kapi by degrees sinks into a flat plain: east of Siliustria it presents nearly a level surface with some swamps. The country to the north is the great level of the Wallachian plain, which near the river is low and generally marshy, while the right bank is comparatively high and bold. In this tract the river first runs nearly south from Tchernitz to below Widdin, then turns to the east and continues in that direction to about 30 miles from the Black Sea, where it suddenly bends to the north near Rasova. In this direction it runs upwards of 100 miles to the junction with the Sereth, and hence again eastward to its mouth. In this part of its course the river frequently divides, and forms numerous large islands, especially below Siliustria. Its width, where it is not divided by islands, is between 1500 and 2000 yards, and its average depth being above 20 feet, it is navigable by vessels of considerable burden. From the north it receives the Aluta, or Alt, Sereth, and Pruth, which rise in the eastern Carpathians [AUSTRIA, vol. i. col. 721], and from the south the Morava, which is formed by two large rivers, the western and eastern Morava, which drain a great portion of the northern declivity of the Balkan Mountains.

After having been joined by the Pruth, the Danube divides into several branches, forming a number of deltoid islands, and flows into the Black Sea by seven mouths, of which the principal are the Kilie, the Sulina, and the Gheorghievskoi (St. George's, which forms the boundary between Turkey and Russia in this part). Besides these outlets a small branch from the St. George mouth communicates with the lake Rassein in the north of the Dobrudscha in Bulgaria, and this lake has two outlets (Jalova and Pertitcha) into the Black Sea, which are sometimes called mouths of the Danube. Round the embouchure of the river vast quantities of mud brought down by the stream have accumulated and formed banks; and it is only by constantly raking the mud deposited on its bottom that the Sulina or principal channel is kept practicable for shipping. When easterly winds continue for some time, the depth of water on the bar of the Sulina mouth diminishes rapidly, the increased resistance of the sea against a diminished

force of current causing the mud to accumulate very fast. This caused to do by treaty, has left at times only a depth of nine feet water on the bar. In such cases the corn ships on the Danube are obliged to take in the greater part of their cargoes outside the bar by means of lighters, at greatly increased cost and risk. In the present spring (1854) the Russians, at war with Turkey, have blocked up the Sulina mouth altogether. The Turks kept a depth of 16 feet water on the bar of Sulina: of late years the depth has seldom exceeded 13 feet. Russian steamers ply up the Kilia mouth to Ismail. The St. George mouth is almost entirely blocked up with mud; in many parts it has not over 4 feet water, and its channel can be reached through the mud banks round its embouchure only by constant sounding, so intricate and shifting is the passage. To avoid the tedious and difficult navigation of the Danube below Rassoia, it has been frequently proposed to cut a navigable canal from Czernavoda to the harbour of Kustenji on the Black Sea, a distance of little more than 30 miles, and nearly parallel to the so-called Trajan's Wall; but it has been stated that the nature of the ground presents very great if not insuperable obstacles to the execution of this project.

Steam navigation was introduced on the Danube in 1830. Vessels of 100 tons ply up to Ulm. The 'up' navigation is very tedious on account of the force of the current in many parts of its course. The steam voyage between Vienna and Constantinople is now made in seven days. Besides its connection with the Rhine by means of the Ludwigs Canal above mentioned, the Danube communicates with the Elbe by the Moldau and canals. This river forms perhaps the greatest natural highway for commerce in Europe; but its advantages have been vastly abridged by the vexatious tolls and still more vexatious sanitary regulations imposed by the different states through which it flows.

The Danube is frozen over in winter in all its upper course, and even in the plain of Hungary from December to March. The breaking of the ice is a moment of great anxiety to the inhabitants of the towns on its banks. If the snow melts and the rains fall gradually, the river rises slowly and the ice breaks off by a few yards at a time; but if a rapid thaw sets in, in the upper part of the stream before the ice has begun to stir lower down, the river becomes swollen suddenly, tosses the ice into the air with a loud explosion like artillery, and sweeps ashore icebergs many tons in weight. So sudden in some seasons is the crash, that persons on the ice have not time to reach the shore, and many lives are lost. When this sudden thaw is apprehended, watchmen are posted on every eminence along the banks of the river, who give notice all along the line, by firing alarm-guns, that the ice is broken.

The Danube was known to the early Greek writers under the name of Istros (Ἴστρος), called by the Romans Ister, which was probably the genuine name of this river in the lower part of its course, perhaps from the Iron Gate to the sea. The Romans learned the name Danubius from the natives on the upper course of the stream, with whom they were brought into contact by commerce and by conquest. Herodotus (book iv., chap. 43, &c.) has transmitted to us all that was known in his time of the Danube and its tributaries in the middle and lower part of its course. Strabo observes (p. 304), "the upper parts of the river and the parts at its source, as far as the cataracts, are called Danubius, and flow chiefly through the country of the Daci; the lower parts, as far as the Pontus [the Black Sea], and in the neighbourhood of the Getæ, are called Ister."

DANZIG, one of the four administrative circles of the province of West Prussia, extends nearly about 100 miles along the Baltic, and is bounded N. by the Gulf of Danzig, E. by the circle of Königsberg, W. by Pomerania, and S. by the circle of Marienwerder. Its area is 3223 square miles, and the population in 1849 was 409,697, almost wholly composed of Catholics and Evangelicals, the ratio between them being very nearly that of nine to ten. The Jews number about 6000. The surface is mostly level, with a gradual slope from the banks of the Vistula to the Baltic. The soil is in many parts sandy and swampy; but in general it is productive, and along the Vistula exuberantly fertile. The produce consists of great quantities of grain, vegetables, and fruit. The circle contains about 800,000 acres of woods and forests. The rearing of horses and cattle, and the fisheries along the coast afford profitable occupation to a large portion of the inhabitants. Amber is obtained on the shore in the vicinity of Danzig. The principal rivers are the Vistula, Schwante, Sorge (which takes the name of Elbing before it falls into the Frische Hafl), Thiens, and Motlau. The semicircular inlet of the Baltic along the coast of West and East Prussia is called the *Gulf of Danzig*, which between the Brunstort light on the east and the Rückshöfen light on the west, has a length of about 60 miles, and its depth from the line joining these points to the Frische Nehrung (a narrow spit that separates it from the Frische Hafl) is about 80 miles. The north-western part of the gulf is called *Putzig Bay*, which is bounded on the north-east by a spit of land 20 miles long, with a breadth of one to two miles, stretching out in a south-east direction from the Rückshöfen light towards the head of the gulf.

The chief manufactures are woollens, linen, leather, beer, and spirits. A very extensive trade in corn is carried on with foreign countries from the ports of Danzig and Elbing. From the Berlin,

Stettin, and Posen railway a branch runs eastward to Bromberg in the valley of the Vistula, whence a line runs up the left bank of this river through Dirschau to Danzig; from Dirschau a branch runs eastward through Marienburg and Elbing to Königsberg.

The circle of Danzig is subdivided into seven districts, which are named from the chief town in each. These towns are—**DANZIG**: *Neustadt*, 20 miles N.N.W. from Danzig, with about 2000 inhabitants; *Karthaus*, a small place W. of Danzig; **ELBING**: *Marienburg*, on the right bank of the Nogat arm of the Vistula, which is here crossed by a pontoon bridge 546 feet long; the town is surrounded by a rampart, and contains a fine palace (which was once the seat of the Grand Master of the Teutonic Order, and was restored by the present king of Prussia), several breweries, distilleries, tan-yards, cotton and woollen factories, and about 6000 inhabitants, who export corn, fish, timber, quills, bristles, &c.; *Stargard*, a walled town 26 miles S. by W. from Danzig, on the Ferse, which has distilleries, breweries, tan-yards, and about 4000 inhabitants; and *Behrendt*, in the western part of the circle, near the source of the Ferse, which has about 2000 inhabitants. *Dirschau*, on the left bank of the Vistula, 20 miles by railway S. from Danzig, has 3500 inhabitants, who manufacture leather and beer. *Putzig*, is a small manufacturing town, 23 miles N.N.W. from Danzig, and near the head of the Bay of Putzig, which is named from it: population about 2200; industrial products broadcloth and iron-ware.

DANZIG, or GDANSK, a fortified city and sea-port of Prussia, capital of the administrative circle of Danzig, in the province of West Prussia, is situated in 54° 21' N. lat., 18° 39½' E. long., on the left bank of the principal arm of the Vistula, about 3¼ miles from its mouth in the Baltic at Weichselmünde, and has a population of about 70,000 including its nine suburbs and the garrison. The city is traversed by the Motlau and Radaunde, which flow by several channels into the Vistula. The Motlau is deep enough within the town to float vessels of 8 or 9 feet draught, and between the lower part of it and the Vistula there is a harbour for larger vessels. By the mouth of the Vistula only small vessels can enter, as it is made shallow by sandbars; but by a canal cut across a neck of land directly into the gulf, and having a breadth of 120 to 180 feet, with a depth of 15 feet, large vessels can go quite up to the town. The entrance to the canal is protected by piers that run out for about 500 yards into the gulf, in which there is excellent anchorage, good holding ground, and shelter against all winds except the north-east and east. Among the outworks is the entrenched camp on the Island of Neufahrwasser, which covers the approach from the Baltic.

The first mention of Danzig occurs in the 10th century, and it was long afterwards a bone of contention between the Dukes, Swedes, Pomeranian princes, and Teutonic knights. In 1454 it sought the protection of the kings of Poland, who recognised its independence to the fullest extent, and admitted its citizens to enjoy every right possessed by the Poles themselves. In 1783 it gave shelter to King Stanislaus, but, after enduring a furious bombardment by the Russians and Saxons, was forced to acknowledge Augustus II., his rival, as legitimate sovereign of Poland. Prussia by her acquisitions at last hemmed in this little state so completely, that in 1772 its commerce with the interior was almost annihilated by heavy dues laid on its exports by that power. On the re-partition of Poland in 1793, Danzig was compelled to admit a Prussian garrison, and to make its usages harmonise with the institutions of its new masters. From this time until the breaking out of the war between France and Prussia in 1806, the town again rose to affluence and prosperity, but it experienced another reverse in 1807, on its falling into the hands of the French, by whom it was besieged for four weeks, under the command of Lefevre, subsequently Duke of Danzig. In the same year the treaty of Tilsit erected the town and a surrounding tract of about 230 square miles into a free state under the ancient Danzig code of laws. Under the French its trade was again almost annihilated. In December 1813 Danzig capitulated to the Russians and Prussians, after a siege of eight months. On the 3rd of February following, the king of Prussia was again recognised as its sovereign.

Danzig is one of the strongest fortresses and most flourishing towns in Prussia. Many parts of it are in a fine old style of building, though not regularly laid out; but a great number of the streets are narrow and crooked. The fortifications consist of ramparts, wet-ditches, crossed by four drawbridges, leading to as many gates, nineteen bastions and the citadel of Hagelsberg, and two strong forts on adjacent eminences. By means of gigantic sluiceways the country around the town on three sides can be laid under water. Within these defences the town is divided into six quarters—the Altstadt, Vorstadt, Rechtstadt, Niederstadt, Langgarten, and Speicher-Insel—and is about 2½ miles in circuit. Without the walls there are nine suburbs. The Langgarten, the finest quarter, is traversed by a broad handsome street, planted with lime-trees; the Rechtstadt too has some spacious streets and handsome houses; but the Altstadt (old town) is close, dirty, and ill-constructed. There are no spacious or regular squares. The Speicher-Insel contains the storehouses and magazines, which can contain half a million quarters of corn. There are about 20 churches in the city: Lutheran, Reformed-Lutheran, and Roman Catholic. The cathedral or Marien Kirche is a remarkable cruciform edifice; it was commenced in 1343,

and finished in 1503; the roof, which is 98 feet above the pavement, rests on 28 brick columns, and its exterior is ornamented with 10 small towers; it has a lofty steeple, and round the interior are 19 altars and 50 chapels, chiefly founded by citizens of Danzig as burial places for their families. A Dutch painting of the Last Judgment, by John Van Eyck, is suspended against one of the columns. Among the other remarkable buildings are the exchange, called *Arthushof*, a large gothic structure erected in 1379; the senate house built about 1311; the *Grüne Thor*, now converted into a museum; and the theatre. There are also two Mennonite places of worship, two synagogues, and several convents in the town. Danzig has a royal school of navigation; a gymnasium with seven professors and a library of 30,000 volumes; and a great number of endowed schools. It has a board of trade and navigation, a tribunal of commerce, a public library, an orphan asylum, a foundling hospital, four hospitals, and an observatory. There are yards and slips for shipbuilding; sugar refineries, spirit distilleries, breweries, copper-works, and manufactories of silks, woollens, linen, leather, hats and gloves, soap and starch, earthenware, arms, steelware, tobacco, &c. Independently of these branches of industry, the town has a very considerable trade with the adjacent provinces and foreign parts, and exports large quantities of corn, timber, pot and pearl ashes, quills, Danzig brandy, black or spruce beer, zinc, wool, flax-seed, oil-cake, bones, flax and hemp, &c.

The imports are composed of wine, brandy, rum, raw cotton, coffee, herrings, iron and steel-ware, indigo, lime and plaster of Paris, sugar, salt, tobacco, piece goods, coal. In 1849 the arrivals in the port numbered 781, the departures 809. Of the former more than half were in ballast or limestone; of the departures 397 were freighted with corn, and 303 with timber. In 1850 Danzig exported 400,000 quarters of wheat, 62,400 quarters of rye, above 40,000 quarters of barley, 2000 quarters of oats, and 27,700 quarters of peas.

Danzig is 260 miles in a straight line N.E. from Berlin; but the distance by railway through Stettin is 344 miles.

DARABGHERD (*Darab*), a town in Persia, in the province of Farsistan, about 26° N. lat., 54° 50' E. long. It was formerly a town of great extent, but like many other towns in Persia it has fallen from its former splendour. Although a great part of it is in ruins it still contains between 15,000 and 20,000 inhabitants. It stands on the banks of a small river in an extensive plain, which is intersected with villages and cultivated lands. The town is surrounded with groves of dates, oranges, and lemons. The tobacco cultivated in its neighbourhood is esteemed for its mildness, and is largely exported. There are some antiquities in its neighbourhood, including the ruins of an aqueduct, some sculptured rocks, and a caravanserai, hollowed in the very heart of a mountain.

DARDANELLES are fortifications erected on both sides of the Hellespont, which from them takes also the name of the Strait of the Dardanelles. This strait, which divides Europe from Asia and unites the Sea of Marmara to the Archipelago, extends in a south-west direction between 40° and 40° 30' N. lat., 26° and 27° E. long. Its length is upwards of 50 miles, but its width varies. Near the Sea of Marmara it is about 10 miles across, but it narrows by degrees, until opposite the town of Gallipoli it is only about 2 miles wide. Towards the southern extremity it narrows still more, at some places even to one mile and less. A strong current runs always through it from the Sea of Marmara to the Archipelago, and the Turks have erected fortifications at these narrow places for the purpose of rendering it impossible to attack their capital from the side of the Mediterranean Sea.

The fortifications originally consisted of four castles, two in Europe and two in Asia. Two called the New Castles are situated near the entrance of the strait from the Archipelago, where it is more than two miles across. The castle in Europe is called *Kilid Bahr*, and that in Asia, *Kum Kalesi*. About 18 miles farther to the north-east are the Old Castles; that in Europe, the ancient *Sestos*, is called *Sed Bahr*; that in Asia, the ancient *Abydos*, *Khanuk Kalesi*. The name of Dardanelles is now especially applied to some fortifications erected in modern times between the castles, but considerably nearer to the old than to the new castles. The number of guns mounted in all these fortifications and some others of less importance is 689, besides 8 mortars. Among them are several immense guns, from which they discharge stone-shot. The quantity of powder which these large guns require is enormous; the largest is charged with 830lbs.

DAR-FUR, a country in Africa, between Bornou and Abyssinia, lying between 11° and 10° N. lat., 26° and 30° E. long. Its extent and boundaries are very imperfectly known.

It may be considered as a large oasis placed in the south-eastern corner of the Sahara, and divided by deserts of considerable breadth from *Dar-Zuleh* or *Wadaï* on the west, and from *Kordofan* on the east. The southern part of the country is hilly, and contains valleys with brooks and rivulets which have water all the year round. But the northern part is a level country, partly covered with sand, and in other places by rocks; water is obtained only from wells. During the rainy season it exhibits a fine vegetation, but during seven or eight months in the year the whole district is dried up, all the plants fade away, and even the trees lose their foliage.

The periodical rains commence in the middle of June and continue to

the middle of September; they are generally very heavy, and mostly accompanied by lightning. The changes of the wind are not periodical but instantaneous. The greatest heat prevails with a southerly wind, and the greatest quantity of rain falls with a south-east wind. When the breeze is from the north or north-west it is most refreshing, but it does not generally continue long in that quarter. When southerly winds blow the hot air is filled with thick dust.

As soon as the rains begin the agricultural operations commence. The grains raised are wheat, doku, kassob, and sesamum. They plant also beans, kidney-beans, lentils, and some leguminous vegetables peculiar to that part of Africa. Water-melons, together with some other kinds, abound during the wet season, and also before if they are irrigated. Among the fruit-trees are tamarinds and dates. Browne says that tobacco is indigenous in *Dar-Fur*.

Neither horses nor sheep are numerous. The flesh of the sheep is indifferent, and the wool resembles hair: they have not a large tail, like other sheep in this part of Africa. Goats are more numerous. Asses are of small size. Cattle form one of the chief branches of wealth, and they are paid as tribute to the sovereign. Camels are very numerous, and of all colours and sizes; their flesh is used for food.

The ferocious and wild animals are principally the lion, the leopard, the hyæna, the wolf, the jackal, the elephant, the rhinoceros, the giraffe, the hippopotamus, crocodile, and buffalo. Antelopes, ostriches, and civet-cats are also common. Iron and copper are found in the southern districts; besides alabaster, various kinds of marble and common salt occur here. Nitre abounds, but is not used.

The population of *Dar-Fur*, which is estimated at from 150,000 to 200,000, consists mostly of the descendants of emigrants from *Dóngola*, *Sennaar*, and *Kordofan*. Among them are also some families from Egypt, Tunis, and Tripoli. They use the language of *Barabra*, though they also speak Arabic. Arabs are also numerous in some parts.

Cobbe, *Kobbe*, or *Qorbi*, the capital, from whence the caravans or 'kafilas' depart for Egypt, is two miles in length, extending from south to north, but very narrow, and the houses, each of which occupies in its inclosure a large portion of ground, are separated from one another by a considerable space. The town is full of trees of every kind, and contains about 6000 inhabitants, all of them merchants. Other places are *Cubabta*, or *Kubabta*, in the western district, the depôt of all the merchandise destined for Soodan and the general resort of the merchants trading to Egypt.

Dar-Fur carries on some trade with *Syout*, in Upper Egypt. The kafilas travel only once in fifteen months, and pass by way of the great wady *El-Khargeh*; they consist of about 1100 camels carrying slaves, ivory, horns of the rhinoceros, teeth of the hippopotamus, ostrich feathers, gum, hides, drugs, copper, pimento, tamarinds, and leather sacks for water; also parroquets, monkeys, and guinea-hens. The caravans of *Dar-Fur* carry from Egypt silk manufactures, cotton cloths (striped, blue, and white), glass, glass wares, imitation corals, coral beads for bracelets, gold lace, Indian merchandise, spices, coffee, a little sugar, gum, benzoin, alum, tartar, oil of vitriol, verdigris, sulphur, nails, metals, corn, carobs, and fruit. The inhabitants are Mohammedans, and are governed by a despotic sovereign.

(Browne, *Travels in Africa*.)

DARIEN. [PANAMÁ.]

DARLINGTON RIVER. [NEW SOUTH WALES.]

DARLINGTON, Durham, a municipal borough, market-town, and the seat of a Poor-Law Union, in the parish and ward of Darlington, is situated in a rich fertile country on the eastern slope of a hill on the right bank of the river Skerne, in 54° 31' N. lat., 1° 32' W. long.; distant 18 miles S. by E. from Durham, 241 miles N.N.W. from London by road, and 235 miles by the Great Northern railway. The population in 1851 was 11,228. For sanitary purposes the township is under the management of a Local Board of Health. There are three livings, which are perpetual curacies in the archdeaconry and diocese of Durham. Darlington Poor-Law Union contains 41 parishes and townships, with an area of 60,759 acres, and a population in 1851 of 21,560.

The town consists of a square market-place, of which the church forms the eastern side, and of several streets, or as they are designated gates, which branch from it. There is a bridge of three arches over the Skerne. The parish church, dedicated to St. Cuthbert, is a cruciform building, and has a central tower surmounted by a light spire. The general character of the architecture is early English. In the chancel are three stone stalls of a date considerably later than the walls of the chancel. The Independents, Baptists, Wesleyan, Primitive, and Association Methodists, Quakers, and Roman Catholics have places of worship. The Grammar school, founded by Queen Elizabeth in 1567, has an income from endowment of 220l. a year, and had 78 scholars in 1852. There are also National, British, and Infant schools, and a Blue-Coat school; a mechanics institution, a savings bank, and several almshouses. A county court is held in the town.

The trade of Darlington is considerable: for a long period the principal manufactures were of camlets and other woollens: about the close of last century moreens and similar stuffs were made.

The woollen manufacture was superseded in a great degree by that of linens, as huckabacks, diapers, sheetings, and checks. But the chief occupation of the inhabitants now is combing wool and making woollen yarn (which is used for imitation Indian shawls, Brussels carpets, &c.), spinning flax, grinding optical glasses, and the manufacture of brass and iron. There are very extensive worsted mills. The market is on Monday for corn and provisions of all kinds; there is a great market for cattle every fortnight.

DARMSTADT, the capital of the grand duchy of Hesse Darmstadt, and of the province of Starkenburg, stands in 49° 52' N. lat., 8° 37' E. long., 16 miles by railway S. from Frankfurt-am-Mayn, 39 miles N. from Mannheim and Heidelberg, and has 22,500 inhabitants. It is situated on the banks of the small river Darm, between the Mayn and the Rhine (about 10 miles from the latter) at the commencement of the Bergstrasse, a Roman road leading from Darmstadt to Basle. It was formerly a village, but under the emperor Louis the Bavarian, became a town of the principality of Katzenellenbogen, and a castle was erected for its defence. After the extinction of that family it lost much of its importance, until George I., son of the emperor Philip the Great, made it his residence, since which period it has increased considerably both in extent and consequence.

Darmstadt is divided into the old and new town; the former is inclosed within old massive walls, and has a gloomy uninteresting appearance. The new town is similarly defended, and is built in better style, has broad, clean, and well-lighted streets, and handsome houses; but there are many spaces within the walls not occupied with buildings. The town has six gates and five public squares. The principal public buildings are—the new palace, in which the Grand Duke resides; the old palace, which contains a large gallery of paintings, a fine museum of natural history, and a public library of 200,000 volumes; the Exercier-Haus, or riding-school; a very handsome opera-house; an arsenal; barracks; the town church, containing the ducal vaults; the Lutheran and Reformed Lutheran churches; and the Roman Catholic church, a handsome circular structure situated on an eminence and surmounted by a splendid dome, which is supported by 28 large columns. There are a gymnasium, a training-school, and various other schools in the town. The chief manufactures are woollens and lincens: the inhabitants are mainly dependent for support upon the expenditure of the court and the garrison; many of them however are engaged in tanning, gardening, &c. The environs are very picturesque, and the soil is highly cultivated. Darmstadt has six fairs every year.

DARNETAL. [SEINE-INFÉRIEURE.]

DARORA. [ARAGON.]

DARTFORD, Kent, a market-town and the seat of a Poor-Law Union in the hundred of Axton, Dartford, and Wilmington, is situated on the river Darent, in 51° 27' N. lat., 0° 13' E. long.; 15 miles E.S.E. from London by road, and 17 miles by the North Kent railway. The population in 1851 was 5763. For sanitary purposes the parish is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry of Maidstone and diocese of Canterbury. Dartford Poor-Law Union contains 21 parishes and townships, with an area of 47,305 acres, and a population in 1851 of 27,214.

Dartford lies in a narrow valley, formed by the river Darent, from which it takes its name (Saxon Darentford), and the principal street is on the Dover road. The chief circumstance of note in its history is that the great insurrection, under Wat Tyler, in the reign of Richard II., broke out here. The first paper-mill at Dartford was built by Sir John Spielman, a German, who introduced the manufacture; the mill stood on the site of the present powder-mills: the first mill established in England for rolling and slitting iron was also near Dartford. The trade of the town is considerable. There are chalk-pits in the vicinity; oil, powder, and paper-mills on the river Darent; corn-mills on a large scale worked by water-power and steam; also a large iron foundry and manufactory of machinery. At a short distance from Dartford are a cotton-mill and silk printing works. The town is lighted with gas. Many new houses have been erected, and the town appears to be steadily improving. Barges from the Thames come up to the wharf below Dartford. The church is a large and ancient edifice, chiefly of the decorated style, and contains some good brasses. The Independents, Wesleyan Methodists, Baptists, and Lady Huntingdon's Connexion have places of worship here. There are National, British, and Infant schools, and a literary institute. The market is on Saturday, and there is a yearly fair.

Near the town are the ruins of a nunnery, founded A.D. 1371, by Edward III., for Augustine nuns, but afterwards occupied by Dominican nuns. The remains consist of a large embattled gateway, with some adjacent buildings, now occupied as a farm-house; the gardens and orchards occupied 12 acres, and were surrounded by a stone wall yet entire. Dartford Heath is of considerable extent, and affords very pleasant prospects.

(Hasted, Kent; Dunkin, History of Dartford; Communication from Dartford.)

DARTMOOR. [DEVONSHIRE.]

DARTMOUTH, Devonshire, a sea-port and market-town, a municipal and parliamentary borough, in the hundred of Coleridge, is situated at the mouth of the river Dart, in 50° 21' N. lat., 3° 35'

W. long., 32 miles S. by W. from Exeter, and 202 miles W.S.W. from London by road. The nearest railway station is at Totnes, on the South Devon line, which is 8 miles N.N.W. from Dartmouth, and 222½ miles from London. The population in 1851 was 4508. The town is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. The livings are in the archdeaconry of Totnes and diocese of Exeter.

Dartmouth is delightfully situated on a declivity on the right bank of the river Dart. The hill on which the town stands is so abrupt that the base of the houses in the upper street is almost on a level with the chimneys in the street below. Some of the houses are extremely old, and display some fine specimens of wood-carving; but generally the town is dirty, and the streets are narrow and ill-paved. The town has been recently lighted with gas. A floating bridge has been established across the river Dart. The harbour is safe and convenient, and can accommodate 500 ships. The entrance is between the ruins of Kingswear Castle and the fort and church of St. Petrox, where a battery has been erected. The port extends from the river Teign to the river Erme, a distance of 40 miles.

In ancient records this place is called Clifton-Dartmouth-Hardness, originally three adjoining towns: it was incorporated by this name in the reign of Edward III. (1342). From the convenience of its harbour it was very early a place of some note. In the beginning of the 13th century it obtained a market, and other valuable privileges. It sent two members to Parliament from the 14th year of the reign of Edward III. to the passing of the Reform Act, which reduced the number to one. In the reign of Edward I. Dartmouth contributed 31 ships and 800 men towards the naval expedition against France.

Dartmouth was during the parliamentary war strongly contended for by both parties. Prince Maurice succeeded after a siege of four weeks in taking the town, in which he placed a garrison, but General Fairfax afterwards took the town by storm. The trade consists principally in the export of woollen goods and cider, and the import of wine. Dartmouth is one of the quarantine ports of the channel. The number of vessels registered as belonging to the port on December 31st, 1852, was:—Under 50 tons 172, tonnage 4817; above 50 tons 266, tonnage 29,590, and one steam vessel of 19 tons. During 1852 there entered and cleared at the port as follows:—Coasting trade, sailing vessels, inwards 838 vessels, 51,633 tons; outwards 323, tonnage 11,352; steam vessels, inwards 119, tonnage 22,009; outwards 2, tonnage 344. Colonial and foreign trade, sailing vessels, inwards 114, tonnage 7188; outwards 166, tonnage 16,019; stein vessels, inwards 23, tonnage 3956; outwards 22, tonnage 1784.

The church of St. Petrox is beautifully situated at the entrance of the harbour. St. Saviour's church is of the 14th century; the interior is highly ornamented. The pulpit is of stone, richly sculptured and gilt, and the rood-loft is beautifully carved. There are places of worship for Baptists, Independents, and Wesleyan Methodists; and a Grammar school with a small endowment. Newcomen, the inventor of the steam-engine, was a native of Dartmouth.

A market was granted to the town as early as 1226, and a fair for three days at the festival of St. John the Baptist. There are no fairs held here now, but a large cattle-market is held on the Mouday before the third Wednesday in every month, and a weekly market on Fridays. A new market-place has been lately erected. The remains of the old castle, consisting of a square and a round tower, the latter of which is the most ancient, and supposed to have been built in the reign of Henry VII., are very picturesque. In the immediate neighbourhood are several handsome mansions.

(Polwhele, Devonshire; Route-Book of Devon; Murray, Hand-book of Devon; Lysons, Magna Britannia; Communication from Dartmouth.)

DARVEL. [AYRSHIRE.]

DARWAR, a district in the province of Bejapore, situated between 14° and 16° N. lat.; it contains an area of 9122 square miles, and a population estimated at 838,757. Darwar was formerly part of the territory of the Peishwa, and came into possession of the English in 1818. In the following year there occurred a serious failure of the harvest, accompanied by an epidemic, which carried off about 25,000 of the population, which was then in all about 600,000. The district has considerably improved since it came into the possession of the British. Darwar, the capital, is situated in 15° 28' N. lat., 75° 5' E. long., about 75 miles E. from Goa. It is a fortified town, and was besieged by an allied force of English and Mahratta troops for twenty-nine weeks in 1791, when it surrendered by capitulation.

DARWAZ. [BADAKHSHAN.]

DARWEN, OVER. [LANCASHIRE.]

DATCHET. [BUCKINGHAMSHIRE.]

DAUPHINÉ, a frontier province of south-eastern France, constituted (with the principality of Orange) one of the 32 military governments into which in ante-revolutionary times that kingdom was divided. It included the country between the Rhône, the crest of the Alps, and Provence. It now forms the three departments of Isère, Drôme, and Hautes-Alpes, and the physical character of the country is described under the heads ALPES, HAUTES; DRÔME; ISÈRE.

Dauphiné is one of the most mountainous districts in France; branches from the Alps traverse it, and some of the loftiest summits of that mountain system are close upon or within its boundary: no other part of France has points equally elevated. The country is watered by a number of streams which flow into the Rhône, either immediately or by the Isère, Durance, and other tributaries.

Dauphiné was formerly divided into Haut (upper) Dauphiné and Bas (lower) Dauphiné. Haut Dauphiné comprehended the districts of Les Baronnies, Le Gapençois, L'Embrunois, Le Briançonnais, Le Champsaur, Le Grésivaudan, and Le Royans or Royanez. Bas Dauphiné comprehended Le Tricastin, or Tricastinois, Le Valentinois, Le Diois, and Le Viennois. Grenoble, Gap, Embrun, Briançon, Vienne, and Valence were its chief towns. Dauphiné had a provincial tribunal, or parliament, which held its sittings at Grenoble. This country was inhabited in ancient times by the Allôchroges, the Caturiges, and other Celtic nations. In A.D. 734 it was invaded by the Saracens, who were expelled by Charles Martel. In the 9th century it formed part of the kingdom of Arles, and was governed by its own counts, who took the title of Dauphins until 1343, when Count Humbert II. seeing himself without heirs, sold his estates for 100,000 gold florins to Philippe, eldest son of King Philippe of Valois, on condition that the eldest son of the kings of France should thenceforth for ever bear the title of Dauphin. Dauphiné was about 124 miles long and 100 broad.

(Chappuy-Montlville, *Histoire du Dauphiné*; *Dictionnaire de la France*.)

DAVENTRY, Northamptonshire, a borough and market-town, and the seat of a Poor-Law Union, in the parish of Daventry and hundred of Fawsley, is situated in 52° 16' N. lat., 1° 10' W. long., distant 13 miles W. by N. from Northampton, 72 miles N.W. from London by road. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The population of the borough in 1851 was 4430. There are two livings, which are perpetual curacies in the archdeaconry of Northampton and diocese of Peterborough. Daventry Poor-Law Union contains 23 parishes and townships, with an area of 63,301 acres, and a population in 1851 of 21,926.

It has been conjectured that the town of Daventry rose from the decay of the British and Roman stations of Bennavenna and Isnavatia. Bennavenna station was probably on Borough Hill, a short distance east from Daventry, on which is one of the largest ancient camps or forts existing in the island. During the civil war of Charles I. some skirmishes occurred near Daventry. The place has little else of historical interest. The town stands on an eminence, and consists of two principal streets and some smaller ones, which are paved and lighted with gas; the houses are generally neat and well built. The church is a modern building, consisting of nave, side aisles, and chancel. There are—a small chapel of ease; chapels for Independents and Wesleyan Methodists; a Free Grammar school, which had 14 scholars in 1851; National and British schools, and a savings bank. The chief manufactures are those of shoes for exportation, and of whips. The market is on Wednesday, and there are nine annual fairs, chiefly for horses and cattle.

The Dissenting academy at Northampton was removed to Daventry on the decease of Dr. Doddridge, 1752, and continued there till 1789, when, on Mr. Belsham's resignation, it was removed to Wymondley. It was afterwards transferred, under the designation of Coward College, to London, and in 1850 was united with Homerton and Highbury colleges, when the joint institution received the name of New College.

(Baker, *Northamptonshire*; *Communication from Daventry*.)

DAVID, ST. [FIFESHIRE.]

DAVID'S, ST., Pembrokeshire, an episcopal city in the parish of St. David's and hundred of Dewisland, is situated on the little river Alan, in 51° 52' N. lat., 5° 15' W. long.; distant 26 miles N.W. from Pembroke and 265 miles W. by N. from London. The population of the parish was 2460 in 1851. The living is a perpetual curacy in the archdeaconry and diocese of St. David's.

St. David's was in ancient times a large and populous city, and was during the middle ages resorted to by numerous pilgrims. Its present aspect is that of a poor village, the houses generally, except those of the clergy, being mean and almost ruinous. Still it must be regarded with interest as an ancient and once important episcopal city, with a fine cathedral, and the remains of other magnificent buildings devoted to religious uses. Of the three archbishops' seats appointed when Christianity was introduced into England, namely, London (afterwards transferred to Canterbury), York, and Caerleon, that of Caerleon was removed about 519 to Mynyw (called by the Romans Menavia), which afterwards received the name of St. David's, in honour of the archbishop and saint by whom the transfer was effected. Hence the appellation of 'Menevensis' assumed by the bishops of this see, which was the metropolitan and archiepiscopal see of Wales until 930, when Sampson, the last of twenty-five archbishops, withdrew with his clergy to Brittany, carrying with him his sacred pall of office. The ecclesiastical buildings occupy a spacious area called the Close, on the south side of the city towards the sea-shore. The cathedral is partly Norman with early English and decorated portions; Bishop Vaughan's chapel is perpendicular. The cathedral is cruciform, 307 feet long, with a square tower at the west end 124 feet high; a nave 124 feet in length; a choir, transepts, side aisles, and lateral chapels, one of which is roofed with slabs of freestone. The choir, which is lofty, contains 23 stalls

and a curious movable pulpit. The bishop's throne is of exquisite workmanship, resembling that in Exeter cathedral. Numerous antiquarian relics are preserved in the building. An altar-tomb of the son of Owen Tudor is similar to that of Prince Arthur in Worcester cathedral. The cathedral has recently undergone considerable repairs and restoration. St. Mary's College was founded in 1365 by John of Gaunt for the maintenance of a master and seven fellows. The chapter-house contains a school-room for the instruction of the choristers, and an elegant dining-room, with kitchen and cellars, for the use of the canons when they assemble to audit the accounts of the see. The present episcopal residence is at Abergwilli, near the city of Caermarthen, in a noble palace rebuilt by Bishop Burgess. The cathedral buildings, named above, are enclosed by a lofty wall about a mile in circumference, having four gates, north, south, east, and west. The principal gate is the eastern, between two massive towers, one of which is 60 feet in height. The little river Alan runs through the area, and was crossed by a marble bridge, worn and polished by the feet of the pilgrims who visited the place. The inhabitants of St. David's are chiefly employed in agriculture. Fairs are held on March 12th and August 5th. In the neighbourhood, and especially at St. David's Head, a rocky promontory three miles from the city, are numerous cairns, tumuli, holy wells, &c. There is also an oratory, dedicated to St. Justinian, which was erected by Bishop Vaughan for the use of pilgrims who were about to embark for Ramsey Island, which lies off St. David's Head. Ramsey Island forms part of the parish of St. David's.

The diocese of St. David's comprehends Pembrokeshire, Cardiganshire, Brecon, Radnorshire, Caermarthenshire, with a small portion of the counties of Montgomery, Glamorgan, and Hereford. There are 412 benefices. The diocese is divided into the archdeaconries of St. David's, Brecon, Cardigan, and Caermarthen. The cathedral establishment includes besides the bishop a dean, 4 archdeacons, a chancellor, 2 canons, 12 non-resident canons, 3 minor-canons, 3 vicars-choral, &c. The income of the bishop is 4500*l.* a year.

DAVIS STRAIT unites Baffin's Bay to the Atlantic, and extends between Greenland on the east and Cumberland Island on the west, in a northern direction, from Cape Farewell to Disco Island (that is, from 60° to 70° N. lat.). Its narrowest part is near the Polar Circle, where it is about 200 miles across. It is the principal resort of the whalers, whales being more numerous here than in other seas near the Pole. But the immense icebergs which even in summer lie the western coasts of the strait, and the violence of the currents, render the navigation very dangerous. Many of the icebergs rise some hundred feet above the level of the sea, and the whalers which arrive at the end of April or in the beginning of May find the whole strait blocked up by a barrier of icebergs between Cape Walsingham and the Greenland coast. The current, which runs along the eastern coast of Greenland, turns round Cape Farewell, and continues along the western coast of Greenland nearly up to the Polar Circle, where it crosses the strait to Cape Walsingham, and then continues in a southern direction to Labrador and Newfoundland. By this current the immense icebergs of Davis Strait are carried down to the centre of the Northern Atlantic, where they sometimes are met with as far as 40½° N. lat. The countries on both sides of the strait rise in rocky mountains to a considerable elevation, and exhibit a very scanty vegetation. They are inhabited by Esquimaux.

DAWLISH, Devonshire, a small town in the hundred of Exmister, lies in a valley running from east to west, about midway between the rivers Exe and Teign, in 50° 35' N. lat., 3° 29' W. long., 12 miles S. from Exeter by the South Devon railway, 191 miles S.W. by W. from London by road, and 206 miles by the Great Western and South Devon railways. The population in 1851 was 2671. The living is a vicarage in the archdeaconry and diocese of Exeter.

About fifty years ago Dawlish was merely a collection of fishermen's huts. It is now a fashionable and flourishing watering-place. The situation is exceedingly pleasant. The sea-front lies near the centre of a cove a mile and a half in extent, formed by the projecting cliffs of Langstone on the east and the Parson and Clerk rocks on the west. The climate is warm and equable. The Public Baths, a handsome building of recent erection, is situated on the sands. The parish church, about three-quarters of a mile from the beach, was rebuilt in 1824 except the tower, which is part of the old church and is of very ancient date. The Independents, Wesleyan Methodists, and Plymouth Brethren have places of worship here. A small but curious and handsome viaduct carries the line of the South Devon railway over the stream which runs through the town. The railway runs between the town and the sea.

(Polwbele, *Devonshire*; *Land We Live In*, vol. iii.; *Route Book of Devon*; *Murray's Handbook of Devon*.)

DAX. [LANDES.]

DEAD SEA, the ancient *Lucus Asphaltites*, is situated in the south-east of the Holy Land, near the borders of Arabia. The point 31° 30' N. lat., 35° 30' E. long., is not very far from its centre. It lies in the deepest known depression on the surface of the earth; the level of this sea being 1312 feet below the level of the Mediterranean. The depression in which it lies, called El-Ghor, extends north and south, so as to include the valley of the Jordan, below the Lake of Tiberias, and the wady El-Arabah, which rises gradually

from the southern extremity of the sea to the uplands of Arabia Petraea. The Dead Sea has no visible outlet.

The greatest length of the Dead Sea, which lies due north and south, is hardly 40 miles; the breadth of the northern part, which is widest, varies between 7 and 9½ miles. At about 25 miles from the northern shore a remarkable peninsula advances northward into the sea from the mountains of Moab, leaving on the eastern side a bay from 3½ to 1½ miles wide and about 3 miles long, and on the western side a strait about 7 miles long and 2 miles wide at its narrowest part. To the south of this strait spreads out the southern part of the sea forming what the Arabs call Bahr Lut, or the Sea of Lot, 10 miles long and from 5 to 8 miles broad. It must be remarked however that these dimensions are considerably increased in winter, when the sea is swollen by the rains. The aspect of a country so near the tropics differs greatly at different seasons of the year. Accordingly, the notice of the scenery of the shores which is here given, and which is taken from Lieutenant Lynch's account, whose survey of the Dead Sea was executed in the months of April and May, will be found to differ considerably from the description of M. de Saucy, who visited the region in January.

The north shore is an extensive marshy flat, with a sandy plain beyond it, and is joined on the north-west angle of the sea by a bed of gravel sloping gradually down from the mountains of Canaan. Near the wady Gumran in this part of the mountains, De Saucy discovered extensive ruins, which he supposes to be those of *Gomorrhah*. The beach here consists of minute fragments of angular flint, interspersed with numerous pebbles of bituminous limestone, and there is an almost total absence of round pebbles. A line of bold, lofty, and in most parts perpendicular cliffs runs along the shore at a very little distance, consisting chiefly of bituminous limestone, with in a few places masses of conglomerate of a dull ochre colour. These cliffs rise to the height of 1000 or 1200 feet. They are broken by a few ravines, which in winter are traversed by torrents, whose deposits form little deltoid or alluvial projections along the shore. Except along these ravines the rocks are utterly devoid of vegetation, and present a scene of unvaried desolation and barrenness. Along the marshy beds of the streams that flow through the ravines tamarisks, low canes, and spina christi are almost the only specimens of vegetable life. The principal of these ravines on the western side of the sea are the wady En-Nar and Ain-Jidy or Engaddi; through the former the brook Kedron enters the sea, the cliffs on each side of it being 1200 feet high, and midway down the ravine is the convent of Mar Saba. The mountains here and to the southward consist of horizontal strata of limestone, in which are seen numerous caves. At the foot of the cliffs is a dark coarse gravel. The mountains about Ain-Jidy are 1500 feet high, and abound in caverns. Between the delta of the Ain-Jidy and the mouth of the Arnon on the Arabian shore the sea is about 9 miles wide. There is a current southward through the whole length of the sea, caused by the impetus of the Jordan; and the current deflected from the southern shore causes an eddy northward along the west shore. On the lofty cliff of Sebbeh, opposite the peninsula mentioned above, are remains of the strong fortress of Masada, to which Herod retired with his family and treasures after the capture of Jerusalem by the Partians. This cliff rises perpendicularly to a height of from 1200 to 1500 feet, and is isolated from the rest of the chain by two deep ravines, the detritus carried down which has formed a sandy alluvium more than two miles wide between the cliff and the sea.

Bold savage cliffs and terraced mountains of limestone in horizontal strata, crossed at intervals by lava streams, continue to within about four miles of the southern shore of the sea. In this interval lies the remarkable isolated mass of rock called Usdum (Sodom). This mountain mass consists of rock-salt; it is incrustated with carbonate of lime, which gives it the tinge of the eastern and western mountains. At about a mile distant from the north point of Usdum a round pillar of salt, cylindrical in front towards the sea and pyramidal behind, 40 feet in height, rests on an oval pedestal from 40 to 60 feet above the level of the sea. Between the base of Usdum and the sea there is a broad marshy flat coated with salt and flaky bitumen. The whole of the southern bay is shallow, and the bottom consists of a slimy black or gray mud. A species of melon grows on the Usdum, oblong, ribbed, of a dark green colour, and in taste exceedingly bitter, like quinine. Along the whole of the western shore at intervals are dead bushes incrustated with salt, as is everything exposed to the spray of this sea.

The southern shore presents a scene of unmixed desolation. On one side the salt mountain of Usdum, rugged and worn, with its conspicuous pillar; on the other the lofty barren hills of Moab; to the south an extensive flat marsh, intersected with sluggish streams, with the high hills of Edom, which border the Ghor to the south behind the Valley of Salt; the glare of light blinding to the eye—the air suffocating—no living thing to be seen.

The eastern shore of the southern bay is separated by a narrow marsh with a few scrubby bushes from hills 2000 feet high, consisting of brown-coloured limestone in horizontal strata, with rose-coloured sandstone beneath. The peninsula mentioned above, and called now as of old *El-Lisan*, or the Tongue, stretches out to the north-west and north in the shape of an extended wing for about 8 miles, and

terminates northward in a bold promontory 40 to 60 feet high. A sharp angular ridge some 20 feet higher runs along its centre; and round its base there is a broad margin of sand incrustated with salt and bitumen. The perpendicular face extending all round it presents a coarse chalky appearance. The surface of the peninsula is rugged and irregular, covered with loose calcareous marl, with incrustations of salt and pieces of pure sulphur, with gypsum and marly clays. At the head of the bay, on the eastern side of the peninsula, is a flat into which the wadys of Beni-Hamed and Kerak open. Here stands the village of Mezraa, inhabited by Arabs resembling negroes, and near it is the plain and so-called ruins of Zoar. These ruins which are commanded by several terrific craters De Saucy says with reason are those of *Zebolim*. Along the stream that traverses the wady of Beni-Hamed are oleanders 18 feet high, and on the plain groves of acacias and many other shrubs (*Aesclepias procera*), the fruit of which is called the Apple of Sodom. This fruit, fair to the eye and bitter to the taste, is about the size of a large apple, and when ripe is filled with fibre and dust. The wady Kerak has no water in summer; on one side of it is a deep yawning chasm, and on the other side are beetling crags blackened by the tempests of ages, and in shape resembling the broken waves of an angry sea. The Arabs of Mezraa cultivate some millet and tobacco.

The Arabian shore to the northward from the wady of Beni-Hamed presents lofty perpendicular rocks of red-sandstone capped with limestone, and broken from within by ravines, in which grow some patches of cane, tamarisk, and a few other shrubs. At about 7 miles northward from the bay is the wady El-Mojeb, through which the Arnon breaks into the Dead Sea. This river, which is 82 feet wide and 4 feet deep in summer, runs through a winding chasin 97 feet wide, formed by perpendicular cliffs of red, brown, and yellow sandstone, capped in the interior with yellow limestone. The cliffs are scored and worn by the winter rains into architectural forms resembling walls of Egyptian masonry. Along the bed of the river castor beans, tamarisks, and canes grow down to the sea-shore. North of the Arnon the shore, in one place enlivened by a small cataract, presents the same lofty rugged brown-parched hills, which form part of the Belka Mountains. Near the wady Zerka-Main, the outlet of the hot springs of Callirhoë, the shore is lined with huge black boulders of trap interspersed with tufa, and the mountains here seem to be one black mass of scoria and lava stratified. All the rocky hollows along the shore are incrustated with salt. The Zerka-Main rushes in a strong current through a chasin 122 feet wide for a mile from the shore, with sides 150 feet high, formed by red and yellow sandstone overlaid with trap.

The sea inclosed within the boundary just traced is in many respects very remarkable. Its water is a nauseous compound of bitters and salt, and of great density. The density of distilled water being 1, the density of the Atlantic water is indicated by 1.02, of the water of the Dead Sea by 1.13; the first dissolves 5.17ths of its own weight of salt, the second 1.6th, and the third only 1.11th. Accordingly, its buoyancy is also great. A strong man floats nearly breast high above it without the least exertion; fresh hens' eggs float up one-third of their length. Lieutenant Lynch's boats with the same loads drew one inch less in the Dead Sea than in the Jordan. No aquatic animal whatever is found in this sea.

When no wind is stirring the sea seems a vast caldron of dark metal fused and motionless, and the great evaporation envelops it in a vapour of a purple tinge. When lashed by the simoon or the sirocco it presents a sheet of raging foam, but when the wind lulls, as it sometimes does, instantaneously, the waves as suddenly subside, in consequence of the ponderous nature of the water. The spray leaves an incrustation of greasy salt, and causes a pricking sensation when it touches the skin. Generally speaking, during Lieutenant Lynch's survey the wind in the forenoon blew from the southward, in the afternoon from the northward, with a fetid sulphureous smell, owing to the marshes it blows over, and after midnight there was a calm. Sudden and violent hurricanes are frequent. The nights were cloudless, and there was scarcely any deposit of dew, the ground is so heated by the sun during the day. There was a remarkable exception to this however during the night the surveying party spent near the village of Mezraa, when a hot wind blew from the north. The dew on this night dripped through the canvass on the men asleep. On April 23 Fahrenheit's thermometer marked 70° at 6 a.m., 85° an hour and a half later, and 92° at 6 p.m. The heat experienced in the southern part of the sea was most oppressive, causing, in conjunction with the sulphureous vapour, a drowsy sensation amounting almost to stupor. After a blistering hurricane at the head of the eastern bay on April 26, the thermometer five feet from the ground marked 106° at 8 p.m., and 104° at one foot above the ground, and mosquitoes were troublesome.

The depth of water in the northern part of the sea is very great; and it increases rapidly and almost immediately from the shore. The first cast of the lead at the mouth of the Jordan gave one fathom, but a few soundings in a south-east direction towards the wady Ghluveir gave 81 fathoms; farther south the depth in mid-sea increased to 116, 117, 218 (1308 feet) opposite the wady Zerka-Main, but near the shores the depth varied from 6 to 23 fathoms. Opposite the Arnon the mid-sea depth is 188 fathoms (1133 feet). On approaching the peninsula the

depth in the centre is still very great, but it gradually diminishes. Opposite its northern promontory, at the centre of the strait on the west side the depth is 107 fathoms; thence to the southern end and narrowest part of the strait there is a rapid ascent of the bottom, the greatest depth here being only 3 fathoms. The eastern bay also rises rapidly from 24 fathoms to one fathom at its southern extremity. In all this northern part of the sea the bottom for the most part consists of mud (yellow, gray, brown, or blue), with cubical and rhomboidal crystals of salt; a hard bottom was found in one or two places only, and in a few others sand and salt. The temperature of the water decreases from the surface to a depth of 10 fathoms, where there is a stratum of cold water; below this the temperature increases. For instance, the surface-water was found to mark 76° Fahr., at 10 fathoms depth 59°, and at 174 fathoms, or 1044 feet, 62°. The coldest water is found at the uniform depth of 10 fathoms.

In the south bay, which, according to De Sauley, occupies the valley of Siddim, the depth is in summer comparatively inconsiderable, nowhere more than two fathoms and a half, or 15 feet, and the water shoals rapidly towards the southern extremity of the sea, so that for a mile from the shore the depth varies from half a foot to a foot. A ford is marked on some maps from the south of the peninsula to the western shore, but Lynch could not find it. There may be a ford however later in the summer. There is a frothy scum and flakes of bitumen floating on the water. The bottom is black or gray slimy mud. Along the shore are many dead bushes, the soil marshy, overlaid with salt and bitumen, and yielding to the foot. The utter desolation of the scenery, the profound silence, and the general absence of any living thing, are very impressive everywhere along the Dead Sea, and especially in this part of it. It is not however to be supposed that animals do not live along its shores; flocks of ducks and other birds, herons, storks, doves, bunting-birds, brown hares, partridges, snipe, butterflies, and cat-birds are among the animals seen by Lieutenant Lynch's party at different parts along the coast. A duck was once seen upon the sea, and now and then a dead quail was picked up that had died of exhaustion; tracks of panthers, tigers, and gazelles were observed. It must be acknowledged however that it is rare to see any animal (except mosquitoes perhaps) near the sea in summer, unless it be after storms; nor that there is any exhalation from the sea itself that is offensive or fatal to them, but that perhaps the same sulphureous and other nauseous vapours that rise from the sour and slimy marshes along the shore are disagreeable and injurious to the lower animals as well as to man. The Arabs who dwell in the wadys and upon the mountains along the coast are ragged, filthy, lean, and hungry, but well-formed savages.

The bottom of this remarkable sea seems to consist of two submerged plains, one averaging 13 feet and the other 1300 feet below the surface, and in the deepest part of the northern plain is a ravine corresponding to the bed of the Jordan; and it has been inferred further from the sudden break-down in the valley of the Jordan between the Jabok and the Dead Sea [JORDAN], from the geological structure of the mountains, the nature of the watercourses, and the clear marks of volcanic agency, that the whole Ghor subsided in consequence of some extraordinary convulsion. On this supposition the northern plain may have been always water, the south plain may once have been dry land. M. de Sauley, who visited the country in 1850 and 1851, comes to the conclusion that the sites of Sodom, Gomorrah, and Zoar are to be sought on the western shores of the Dead Sea, and that the common belief of these cities being buried by the waters of the Dead Sea has no foundation in the history of their destruction. He adds, that the mountain of Usdum, or Eadum, "bears on all its declivities flanking its northern part, the extensive ruins of a city; ruins among which you can distinguish, on a careful examination, many foundations of walls." A mile and a half distant, to the north-west, near the wild rock-strewn wady Ez-Zouera, at the southern end of the Canaanitish Mountains, he discovered the ruins of another town which he considers to be those of Zoar.

(Lynch, *Expedition to the River Jordan*, 1849; De Sauley, *Discovery of the Site of the Destroyed Cities of the Plain*, London.)

DEAL, Kent, a municipal and parliamentary borough and market-town in the parish of Deal, hundred of Bewsborough and lathe of St. Augustine, is situated close to the sea on a bold open beach between the North and South Forelands, in 51° 14' N. lat., 1° 23' E. long., 18 miles E. by S. from Canterbury, 74 miles E.S.E. from London by road, and 102 miles by the South-Eastern railway. The population in 1851 was 7067. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and with Sandwich and Walmer returns two members to the Imperial Parliament. The living is a rectory in the archdeaconry and diocese of Canterbury.

In the reign of Henry VIII. Deal was but a little fishing village about half a mile from the coast, but it is now a good-sized town running close along the shore. The former village is now called Upper Deal, while the present town has grown into existence in modern times. It has arisen in a great measure to supply the wants of the seamen belonging to the ships passing up and down the channel or riding at anchor in the Downs. The town is much resorted to for sea-bathing. The climate of Deal is healthy; the soil is dry, and the air pure and free from marshy vapours and from fogs. Deal was annexed to the Cinque Ports in the 13th century as a member of

Saudwich, and though now of much greater importance still ranks as one of its members. At the south end of the town is a strong castle erected in 1539 by Henry VIII. In the fine roadstead called the Downs, between the shore and the Goodwin Sands, vessels of all dimensions, to the number of occasionally four or five hundred, ride windbound and with safety, except during heavy gales, when some put into Ramsgate for greater security. The pilots of Deal have a high character, and the boatmen are an intrepid race of men. Their courage is often manifested in affording assistance to vessels in distress. The town is well paved and lighted, and watched by a police force. It contains a custom-house, a yard for naval stores, a naval and military hospital, barracks, a pilot-house, a tow-hall, and a jail. The inhabitants are chiefly engaged in boat-building, sail-making, and other pursuits subservient to maritime business; but there is a considerable trade occasioned by supplies required for shipping detained in the Downs by contrary winds.

Besides the parish church, a new church, and a chapel of ease, there are chapels belonging to Independents, Wesleyan Methodists, and Baptists. There are also National schools and a Nautical school. Markets are held on Tuesday and Saturday, and two small fairs in April and October. There is a savings bank.

The village of Walmer adjoins Deal. Walmer Castle, the official residence of the Warden of the Cinque Ports, is about half a mile from Deal. Sandown Castle, erected by Henry VIII. about the same time as Deal Castle, is about a mile east of Deal.

(Hasted, *Kent*; *Land We Live In*; *Communication from Deal*.)

DEBA. [BASQUE PROVINCES.]

DEBENHAM. [SUFFOLK.]

DEBRECZIN, or DEBRECZYN, a royal free town in the western part of Upper Hungary, is the capital of the county of Bihar, and the largest town in the kingdom, Pesth only excepted. It stands in the centre of an extensive sandy but fertile plain, about 120 miles E. from Pesth, to which a railway is in course of construction. The town is open, and has a rustic appearance; for the houses, which are about 4600 in number, seldom exceed one story in height, and are as humble in their exterior as common cottages. Including the three suburbs, from which it is separated by a slight palisade, Debreczin contains about 60,000 inhabitants. The streets are unpaved, and the foot-passenger has consequently to wade either through mud or sand, according to the season of the year, with the aid of a few planks, laid down for crossing the streets. Debreczin has several handsome buildings, among which are the town-hall, the Protestant and Roman Catholic churches, the Franciscan and Piarist monasteries, and the handsome Protestant Collegium, to which a small church and a library of 20,000 volumes are attached. There is also a Roman Catholic gymnasium, a school of design for mechanics, &c., an orphan asylum, three dispensaries, three hospitals, and a house of correction. The inhabitants derive their subsistence from agriculture and the manufacture of coarse woollens, sheep-skins for clothing, pottery, leather, saltpetre, soap, and tobacco-pipes (about 13 millions per annum are made with born mouth-pieces and red or black clay beads). Other industrial products comprise cutlery, combs, buttons, pearl necklaces, &c. Four periodical fairs are held in wooden booths outside the town, and are the resort of buyers and sellers from all parts of the kingdom. Debreczin is noted for the excellence of its bread. It suffers greatly from want of water in summer.

DECAZEVILLE. [AVEYRON.]

DECCAN (Dacshina, the south) was anciently understood to comprehend the whole of the peninsula of India south of the river Nerbudda and the southern boundaries of Bengal and Bahar, and included nearly one half of the territory generally known under the name of the Mogul empire. The name Deccan now denotes the countries lying between the Nerbudda and the Gap of Coimbatore. The Deccan therefore comprehends the following divisions: Candcish, Gundwana, Orissa, Berar, the Northern Circars, Beeder, Aurungabad, Hyderabad, Bejapore, and Mysore.

The interior of this extensive region is an elevated table-land encircled by lofty hills called the Gbauts, which are bordered by low plains extending to the sea-shore. The table-land extends from 12° to 22° N. lat. Between 12° and 16° its average breadth is about 150 miles, but north of 16° it widens gradually to 400 miles. The hills on the table-land are barren, but some of the valleys are very fertile. Over the whole surface a black soil prevails favourable to the growth of cotton. The physical features of the Deccan are described under HINDUSTAN.

The first Mohammedan invasion of the Deccan occurred at the close of the 13th century, in the reign of Ferozo. About the year 1350 the Afgham Hussun ascended the throne under the title of Sultan Alla ad Dien Hussun Kongoh. He was the first acknowledged independent sovereign of the Deccan, and became the founder of the Bhamineo dynasty, of which twelve members in turn succeeded him. After this the Deccan was again divided, and a large part was formed into a province of the Mogul empire. About the close of the 17th century Aurengzebe reduced the country under his immediate sway; but in 1717 Nizam ad Mulk, who had been sent as viceroy into the Deccan, made himself its virtual sovereign; and the whole country continued independent of the Mogul empire until 1818, when a large part of it came under the dominion of the English.

What is known as British Deccan comprises the electorates of Poona, Ahmednuggur, Darwar, and Caudeish; the remainder is under the sway of Hindoo or Mohammedan princes. The lands in this part of India are held under various descriptions of tenure. In most villages of the Deccan are to be found some Ramosis, who are thieves by birth, and who have lands given to them free from government tax, that they may hold themselves responsible for the safety of property in the district where they reside. The condition of the cultivators and of the inhabitants generally has been much improved since the Deccan came into the possession of the English government.

(Rennell, *Memoir*; Mill, *History of British India*.)

DEDDINGTON. [OXFORDSHIRE.]

DEDHAM. [ESSEX.]

DEE, the liver, rises in Merionethshire, of which it drains the eastern districts and also the south-eastern part of Denbighshire. It afterwards separates Denbighshire from the detached portion of Flintshire and from Cheshire, but the lower part of its course is entirely within Cheshire. The Lako of Bala, or Llyn Tegid, which may be considered as the source of this river, receives several mountain streams, one of which is called Dec. [BALA.] The waters of this mountain lake are discharged at its north-eastern corner by a stream of considerable size and depth, which is soon increased by other considerable mountain streams, as the Treveryn and Alwen. The Dee so far flows in a fine open valley; at Corwen the river begins to descend from the mountain table-land of North Wales, and in 10 miles from Corwen to Trevor it probably falls above 300 feet; its course in this part is consequently extremely rapid, though without cataracts. In this part of its course the Dee flows through the beautiful vale of Llangollen. Near Trevor the valley is spanned by the Cyaylltau aqueduct, which carries the Ellesmere Canal across the valley at a height of 120 feet above the Dee. The aqueduct is 1007 feet long, and is supported on 13 stone piers. It is a very striking structure, but is surpassed both in magnitude and beauty by the viaduct which at a short distance from it carries the Shrewsbury and Chester railway across the Dee at a height of 150 feet above its surface. This viaduct consists of 19 arches of 90 feet span, and is 1530 feet in length; it is built almost entirely of stone. Below Trevor the Dee enters the plain, in which it runs with numerous windings upwards of 35 miles to the tideway at Chester. Here it is joined by the Alyn from the west, and changes its western course into a northern. At Chester the Dee is about 100 yards wide, and runs farther down in an artificial channel along the marshes for about 9 miles. The river now enlarges into a spacious estuary 3 miles across, which at high water forms a noble arm of the sea: but at ebb-tide it is dry, and resembles an extensive dreary waste covered with sand and ooze, through which the river runs in a narrow and insignificant stream. It enters the sea near the island of Helbre, where the estuary is about 6 miles wide. In its natural state the Dee is wholly unnavigable; but by means of a weir at Chester a sufficient depth of water is maintained to allow small boats to pass two or three miles above Chester. The whole course of this river from Bala Pool to the beginning of the estuary is upwards of 80 miles.

DEE, RIVER. [ABERDEENSHIRE.]

DEEG. [BHURTPUR.]

DEEPING MARKET. [LINCOLNSHIRE.]

DELAWARE, next to Rhode Island the smallest state of the United States of North America, extends from 33° 23' to 39° 47' N. lat., and from 74° 56' to 75° 46' W. long. It is bounded N. by Pennsylvania, E. by Delaware Bay and the Atlantic Ocean, and S. and W. by Maryland. It comprehends the north-eastern portion of the peninsula which lies to the east of Chesapeake Bay, and more than one-third of its surface. Its length from north to south is about 92 miles; its breadth varies from 10 to 36 miles. Its area is 2120 square miles, or somewhat more than that of the county of Norfolk. The total population in 1850 was 91,532. The following table shows the increase of the population and the proportion of slaves in this state since 1820:—The total population in

1820	was	72,749,	including	12,958	free coloured persons and	4509	slaves.
1830	"	76,748,	"	15,855	"	3292	"
1840	"	78,085,	"	16,919	"	2695	"
1850	"	91,532,	"	18,073	"	2290	"

The federal representative population in 1850 was 90,616, in which number three-fifths of the slaves are included. This entitles the state to send one representative to Congress. To the Senate, like each of the other United States, Delaware sends two members.

Coast-line, Surface.—The coast is low and sandy, and has no natural harbour except at the northern extremity along the banks of the river Delaware. Rehoboth Bay, formed by a long and narrow strip of sand, is too shallow to admit vessels drawing more than six feet of water. In order to form a serviceable harbour a breakwater has been constructed by the general government opposite the village of Lewistown, and above Cape Henlopen, at a cost of nearly three millions of dollars. It is two-thirds of a mile in length, 75 feet wide at bottom, and 22 feet wide at top. A dyke more than half the length of the breakwater, and parallel to it, protects it against the ice brought down by the river.

The watershed runs nearly through the midst of the peninsula, along the western boundary-line of Delaware, but rather within it.

In its northern portion Delaware is undulating, and near Christiana Creek are some hills perhaps 400 to 500 feet high; but south of the creek it nowhere rises to 100 feet above high-water mark; and it gradually becomes more flat towards the Atlantic Ocean. Farther south it is an extensive flat abounding with swamps, from which the small rivers ooze rather than flow to the Chesapeake Bay and the Atlantic Ocean. Some districts of the country towards the sea are marshy and subject to inundations. At the southern extremity is the Cypress Swamp, 6 miles from east to west and 12 miles from north to south, covered with trees and plants, and harbouring numerous wild animals and reptiles. Cypress Swamp has an area of about 50,000 acres: a part of it belongs to Maryland.

Hydrography, Communications.—Except the DELAWARE, which forms its eastern boundary, and is noticed in a separate article, all the rivers of the state are small. The most important is the *Brandywine*, which enters the northern end of the state from Pennsylvania, and flows in a generally southern course past Wilmington, a mile below which it unites with Christiana Creek, which also rises in Pennsylvania, and the united stream forms Wilmington Harbour, which is navigable for large ships, and falls into the Delaware two miles below the town. The other rivers mostly rise within the state, and after a short course fall into the Delaware; they are generally wide in proportion to their length, and navigable by vessels of light draught several miles from their mouth, and hence perhaps they are commonly called creeks. The principal are Duck, Jones, Mispillon or Mospigon, Mother or Murder, and Broad-Kill creeks, and the Indian and Appoquinnimink rivers.

The Chesapeake and Delaware Canal, which connects the bays so named, is an important work. It commences at Delaware city, on the Delaware, and is carried in a generally western direction for 13½ miles to Back Creek, a navigable branch of the Elk River in Maryland. It is 66 feet wide and 10 feet deep, and is navigable by steamers and vessels of considerable burden. It was completed in 1829 at a cost of 2,250,000 dollars.

The state is tolerably well furnished with the ordinary turnpike and bye roads. The most important line of railway yet completed is the Newcastle and Frenchtown railway, which runs from Newcastle on the Delaware to Frenchtown (Maryland) on the Elk River, 16½ miles, thus connecting the Delaware and Chesapeake Bays, and in conjunction with the steamboats stationed at each end forming a convenient line of communication between Philadelphia and Baltimore. The Philadelphia, Wilmington, and Baltimore railway crosses the state farther north, and is the usual land line of communication between those cities. Other lines are projected, but these are the only ones yet constructed within this state.

Geological Character.—In the northern part of Delaware the rocks belong to the primary formations; but the middle and southern parts, forming by far the larger portion, belong to the Atlantic plain, and are almost wholly of the tertiary series. Much of this part is swampy. Towards the west the country becomes sandy, and sandstone rocks occur in the low hills which form the watershed of the peninsula. Bog iron-ore is found in the swamps, and is worked to some extent. Kaolin, or porcelain clay, of excellent quality is obtained in the north, and is sent to supply the porcelain works at Philadelphia. Shell-marl occurs in considerable quantities, and is much used for agricultural purposes.

Climate, Soil, and Productions.—The soil is in many places excellent, but generally it is thin and sandy. In the northern parts of the state along the Delaware, and for eight or ten miles inland, it is a rich and very productive clay, which becomes more and more sandy towards the south. The central part is a light poor sand; the southern part is still less productive. Almost everywhere it is however carefully cultivated. In the southern part of the state there is some good grazing land. The climate is in general healthy and mild, but much severer in the northern than in the southern district, though the two are hardly more than a degree apart. In the neighbourhood of the swamps endemic sickness prevails to a considerable extent.

The natural productions are similar to those of the middle Atlantic states. The forests are not extensive, but large timber grows in the north, and considerable quantities in the Cypress Swamp in the extreme south, and woods of various kinds occur throughout the state.

Agriculture is the principal occupation of the inhabitants. Grain and flour are the chief articles of export. In 1850 the number of farms under cultivation in the state was 6063; the extent of improved lands was 580,862 acres, of unimproved lands 375,282 acres, which together were valued at 13,880,031 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 482,251 bushels; maize, 3,145,633 bushels; rye, 8066 bushels; oats, 604,518 bushels; barley, 56 bushels; huckwheat, 8015 bushels; potatoes, 240,542 bushels; sweet potatoes, 65,443 bushels; peas and beans, 4120 bushels; hay, 30,159 tons; water-rotted hemp, 570 tons; flax, 11,050 lbs.; clover and other grass seeds, hops, &c., are also raised to some extent. Fruits and vegetables are produced in abundance: the value of orchard products in 1850 was 46,574 dollars; of market-garden products, 12,714 dollars. Some wine is made.

The number of horses in the state in 1850 was 13,852; asses and mules, 791; milch cows, 10,248; working oxen, 9797; other cattle, 24,166; sheep, 27,503; swine, 56,261. The products of animals

were thus returned:—Wool, 57,765 lbs.; butter, 1,055,308 lbs.; cheese, 3187 lbs.; the value of animals slaughtered in the year, 373,665 dollars. Bees'-wax and honey, 41,248 lbs.

Manufactures, Commerce, &c.—Although mainly an agricultural state, there is in the north, where water-power is abundant, considerable manufacturing industry; the trade of the state is also important, and from Wilmington the whale-fishery has been successfully prosecuted. In 1850 the number of manufacturing establishments producing to the value of 500 dollars and upwards, was 513, of which 12 were cotton-factories, employing 413 males and 425 females, and a capital of 460,000 dollars; 8 woollen-mills, employing 140 persons, and a capital of 148,500 dollars; 15 iron-works, employing 300 persons, and a capital of 388,500 dollars; and 16 tanneries, employing 108 persons. The other establishments consist of grist, flour, saw, gunpowder, and paper-mills, smitheries and machine-shops, &c. Ship-building is carried on to some extent at Wilmington. The total number of ships built in the state in the year ending June 30, 1852, was 16 schooners, 5 sloops, and 2 steamers, with an aggregate tonnage of 2923 tons. Salt is made from sea-water at Lewis and Rehoboth.

Delaware has scarcely any direct foreign commerce, both the exports and imports being made through Philadelphia, Baltimore, and New York. In 1847 the exports were returned at 235,459 dollars, the imports at 12,722 dollars. In 1849 the exports had fallen to 38,229 dollars, the imports to 1400 dollars. Since that year no entry has been made of either exports or imports in the Treasury returns. The total shipping owned in the state in 1850 amounted to 16,719 tons, all of which was employed in the coasting-trade and fisheries.

Divisions, Towns, &c.—Delaware is divided into three counties,—Newcastle in the north, Kent in the middle, and Sussex in the south; and these are subdivided into 25 hundreds. Dover is the capital of the state, but the principal town is Wilmington. The following are the only places which require notice here: the population, when not otherwise expressed, is that of 1850:—

Dover, the capital of the state, population about 700, is built on high ground between the two principal branches of Jones Creek, in 39° 10' N. lat., 75° 30' W. long., 114 miles E.N.E. from Washington. The streets are wide and laid out at right angles. The state-house, a spacious and handsome edifice, occupies one side of a large central square, in which are also placed the county buildings. There are in the town four churches, an academy, two schools, and a costly monument erected in memory of Colonel Haslett, who was killed in the battle of Princetown. The trade of the town is chiefly in flour with Philadelphia.

Wilmington, the principal port of the state, 37 miles N. by W. from Dover, stands on rising ground between the Brandywine River and Christiana Creek, about a mile above their confluence, and two miles above the Delaware River: the population, which was 13,979 in 1850, had increased in 1853 to 16,153. The streets are wide, and cross each other at right angles; the houses are chiefly of brick, and well built. The town is well supplied with water from the Brandywine by means of extensive waterworks. The public buildings are—a city hall, two market-houses, the usual county buildings, an arsenal, 19 churches, several academies, and a spacious hospital. Wilmington has now no foreign commerce, but it carries on an extensive coasting-trade, and has several vessels engaged in the whale-fishery. Vessels drawing 14 feet of water ascend to its wharfs in Christiana, and vessels of 8 feet draught to those on the Brandywine. Its vessels possess an aggregate tonnage of about 10,000 tons, of which about 2600 tons are propelled by steam. The manufactures of Wilmington are also important, full advantage being taken of the large amount of water-power furnished by the Brandywine. Flour-mills are the most numerous, and some of them are among the largest in the Union. Gunpowder is made to a considerable extent. The town stands in the midst of a busy and fertile country, and since communication has been opened by railways with the principal towns in this part of the Union, Wilmington has been steadily increasing in business and prosperity. Five newspapers are published in the town.

Christiana stands on the left bank of Christiana Creek, 33 miles N. by W. from Dover: population of the town and district 3902. There are extensive flour and gunpowder-mills, cotton-factories, &c. The Philadelphia, Wilmington, and Baltimore railway passes through Christiana. *Delaware City*, on the right bank of the Delaware, at the entrance of the Chesapeake and Delaware Canal, 28 miles N. from Dover, though styled a city, is really a small village of about 60 dwelling-houses, warehouses, stores, &c. *Georgetown*, the capital of Sussex county, 34 miles S. by E. from Dover, contains the court-house, jail, and other county buildings, and, with the surrounding district, 2318 inhabitants. *Newcastle*, the port of entry and capital of Newcastle county, stands on the Delaware, 31 miles N. from Dover: population, 3500. Next to Wilmington, from which it is 5 miles distant, Newcastle is the chief port of the state. It is an old town, and was formerly the capital of Delaware. It contains a court-house, jail, market-house, arsenal, five churches, several schools, and a public library of 4000 volumes. There is a large manufactory of steam-engines, locomotives, &c. The harbour is well protected by piers. The shipping of the port in 1850 amounted to 7259 tons, of which 1345 tons were propelled by steam. The shipping is almost wholly engaged in the coasting-trade. Newcastle is connected by the Wil-

ington and Frenchtown railway with those towns and also with Baltimore and Philadelphia.

Government, Judicature, Education, &c.—The right of voting belongs to all free white male citizens, 21 years of age, who have resided one year in the state, and one month in the county for which they offer to vote. The legislative body, styled the General Assembly, consists of a senate of 9 members elected for four years, and a house of representatives, consisting of 21 members, elected annually. The governor is elected for four years: his salary is 1333½ dollars.

The revenue from all sources for the year 1853 was 95,206 dollars, the expenditure was 60,419 dollars. The state has no debt, and has an invested capital of 350,637 dollars, and a school-fund of 435,505 dollars. The militia of the state is composed of 9229 men, of whom 447 are commissioned officers.

The judiciary consists of a superior court, presided over by a chief-justice and an associate-justice, with salaries of 1200 dollars a year each, and two other associate-justices with salaries of 1000 dollars each; a court of chancery, presided over by a chancellor, with a salary of 1100 dollars; and an orphans' court, presided over by the chancellor and a judge of the superior court. The judges hold office during good behaviour.

In order to place a free school within reach of every family, 236 districts are laid off, numbered, and incorporated, in each of which a school is maintained. The number of scholars (only white children being admitted) was 10,230 in 1853. Besides these there are about 40 academies and grammar-schools in the state, and two colleges. Delaware College, at Newark, had 6 professors in 1853, with 45 scholars, and a library of 7500 volumes. St. Mary's Roman Catholic College, at Wilmington, had 3 professors in 1850, and 107 students. Among religious sects the Presbyterians are much the most numerous in Delaware: in 1850 they had 42 ministers and 2600 members. The Methodists are the next most numerous sect: there are also many Episcopalians, Roman Catholics, Baptists, and Quakers. Eleven newspapers are published in the state.

This country was first settled by the Swedes, whom Gustavus Adolphus sent there in 1637. In 1655 it passed into the hands of the Dutch, who ceded it in 1664 to the English. Its name is derived from Lord Delaware, the governor of Virginia, who in 1610 was the first to enter the bay, which thence received his name.

(Colton, *Statistical Gazetteer of the United States*, 1853; Hassell and Smith; Darby; Warden; *American Almanac*, 1854, &c.)

DELAWARE, a river in the United States, rises in the state of New York, between 42° and 42° 45' N. lat., and afterwards forms the boundary-line between New York and New Jersey on one side, and Pennsylvania and Delaware on the other side. It terminates its course of 305 miles about 5 miles below Newcastle in Delaware, about 39° 30' N. lat., and 75° 40' W. long.

The Delaware is formed by two branches, the principal of which, called the Mobawks, issues from a small lake near the borders of Schoharie county, New York, 42° 45' N. lat., at an elevation of 1886 feet above the sea. The other branch is called the Papachton; both rise on the western declivity of the Catskill Mountains, hardly 30 miles from the tide-water in the Hudson River. Both branches flow in a west-south-west direction for about 50 miles, and unite on the boundary of Pennsylvania. The river, now called the Delaware, flows south-east for about 60 miles to the junction of the Neversink River. Hence it runs in a south-western and southern direction to the junction of the Lehigh at Easton, 65 miles, where it again turns to the south-east. After a course of 35 miles in that direction to Bordentown, it resumes its south-western course to the place where it enters the Delaware Bay, 5 miles below Newcastle. The tide ascends in this river 120 miles from its mouth to the rapids at Trenton. The frequent changes in its course are caused by four ridges of the Appalachian Mountains, through which the river breaks in an oblique line. In passing through the Kittanning or Blue range it traverses a remarkable ravine, two miles long, known as Delaware Water Gap, where the rocks rise precipitously 1600 feet from the edge of the water, in many places scarcely leaving room for a road. Though in its course above Trenton it forms 25 rapids within 60 miles, having a total fall of 165 feet, they are insufficient to prevent the navigation, which at seasons of high water extends by both branches into the state of New York. Ships of the line may ascend to Philadelphia, 45 miles above Delaware Bay, where the tide rises 5 or 6 feet, and sloops as far as Trenton, 80 miles above the bay.

The importance of this river has been greatly increased by the discovery of extensive coal-beds near the sources of its two largest tributaries, the Lehigh and Schuylkill. The Lehigh joins the Delaware at Easton, and the Schuylkill 5 miles below Philadelphia. Though both these rivers, whose sources are between 1400 and 1500 feet above the sea, and whose course does not exceed 100 miles, are extremely rapid, a great portion of their course has been rendered navigable by dams and locks, so that the produce of the coal-mines can be brought down to Philadelphia.

The navigation of the Delaware River as noticed under DELAWARE State, is united to that of Chesapeake Bay by the Chesapeake and Delaware Canal, and they are further connected by the Newcastle and French-town railway. The Delaware is united with the Hudson River and the bays of New York by the Delaware and Hudson, the Morris,

and the Delaware and Raritan canals. By the Union Canal the Schuylkill navigation is connected with that of the Susquehanna. The Lehigh Canal connects the Delaware with the coal-mines of Mauch Chunk on the Lehigh.

DELAWARE BAY extends in a north-west direction, between 38° and 39° 30' N. lat., 74° 50' and 75° 40' W. long. Its entrance between Cape May in New Jersey and Cape Henlopen in Delaware is nearly 20 miles wide. It afterwards grows wider, forming on the east an open bay, 30 miles wide, between Cape May and Egg Island; it then gradually narrows, and is considered to terminate 5 miles below Newcastle, at the embouchure of the River Delaware. Its whole length is about 75 miles. The navigation is difficult and dangerous on account of numerous shoals. Its low and sandy shores were without harbours, even for small vessels, until the government of the United States constructed the magnificent breakwater within Cape Henlopen, noticed under DELAWARE, State of.

DELEMONT. [BERN.]

DELFT, a large town in the province of South Holland, 10 miles by railway N.W. from Rotterdam, is an ancient and gloomy place on the Schie, with 17,000 inhabitants. Many of the streets are divided by narrow stagnant canals; in the centre of the town are two handsome streets with broad canals and shaded with trees. The greater part of the country-houses inhabited by the wealthy merchants of Rotterdam are situated on the banks of the canal near Delft. This town was formerly famous for its pottery, to which it gave its name; but this manufacture has been supplanted even in Holland by the superior pottery of England; the earthenware of Delft is now of the coarser kind, and not more than 200 persons are employed in the manufacture. The principal buildings are—the New Church, which contains the monuments of Grotius and William I., prince of Orange, who was murdered at Delft, July 10, 1584; the town-house, which stands on one side of a large market-place, and opposite to the new church; and the old church, which is distinguished by a leaning tower, and contains the tombs of Leuwenhoeck the naturalist, and Admiral Van Tromp. At the entrance of the town, on an island formed by canals, is the state arsenal of Holland, formerly the Dutch East India House. Manufactures of woollen cloths and tobacco-pipes are carried on. There is also a considerable trade in butter.

DELHI, formerly a large province of Hindustan, lying between 28° and 31° N. lat., bounded N. by Lahore, E. by Oude and northern Hindustan, S. by Ajmeer and Agra, and W. by Ajmeer and Lahore. It extends east and west from the hilly countries to the central desert, a distance of 240 miles, and in breadth, from north to south, about 200 miles. The province is generally level. To the north of the city of Delhi is a ridge of low hills, which joins the mountains between the Sutlej and the Jumna. Except on the banks of the rivers by which it is traversed, the soil of the province is in a high degree arid and unproductive, but great pains have been taken to remedy this disadvantage by means of irrigation. The province is watered by the Ganges, the Jumna, the Caggar, the Chittung, and the Saraswati. In addition to these rivers several artificial canals of great extent have been made. The canal of Ali Merdan Khan receives the pure water of the Jumna, not far from its source in the mountains, and conducts it 120 miles to the city of Delhi. This canal supplies the inhabitants of Delhi with water for domestic purposes, that of the Jumna Kurnal being much impregnated with earthy salts. The canal of Sultan Feroze Shah commences from Ali Merdan Khan's Canal a little below Kurnal, and is carried to the westward through Hurriana to the frontiers of Bikaner. The Great Doab Canal joins the Jumna a few miles below the place where it issues from the northern mountains, and is carried to the same river nearly opposite to Delhi, a distance of 150 miles. It passes through Saharupoor, Rampoor, Shamlee, and some other towns, and gives fertility to an extensive tract of country. Wheat, barley, gram, and other grains are produced in that portion of the province which lies between the Jumna and the Sutlej, but the long-continued droughts in the western parts of Delhi are unfavourable to husbandry, and except in the rainy season the country is sterile and uncultivated. The Rohilla district, lying between the east bank of the Ganges and the kingdom of Oude, has a fertile soil and a genial climate, and is well watered. This district produces sugar and wheat abundantly.

The city of Delhi was taken by Mahmood about the year 1011, and laid under contribution. The province was afterwards the seat of empire under the Arabian or Afghan monarchs. The Mogul dynasty was founded by Baber in 1525, the last of the Afghan monarchs having been slain by him in battle. The throne continued in the possession of this monarch and his descendants until the establishment of the English in India.

In the year 1788 the Rohillas became masters of the imperial city. In 1808 Lord Lake, after defeating Dowlut Rao Scindiah, took possession of the city and territory of Delhi, and assigned lands for the support of the Mogul, thenceforth entitled King of Delhi.

The consequences of the immediate administration of the government by the British have been highly favourable to the inhabitants. The whole population is well clad, which, in a climate where clothing is not of prime necessity as a protection from the elements, is considerable evidence of prosperity. The tenure of the land has not been interfered with by the English, as in other provinces of India.

Settlements are made with the village proprietors according to immemorial usage.

The district now called Delhi, one of the six administrative divisions of the North-Western Provinces, includes only a small portion of the former province. The area is about 8300 square miles, of which about one-half is under cultivation. The population is about a million and a half, of whom about a million are Hindoos.

(Rennell, *Memoir; Parliamentary Papers*.)

DELHI, the capital of the province above described, is situated on the right bank of the Jumna, in 28° 40' N. lat., 77° 16' E. long. According to tradition this city was founded 300 years before the Christian era by Delu. It formerly stood on the left bank of the Jumna, and is said to have covered a space of 20 square miles. The present city was built in 1631 by the emperor Shah Jehan. The city is about seven miles in circumference, and is surrounded by walls constructed of large blocks of gray granite: several towers and bastions occur in the walls at intervals. It has seven gates of freestone, and contains the remains of several fine palaces, the former dwellings of the chief omrahs of the empire. These palaces are each of considerable extent, and surrounded by high walls, containing baths, stabling, and numerous out-buildings. There are several beautiful mosques in good preservation, of which the largest, built by Shah Jehan, is constructed of white marble and red sandstone. There are two fine streets, one 90 feet broad and 1500 yards long, the other 120 feet wide and a mile in length. Down the middle of the first of these streets is an aqueduct, supplied with water from Ali Merdan Khan's Canal. The other streets are narrow, but contain many good brick houses. The Mogul's Palace, built by Shah Jehan, on the west bank of the Jumna, is surrounded on three sides by a wall 30 feet high, and more than a mile in circumference. The chief hall of audience is an open quadrangular terrace of white marble, richly ornamented with mosaic work and sculptures in relieve; and the chapel of Aurengzebe, also of white marble, although small, is of beautiful workmanship. The gardens are said to have cost a crore of rupees—one million sterling. The principal buildings of European erection are the arsenal, a church, and the college, with the residences of the officials. One of the most generally useful works of the emperor Shah Jehan in this city is the well, excavated by great labour out of the solid rock upon which the Jumna Musjeed is built. The water is raised from a great depth by complicated machinery to a succession of reservoirs, and fills a pond, from which the inhabitants obtain a supply.

This city has at various times undergone great vicissitudes. In 1803 the city and territory of Delhi passed into the possession of the British, and from that time the king of Delhi has been a merely nominal sovereign, receiving a pension from the British government. The population of the city is estimated at 200,000. The trade of Delhi is still extensive, particularly in shawls, which are brought from Cashmere to be embroidered with gold and silk. The jewellers and ivory carvers of Delhi are celebrated for their skill and the delicacy of their workmanship. A considerable trade is carried on in precious stones and in carnelians.

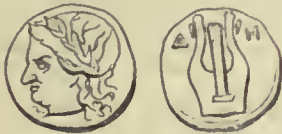
Among the ruins of the ancient city on the eastern side of the river are some splendid mausoleums in good preservation. About 1825 a college or madriasa was established by the General Committee of Public Instruction, and funds were assigned for its support by the Company's government, in addition to which a sum equal to 17,000*l.* was presented to the college by Nawaub Islamaid-ood-Dowlah, late minister of the king of Ouda. There is another school at which the children of the native gentry are taught the English language. In addition to these establishments about 300 schools have been opened in Delhi and its vicinity for the instruction of poor children. There are several missionary churches and schools in the city. A jail, a lunatic asylum, and other public buildings have been recently erected by the Company's government.

Delhi is distant from Calcutta, by the Birbhúm road, 956 miles; from Bombay, by Ahmedabad and Ajmeer, 880 miles; from Madras, by Ellichpore, 1275 miles.

(Rennell, *Memoir of a Map of Hindustan*; Mill, *History of British India*; Heber, *Journals in India*; Stoecker, *Handbook of India; Parliamentary Papers*.)

DELOS, an island of the Archipelago, the smallest of the Cyclades group, lies in the strait between Mycone and Rhenea. According to the poetic tradition, it was originally a floating island, until Jupiter fixed it fast to the bottom of the sea in order to afford a secure resting-place for Leto or Latona to bring forth Apollo and Diana. (Strabo, p. 485.) It had several ancient names, as Ortygia, Cynthia, and Asteria. It was celebrated from the earliest times as a seat of the worship of Apollo, who was said to have been born there. His temple and that of his mother, Latona, were in the town of Delos, which was built on a little plain on the west side of the island, at the foot of a lofty mountain, called Cynthus. (Strabo, p. 485.) The river Inopus ran into the sea to the south of the town; and in the sacred inclosure was a diminutive circular basin. (Herod. ii. 170; Tournefort, 'Voyage du Levant,' tom. i.) Delos was a place of meeting for the Ionians in the time of Homer; and athletic sports, with dancing and singing, were carried on there in honour of Apollo. (Thucyd. iii. 104.) Polyrate, of Samos, consecrated the adjoining island, Rhenea, to the

Delian god, and joined it to Delos by a chain. Delos fell into the power of the Athenians in the time of Peisistratus, and then a partial purification of the island took place by the removal of the tombs which were within sight of the temple. In the year B.C. 426 a complete purification of Delos was made by the Athenians; all the tombs there were removed, and it was proclaimed that no one should thenceforth die or be born in the island, but that all persons likely to die or bring forth should be sent over to Rheneia. (Thucyd. i. 8; iii. 104.) The Athenians instituted at Delos a festival, which returned at the beginning of every fifth year, called the Delia, and sent thither annually a sacred vessel, called the Theoris, in commemoration of the delivery of Athens by Theseus from the Cretan tribute. (Plat. 'Phædo.') The Persians regarded Delos with so much veneration, that when they were sailing to Eubœa, in B.C. 490, they would not land there, but sent to offer a most sumptuous sacrifice to the Delian Apollo. (Herod. vi. 97.) It was probably on account of the respect which all parties paid to this temple that the Athenians selected it as the depository of the tribute which they collected from their allies after the Persian war. (Thucyd. i. 96.) In B.C. 422 the Athenians removed the whole population of Delos to Adramyttium, where they were allowed to settle by the satrap Pharnaces (Thucyd. v. 1), and where many of them were afterwards treacherously massacred by the Persians. (Thucyd. viii. 103.) When Corinth was destroyed by Mummius, Delos succeeded to the commerce of that city, and was for a time very flourishing; but the generals of Mithridates having landed there in the war between that monarch and the Romans, the island was laid waste by them, and remained in a state of great desolation. (Strabo, p. 486.) In the days of their prosperity the Delians carried on a very extensive slave-trade with Cilicia, and 10,000 slaves are said to have been landed and sold in a single day. (Strabo, p. 668.) The island was formerly famous for its palm-trees; there are none now on the island. Delos is little more than a mass of bare rock about five miles round. The town Delos stood in a plain at the foot of Mount Cynthus, a bare granite rock 400 or 500 feet high, on the sides and summit of which are some architectural fragments of white marble. The building that stood on the summit seems to have been an Ionic temple. The town is now a heap of ruins. Whole ship-loads of columns and other architectural remains were carried off centuries ago to Venice and Constantinople. The chief buildings lay between the circular basin and the harbour. The ruins of the great temple of Apollo may be distinctly traced; and there are still remains of the colossal statue of Apollo dedicated by the Naxians. The only inhabitants now are a few shepherds and goatherds from Myconus.



Coin of Delos.

British Museum. Actual size. Copper. Weight, 55 grains.

The island of *Rheneia*, half a mile distant, is larger than Delos, being ten miles round. It consists of two parts connected by an isthmus. The southern part was the burial place for Delos, and still contains numerous tombs. On both Delos and Rheneia are ruins of many private houses. Both islands are now called *Dhiles*.

(Leake, *Northern Greece*.)

DELPHI, now CASTRI, a town of Phocis, celebrated for its oracle of Apollo. Its original name was Pytho, which some derive from *πυθίσθα*, 'inquire'; others from the serpent Pytho, which Apollo slew here; and Homer does not call it by its more modern appellation. There was a legend that two eagles sent by Jupiter from the east and west met at Delphi, and in the temple was a stone adorned with two golden eagles and other devices, which was called the navel-stone, signifying that Delphi was the navel of the earth: representations of this may be seen on many ancient monuments. The oracles were delivered by a priestess, who sat upon a tripod placed over the mouth of the cavern in which the serpent Pytho was buried, and who, having exhaled the vapour, pronounced some prophecy in verse or prose; if in prose, it was afterwards set to verse by the poets attached to the temple. The great reputation of the Delphian oracle made it the richest shrine in Greece, as every person who was satisfied with the response he obtained made a point of offering some costly donation to the temple. The first stone temple at Delphi was built by Trophœus and Agamœdes; this having been destroyed by fire B.C. 548, a new one was built by the Amphictyons from the proceeds of a voluntary subscription to which Amasis, the king of Egypt, largely contributed. The Alcæonidae, who contracted to build it, very liberally substituted Parian marble in the front of the building for the common stone of which they had undertaken to construct the edifice. (Herod. ii. 180; v. 62.) The wealth of Delphi naturally attracted plunderers. The Persians under Xerxes made an unsuccessful attempt to get possession of the treasures accumulated there. (Herod. viii. 37.) The Phocian leaders in the sacred war did not hesitate to appropriate them as a fund for the payment of their mercenaries (Strabo, p. 421); and Brennus, or Bran, the Gallic king, subsequently carried off the

greater part of the offerings which remained. (Strabo, p. 188.) There were however still some objects for the rapacity of Nero, who carried off 500 bronze statues at once. (Pausan., 'Phoc.' 5.) The city of Delphi, which was the largest in Phocis (Pausan., 'Phoc.' 34), was situated in the narrow vale of the Pleistus, on an elevation, sixteen stadia in circumference, at the foot of the south side of Parnassus (Strabo, p. 418); and as the focus of the Dorian religion, and the seat of the most celebrated oracle in Greece, it naturally became populous and wealthy. The population consisted of Dorians, who formed the privileged class, and of the descendants of the bondsmen of the temple. The constitution was originally monarchical (Müller, 'Dor.' iii. 6, § 10); the kings were also called Prytanes. (Müller, iii. 8, § 3.) The Dorian families made an oligarchy, from which the priests, the Pythian court of justice, and a limited senate, were chosen. (Müller, iii. 9, § 17.) Delphi was from very early times the rendezvous of an important federal union, or amphictyony, the organisation of which is attributed by Strabo to Acrisius. (Thirlwall, 'Hist. Greece'.)



Coin of Delphi.

British Museum. Actual size. Silver. Weight, 22½ grains.

The topography of Delphi, and the remains still existing there, are accurately described by Leake, 'Northern Greece,' vol. ii.; and by Ulrich, 'Reisen und Forschungen in Griechenland.'

DELTA, the name of the fourth letter of the Greek alphabet. It was originally given by the Greeks to that part of Lower Egypt which, being comprised between the two main branches of the Nile and the sea, had a triangular form, somewhat resembling the Greek letter Δ. The same name has since been extended to all those alluvial tracts, whether of triangular form or not, at the mouths of rivers which empty themselves into other rivers, into lakes, or into the sea by two or more diverging branches. Of the different circumstances which contribute to the formation of deltas two are essential: first, the river, in the lower part of its course, must open out or spread sufficiently to have the motion of its waters considerably retarded; and secondly, it must either be habitually or periodically charged with fine detrital matter, which it deposits when its motion is diminished or its progress checked.

The principal deltas of Europe are those of the Rhône, the Danube, and the Po. Many other rivers however form deltas, such as the Ebro, the Vistula, the Neva, the Dwina, the Don, &c. The delta of the Rhine has been, as it were, obliterated by the irruption of the Zuydersee, though the whole of Holland is a formation of deltoid islands, created by the anastomosing branches of the Rhine, the Meuse, and the Schelde. The deltoid form of the mouths of the Petchora is no longer recognisable in the group of islands at its embouchure.

In Asia, the principal deltas are those of the Ganges, the Indus, the Irrawaddi, the Cavery, the Euphrates, the Oural, the Lena, and the Kolima.

The Volga, before entering the Caspian, is split into a great number of branches; but the space which they inclose, in strictness, bears little resemblance to a delta.

In Africa, the Nile and the Niger; and

In America, the Mississippi and the Orinoco form the principal deltas.

DELVINO, a town, or rather large village in the interior of Albania (Turkey in Europe), in a rich plain at the foot of the south-western slope of the mountain range of Khimára. It is 45 miles N.W. from Janina, and about 15 miles N.E. from Butrinto. It was formerly the residence of a pasha, and had a population of 8000, but the population is now said to be greatly reduced. There is a castle at Delvino, and a Greek hishop still resides in the town.

DEMBEA. [ABYSSINIA.]

DEMERRARA. [GUYANA, BRITISH.]

DEMETRIO, SAN. [ABRUZZO.]

DEMONA, VAL DI. [NAPLES; SICILY.]

DENBIGH, Denbighshire, the county town, a municipal and parliamentary borough, and market-town in the parish of Denbigh, is situated in the vale of Clwyd in 53° 10' N. lat., 3° 23' W. long.; distant 213 miles N.W. from London. The population of the borough in 1851 was 5498. It is governed by four aldermen and twelve councillors, one of whom is mayor; and with Ruthin, Holt, and Wrexham returns one member to the Imperial Parliament. The Epiphany and Trinity quarter-sessions are held here; the other sessions and assizes are held at Ruthin. The living is a rectory in the diocese and archdeaconry of St. Asaph.

The town of Denbigh is built on the rugged sides of a steep insulated hill, the summit of which is crowned by the picturesque ruins of the castle; the principal street contains several good private residences. The original town was situated on the summit of the rock, but about the middle of the 16th century most of the streets were demolished, and the town was almost deserted; a new and

much more convenient town was then formed about the bottom of the rock. The walls of the old town were of great strength.

Denbigh castle appears to have been erected by Henry Lacy, earl of Lincoln, upon whom Edward I. conferred the lordship of this place on the death of Llewellyn, the last prince of Wales. The castle walls were of extraordinary strength: the outer and inner faces were built in the usual way, and the interval was filled with rough stones of all sizes and with a grouting of hot mortar, which, on cooling, formed a mass as hard as stone. The grand entrance to the castle, a magnificent pointed archway, with the statue of the founder in a niche over it, in tolerably good preservation, still remains: there are also portions of two large octagonal towers which flanked the entrance. The walls, which run round the brow of the hill, inclose a considerable area, partly used for pasture, and partly as a bowling-green. Edward IV. was besieged in this castle by the army of Henry VI., but he made his escape before the castle surrendered. Charles I. came here on his flight from Chester after the battle of Rowton Heath in 1645, and the tower in which he is said to have lodged is now called the King's Tower. The garrison withstood the Parliamentarians for above two months, and then surrendered only by order of the king. After the restoration of Charles II. the castle was dismantled, but owing to the excessive thickness of the walls it was found necessary to blast them with gunpowder.

The town is well-paved and lighted, and possesses a mechanics institution, a dispensary and infirmary, a lunatic asylum, and a new and handsome market-place. The parish church is at Whitechurch, about a mile from the town; it is very ancient. It has been recently repaired. A chapel near the castle gate, within the old town walls, once belonged to the old castle, and was dedicated to St. Hilary. There is a church for the Welsh portion of the inhabitants. The Independents, Calvinistic and Wesleyan Methodists, Baptists, and Plymouth Brethren have places of worship. There are National schools, a British school, two Endowed schools, a Free grammar school, and a Blue-Coat school. Denbigh has a considerable manufactory of gloves and shoes; tanning is extensively carried on. The markets are held on Wednesday and Saturday; there are six fairs in the year. The neighbourhood is greatly celebrated for the beauty of its scenery.

(*Land We Live In*, vol. iii.; Pennant, *North Wales*; Cliffe, *Book of North Wales*; Parry, *Cambrian Mirror*; Bingley, *North Wales*; *Communication from Denbigh*.)

DENBIGHSHIRE, a county of North Wales, of very irregular form. It is bounded N. by the Irish Sea; N.E. by the county of Flint; E. by that of Chester, from which it is separated by the Dee; S.E. by a detached part of Flintshire, and by Shropshire, from both of which it is also separated by the Dee; S. by Montgomeryshire; S.W. by Merionethshire; and W. by Caernarvonshire, from which it is separated by the river Conway. A small detached part of the county is included between Shropshire and Montgomeryshire. Its greatest length, from north-west (Llan Drillo Rhôs, near Little Orme's Head) to south-east (Llan Gedwyn, on the river Tanat), is 41 miles; its greatest breadth from the extremity of the county near Eaton Hall (which is in Cheshire) to the source of the Rhaiadr, which flows into the Tanat, is about 29 miles. The area of the county is about 603 square miles: the population in 1851 was 92,583.

Surface, Hydrography, and Communications.—The Hiraethog hills, which occupy the western side of the county towards Caernarvonshire, extend from the north-western extremity of Denbighshire, near Little Orme's Head, in a south-south-east direction, skirting the valley of the Conway, to which they present their steepest side; on the east side several ridges of hills varying in length from 5 to 10 miles, run out laterally from the principal range. The Hiraethog hills, with these lateral branches, form one of the most extensive and dreary wastes in the principality of Wales, stretching in length from 25 to 30 miles, from the neighbourhood of Little Orme's Head to near the town of Corwen (Merionethshire), on the Dee; and in breadth according to the extent of the lateral ridges. The general covering of these hills is heath or lugg; the hollows and flats abound with excellent peat for fuel. The principal summit of the Hiraethog range is Modwl Eithin, 1660 feet high. In the branch ridges the highest summit is Bronbanog, near the source of the Clwyd, 1572 feet. The eastern side of the county, adjacent to Flintshire, is occupied by part of two parallel ranges of hills (the western range called the Clwydian hills), which commence on the coast of Flintshire, and entering Denbighshire run southward more than 20 miles towards the valley of the Dee, and are united by the hills which form the northern side of that valley to the Hiraethog range already described. The whole may be considered as forming one range 60 to 65 miles long, in the form of a horse-shoe, or of the letter U, and inclosing the beautiful and fertile vale of Clwyd. The Clwydian hills and the parallel range inclose a valley watered by the river Allen (Alen or Alyn) a tributary of the Dee. The principal summits of the Clwydian and parallel ranges vary in height from 1491 feet to 1853 feet. The Berwyn hills, which separate the basin of the Dee from that of its tributary, the Ceiriog, and the hills which separate the basin of the Ceiriog from that of the Tanat (whose waters flow, though not immediately, into the Severn), occupy the southern part

of the county. Cefn Ucha, in the Berwyn range, south of the town of Llangollen, is 1316 feet high.

The waters of Denbighshire find an outlet into the sea chiefly by the Conway, the Clwyd, and the Dee, not one of which has its estuary within the county. The Conway carries off the waters of the western slope of the Hiraethog hills; the Clwyd drains the country inclosed between the Hiraethog and the Clwydian hills, except a small part which is drained by the Alwen, a feeder of the Dee; the Dee receives by several tributaries the waters of the rest of the county. The Conway is noticed under CAERNARVONSHIRE. Its Denbighshire tributaries are all small, for the hills on whose slopes they rise are near the main stream: these tributaries are the Serw, which flows from Llyn Serw and joins the Conway near its source, the Clettwr, the stream from Cernioge, the Afon Hwch, the stream which passes Eglwys Ffieb, and many other smaller streams. The Clwyd rises near the hill Bronbanog. [CLWYD.] The width of the valley of the Clwyd allows the formation of several large affluents. The Dee touches the border of the county 4 or 5 miles below the town of Corweu (Merionethshire), and after separating it from Meriouthshire for a mile or two, quits the border and crosses Denbighshire in a winding course from west to east through the vale of Llangollen, passing the town of Llangollen, and Wynnstay, the seat of Sir W. W. Wynn. A little below Wynnstay it reaches the border of the county, and divides it from Shropshire, a detached part of Flintshire, and Cheshire, until it finally quits Denbighshire a little above Eaton Hall. That part of the course of the Dee which is upon or within the border of the county, may be estimated at more than 40 miles; the river is not navigable till after it leaves Denbighshire. Of those feeders of the Dee which belong to Denbighshire, the Rhaiadr or Moch, the Alwen, the Ceiriog, the river which rises at Minera and passes near Wrexham, and the Alen, or Alyn, are the chief. [DEE.] The Rhaiadr, or Moch, is a small stream which forms the boundary of Denbighshire and Meriouthshire. Its length does not exceed 7 or 8 miles, but it forms in its course the celebrated waterfall of Pistill Rhaiadr. This fall, which is the loftiest and perhaps most picturesque waterfall in North Wales, is broken into two parts; its total height is about 200 feet. The southern border of the county is skirted for about 5 miles by the Tanat, which flows by the Yrwy into the Severn. The Ywrch, the Cwmrhwi, and one or two other affluents of the Tanat belong to Denbighshire, but they are small. Some small streams in the northern part of the county flow directly into the sea between the Conway and the Clwyd. The Dolwen, the largest of them, has a course of not more than 8 miles.

There is in Denbighshire a navigable feeder of the Ellesmere Canal. It is taken from the Dee near Llan Tysilio, in this county, and follows the valley of that river to the neighbourhood of Ruabon, where there is a short railroad from the canal to Ruabon brook. The canal then turns abruptly, and crossing the river Dee, over which it is carried by the aqueduct of Pont Cysylltau, runs southward to the river Ceiriog, over which it is carried by another aqueduct bridge, and thence into Shropshire. There is another large aqueduct bridge over the Ceiriog, built of stone, which is 600 feet in length, and is supported on 10 arches at an elevation of 65 feet above the river.

Of the roads which cross Denbighshire the most important is the parliamentary mail road from London to Holyhead, which was, until recently, the principal channel of communication between the Metropolis and Dublin. It enters Denbighshire near the village of Chirk, and runs northward to near the Dee, where it turns to the west, and passing through Llangollen, enters Merionethshire. It afterwards re-enters Denbighshire, which it finally quits by crossing the Conway at Bettws-y-Coed. The mail road from London to Holyhead, by Chester, enters Denbighshire between St. Asaph and Abergele, and quits it at the bank of the Conway. The Chester and Holyhead railway enters the county near Rhyl and passes along the coast to the bank of the Conway, a distance of about 14 miles, where it enters Caernarvonshire. The Chester and Shrewsbury railway enters the county a few miles north from Wrexham, and proceeding southward quits it near Chirk, a distance of about 12 miles.

Geology, Mineralogy, &c.—In describing the geological character of this county, we shall notice the principal rocks which are found in it in the order of superposition, beginning with the uppermost, the red marl or new red-sandstone. This rock occupies part of the coast on the north of the county, and skirts the Clwyd from its mouth to above Ruthin. It is found also occupying a considerable tract in the eastern part of the county, along the Dee, extending from that river to the town of Wrexham; and again it is found in the valley of the Ceiriog, near the village of Chirk. The coal-measures which underlie the red marl, and which form the coal-field of Flintshire, extend from that county into Denbighshire as far as Wrexham, and again appear in the valley of the Dee, extending from Ruabon to Chirk. Coal is dug near Wrexham and in the neighbourhood of Ruabon. Common, cannel, and peacock coal are found in these coal-measures. The coal-measures rest on a base of shale and sandstone, answering in position and character to the millstone grit of Derbyshire; this base rises to the surface, and occupies a narrow strip of the county extending from Flintshire south-east to Wrexham, and from that town south by west to Chirk; after which it continues into Shropshire, skirting the Flintshire and Ruabon coal-fields. The shale is succeeded by carbon-

frous limestone or mountain limestone, which extends from the coast, in the neighbourhood of Great and Little Orme's Head (both these promontories consist of this rock), and forms part of the mass of the hills that extend from the Hiraeathog hills to the vale of Clwyd. A considerable part of that vale, and the upper part of the valley of the Alen, separated from it by the Clwydian hills, are also occupied by this limestone, which extends south-east from the vale of Clwyd across the vale of Llangollen into Shropshire. The older red-sandstone, which underlies the mountain limestone, occupies a narrow belt of the surface, skirting the district which has just been described as occupied by the limestone. The Hiraeathog hills are formed principally of transition limestone. The rest of the county is occupied by the clay slates and grauwacke slates, which are so abundant in Wales. (Conybeare and Phillips's 'Outlines of the Geology of England and Wales;' Greenough's 'Geological Map of England and Wales;' 'Geological Map of the Society for Diffusion of Useful Knowledge.')

The coal-mines of Wrexham and Ruabon have been already mentioned. There are some old lead-mines near Abergele, on the coast: others in the range of limestone hills which run parallel to the Clwydian hills on the east, and others again in the neighbourhood of Ruabon. On the western side of Great Orme's Head copper is worked. Iron ore is dug at Ruabon and in the neighbourhood of Wrexham. Slate is quarried near Chirk; millstones are procured in the hills which bound the valley of the Ceiriog, and freestone for building in various places, especially near the coal-field.

Divisions, Towns, &c.—The ancient districts and subdivisions of North Wales were superseded by the modern counties and hundreds, which were introduced as late as the reign of Henry VIII. By statute in the 27th year of Henry's reign, four shires were formed in Wales, of which Denbigh was one: these were subdivided into hundreds; and it was enacted that the English laws should from thenceforth be in force through Wales, all laws, customs, and tenures inconsistent therewith being for ever abolished. The present hundreds are six—namely, Bromfield, Chirk, Isaled, Isdulas, Ruthin, and Yale. The county contains one principal borough and market-town, namely, DENBIGH: two market-towns, which are contributory boroughs to Denbigh, namely, WREXHAM and RUTHIN; one borough which has no market, Holt; and two market-towns, Llangollen and LLANRWST. Holt and Llangollen we notice here, the other towns will be found described under their respective titles.

Holt is on the river Dee, which here separates Denbighshire from Cheshire, 6 miles N.E. from Wrexham: population of the borough 1029 in 1851. In the civil war of Charles I. Holt Castle was garrisoned for the king, but was seized in 1643 by the parliamentary troops. Scarcely any relics of it are left. The town is an irregular assemblage of streets or lanes; the main street leading down to the bridge of ten arches over the Dee, by which Holt is united to the village of Farnodon. This bridge was built in 1845; there are relics of a guard-house in the middle. The chapel of Holt is a plain building in the perpendicular style. There are a chapel for Baptists, and a Free school. The population is chiefly engaged in agriculture. There are two cattle fairs in the year.

Llangollen stands on the right bank of the river Dee, and on the parliamentary mail-road from London to Holyhead, 184 miles from London; the Llangollen road station of the Chester and Shrewsbury railway, which is 4 miles from Llangollen, is 193 miles from London: the population of the entire parish, which extends over an area of 20,176 acres, was 5260 in 1851. The vale of Llangollen is much resorted to by tourists on account of its picturesque beauty and its antiquarian remains. The streets are narrow, and the houses are built of a dark shaly stone. The bridge was built by John Trevor, bishop of St. Asaph, who died in 1357; it consists of five arches, the widest not having more than 28 feet span. The inhabitants are engaged in agriculture, in quarrying stone, in burning lime, and in the manufacture of flannel, cotton goods, and earthenware, and in iron-works and collieries. The market is on Saturday; there are five fairs in the year. The Ellesmere Canal passes through the parish. The church is a plain edifice. There are places of worship for Independents, Baptists, and Calvinistic and Wesleyan Methodists. Castell Dinas Brán, whose remains nearly cover the summit of the conical hill on which it is placed, is on the north bank of the Dee, just opposite to Llangollen. It was built of the coarse stone of the country, with here and there a few freestone mouldings. Llan Egwast, or Valle Crucis Abbey, is just within the parish of Llan Tysilio, and on the border of that of Llangollen. There are some beautiful remains of the church and of a part of the abbey, the latter now converted into a farm-house. A short distance from the abbey is the remainder of a round pillar, called the pillar of Eliseg, probably the most ancient British inscribed pillar existing.

The following are some of the more important villages, with the populations in 1851 and a few other particulars:—

Abergele, 11 miles N.N.W. from Denbigh, population of the parish 2855, lies at a short distance from the coast. It is much resorted to in the summer as a bathing place. A considerable quantity of limestone is shipped here from the Llysfen quarries. During the summer a small market is held on Saturday. Gwrych Castle is an extensive modern mansion in a fine situation. *Chirk*, 22 miles S.E. from

Denbigh, population of the parish 1590, is a village near the north bank of the Ceiriog, on the road from Oswestry to Ruabon and Wrexham. A considerable number of the inhabitants are employed in coal-pits, stone-quarries, lime-works, and some paper-mills. Three fairs are held in the year. The Ellesmere Canal runs by the village; the Shrewsbury and Chester railway has a station at Chirk. Chirk Castle, built by Roger Mortimer in the 13th century, on the site of one erected in 1011, is a large oblong square, built round a quadrangular court, and inclosed by massive walls strengthened by round towers at the corners: a fifth tower is close to the entrance. The interior is handsomely fitted up, and contains, among other apartments, a gallery 100 feet long, adorned with the portraits of many public characters of the time of Charles II. From the castle grounds the prospects are of great beauty and extent: it is said that seventeen counties may be seen from one spot. *Gresford*, 23 miles E.S.E. from Denbigh: population of the township 614. The church, an interesting structure partly of the perpendicular style, is situated on an eminence. The Shrewsbury and Chester railway has a station at Gresford. Near the village are vestiges of a British fortress. *Pentre Voelas*, 14 miles S.W. from Denbigh, population 561, is chiefly noteworthy as being a rather favourite station for tourists and anglers. At Ceruioe, a few miles from Pentre Voelas, the finest view of the entire Snowdon range may be obtained. Near the village is Castell Coch, an earthwork of uncertain date. *Ruabon* (or according to the Welsh orthography, Rhiw Abon) is a village at the junction of the roads from Oswestry and Llangollen to Wrexham, 25 miles S.E. from Denbigh: the population of the entire parish, which covers an area of 14,364 acres, was 11,507 in 1851. The church, which is spacious, is adorned with some elegant monuments of the Wynn family, especially one by Rysbrack, to the memory of the first Sir Watkin Williams Wynn, who died in 1747. There are several Dissenting meeting-houses in the parish, also two sets of almshouses. Many of the inhabitants are employed in the collieries and iron-works: the iron-ore is partly dug in the adjacent hills, and partly brought from Lancashire. The Ellesmere Canal passes through the parish; there is a mineral railway to Ruabon Brook, and the Shrewsbury and Chester railway has a station here. A market is held every Monday. Three fairs are held in the year. Wynustay, the seat of the Wynn family, is at Ruabon, the entrance to the park being immediately from the village. The grounds are of great extent and very beautiful. The house contains some good pictures. In the parish is an ancient British fortified post: the area is about 4 acres, and it is defended by two ramparts and two ditches: the inner rampart is a massy wall, on the top of which is a carriage drive. In the vicinity of this post, in 1161 or 1162, Owen Cyfeiliog, prince of Powys, defeated the English, and commemorated his victory in a poem called 'Hirlas Owain,' 'the Drinking Horn of Owain.'

Divisions for Ecclesiastical and Legal Purposes.—The county of Denbigh is for the most part comprehended in the diocese and archdeaconry of St. Asaph: a small part is in the diocese and archdeaconry of Bangor, and several parishes are in the peculiar jurisdiction of the Bishop of Bangor. A very small part is in the diocese and archdeaconry of Chester. According to the 'Census of Religious Worship,' taken in 1851, there were then in the registration county (which includes a population of 4332 more than the county proper) 341 places of worship, of which 98 belonged to Calvinistic Methodists, and 73 to other bodies of Methodists; 76 to the Church of England; 49 to Independents; 31 to Baptists; and 14 to smaller bodies. The total number of sittings provided was 78,120. The county is divided by the Poor-Law Commissioners into three Unions, Llanrwst, Ruthin, and Wrexham, which include 82 parishes and townships, with a population in 1851 of 69,375, but the boundaries of the Unions are not strictly coextensive with those of the county. Denbighshire is included in the North Wales circuit: the assizes are held at Ruthin; and the quarter sessions alternately at Ruthin and Denbigh. County courts are held at Denbigh, Llanrwst, and Ruthin.

History, Antiquities, &c.—Denbighshire, before the conquest of South Britain by the Romans, was comprehended in the territory of the Ordovices, a powerful tribe, into whose dominions Caractacus in his last struggle against the Romans transferred the seat of war, and whose subjugation was not completed till the time of Agricola. In the Roman division of the conquered part of the island, Denbighshire was included in Britannia Secunda. Of monuments of the time preceding the Roman conquest may be noticed two kistvaens, or stone cells, mentioned by Camden: and perhaps the tumuli at Llan Armon yn Yale. At Abergele are the remains of a British post, called Copp yr Wylfa, or the Mount of the Watch Tower; but we know not to what period it is to be referred.

When the Saxons established themselves in Britain, Denbighshire, as being on the frontier towards Mercia, one of the kingdoms of the heptarchy, or rather octarchy, established by that people, became the scene of frequent struggles. To the time of these struggles we may refer some existing monuments, as the pillar of Eliseg, near Llangollen; and the famous dyke, or ditch, called Offa's Dyke, made by Offa, king of Mercia, as a barrier against the predatory incursions of the Welsh. This ditch is strengthened at intervals by small forts or artificial mounds: several of the mounds yet remain. The ditch is on the Welsh side of the mounds. The dyke crossed that detached

part of the county which is contained in the parish of Llan y Mynsiech, entered Denbighshire by the hills on the south side of the valley of the Ceiriog, passed near Chirk Castle and Ruabon, and so into Flintshire. Although insufficient as a military work to keep off invaders, it was the recognised boundary of England and Wales; and heavy penalties were denounced against all Welshmen who should be found in arms on the English side. A dyke, called Wat's, or Watt's Dyke, equal to that of Offa in depth, though not in extent, runs parallel to it through this county. It enters Denbighshire 2 or 3 miles to the east of Offa's Dyke, crosses the Ceiriog and the Dee, and runs through Wynnstay (once called Wattstay) Park, past Wrexham, and across the Alyn into Flintshire.

About the year 828, Denbighshire was overrun by Egbert, king of Wessex, who had acquired for that kingdom the permanent supremacy of the Anglo-Saxon kingdoms. The Britons however seem to have recovered the territory appropriated by Offa, which included part of Denbighshire. The country thus restored to its original masters was included in Powys or Powysland, one of the subdivisions of Wales. The consolidation of the power of England under the Norman princes again subjected the Welsh to the pressure of a superior hostile power. Denbighshire fell into the power of Edward I. in 1277, being ceded by Llewellyn, the last prince of North Wales, at the close of his first struggle with the ambitious and politic king of England. In the subsequent revolt of the Welsh prince and his brother David in 1282, it reverted to its native masters, but the death of Llewellyn and the execution of David as a traitor, again and finally placed it under the English dominion.

In the insurrection of Owen Glyndwr, in the civil war of the Roses, and again in the great civil war of the 17th century, Denbighshire became the scene of contest. In 1645 a considerable body of Welsh and Irish royalists under the command of Sir William Vaughan, marching to the relief of Chester, were attacked and defeated near Denbigh by a detachment of the parliamentary army under General Mytton. In February 1645-6, the castles of Ruthin and Holt were simultaneously attacked by Mytton, and surrendered after a siege of two months. The conqueror then marched to Denbigh, the castle of which he besieged in July: it held out till November, when it surrendered on honourable terms. In the year 1659, Sir Thomas Myddleton and Sir George Booth made a premature attempt to restore the Stuarts. Denbighshire has not been the scene of any public event of interest since that time.

In 1851 the county possessed three savings banks—at Denbigh, Ruthin, and Wrexham. The total amount owing to depositors on the 20th of November, 1851, was 56,598*l.* 11*s.* 7*d.*

DENDER. [FLANDERS, EAST; HAINAULT.]

DENDERAH, the Tentyra of the Greeks and Romans, a ruined town of Upper Egypt, near the left or west bank of the Nile, and nearly opposite Keneh, is celebrated for its temple, which is the best preserved and one of the most splendid in all Egypt. Its remains occupy a vast extent of ground, and consist of various buildings and propyla, besides the temple itself. They are inclosed, with the exception of one propylon, within a square wall, the side of which is 1000 feet, and built of sun-dried brick. The wall is in some parts 35 feet high and 15 feet thick. The handsome portico in front is formed of 24 columns ranged in four rows, with quadrangular capitals, having a colossal head of Isis, or as some say of Athor on each side, surmounted by another quadrangular member, each face of which contains a temple doorway with two winged globes above, and other decorations. The shafts of the columns are perfectly cylindrical and of equal diameter all through, and the whole height, including the base, the quadrangular capital, and dé above that, is 46-10 English feet. The front is adorned with a beautiful cornice and a frieze covered with figures and hieroglyphics, over the centre of which the winged globe is predominant. On all the walls, columns, architraves, and ceiling there is nowhere a space of two feet that is not covered with some figures in basso-relievo of human beings, animals, plants, emblems of agriculture, or of religious ceremonies. The interior chambers of the temple are likewise covered with sculptures, among which the figure of Isis is repeated in numberless instances, as she appears to have been the presiding deity of the place. The light in the chambers comes in through small holes in the wall; the sanctuary itself is quite dark. The ceiling of the portico is occupied by a number of mythological figures, among which the French savans thought they recognised the signs of the zodiac; but as the Crab is wanting, recent travellers and archaeologists are of opinion that it is no zodiac, but a collection of mythological emblems, without any reference to astronomy. On the east side of the temple there are some apartments, both on the ground floor and upper story. On the ceiling of one of the latter, under the roof of the temple, there was another assemblage of mythological figures resembling those on the ceiling of the portico, though fewer in number and differently arranged. This was called a planisphere or zodiac, because in the middle of it figures similar to the signs usually adopted to represent the twelve constellations were observed. These figures however probably represent merely gods and goddesses and religious processions. The so-called zodiacs of Denderah have given rise to a warm discussion connected with the truth of the Mosiac history of the world. It is now generally believed that the temple of Denderah, with its zodiac,

is not older than the period of the Ptolemies. The circular zodiac in the upper chamber of the temple of Denderah, which was sculptured on a kind of sandstone, was cut out of the ceiling by a Frenchman, with the permission of Mehmet Ali, and shipped for France in 1821, when it was purchased by the French government, and is now in the Museum at Paris.

(Belzoni; Richardson; Hamilton; Champollion; Visconti; Halma, *Examen des Zodiaques Egyptiennes*; Letronne, *Observations sur l'Objet des Représentations Zodiacales, &c.*; *Egyptian Antiquities*.)

DENDERMONDE, or TEILMONDE, a fortified town in East Flanders, is built at the confluence of the Dender and the Schelde, about 18 miles by railway E. from Ghent, 16 miles W. from Malines, and contains 8000 inhabitants. There are four churches, five chapels, a town-house, an hospital, a lunatic asylum, an orphan house, two convents, several schools, and a college in the town. In the church of Notre Dame, which is a very old structure, surmounted by an octagonal tower, there are two pictures by Vandyk, and an ancient sculptured font. The house in which Teniers lived is still shown. The town, which is fortified and defended by a citadel built in 1534 by the Duke of Parma, is said to have been founded in the 8th century. It was besieged by Louis XIV. in 1667 with 50,000 men, who were obliged to retire by the opening of the sluices on the part of the besieged, whereby the surrounding country was laid under water. In 1706 it was besieged and taken by Marlborough, an event more than once alluded to by 'My Uncle Toby' in Sterne's 'Tristram Shandy.' In 1745 it fell into the hands of the French. Dendermonde is the seat of many branches of manufacture, the most important of which are woollen cloths, cotton-yarn, lace, hats, soap, cordage, and pottery. The surrounding country is fertile and well cultivated, and considerable business is transacted at the weekly market in grain, linseed, hemp, and oil. Many Roman antiquities have been dug up in the neighbourhood. (*Dictionnaire Géographique de la Province de la Flandre Orientale*.)

DENIS, ST., an ancient well-built town in the department of Seine, in France, stands at the distance of 5 miles from Paris on the Paris and Boulogne railroad, in 48° 56' N. lat., 2° 21' E. long., and has 12,213 inhabitants, including only the commune. It is traversed by the Croud and the Rouillon, small streams that enter the Seine on the right bank at a short distance from the town, and by a canal which connects the Seine with the canal of the Ourcq. The town was formerly fortified, but the ramparts are now converted into handsome promenades. It lies within the line of detached forts which form the outworks of the new fortifications of Paris; one of these forts is built across the road which enters the town from the north.

St.-Denis dates its rise from the foundation of a chapel erected A.D. 240, over the tomb of St. Dionysius, or Denis. The chapel was afterwards replaced by an oratory, and in the beginning of the 7th century by a magnificent church erected by Dagobert I., who also founded the abbey of St.-Denis, and was buried in the abbey church in A.D. 638. Succeeding kings added to the wealth and decorations of the abbey which was to receive their ashes. The church, commenced on a larger scale by Pepin le Bref, was finished by Charlemagne. The present abbey church dates from 1130, when Abbot Suger, regent under Louis le Jeune, built the portal, towers, vestibule, apsis, and the crypt, which contains the royal tombs. The nave was completed in 1281 by Abbot Odon. The western front is divided by buttresses into three compartments, which are crowned by a range of battlements. In each compartment is a wide semicircular arched doorway, the ascent to which is by a flight of steps running along the whole front. The upper part of the centre compartment is occupied by the clock. The doors are covered with grotesque but well-executed bronze figures in bas-relief. This church formerly contained the tombs of most of the kings of France and of several other eminent individuals. By a decree of the National Convention, dated July 31, 1793, the monuments were ordered to be demolished. In three days 51 tombs were destroyed and 51 royal graves brutally desecrated, the bones found in them being thrown pell-mell into two ditches opened on the north side of the church. Under the Directory the lead was stripped off the roof, the stained-glass windows removed, and it was even in agitation to demolish the structure altogether. Under the Consulate and the Empire the restorations commenced; these were continued through many subsequent years, and were completed in the reign of Louis Philippe, so that the church of St.-Denis presents now an appearance of greater splendour than it presented before the rude hands of republican violence assailed it. The mass of royal remains were removed by order of Louis XVIII. from the ditches into which they had been cast, and placed, together with those of Louis XVI. and Marie Antoinette, in the central vaults below the high altar. The crypt, which is entered by a descent of steps on either side of the choir, contains statues of the kings of France arranged chronologically from Clovis to Louis XVI.

The abbey of St.-Denis was suppressed in 1792. The abbey buildings, a huge structure, are now occupied by the Institution for the Orphans of Members of the Legion of Honour. Among other remarkable buildings at St.-Denis are the former convent and church of the Carmelites, and the infantry barracks to the north of the town.

The trade of St.-Denis is considerable. Printed calicoes and other

cotton goods are manufactured: there are several establishments for washing wool, bleaching linen, casting sheet-lead, and making saltpetre, soda, and other chemical products. There are also several flour-mills for the supply of Paris. Other articles of trade are corn, wine, vinegar, wood, wool, and cattle. There are several fairs held in the year. At one of these, called the fair of Landit, which commences on the 11th of June and lasts a fortnight, vast numbers of sheep and a great quantity of manufactured goods are sold.

(Dulaure, *Histoire des Environs de Paris*; *Dictionnaire de la France*; Murray, *Handbook of France*.)

DENMARK, or DANMARK (the land or Mark of the Dane), also termed the Danske Stat (the States of Denmark), is a kingdom lying, independently of its colonial possessions, between 53° and 58° N. lat., and 7° and 13° E. long. It is bounded N. by the Skager Rack, a gulf of the North Sea; N.E. by the Cattegat, another gulf of the North Sea, which, with the Sound, separates Denmark from Sweden; S.E. by the Ost-See, or Baltic; S. by parts of the free states Lübeck and Hamburg, the grand-duchy of Mecklenburg-Schwerin, and the kingdom of Hanover; and W. by the North Sea.

Area and Subdivisions.—The entire area of the kingdom of Denmark is about 21,900 square miles: the population in 1850 was 2,296,597. The following table shows the principal divisions of the kingdom, with the extent and population of each: we add also a list of the colonies which belong to Denmark:—

Circles.	Capitals.	Area in Eng. square miles.	Population in 1850.
Kingdom of Denmark.			
Copenhagen	Copenhagen	2,833	{ 129,695 378,763
Siælland and Moen			
Bornholm	Rönne	213	27,927
Fünen and Langland	Odense	1,284	187,818
Laaland, Falster, &c.	Maribo	647	79,017
Jütland	Aalborg	9,996	604,525
The Duchies.			
Schleswig	Schleswig	3,545	363,000
Holstein (1845)	Kiel	3,269	470,364
Lauenburg	Ratzeburg	413	40,486
		21,000	2,290,507
Colonies.			
Farøe Islands	Thorshavn	495	8,150
Iceland	Reikiavik	33,200	60,000
Greenland	Lichtenfels	3,950	9,400
West Indies:—			
St. Cross	Christianstadt	110	{ 23,720 13,666 2,228
St. Thomas			
St. John's			

The subsequent details refer only to the European dominions of the Danish crown, namely, the insular portion, Jütland, Schleswig, Holstein, and Lauenburg.

Surface, Hydrography, &c.—Continental Denmark, which may be designated the north-western peninsula of Germany, in its greatest length from north to south is about 305 miles; in breadth it varies from about 33 to 106 miles, the average being about 70 miles. Its length of coast on the North Sea and Skager Rack is about 460 miles, and along the Cattegat, Little Belt, and Baltic, about 650 miles; the whole extent of coast is accordingly not less than 1110 miles. Many parts of this long coast-line are almost useless, in consequence either of the want of deep water, or of the numberless banks, bars, and islands which line it. The shores too of the islands that lie next the Baltic are so flat and irregular as to be unapproachable in most quarters by vessels which draw much water.

The surface of Denmark presents an almost uniform plain, elevated only a few feet above the level of the sea, but occasionally relieved by some small groups of hills, whose wooded summits break the monotony of the landscape, and in combination with numerous inlets of the sea and small lakes, give the country a very pleasing appearance.

Denmark possesses no mountains, but a range of hills traverses the whole peninsula from south to north, keeping in general near to the eastern coasts, and terminating with Cape Skagen (Skagens-Odde), the extreme point of Jütland. The loftiest summits of the range are the Himmelsberg, in the bailiwick of Skanderburg, in Jütland, which is above 1200 feet high; the Dagbjerg-Daas, 700 feet, in the bailiwick of Viborg, and the Askehoy, 690 feet. There is also a range of hills, called the Finen Alps, in the island of Finen, which runs from the north-easternmost point to the south-easternmost at Svenborg, bending always towards the south-western coast: its highest summit does not much exceed 400 feet. [FÜNEN.] The chief mass of the Siælland hills inclines towards the eastern coast, and extends from the northern mouth of the Sound to the southernmost extremity of the island; the most elevated point is the Mangelberg, near Hirschholm, to the north-west of Copenhagen, which is 560 feet in height.

The western coasts of Schleswig and Holstein are quite flat, and are protected from the North Sea, or West Sea as it is termed by the

Danes, in contradistinction to the Ost-See (East Sea, or Baltic), by sand-hills and dykes in Schleswig. The eastern coasts of Schleswig, as well as the island coasts, are abrupt and precipitous, formed of chalk or limestone, and called Klinte by the natives: the Moens-Klint, on the eastern side of the island of Moens, which stretches above 10 miles out into the sea, is remarkable for its fossils and numerous waterfalls. The north-eastern shores of Siælland, or Zealand (*Sjælland* in Danish), are separated from Sweden by the Sound or Ear-Sound, (Ore-Sund, so denominated from the resemblance of its form to the human ear), the well-known entrance into the Baltic, which is about 70 miles in length from the Swedish point of Kullen-Cattegat to Falsterboe, and a mile and a half (7986 feet) in breadth between Helsingör (Elsinore) and Helsingborg, where it is narrowest; in mid-channel it varies from 10 to 19 fathoms in depth. Between the western side of Siælland and the north-eastern side of the island of Finen lies a second entrance into the Baltic, called the Great Belt, which is about 9 miles wide at its narrowest point between Nyeborg and Korsør, and varies 5 to 25 fathoms in depth, but on account of sandbanks and rocks, is difficult of navigation for large ships. Between the western coast of Finen and eastern coast of Schleswig and the island of Alsen, or Als, is a third entrance, called the Little Belt, which is not more than three-quarters of a mile, or 4100 feet wide, next Middelfahrt, where it is most confined; it is about 46 miles in length, is hazardous to navigate, and just above Middelfahrt is commanded by the fortress of Fredericia.

The coast of Denmark is indented in several parts with bays and inlets, here called Fiords, or Vügen, the latter name being applied to the smaller bays. The largest of these fiords are the Ise-Fiord, on the northern side of the island of Siælland, which is connected with the Roeskilder-Fiord on the east, and Liim-Fiord on the west; it is about 74 miles in its greatest length, and contains several islands. The Liim-Fiord, which intersects Jütland, occupies nearly 252 square miles; the narrow isthmus which formerly existed between the Liim-Fiord and the North Sea, was during a violent storm in 1825, broken through in two places. Liim now consequently insulates the northern part of Jütland, the openings however are too shallow to admit vessels of much burden. Kingkiöpings and Nissum fiords are to the south of the last-mentioned bay; Mariager and Randers fiords are on the eastern coast of Jütland; and the Apenrade, Flensburg, and Ecken fiords, on the eastern coast of Schleswig. The Kieler-Fiord some distance south of the Ecken-Fiord, in the duchy of Holstein, forms the noble harbour of Kiel, which admits vessels of war of the largest size to anchor within it, and which has during the present month (April 1854) been the rendezvous of the British fleet in the Baltic. A canal, as will be noticed presently, connects the Kieler-Fiord with the German Ocean.

Denmark abounds in small lakes, the most considerable of which are—the Mossee (about 5 miles long and a mile and a quarter broad), the Viborg, Skanderborg, Garbold, and Langesee, in Schleswig; the Arresø, Esrumsee (celebrated for its fish, and united by a canal with the Great Belt), the Tüsee, and Loroese, in Siælland; the Arreskoese in Finen; the Marienboerse in Laaland; the Ploener and Selentersee in Holstein; and the Ratzeburgersee in Lauenburg.

As no inland point in Denmark is more than 35 or 40 miles from the sea, the country has no large rivers. The Elbe forms the southern boundary of Lauenburg, from the town of Lauenburg to the Mas-Queller, where it discharges itself into the North Sea. The Danish streams which flow into it are the Delvenau, Bille, Alster, and Støer. The largest of the navigable rivers of Denmark is the *Eyder*, which was considered the north-western boundary of the empire of the Franks in the days of Charlemagne, and of the German empire in after-times; it flows out of an inland sheet of water near Bördesholm in Holstein, passes westward through Rendsburg, and skirts Fried-richstadt, dividing Holstein from Schleswig, is navigable along nearly the whole of its course of about 105 miles, and enters the North Sea at Tönningen, at the south-western extremity of Schleswig, where it is 800 feet in width. The *Trave*, a Holstein river also, rises near Giselrade, flows southward through the Lauenburg and Lübeck territories, is navigable throughout the greater portion of its course of about 65 miles, receives the Steckenitz, and winding north of Lübeck, falls into the Baltic at Travemünde. The other streams which water Denmark and the adjacent islands, and to which the Danes give the name of Aae, scarcely deserve the name of rivers; the largest of them are the Gdenaac, in Jütland, which rises in the Tyrild Heide, in Jütland, flows through several lakes, and enters the Cattegat near Randers; the Nipsaa, in Schleswig, which enters the North Sea at Ribe; the Schol, Wid, and Bredeaa, in the same duchy; and the Snaeo, in Siælland, which flows into the sea at Nestved.

Denmark contains four large canals. The Schleswig and Holstein, or Kieler Canal, which connects the North Sea with the Baltic, was formed by rendering the Eyder navigable from Rendsburg to Klunvensik, whence the canal takes an easterly direction through the northern extremity of Lake Flembude, then crosses the range of hills which traverse the peninsula of Jütland and Schleswig from north to south, and terminates in the Kieler-Fiord. Its greatest elevation above the level of the Baltic is 27 feet; its length from Rendsburg to its termination is about 27 miles; it has seven bridges and as many

sluces; is 100 feet broad at the surface and 24 feet at the bottom; it is 10 feet deep, and capable of receiving vessels of 150 tons burden. The Steckenitz Canal in Lauenburg, which unites the Elbe with the Baltic by connecting the Delvenau with the Müllnersee, Steckenitz, and Trave, was constructed in 1390, and establishes a communication between Lauenburg on the Elbe and Lübeck on the Trave. The Daneskiold Canal, on the island of Slesland, which was constructed by Count Daneskiold Sainsoe, between the years 1810 and 1812, gives access from the south-eastern waters of the Great Belt to that quarter of the island which is richest in grain and timber; it begins at Noesdybroe, near Ringstedt, and is carried for about 23 miles to Nestwed, near the Baltic shore. The Odense Canal connects Odense, the capital of Fünen, with the sea.

The royal roads, or roads which the mails travel, traverse all the more important routes in the kingdom; they are under the management of the royal engineers, and are wide and well kept.

Only three railways have as yet been constructed in Denmark. One runs from Kiel in a generally south-western direction to Altona (opposite Hamburg), 65 miles, with short branches to Rendsburg and to Glückstadt. The others run from Copenhagen, one westward to Roeskilde, 17½ miles, and the other northward to Elsinore.

Climate, Soil, Productions.—The proximity of the sea renders the climate of Denmark temperate, considering its latitude. The cold is greatest in Jütland, and least in the adjoining islands. The weather is in general very variable; rains and fogs are of constant occurrence; storms are frequent; the winter cold is not severe, but the summer heats are at times overpowering. The humidity of the atmosphere is a great advantage to a country whose soil is of so sandy a nature. The thermometer seldom ranges above 20° Reaumur (77° Fahrenheit). The barometer varies from 28½" to 28" 6". The upper soil consists of a dense layer of clay or sand in most parts, mixed with gravel in some places; the subsoil is a dark-blue clay (blaalær), entirely destitute of earthy matter, but partially intersected by a fine yellow sand. In some of the islands this clay is of a reddish tint. Remains of vegetable substances, but none of any large land-animals, are found in these clays. In Jütland, the most sterile region in Denmark, the soil lies immediately upon a bed of bog-turf covered by sand from 1 to 3 feet in depth. Sands and heaths are the characteristic features in continental Denmark; and drift-sand renders a considerable portion of the western coasts almost uninhabitable. Together with extensive tracts of moors and swamps, the inland parts of Jütland and the islands are characterised by a rich marshy loam, of which bituminous marl is the chief constituent. The surface of the islands presents partial tracts of moor, heath, and woodland; but in general the soil is fertile, and well suited to cultivation. The component parts of the 21,900 square miles of surface of which Denmark consists, may be thus subdivided: about 10,000 square miles of sand capable of arable cultivation, 2850 of heath, 2700 of black rich earth, 2000 of loam and marl, 1000 of meadows and swamps, 910 of marshes, 940 of woods and forests, 750 of grazing grounds, 300 of drift-sand, and the remainder of lakes and streams.

Denmark is pre-eminently an agricultural state. The most fertile parts are the islands of Laaland and Falster, and next to them Slesland and Fünen; but agriculture is not so skilfully or actively pursued in these parts as in Holstein and Lauenburg, particularly in the Northern and Southern Ditmarsches of Holstein on the Baltic coast, where the most perfect tillage in Denmark prevails. Jütland has the least productive soil of any part of the kingdom, a considerable portion of its western districts, as well as those of Schleswig and Holstein, from the Eyder to the Liim-Fiord, being wholly unavailable for agricultural purposes. The Dunes, as agriculturists, have been steadily improving for some years past, and extensive tracts of land are annually brought into cultivation. The cultivator of the land is however rarely proprietor of the soil, and he is over-burdened with dues and services; his capital moreover is usually too small, and property is too much subdivided. Of the available land about four-fifths have been applied to useful purposes; while of the cultivated land about nine-tenths consist of arable land, the remainder comprising meadows, pastures, and woods and forests. The average yearly produce of the cultivated soil is estimated at 400,000 quarters of wheat, 1,600,000 of rye, 4,500,000 of oats, 2,000,000 of barley, 125,000 of buckwheat, 250,000 of peas and beans, 250,000 of rapeseed, 2,250,000 tons of potatoes, 2500 cwts. of hops, and 450,000 lbs. of tobacco. A large quantity of wheat, rye, barley, oats, buckwheat, peas and beans, and rapeseed are exported; also some malt, meal, and flour. Of the grain exported, above four-sevenths, and of rapeseed more than four-fifths, are from the Danish duchies. Much flax and hemp is also raised, but little of superior quality, and in the whole scarcely enough for domestic purposes. Denmark produces the usual kinds of vegetables; but horticulture is not carried to any extent, except in the vicinity of the towns, especially Copenhagen, Altona, and Glückstadt. Large crops of the commoner descriptions of fruit are produced; but attention is paid rather to quantity than quality.

There is much very fine pasture land in several parts of the kingdom; and the rearing of horses and cattle is an object of great attention. The light Danish and heavy Holstein breeds of horses are equally valuable in their way, the one for cavalry purposes and the other for draught. The Jütland breed is similar in figure and

extraction to the Holstein, but has not so fine a head. The king has large studs at Friedrichsburg and Jägerpreiss; and numerous establishments of this kind are kept up by individuals, particularly in Fünen. The number of horses annually exported is very considerable. The rearing of horned cattle is on an extensive scale, chiefly with a view to the making of butter and cheese and salted beef. Great attention has been given to the improvement of the breeds of cattle, and the number exported is very large, a great stimulus having been given to the trade by the removal of the prohibitory duties on the importation of cattle into England. A great deal of beef is also exported. Of butter above several millions of pounds' weight are annually exported. Cheese, lard, salt meat, hides, and skins are likewise exported in great quantities. Large flocks of sheep are kept: the best native breeds are the Eyderstedt and Frisian in Schleswig, and the Jütland race; but they are reared rather for the sake of their flesh and milk (from which last cheese is made), than for their wool. The stock has been improved by crossing with the Merino breed. The quantity of wool annually obtained is said to be about 5,000,000 lbs. about one-fourth of which is exported. Of swine, Denmark possesses three species, the best of which is the Jütland sort. Poultry of all kinds are raised, particularly geese. Much honey and wax is made in Fünen, Falster, and Bornholm, and also from the bees on the heaths in the duchies of Schleswig and Holstein; but neither the one nor the other is adequate to the domestic consumption.

The fisheries form a very essential branch of national industry: the bays and inlets and the mouths of the Danish rivers being well stocked with fish, afford abundant and profitable employment to the inhabitants in almost every part of the long line of coast. The fishing-grounds of the Liim-Fiord, and indeed of the whole north-eastern coast of Jütland, are the most important with regard not only to the herring trade, but other descriptions of fish, such as mackerel, cod, salmon, eels, flat-fish, shell-fish, &c.; they employ upwards of 250 boats and 1000 men belonging to the adjacent coast, besides a great number of vessels from other parts, among which are above 100 large barks called Quasen, which resort here from Slesland, Fünen, and Bornholm. The average annual produce of salted herrings in this quarter alone is 50,000 tons, of which nearly 20,000 tons are exported. The herring fishery in the Great Belt gives occupation to more than 100 vessels. Oysters are in Holstein a crown monopoly. Seals are taken on the Jütland coast about Eyderstedt, and their fat is converted into oil. There is an association for the herring fishery at Altona, who are the proprietors of twenty or thirty vessels. The Dances also take an active part in the cod-fishery of the North Sea and the whale fishery off the shores of Greenland.

The fine forests which once enriched the Danish soil have gone to decay from want of care and from wasteful consumption. This has especially been the case in Denmark Proper and the duchy of Schleswig. One-fourth of them is crown property. The woods stretch northward from the Schley along the eastern coast of Jütland to the Liim-Fiord; there are long tracts of them also in the south-western parts of Fünen from Bogense to Svenborg. The woods of Slesland, Falster, and Laaland are of low growth. The pine is the prevalent tree, intermixed with the beech, oak, and birch. Denmark is dependent for her supplies of timber on Norway, Prussia, Russia, and other countries; and the inhabitants are compelled in many parts from the positive absence of wood to resort to euy substitute, such as manure, straw, haulm, &c., for fuel. There is little inland game but what is found in the royal and other forests, but great numbers of wild waterfowl are killed on the islands along the Schleswig coasts and in other parts.

Denmark possesses no mines or metals whatever, nor any minerals of importance except coals, freestone, and salt: the coal-pits in Bornholm have been abandoned, and there is but one salt-work, that at Odeslohe in Holstein. The supply of salt is drawn from Portugal, Lüneburg, &c. Amber is collected on the Hitzo, a sandbank on the western coast of Jütland; it is both of the white and deep yellow kinds. Potters' and porcelain earths are also obtained. Peat is got wherever there are swamps, and every village in those parts has bog-land assigned for its supply.

Mineral waters have been brought into use at Glücksbürg in Schleswig and at Bramstede in Holstein, and there are saline springs near Odeslohe in the same duchy.

In a country where agricultural pursuits create a greater demand for labour than the population is competent to furnish, any great development of manufacturing industry cannot reasonably be looked for. The Danish capital is the chief seat of manufacture, and we refer to the article COPENHAGEN for the details. ALTONA is next in importance: its principal productions are silk, woollen, and cotton goods, leather, soap, refined sugar, and tobacco. Lace is made on an extensive scale in and about Tondern, and some is so fine as to be worth 30s. or 40s. a yard. There are large tobacco manufactures, but they are said not to produce more than one-eighth of the quantity consumed. The woollen manufactures, principally of the coarser kinds of goods, are chiefly in Copenhagen, Fredericia, and other parts of Denmark Proper; and the cotton in the same capital, Altona, Roeskilde, Christianfelde, and Hanerau. Randers is the principal seat of the glove manufacture; and Friedrichsværk, Lyngby, and

Haraldskjaer, of the manufacture of iron-ware, next to the metropolis. Linens are made at Kiong and Helsteinborg, and in most parts constitute the occasional employment of the cottagers for the purpose of supplying their own wants. Straw hats, sail-cloth, glass, soap, leather, saltpetre, gunpowder and arms, plated goods, china and earthenware, beer and spirits, thread, paper, refined sugar, soda, and potashes are among the productions of Danish industry. Brandy distilleries and breweries are numerous. The making of wooden shoes is an important branch of industry in various parts of Jütland. The peasants' families make their own woollen clothing in general, which is composed of a coarse stuff termed wadmél; and indeed there are few articles of domestic use, whether utensils or for apparel, which are not made by their own hands.

Probably no country in Europe is better adapted or more favourably situated in many respects for commerce than Denmark. It is the key of the Baltic, and possesses peculiar advantages for a ready and cheap intercourse with all the maritime nations of Europe. Copenhagen is the central point of the Danish foreign trade, but Altona appears to be making greater progress at present. Navigation, in which above 50,000 hands are employed, is a great source of profit to the country. The Danes navigate their vessels on cheaper terms than many of their competitors, and are excellent mariners, on which account they are the carriers for other countries, particularly to the Mediterranean and Levant. The trade between the mother country and the West India colonies is quite free; the busiest traffic is carried on with the island of St. Thomas. The value of the native produce and manufactures annually exported to all parts in 1851 was 1,654,338*l.*; the imports in the same year amounted to 3,165,161*l.* Both in the exports and imports a much larger portion of the commerce is with Great Britain than with any other single state. The imports from England in 1851 were 596,165*l.*, and the exports to England were 680,849*l.* The trade with Sweden and Norway is the next in importance, the total value of both exports and imports amounting to about three-fourths of the British trade. Hamburg and America also share somewhat largely in the trade of Denmark. Among the articles of exportation are grain, butter, cheese, brandy, salted and smoked meats, horned cattle, horses, skins and hides, whale and train oils, eider-down, woollens, fish, tallow, hristles, &c. The imports are wines, salt, silk, wools, cotton, cotton manufactures, timber, coals, colonial produce, brandies and spirits, glass, flax and hemp, drugs, and other articles of domestic consumption. There is a brisk intercourse by sea between the several ports. The chief places of trade are Copenhagen, Altona, Kiel, Koersøer, Helsingør, Odense, Viborg, Randers, Flensburg, Schleswig, Aalborg, Rendsburg, Tondern, Aarhus, Glückstadt, Neustedt, and Itzehoe.

Inhabitants.—The people of Denmark, with the exception of a few thousand Jews, resident in Copenhagen, Altona, and other towns, are of German descent, but of five distinct races:—The Danes, who inhabit Sælland and the circumjacent islands, Jütland, and a small portion of Schleswig, were the Normans of former times; they use a dialect of the German, and number probably somewhat under 1,500,000: the pure Germans, who inhabit the duchies of Holsteiu and Lauenburg and the greater part of Schleswig, and whose numbers are about 700,000: the Frieslanders, who dwell along the western coasts of Schleswig and on the small islands in the North Sea: the Angles, who live between the Bight of Flensburg and the Schley on the Baltic, whose united numbers are nearly 80,000: and the Normans, who people Iceland and the Farøe Islands. The population of Denmark, its duchies, and the adjacent islands in 1820 was 1,662,000; in 1840 it was 2,194,950; and in 1850, as already mentioned, it was 2,296,597.

The Dane is of a strong, well-knit, muscular make; his features are regular, his eyes blue, and his hair commonly light. "The gift of the Dane," says Rothe, a native writer, "is strength, where others have inherited liberty. He is susceptible of high, strong, and enduring feelings, but he is not easily roused; he has more common sense than wit, and being of a patient disposition looks at every side of a question, and requires much time for deliberation." The peasantry are industrious and generally of a contented disposition; their highest ambition being to obtain possession of a small piece of land. This universal desire, and the facilities afforded for carrying it into effect, has led to a remarkable subdivision of the land. It is said that half the soil of Denmark is possessed by petty proprietors. The consequence is that the farms are commonly of small size, and though cultivated with great industry seldom worked with sufficient capital. There are, besides the small landholders, a large number of labourers who rent houses with small pieces of land attached, for which they pay rent by a certain number of days' work, on the 'inctayer' system.

The population of Denmark is collected in 98 towns, 45 market-towns (all in the three duchies), and 4985 villages, besides isolated farms and dwellings.

The Lutheran is the predominant religion, but every other is tolerated. The members of other religious communities are but comparatively few in number. The affairs of the national church are under the superintendence of the eight bishops of Sælland, Laaland, Fünen, Ribe, Aarhus, Viborg, Als, and Aalborg. The bishoprics are in the gift of the crown. There are twelve religious communities in

Denmark Proper and the duchies; a missionary college at Copenhagen, called the 'Collegium de cursu evangelii promovendo,' founded in 1714; and a seminary for approved candidates in divinity in the same city.

Much has been done for the education of all classes in Denmark. By law every child between the ages of 7 and 14 years must attend some school; and free schools are provided for all children whose parents are unable to pay for their education. There is in the ministry a department of public worship and instruction; and ministers who have the superintendence of those matters are appointed for the several duchies as well as for the kingdom. The masters are appointed, and the course of study regulated in the public schools, by the ministers of public instruction. Besides the primary schools there are several seminaries for educating teachers; between 30 and 40 gymnasia, or grammar-schools; and two universities—one in Copenhagen, founded in 1478, and attended by about 1000 students; and the other in Kiel, founded in 1665, and attended by about 300 students. There are also schools for the deaf and dumb, and various special schools; as well as several public libraries, and various societies for scientific and national purposes, which are noticed under the head of COPENHAGEN. The number of periodical journals published in Denmark is very large when compared with the population; but the press is under a somewhat strict censorship.

Government, Finance, &c.—Denmark was an absolute and hereditary monarchy, founded on three fundamental laws—the Act of Sovereignty of 1661, the King's Law (Konge Lowen) of 1665, solemnly ratified by the whole nation, and the Native Subjects' Law (Ind Føtts Retten) of 1776. In 1843 however Frederick VII., shortly after his accession to the throne, promulgated a new constitution, by which Common States were appointed, to consist of 52 delegates (of whom the king named eight), who were to be elected by the votes of the deputies of the provincial assemblies, and of the clergy, prelates, and landed nobility of the duchies, and the consistories of the universities of Copenhagen and Kiel, and assembled at fixed periods. They have the right to discuss and to decide upon all new laws affecting the common interests of the monarch, and the control over all matters of finance. By this constitution nothing was changed in the general ordinances of 1831 and 1834 respecting the provincial assemblies noticed below. As Duke of Holsteiu and Lauenburg, the king is a member of the German Confederation, and furnishes a contingent of 3600 men to the confederate army. The sovereign must be of the Angshurg Confession of Faith, and must uphold its ascendancy in his dominions. He attains his majority on reaching his 14th year. The sovereign fixes the allowances to be made to the members of the royal family of his own free will. By a general law of May 23, 1831, and a decree of May 15, 1834, the kingdom was divided into four electoral districts, each of which has at present its provincial assembly: these districts are the Danish Islands, Jütland, Schleswig, and Holstein. The four provincial assemblies must be called together at least once in two years: their consent is necessary to all alterations in laws affecting persons or properties, public imposts, or requisitions for the national service; and they are allowed to propose laws for the sovereign's adoption, and to lodge complaints against any of the public authorities.

The privy council is the highest board in domestic affairs: it is composed of the king, as president, a vice-president, and eight members. The ministry consists of a minister for home affairs, a minister for the finances, &c., for foreign affairs, for justice and police, for the duchies of Schleswig, Holstein, and Lauenburg, for the war department, for naval affairs, and for public worship and instruction. There is a governor for Lauenburg; and the West Indian Islands have a governor also. A land-vogt, or lieutenant, governs the Farøe Islands, and a stifts-amtman, or high bailiff, is at the head of the public authorities in Iceland.

The supreme court of justice holds its sittings at Copenhagen, and there are royal courts in the duchies and lower courts in the various towns. All civil cases must in the first instance be carried before a 'Court of Conciliation,' composed of persons selected from the vicinity, on account of their position, character, or intelligence. Their decision is registered, and has the force of a legal decree in cases where both parties to the suit have signified their readiness to abide by the judgment; otherwise the suit may be carried for decision into the proper courts. From all the lower courts appeals are allowed both in civil and criminal cases to the supreme courts.

The state of the finances will be best shown by the following official statement of the estimated receipts and expenditure for the entire monarchy for the year 1853-4:—

Receipts, 1853-4.

General.—For the whole Monarchy.

Surplus from the Domains—	£
For the Kingdom of Denmark	40,777
For the Duchy of Schleswig	40,725
For the Duchy of Holstein	76,839
For the Duchy of Lauenburg	34,680
For the West Indian Colonies	1,061

Carried forward £193,882

Brought forward	£103,882
Interest and Payments on State-paper	121,146
Sound, River, and Canal dues	241,368
Surplus from Customs, Stamps, Excise, &c.—	
For the Kingdom of Denmark	471,105
For the Duchy of Schleswig	128,250
For the Duchy of Holstein	121,346
Surplus from Postage—	
For the Kingdom of Denmark	1,965
For the Duchy of Schleswig	293
For the Duchy of Holstein	559
For the Duchy of Lauenburg	555
Lottery	11,925
Miscellaneous	146,250
Special.—For the Kingdom of Denmark.	
Direct Taxes	426,707
Indirect Taxes	101,857
Iceland	3,144
Miscellaneous	13,233
For the Duchies of Schleswig and Holstein.	
Direct Taxes	216,008
Indirect Taxes	45,581
Miscellaneous	151,503
Total	£2,400,517

Expenditure.

General.—For the whole Monarchy.	£
Civil List	90,000
Appanages to the Royal Family	36,211
Privy Council	6,086
Interest and Payments on the National Debt	804,409
Pension List	181,080
Foreign Department	25,942
War Department	510,378
Navy Department	181,141
Finance Department	50,194
Miscellaneous and Extraordinary Payments	26,848
Special.—For the Divisions of the Monarchy.	
For the Kingdom of Denmark.	
Parliament	6,750
Home Department	110,719
Justice Department	54,388
Education Department	28,276
War Department	5,377
Navy Department	326
Finance Department	13,708
Extraordinary Payments	23,800
National Debt	5,636
For the Duchies of Schleswig and Holstein.	
Cabinet	164,419
Provincial Estates	7,875
Payments in common with Holstein	10,665
Total	£2,353,818

The National Debt amounted in 1853 to 13,612,500*l*.

The numerical strength of the Danish army on the peace footing nominally amounts to nearly 40,000 officers and privates; but the number actually employed is under 10,000. A sufficient number of officers and others always remain at the disposal of the crown to call a force of 25,000 men at any time into active service. The militia, when called out, musters about 60,000 rank and file.

The navy in 1853 was composed of 5 ships of the line, mounting 390 guns; 7 frigates with 346 guns; and 11 sloops, brigs, schooners, and cutters, mounting 148 guns: in all 23 vessels and 884 guns. To these must be added 79 gun-boats, bomb-vessels, &c., and 5 steamers of 1009 horse-power.

The fortresses and fortified ports of Denmark are Copenhagen, Cronburg Castle, Korsør, Fredericia, Friedrichsørt, Friedrichshavn, Rendsburg, Christiansøe near Bornholm, Nyborg, and Glückstadt. The chief military and naval establishments are the Cadet Academy, Copenhagen; the Arsenal and Archive of Charts, in the same city; a cannon and ball foundry at Friedrichsværk; an invalid hospital at Eckernförde; and arsenals at Rendsburg and Randers.

History.—The oldest history of Denmark is pure tradition, derived from the suspicious source of the Icelandic Legends or Saga. The first fact of which we can speak is that the Cimbric, a branch of the Normans or Scandinavians, were the earliest known inhabitants of the peninsula of Jütland and Schleswig, which was thence called the Cimbric Chersonesus. They first became known to the Romans from their taking part with the Teutones, about 100 years before the Christian era, in the invasion of Gaul and Italy, in the times of Marius. About A.D. 250 the Goths overran the Scandinavian territories under Odin or Wodin, and imposed rulers of their own on Sweden, Denmark, and Norway. Skiold, Odin's son, is the first name which has descended to us as sovereign of Denmark; but we possess no record of his time beyond numerous legendary fragments. Denmark appears however to have been divided into a variety of petty states, of which Skiold's descendants assumed the lordship for many centuries, and to have been inhabited by a warlike race of men, whose principal occupation was piracy. The Normans, or Angles, under which designation the Swede and Norwegian as well as the Dane were

included, during the 8th and 9th centuries, established their dominion in parts of England, which they distracted by their invasions until the middle of the 11th century: they also made themselves masters of Normandy under Rollo, colonised the Orkneys and Hebrides, the Isle of Man, Iceland, and part of Ireland, and pushed their settlements as far south as Spain, Italy, and Sicily. Of this pre-historic period the vestiges, consisting of tumuli, cromlechs, &c., are very numerous, and have engaged a large amount of attention and research among the antiquaries of Northern Europe.

The first Danish monarch with respect to whom we are enabled to speak with certainty was Gorm, or Worn, the Old, a Skioldinger, who brought Jütland under his sway in 863, and succeeded between that date and the year 900 in uniting every state in Denmark to his dominion. In 1000, Sven, his grandson, subjugated part of Norway, and in 1014 the greater part of England, where he soon after died; in 1016, his grandson Knud the Second, or Canute the Great, possessed himself of the whole of England and part of Scotland; and in 1030, of the remainder of Norway. To this monarch Denmark was indebted for her greatness, laws, and internal organisation, and the establishment of Christianity as the religion of the country. His successors however were not endowed with capacity enough to preserve his dominion in its integrity; England threw off their yoke in 1034, and Norway two years afterwards. A new dynasty out of the female line of Canute's descendants mounted the throne in 1047, in the person of Sven Magnus Estritson the Third, and held the sceptre for 400 years afterwards. The male descendants of Magnus Sven became extinct with Waldemar the Third in 1375; and Olaf the Fourth, of the female line, Waldemar's grandson, dying in 1387, his mother, Margareta, styled the Northern Semiramis, ascended the throne of Denmark. She acquired Norway by inheritance, and having subdued Sweden by force of arms, united the three northern kingdoms under one crown by the Caluar union in 1397. The Swedes however could never be brought to endure this league, and after a long series of contests ultimately renounced the union in 1523. These contests undermined the prosperity of the Danish monarchy no less than the perpetual broils between the sovereign and his nobles on the one hand, and the nobility and clergy on the other; the population decreased greatly, and the adjacent seas swarmed with Danish pirates, while trade and navigation dwindled to insignificance. Margareta's line having forfeited the throne in 1439, and Erick the Seventh having been deposed, the Danish States elected Christian Count of Oldenburg king. From his grandson, Christian II., surnamed 'The Wicked,' the crown was transferred to Frederick the First, duke of Schleswig and Holstein, who received the crown of Denmark and Norway in 1523. His son Christian the Third united the duchies of Schleswig and Holstein in perpetuity to the crown of Denmark in 1533, and brought the turbulent Norwegians to recognise the Danish kings as their sovereigns 'for ever.' In his reign the Reformation was established throughout the united kingdoms, and a code of laws, entitled the 'Recess of Kolding,' was promulgated. The struggles arising out of his partition of the greater part of Schleswig and Holstein between his brothers, became a source of much subsequent mischief to Denmark, and was not terminated until 1773, when the alienated territory was recovered by the cession of Oldenburg and Delmenhorst to its then possessor, the grand-duke of Russia. In the 17th century Sweden wrested from Denmark the provinces of Jemtland and Herjedalen, together with the islands of Gottland and Oesel, the extensive districts of Schonen, Halland, Blekingen, and Bihus. In 1660 the three estates of the realm acknowledged Frederick and his successors as absolute sovereigns of Denmark, in solemn diet at Copenhagen; and they confirmed the surrender of their rights by presenting him with the 'Arve-Enevolds-Regierungs-Akt.' This gave occasion to the promulgation of his 'Konge-Lov,' in 1665; the fundamental law of settlement which prevailed in Denmark until our own day. In 1720 Sweden ceded the right of receiving the Sound dues to the Danes, and the long-disputed claim of Denmark to the sovereignty of Schleswig was fully recognised. The subsequent hundred years were a period of continued tranquillity, during which the state rose, and enjoyed prosperity: the happiest fruits of this interval of peace were, the abolition of servitude among the peasantry, begun by Christian the Seventh in 1707, the extinction of the negro slave trade, and the establishment of greater liberty of the press. During the wars of the French Revolution, Denmark observed a strict neutrality; but in contesting the right of search as to her mercantile shipping, insisted upon by England, which led her into a defensive alliance with Russia, Prussia, and Sweden, she brought upon herself the loss of her East and West India colonies, and suffered severely in the naval fight off Copenhagen in 1801. The treaty which ensued restored those colonies to her. The peace of Tilsit, in 1807, in which there were secret articles stipulating that the whole Danish navy should be delivered over to the French emperor, occasioned however a fresh rupture with England, which commenced with the appearance of a formidable force under Earl Cathcart and Lord Gambier on the coast of Svaland, and was carried to open hostilities upon the refusal of the Danish government to surrender their fleet, consisting of fifteen ships of the line, fourteen frigates, and three brigs, as well as their timber and the naval stores then in the yards and arsenal of Copenhagen. Upon

this refusal, Lord Gambier bombarded the Danish metropolis, from the 2nd to the 5th of September, forced it to capitulate after a considerable part of the town had been burnt, and carried away the fleet to England. In November following a formal declaration of war was issued by the English government, and Denmark was again stripped of her colonial possessions, and not only lost the islands of Anholt and Heligoland, but the whole of her foreign commerce. By the treaty of Kiel on the 14th of January, 1814, Denmark accepted Pomerania in exchange for Norway. This province was in 1815 ceded by her to Prussia, in consideration of her receiving the duchy of Lauenburg and a large sum of money. In making peace with England, she recovered her colonial dominions, but with the loss of her fleet and the island of Heligoland. In 1845 Denmark sold her East Indian and African colonies to England.

The most important event in the recent domestic history of Denmark is the protracted struggle between the duchies of Schleswig and Holstein and the Danish government. A difference of long-standing between Denmark and the duchies respecting the succession to the crown, which was settled on somewhat different principles by the laws of the two countries, had been increasing in intensity as it became more certain that the reigning family would be soon left without a direct male heir. In the excitement following the great revolutionary outbreak of 1848, the duchies resolved to resort to arms; and at once making the quarrel one of races, they appealed to their German brethren for assistance, in order to secure a separation from Denmark. Prussia sent an army to aid the duchies, but Denmark put forth all her resources, and the struggle continued for a long time with varying success. Austria at length prepared to support Denmark, and Prussia eventually withdrew her forces.

The duchies, though forsaken by their allies, continued to offer the most determined resistance, but eventually Austria and Prussia stepped in as mediating powers, and as they were prepared to enforce their arbitration by sending troops to occupy some of the strongholds of the country, the duchies were compelled to submit, and the authority of the king of Denmark again became paramount. The future relations of the duchies of Schleswig and Holstein and the kingdom of Denmark were finally settled by a decree dated January 28th, 1852. The question of the succession to the Danish throne had been referred to a convention of plenipotentiaries of the principal powers of northern and western Europe. The treaty, as eventually agreed upon and signed by the representatives of England, France, Russia, Austria, Prussia, Sweden, Norway, and Denmark, set aside the line of Augustenburg, and settled the succession to the crown of Denmark upon Prince Christian, of the Sonderburg-Glücksburg line, and his male-heirs. The integrity of the Danish monarchy, though its desirableness was fully recognised, was not however, as is sometimes stated, formally guaranteed by this treaty.

DENNY. [STIRLINGSHIRE.]

DENT. [YORKSHIRE.]

DEOGHUR, a district in the province of Gundwana, forming part of the dominions of the Raja of Nagpore, and lying principally between 21° and 22° N. lat. It is separated into two divisions, designated Deoghur above the Ghauts and Deoghur below the Ghauts. The division above the Ghauts is an elevated tract of country, having the valley of the Nerbudda to the north and the plains of Nagpore to the south. Its surface is undulating, hills and dales occurring in regular succession; the general direction of the hills is east and west. The division below the Ghauts lies to the south; it is crossed by several ranges of hills branching off from the Vindhyan chain. In the time of Aurengzebe this country was in a very wild and unsettled condition; the raja was little more than the nominal head of numerous petty chiefs, and was tributary to the throne of Delhi. Shortly after that time the Bhoonsla family obtained the chief power in this part of India, and Deoghur became the central part of their dominions. The title of raja, with a small part of the revenue, was still allowed to the Goond princes; and the show of sovereignty, but without any of its power, is still given to the ancient royal family. *Deoghur*, the capital, is in 21° 43' N. lat., 78° 35' E. long. It was formerly a place of some consequence, but has long since fallen into decay.

DEOGHUR, or BAIDYANA'TH, a place of great sanctity in the district of Birhoom, in the north-western extremity of Bengal, in 24° 32' N. lat., 86° 40' E. long. At a particular season of the year, pilgrims of all ages, both male and female, resort to this place with small bottles filled with water from the Ganges, to be poured over the principal idol of the temple which they are about to visit. Some of the pilgrims take with them a larger stock of the sacred water than they require to satisfy their own devotional feelings: this surplus is made a subject of traffic.

DEPTFORD. [GREENWICH.]

DEPWADE, Norfolk, a hundred in the eastern division of the county, which has been constituted with adjoining parishes a Poor-Law Union. Depwade hundred is bounded N. by the hundred of Humbleyard, E. by the hundred of Loddon, S. by the hundreds of Earsham and Diss, and W. by the hundred of Shropham. Depwade Poor-Law Union, the boundaries of which are much more extended than those of the hundred, contains 43 parishes and townships, with an area of 68,833 acres, and a population in 1851 of 26,082.

DERA-GHAZE-KHAN. [HINDUSTAN—Lahore.]

DERA-ISHMAEL-KHAN. [DAMAN.]

DERBEND, the ancient *Albana*, a fortified town in the Russian part of Daghestan, is situated on the western shore of the Caspian Sea near 42° 12' N. lat., 48° 25' E. long., at a distance of 135 miles N.N.W. from Baku, and about the same distance S.S.E. from Kizliar, at the head of the delta of the Terek. The population is about 12,000. A branch of the Caucasus, which runs eastward to the Caspian Sea, terminates about a mile from its shores, forming what was anciently called the *Albania* or *Caspia Pylæ*, now the Pass of Derhend. As the mountain ridges in no other place come so close to the sea the extremity of this steep and nearly inaccessible ridge offered a very advantageous point for erecting fortifications to command the road along the coast. The town is built on the declivity with which the range terminates, and which forms a parallelogram about 15 miles in length, but only 400 yards across. The walls which inclose the town on the north and south are continuous to the sea. There are two large iron gates in these walls through which the road passes, and which may be shut at pleasure. Hence the town derives its name, which signifies 'the shut-up gates': the Turks call it *Demir Kapu* (Iron Gate). The walls, which are of great antiquity and very strong, are built of hewn stones, 26 feet high, and 8 feet thick. They are strengthened with round and square towers. To the west of the town is the citadel, on a more elevated eminence, which is also well fortified. Many coarse stuffs of silk and wool are made here. Its commerce by the Caspian Sea is not considerable, the harbour being so shallow that only boats can land, and vessels remain at a distance of nearly a mile from the shore. The town is very ancient. The first Darius is said to have fortified the pass to check the incursions of the Scythians or Slaves. The present walls probably formed part of the fortifications erected by Chosroes, king of Persia, as a bulwark of his kingdom in this direction. Derbend was afterwards taken by the Arabians, and their chiefs who lost their lives in the enterprise are said to have been buried in the sepulchral mounds which are seen to the north of the town. The Russians first took it from the Persians in 1722, but restored it in 1735. They took it a second time in 1795, and have kept it since.

DERBY, the county town of Derbyshire, a municipal and parliamentary borough, and the seat of a Poor-Law Union, in the hundred of Morleston and Litchurch, is situated in a wide and fertile vale on the banks of the Derwent, a feeder of the Trent, in 52° 55' N. lat., 1° 28' W. long., distant 126 miles N.N.W. from London by road, and 132 miles by the North-Western and Midland railways. The borough is governed by 12 aldermen and 36 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The population of the borough of Derby was 40,609 in 1851. The livings are in the archdeaconry of Derby and diocese of Lichfield. Derby Poor-Law Union contains 7 parishes and townships, with an area of 3329 acres, and a population in 1851 of 43,690.

Derby is supposed to have risen from the ruins of the Roman station *Derventio*, which was on the site of Little Chester, a hamlet just out of the boundary of the borough and on the opposite side of the river. There appears to have been here a British town upon the British road, the *Rykneld*, or *Icknield-street*. Coins of brass, silver, and gold, with antiquities of various kinds, have been found, and the foundations of buildings are still sometimes discovered. At Little Chester are the foundations of a Roman bridge over the Derwent.

In the time of the Saxons Derby was called *Northworthige*; the name of *Deorahy* is said to have been given it by the Danes, by whom it had been captured. The town was recovered from the Danes by *Ethelfleda*, countess of Mercia, and daughter of King Alfred, who took the castle by storm, about 918. It was again taken by the Danes, and was recovered from them by King Edmund I. in 942. In the time of Edward the Confessor, Derby was a royal borough. The town of Derby has received many charters from different sovereigns: it claims to be a borough by prescription. The town has sent burgesses to Parliament since the 26th year of Edward I.

The situation of Derby is very pleasant, being surrounded with rich and beautiful scenery. In the older parts of the town the streets are narrow and winding. Much improvement has taken place in the buildings and the general appearance of the town of late years. The dwelling-houses are mostly built of red brick, the public buildings of stone. Derby is lighted with gas; and it is supplied with water from the Derwent. The town-hall, a handsome building with an Ionic portico, erected in 1828, was destroyed by fire on October 21st, 1841. The outside and centre walls were preserved and retained as part of the new town-hall, in the plan for which the portico was omitted, and a clock and bell-tower placed in front. This building is used for all municipal and judicial purposes. The other public buildings include the county hall, the county prison, the borough jail, and the new county lunatic asylum.

Derby has some fine old churches. All-Saints or All-Hallows church is on the east side of the town, near to the river: the body of the church, a Roman Doric edifice by Gibbs, was first opened for divine service in 1725; the tower, erected about the time of Henry VIII., is in the perpendicular style and of peculiar beauty; its general arrangement and details are admirable. This tower, which has been recently restored, is 178 feet high, and its situation adds to the effect of its elevation and its fine architecture. St. Alkmund's church, rebuilt in 1846, is a handsome and commodious edifice in the

decorated style, and has a tower at the west end, surmounted with a spire. The height of the spire from the ground is 207 feet. St. Michael's church is another gothic building with an embattled square tower; the date of erection is uncertain. St. Werburgh's church has frequently suffered from its nearness to the brook: floods having capped the foundation, in 1601 the tower fell; it was rebuilt on the east side for greater security, but in 1698 the church itself fell. St. John's church is an elegant building of mixed gothic styles. The Independents, Wesleyan Methodists, Primitive Methodists, New Connexion Methodists, Baptists, General Baptists, Quakers, and Unitarians have places of worship. The Roman Catholics have a fine cathedral church, erected about twelve years ago. This building, which is in the decorated style, is 127 feet long, and 45 feet wide; the nave is 80 feet long, the chancel 27 feet by 20 feet; the tower is 117 feet high.

The Free Grammar school in Derby, originally founded in 1162, has an income from an endowment of 33*l.* 6*s.* 8*d.* a year, and an interest in ten exhibitions at Emmanuel College, Cambridge. The number of scholars in 1853 was 53. There are several National, Diocesan, British, and Infant schools. The Philosophical Society, established by Dr. Darwin in 1783, has a good library, with apparatus, a museum, &c. The Athenæum, the Town and County Museum, the Town and County Library, the News Room, the Mechanics Institution, the Mechanics Hall, the Temperance Hall, the Savings Bank—sufficiently indicate by their names their several purposes. The Arboretum is a piece of ground of about 16 acres in extent, well laid out and arranged with trees and shrubs, so as to combine instruction with recreation, for the benefit of the inhabitants at large. The original arboretum, a piece of ground about 11 acres in extent, carefully arranged by Mr. J. C. Loudon, was given to the town by Joseph Strutt, Esq.; an adjacent portion of about 5 acres has since been purchased and laid out in a similar manner. The Derbyshire General Infirmary, opened in 1810, has accommodation for 80 patients, exclusive of the fever-wards, for which a new wing was lately added: a dispensary, ladies' charity, several sets of almshouses, and numerous other charities are in the town. There are a stone bridge of three arches, a wooden bridge, and a towing-bridge over the Derwent, and three stone bridges crossing the Markeaton brook, which flows through the town into the Derwent.

The principal manufactures are of silk and cotton goods, porcelain, jewellery, and ornamental articles made of the various kinds of spar found in the county, red and white lead, lead-pipe, sheet-lead, cast-iron, ribbed stockings, and bobbin-net and other lace. Silk-hosiery is extensively made. In the early part of the 18th century the art of spinning or 'throwing' silk, which had been exclusively possessed by the Italians, was introduced into Derby by a Mr. Crotchet, who did not succeed in business. In 1717 Mr. John Lombe, who had obtained access to the machinery of the silk-throwsters of Piedmont in Italy, agreed with the corporation of Derby to rent an island in the river Derwent, 500 feet long and 52 feet wide. Here he erected at a cost of 30,000*l.* an immense silk-mill. This building has since become the property of the corporation, the lease having expired. In 1718 Lombe took out a patent, and was proceeding successfully in his business when he died. He was succeeded by his brother William, and afterwards by his cousin, Sir Thomas Lombe. The whole machinery of the mill, which was very extensive, was moved by one water-wheel. Many throwing-mills have since been erected at Derby, and this branch of industry may be regarded as the staple of the town. The spars of the county, especially the fluor-spar, or 'blue Jobn,' are wrought into vases and other ornaments; and the black marble of Ashford is wrought into vases, columns, chimney-pieces, &c.

The assizes for the county are held at Derby, also the Epiphany, Midsummer, and Michaelmas sessions; the Easter sessions are held at Chesterfield. A county court is held in Derby. Borough and petty sessions are held. Wednesday, Friday, and Saturday are market-days; the principal market is on Friday. A cattle-market is held once a week on Tuesday. There are nine fairs in the year for cattle, cheese, pedlery, &c., which are well attended.

The river Derwent was several years since rendered navigable from the town of Derby to its junction with the Trent, but since the opening of the Derby Canal the navigation has been disused. The Derby Canal branches from the Trent and Mersey (or Grand Trunk) Canal at Swarkeston, a few miles south of Derby, runs northward, and intersects the Derwent at Derby, a towing-bridge being thrown across that river. From Derby the course of the canal is eastward until it joins the Erewash Canal at Sandiacre. Over the Markeaton Brook, which runs through Derby, the canal is carried in a cast-iron trough or aqueduct. From Derby a short branch of this canal extends to Little Eaton, three or four miles north of Derby, with two arms to the quarries on Little Eaton common. Derby is favourably situated with respect to railway communication to all parts of the country. The railway station at Derby is very extensive in its arrangements, and serves to accommodate several lines which meet here in connection with the Midland railway.

There were formerly four religious houses at or close to Derby: an abbey (St. Helen's) of Augustine canons, a nunnery of Benedictines, and houses of Dominicans and Cluniacs. St. Helen's abbey was founded by Robert de Ferraria, or De Ferrera, second Earl Ferrera. This abbey appears to have been first established in Derby town, and afterwards removed to a site about a mile north of Derby, where

there has since arisen the village of Darley or Darley Abbey. There was here an hospital for leprous persons. In the vicinity of Derby, on the Nottingham road, is a convent of the Sisters of Mercy; the buildings, which are in the gothic style, are extensive, and present a pleasing appearance.

(Hutton, *History of Derby*; Glever, *History of Derby*; *Land We Live In*, vol. iii.; *Parliamentary Papers*; *Communication from Derby*.)

DERBYSHIRE, a midland county of England, bounded N.E. by Yorkshire, from which it is partly separated by the rivers Derwent, Rother, and Sheaf; N.W. by Cheshire, from which it is in this quarter separated by the river Etherow; W. by Cheshire, from which it is here separated by the river Goyt, and by Staffordshire, which latter county bounds it also on the S.W.; S.E. by Leicestershire, from which it is partly separated by the Trent; and E. by Nottinghamshire, from which it is separated by the Erewash. Its form is irregular; the greatest length is from north to south, 56 miles; the greatest breadth is from east to west, 34 miles. The area of the county is 1030 square miles. The population in 1851 was 296,051. The county is comprehended between 52° 41' and 53° 30' N. lat., 1° 10' and 2° 4' W. long. Beside the main part of the county bounded and situated as above, there is a small detached portion near the southern extremity inclosed between the counties of Warwick, Leicestershire, and Stafford. It contains the villages and parishes of Measham, Stretton-in-the-Fields, and Wilsley, and the village and chapelry of Chilcote.

Surface, Hydrography, and Communications.—The southern and south-eastern parts may be considered as on the whole flat, yet they have an easy ascent towards the north-western portion, which comprehends one of the most elevated and rugged districts in England. This part (which is commonly known by the name of the Peak) is occupied by a part of that range of highlands which some geographers have designated the Pennine chain, which separates the waters that flow into the sea on the eastern side of the island from those on the western side. This chain of mountains enters the county at or near its northern extremity, and the principal ridge runs in an irregular line south-south-west till it enters Staffordshire a few miles south-west of Buxton. Along this ridge are the following heights:—Dane Head Stones, 539 feet high; Blakelaw Stones, which are considered to be the highest point of the ridge and of the county generally; Kinder-scout, which is 1800 feet high; and the northern and middle peaks of Axe-Edge Hill, the southern peak being in Staffordshire. The northern or great summit of Axe-Edge Hill is 1751 feet above the level of the sea. Lord's Seat, to the east of the principal ridge of the Pennine chain, is above 1700 feet high. This ridge divides the basin of the Mersey from that of the Trent, one of that large system of rivers which has the Humber for its estuary. From this the principal ridge of the chain, lateral ridges proceed, one of which, branching from the principal ridge near Axe-Edge Hill and running south-east, separates the basin of the Derwent from that of the Dove. The ridge which forms the eastern boundary of the basin of the Derwent, and which extends in a winding course about sixty-seven miles, does not wholly belong to Derbyshire. It branches off from the Pennine chain, in Yorkshire, and approaching the border of that county towards Derbyshire, runs along the boundary, then enters Derbyshire, and proceeds in a south-eastern direction across the east moors of the county into Nottinghamshire. In this ridge is the hill called Ox Stone, 1377 feet high, between Sheffield (Yorkshire) and Hathersage. Alport or Orpit Hill, south-east of Wirksworth, is 980 feet high.

The whole district of the Derbyshire highlands called the High Peak is an elevated area, rising at intervals into a succession of lofty hills, intersected by numerous narrow valleys. The hills are mostly bleak and barren, or covered with a thin mossy verdure intermingled with gray rock. Some of the peak-hills rise to a great height: Ashop Moor is stated to be 1880 feet and the peak 2000 feet above the level of the sea. The valleys are frequently richly wooded and of great picturesque beauty. The broadest and the deepest valleys are in the higher parts of the Peak. The picturesque beauty of the valleys is increased by the frequently precipitous character of the hills or rocks which bound them. Matlock High Tor and other rocks in Matlock Dale, and the rocks which skirt some parts of the valley of the Dove, are of this precipitous character. In the smaller and narrower dales the projections of one side have frequently corresponding recesses on the other.

The rivers of Derbyshire rise mostly in the north-western and more elevated part of the county, and have a course towards the south or south-east. This is the case with the Derwent and its principal affluent the Wye, with the Dove, which is the boundary river of Staffordshire and Derbyshire, and those of its tributaries which belong to the latter county. In the eastern part of the county about Chesterfield, which is separated from the other parts by the ridge of highland which bounds on the east side the valley of the Derwent, the direction of the stream that drains it (the Rother) is north-east. In the extreme north-west there are a few streams that flow westward into the Etherow or Goyt, and so into the Mersey.

The Derwent rises in a place called 'the Trough,' on the borders of Yorkshire and Derbyshire, where the principal ridge of the Pennine chain enters the latter county, and has a south-south-easterly course.

In its progress the Derwent receives on the right bank the Westend River, the Ashop, and the Noe: on the left bank it is joined by the river Wye, and the brooks Burbage and Barbrook. The Wye rises near the Axe Edge Hill in the principal ridge of the Pennine chain, and flows to the south-east through Miller's Dale and Monsal Dale, and past the town of Bakewell into the Derwent: its whole course is more than 20 miles. From the junction of the Wye the Derwent continues to flow in a south-south-easterly direction to Derby, and receives on the left bank the river Amber, and on the right bank the Ecclesburn. Below Derby the Derwent runs south-east with a sinuous course of about 12 miles into the Trent. Its whole course is about 60 to 65 miles. The scenery of the Derwent is very varied and frequently very beautiful. The banks are often luxuriantly wooded, but in some places they rise into bare precipitous rocks, while the stream itself at times flows in a smooth still current, and at others forces its way impetuously over a rugged rocky bed. The course of the Wye is generally through narrow dells with precipitous sides: it receives a small tributary, the Lathkill, just before it falls into the Derwent.

The Dove rises on the border of Staffordshire and Derbyshire, in the slope of the Axe Edge Hill, and is throughout its course the boundary between the counties. Its course is nearly south, with but little variation eastward for about 20 miles, to Hanging Bridge by Ashbourne, near which it receives a stream which comes from the village of Parwick, and the Schoo, which rises near Wirksworth, and flows by Ashbourne into the Dove, after a course of about 10 miles. The Dove, in the upper part of its course, and especially along the famous Dove Dale, is one of the most beautiful of English streams. In parts the mingling of graceful foliage with the picturesque rocks which rise abruptly from the bed of the river, and the clear sparkling water with its brilliant reflections produce a richness and beauty of effect which, in its way, can scarcely be surpassed. After receiving the Schoo, the Dove is joined by the Churnet, its largest Staffordshire tributary, and by several minor streams, and falls into the Trent just below Burton. The whole course of the Dove may be estimated at 45 miles. The waters of this river have a clear blue tint, deepening through various shades to a dark purple. It frequently overflows its banks in the spring; and the fertilising effect of these floods has given rise to the distich—

"In April, Dove's flood
Is worth a king's good."

Sometimes, however, the waters rise with such rapidity and violence as to be very destructive.

The Erewash rises in Nottinghamshire, near the village of Kirkby, and flowing west-south-west for about three miles reaches the border of Derbyshire, and then flows, first south-west and then south by east along the boundary of the two counties into the Trent. Its whole course is about 20 miles. The Mease rises in Leicestershire, near Ashby-de-la-Zouch, and flows first south-south-west, then west, and then north-north-west into the Trent. Its course, which is about 20 miles, is for a short distance in the detached portion of Derbyshire, partly on the border of the county, and partly beyond the border in the counties of Leicester and Stafford.

The Trent crosses Derbyshire in a direction nearly north-east. It touches the border five or six miles north-east of Lichfield, just at the point where the Mease falls into it, and flows about 10 miles nearly north, along the border of Derbyshire and Staffordshire, past Burton-upon-Trent, in Staffordshire, near which, after receiving the Dove, it quits the border and runs nearly due east through Derbyshire for about 11 miles to the border of Leicestershire. It then turns east-north-east and runs for about 10 miles along the border, separating Derbyshire from Leicestershire and Nottinghamshire, till it receives the Erewash, after which it quits Derbyshire altogether. The Derwent falls into it about 5 miles above the junction of the Erewash. About 31 miles of the course of the Trent are thus upon or within the Derbyshire border. The Trent is navigable from Burton-upon-Trent, but in 1805 the navigation was given up by agreement with the proprietors of the Trent and Mersey Canal, which runs by its side, and the navigation of the river now commences at the junction of the Derwent.

The Goyt rises near Axe Edge, and flows north-north-west along the border of Derbyshire and Cheshire, about 14 miles, till its junction with the Etherow, which has a south-west course of about 15 or 16 miles chiefly on the border of the same counties. The springs of the Etherow are in Yorkshire and Cheshire. The united stream of these two rivers flows into the Mersey at Stockport. They receive many small streams from the adjacent part (the High Peak) of Derbyshire. The Rother rises in the East Moor, a mile or two east of Chatsworth Park, and flows eastward about 8 miles to Chesterfield, where it turns to the north-east and flows into Yorkshire. About 23 miles of its course belong to Derbyshire. It joins the Don at Rotherham in Yorkshire. The Dawley (10 miles long) is its only Derbyshire tributary that requires notice. This rises on the Nottinghamshire border and flows north past Bolsover. The Sheaf, which joins the Don at Sheffield, the Wallin, the Poulter, and the Rytton, whose waters flow directly or ultimately into the Idle, rise in Derbyshire.

Derbyshire has several canals and railroads. The canals are—1, Grand Trunk, or the Trent and Mersey Canal; 2, the Erewash Canal;

3, the Derby Canal; 4, the Cromford Canal; 5, the Nutbrook Canal; and 6, the Chesterfield Canal. The Peak Forest and the Ashby-de-la-Zouch Canals have a small portion of their extent just within the county, but rather belong, the former to Cheshire and the latter to Leicestershire. We shall not therefore notice them here.

The Trent and Mersey Canal belongs to Derbyshire from its commencement in the river Trent, at Wilden Ferry (at the junction of the Derwent), to Monk's Bridge, where the canal is carried for a mile and a quarter over the flat meadows of the Dove valley on an embankment 13 feet high, with aqueduct bridges over the Dove and one or two other streams, containing 23 arches of from 12 to 15 feet span: 12 of these arches are over the main branch of the Dove. This canal was begun in 1766, and its whole extent is 93 miles. It extends through Derbyshire, Staffordshire, and Cheshire.

The Erewash Canal commences in the Trent, midway between the junction of the Derwent and that of the Erewash River, and runs northward along the valley of the Erewash, first on the west and then on the east side of that river, and terminates in the Cromford Canal at Langley Bridge; that part of its course which is on the east side of the Erewash belongs to Nottinghamshire. Its whole length is nearly 11 miles. It has aqueduct arches over the Nut Brook and the Erewash River.

The Derby Canal is described under the town of DERBY.

The Cromford Canal commences in the Erewash Canal at Langley Bridge, and runs northward to the Codnor Park Iron-Works, following the valley of the Erewash, and having the first part of its course on the east side of that river in Nottinghamshire, and the latter part on the west side in Derbyshire. From Codnor it sends off a branch, two miles and a half or three miles long, along the valley of the Erewash, on the right or Derbyshire side of that river, to the village of Puxton, while the main line of the canal turns westward to the valley of the Derwent, crossing the river Amber in its way; it then turns to the north-west, and follows the valley of the Derwent, first on the left and then on the right side of that river, to Cromford Bridge, where it terminates: the length of the canal is nearly 15 miles. Between the valley of the Erewash and that of the Derwent, this canal is carried through the higher ground by a tunnel more than a mile and a half long. There are three aqueduct bridges on the line of this canal. One is over the Erewash; one, Bull Bridge aqueduct, which is over the Amber, is 600 feet long and 50 feet high: the third aqueduct is over the Derwent, at Wigwell, and is 600 feet long and 80 feet high; the span of the river arch is 80 feet. A railway from Mansfield communicates with the Pinxton branch, and the Cromford and High Peak railway communicates with the main line of the canal near its termination at Cromford Bridge.

The Nutbrook Canal commences at the collieries at Shipley, on the right of the road from Derby to Mansfield, and runs nearly south for four miles and a half into the Erewash Canal. Several railways lead from the neighbouring collieries to the Nutbrook Canal, the conveyance of coal being its chief object.

The Chesterfield Canal commences in the tideway of the Trent, below Gainsborough, and has the greater part of its course in Nottinghamshire, and a small part in Yorkshire. It enters Derbyshire from Yorkshire near the village of Kilmars, in the valley of the Rother, and runs southward along that valley to Chesterfield. Its whole length is 46 miles, of which about 12 miles are in Derbyshire. Many railways communicate with the canal, and are intended to convey coal and iron from the collieries and iron-works.

The principal mineral railway is the Cromford and High Peak railway. The others are chiefly private property, and are designed to convey the produce of mines, collieries, and iron-works to the various canals. The Cromford and High Peak railway commences at the Cromford Canal, near its termination at Cromford, and runs in an irregular line north-west to the Peak Forest Canal, which it joins at Whaley Bridge, three or four miles west of Chapel-en-le-Frith. It passes near Wirksworth and Buxton. Its length is nearly 34 miles, and it has six inclined planes.

The passenger railways of Derbyshire are chiefly connected with the Midland line, which has its great central station at Derby. The west branch of the Midland railway enters the county a short distance north of Burton, and proceeds in a direction generally northward past Derby and Chesterfield, a few miles beyond which it enters Yorkshire; its length within Derbyshire is about 40 miles. From Derby a branch is carried eastward to meet the Nottingham branch of the Midland at the Long Eaton station; its length in Derbyshire is about 9 miles. From the Ambergate station of the Midland railway a line called the Manchester, Matlock, and Midland Junction is carried westward through Matlock and along Darley Dale to Rowsley. The length of the Matlock line, which is wholly in Derbyshire, is 11½ miles. The North Staffordshire railway, which leaves the Midland at Burton, runs along the border of Derbyshire and occasionally within the county, but it belongs more properly to Staffordshire. A short branch of the North Staffordshire railway leaves the main line at Rocester, and runs near the boundary of Derbyshire and Staffordshire to the town of Ashbourne, about 7 miles. The Manchester, Sheffield, and Lincolnshire railway skirts the northern boundary of the county, and has a short branch to Glossop.

The great road from London to Manchester, Carlisle, and Glasgow enters Derbyshire at Cavendish Bridge, over the Trent, just above its junction with the Derwent, runs north-west through Derby and Ashbourne, and quits the county at Hanging Bridge, over the Dove. Two other roads to Manchester branch off from that just described; one at Ashbourne, which runs north-north-west through Buxton, and quits the county at Whaley Bridge; another at Derby, which runs through Matlock, Bakewell, and Chapel-en-le-Frith. Numerous other important roads pass through the county.

Geology and Mineralogy.—That part of Derbyshire which lies south of a line drawn through Ashbourne, Duffield, and Sandiacre is almost entirely occupied by the red marl or new red-sandstone, the formation which overspreads so large a portion of the midland counties. There are a few spots in which the magnesian limestone, which ordinarily underlies it, rises to the surface; and just on the Leicestershire border, near Ashby-de-la-Zouch, the coal-measures emerge from beneath it, and form one or two small detached coal-fields. The strata of the red marl present considerable variety: among them are some micaceous gritstone beds producing a good freestone; other strata are not concreted, but appear as sand, red, white, and yellow; others are more clayey, and from them bricks and tiles are made. The strata of the red marl formation are generally horizontal or nearly so. Several deposits of gypsum are found in this formation, and are quarried in several places, as at Darley Abbey, in the tongue of land formed by the Derwent and the Trent, and in the southern extremity of the county. The gypsum which is quite white, or only faintly streaked with red, is used by the potters of Staffordshire (as plaster of Paris) for their moulds; some fine blocks are selected for the turners of alabaster ornaments, and the inferior sort is used by plasterers for ordinary purposes or for making the plaster floors often seen in this county. Some of the best land in or near Derbyshire lies on the red marl; in general however it is inclined to be too tenacious and cold. This formation also occupies a very small portion of the county at its eastern extremity.

The newer magnesian or conglomerate limestone, which crops out from under the red marl of Nottinghamshire, and skirts it on its western border, extends into the eastern part of Derbyshire, where it occupies the part east of a line drawn north and south through Bolsover. The general colour is yellow, of various shades, from a bright gamboge to a light straw colour or white. Many of the beds have a granular texture, and cannot be calcined; they have generally passed with the inhabitants for gritstone rather than limestone. This limestone is quarried for building, also for flooring and staircases. Towards the bottom of the series are several beds of compact blue limestone, imbedded in blue clay, and abounding with shells. This blue limestone yields excellent lime: it is quarried at Bolsover, where also pipe-clay is obtained: the pipe-clay separates the limestone beds. The strata of the magnesian limestone form a better subsoil for arable than for grass land.

The coal-measures underlie the magnesian limestone, and crop out from beneath it on the west. These coal-measures form a portion of that important coal-field which occupies a considerable part of the west riding of Yorkshire, and extends into Nottinghamshire and Derbyshire, being bounded on the east by the magnesian limestone, and on the south by the red marl. The strata range from north to south, and dip to the east. The Derbyshire portion of this coal-field is east of a line drawn from between Hathersage and Sheffield to Little Eaton near Derby. There are twenty gritstone beds, some of them of great thickness, and numerous strata of slate-clay, as shale, bind, and clunch: some of the shale-beds contain rounded or ovate masses, and even thin strata of argillaceous ironstone, with impressions of mussel shells, and coaly impressions of vegetables. A hard argillaceous rock, called crowstone, forms in some places the floor of the coal-beds. Every variety of coal seems to be found in this field, hard stone coal, cannel, peacock, and caking coal. The beds which lie between the seams of coal are worked for various purposes. The workings of the ironstone are generally begun at the surface, and pursued until they become dangerous from the loose nature of the stratum in which they lie: the ironstone which is marked with impressions of mussel shells (called the mussel band) is worked as an ornamental marble. From the gritstone-beds are quarried grindstones for cutlers: the binds, where they are hard and black, are used as black chalk; others, when decomposed, make good brick earth: the clunch is sometimes of that kind which is used for fire-bricks; where it crops out to the surface it becomes soft clay. Potters' clay of various colours and qualities occurs in this coal-field.

Millstone-grit and shale form a series of strata, having an aggregate thickness of about 870 feet; the millstone-grit, 360 feet thick, forming the upper part, and the shale and its associated rocks, 510 feet, the lower part of the formation. The hills formed by it usually present a bold escarpment, crowned by rude piles of crags, exhibiting some of the wildest rock scenery of the district. The shale occupies a lower district between this and the carboniferous limestone, but in this lower tract are occasional insulated mountains, crowned with a cap of millstone-grit. Kinderhook is one of these. The shale contains some alternating beds of fine-grained siliceous grit and nodules of ironstone; and it has some subjacent and apparently local beds of shale limestone, which afford a beautiful black marble.

Carboniferous or mountain limestone occupies the tract bounded on the south by the red marl, and on all other sides by the millstone-grit and shale just described. There are one or two places in the southern part of the county where the limestone crops out. On the eastern side of the county the strata dip under the shale; but on the western side, by a great fault, the lowest bed of the limestone is elevated and brought into contact on the same level with the shale. The limestone is divided into four beds by three intervening beds of toadstone. In each bed of this limestone thin beds of clay are found, with imbedded masses of toadstone, and various organic remains. The lowest bed, which is the most esteemed by the lime-burners, has very few dark coloured strata; but in the three upper beds these are more common, and the second bed contains some very fine black strata, which are quarried as black marble. The upper bed is also quarried as marble, and contains white chert or china-stone, which is extensively used in the Staffordshire potteries. The beautiful fluor spar called 'Bluo John,' from which vases and other ornaments are made, is found in a mountain of limestone.

The outcrop of the carboniferous limestone forms the lead district of Derbyshire. Numerous veins have been worked in it chiefly for lead; but ores of zinc, iron, manganese, and copper also occur. Lead ore is found occasionally in the toadstone which intervenes between the limestone-beds, but commonly the veins are cut off by the toadstone-beds. The veins which contain lead have generally a direction east and west; some of them approach the perpendicular (rake veins); others are nearly horizontal (pipe veins), and are rather beds of spar and ore, lying between the strata of limestone, and in most cases connected with the surface by a rake vein.

The limestone strata of Derbyshire are subject to very remarkable derangements or faults. They are characterised also by numerous caverns and by the frequent engulfment of the streams by subterraneous courses termed swallow holes. The caverns appear to have been excavated wholly or chiefly by the agency of water. There are several varieties of the toadstone, which sometimes passes into ordinary basalt: among the substances inclosed are the quartz crystals locally termed Derbyshire diamonds.

Of the limestone caverns the most remarkable is that now generally known as 'Peak's Hole,' or the 'Devil's Cave,' near Castleton. It is situated at the extremity of a deep and narrow rocky chasm in the valley in which Castleton stands, where craggy projections hide it from the traveller until he approaches pretty near. The entrance is a tolerably regular arch of about 40 feet high and above 100 feet wide, extending in length nearly 300 feet. At the end of this vestibule, as it may be termed, the arch contracts, and the visiter is obliged to stoop until he emerges into a spacious vault, called the 'bell house.' A second contraction, where the rock closes almost down upon the surface of a stream of water which occupies the passage, conducts to a third cavern, said to be 200 feet wide, and in some parts 120 feet high: this is succeeded by a series of cavernous chambers at the extremity of the farthest of which the rocks close down upon the stream of water in such a way as to preclude all access to the caverns which are supposed to lie beyond. The water which thus obstructs farther progress is a stream engulfed at a spot called Perry-foot, three miles from Castleton, on the Manchester road; it re-appears in the innermost recess of the cavern, through the successive chambers of which it flows, and emerges into daylight at the entrance. After heavy rains this stream is so much swelled as to render it impossible to reach the farther part of the cavern. Eldon Hole is a perpendicular chasm in a limestone rock near Castleton more than 180 feet deep, with a sloping passage to an interior cavern or series of caverns. It is supposed that a second chasm of unknown depth descends from the bottom of this cavern. Another series of grottoes (Bagshaw Grottoes), extending about 2000 feet, adorned with stalactites, was first explored about the commencement of the present century. There are several other caverns in the Peak.

The mineral springs of Derbyshire are numerous and important. The most celebrated warm springs are those at Buxton and Matlock. There are also warm springs at Stoney Middleton, where it is supposed that the Romans established a bath. The most celebrated of the sulphureous waters is at Kedleston Park, three miles north-west from Derby. They are valued for their antiscorbutic qualities. There are several chalybeate springs.

Soil, Climate, Agriculture.—On the high hills and moors of Derbyshire there are great tracts of rough pasture which with a moderate outlay might be improved or converted into arable land. In the valleys, or on the less abrupt hills, a very fertile red marly loam is frequently met with. Of this kind are the lands about Bartou, Blount, and Ash, and in several places in the southern and eastern part of the county. The soil on the surface naturally partakes of the nature of the rocks which are found immediately below it; and where any particular stratum rises to the surface, or crops out as it is called, the soil is chiefly made up of the same earthy substances, which have been more or less decomposed by the action of the air and mixed with vegetable matter.

Most of the soils in the county may be ranked among the clays and loams of various degrees of fertility, there being but a very small proportion of sandy soils in Derbyshire. Where these occur, they are mostly alluvial, apparently washed out of the loam and brought

together by currents, or the decomposition of the grit and micaceous sandstone in the grit or limestone shale.

The climate of Derbyshire varies according to the situation and height of the land above the level of the sea. The quantity of rain that falls in the mountainous parts is much greater than that in the low country: at Chatsworth, for instance, the annual fall of rain is about 28·41, and at Derby 24·77 inches. The time of harvest is rather late in exposed situations, and is frequently much protracted by abundant rains in the month of October.

The wheat produced on the red land is good and heavy. When the wheat has failed during the winter, and looks poor and thin in spring, it used to be a common practice to sow barley amongst it; the mixed produce was called 'blend,' and was ground to a coarse meal of which bread was made for the labourers. Spring wheat has been found a better substitute, and blend is now seldom met with. Haver cake made of oatmeal is still a common bread of the labourers, although wheaten bread is now very generally preferred.

Potatoes are raised in considerable quantities, both in garden plots and in the fields, where they are planted in rows and moulded up with the plough. The produce on good loams, well manured, especially on land ploughed up from grass, is very great.

A large proportion of the lands is in permanent pastures, of which some are very rich. Derbyshire cheese is noted as of a good quality, and the best is often sold for Cheshire or Gloucester when made of the shape and colour of these cheeses. The common Derbyshire cheese is not generally coloured. It resembles some kinds of Dutch cheeses, and keeps well.

There are some very highly productive meadows along the course of the rivers in this county, but an improved system of embankment and irrigation is still wanting in many favourable situations. The meadows along the Dove and other rivers are from their situation very subject to sudden floods, which endanger the safety of the cattle grazing in them. Some of the upland pastures are very rich, and will fatten the heaviest oxen. There are many woods and coppices scattered through the county. The coppices are allowed to grow for 20 or 25 years before they are cut, in order that the poles may acquire a considerable size, and be proper for supporting the roofs and sides of excavations in mines and coal-pits, or fit to make ladders of.

The horned cattle of Derbyshire have no peculiar character. The various improved breeds are met with in the richer pastures, and hardier animals on the mountains. The sheep on the hills are similar to those found on the Cheviot Hills; in the valleys the Leicester and South Down breeds, and various crosses, are generally preferred by the best farmers. The Derbyshire breed of horses is good, and many are bred in this county which are fitted for the carriage and the saddle, as well as for the farm, and form an important article in the profits of some of the larger farms.

Divisions, Towns, &c.—The divisions of Derbyshire for civil purposes were anciently called wapentakes; and of these divisions the Domesday Survey mentions five: Scarsdale (Scarsdale), Ilamestan (supposed to be what is now called the High Peak Hundred), Morleston (Morleston), Walocross (supposed to be what is now the hundred of Repton and Gresley), and Apultre (Appletree); besides a district called Peche Fers (Peak Forest). A document of a somewhat later date (the 'Hundred Roll,' A.D. 1273) speaks of the wapentakes of Peck (Peak), Scarvadale, Apletre, Repindon (Repington or Repton), Greslegh (Gresley), Littlechirch (Litchurch), and Wyrkesworth (Wirksworth). Other records speak of the hundreds of Risley (Gresley?), and Sawley. The present division is as follows. The Wirksworth division is still called wapentake: the others are called hundreds.

1. High Peak, north and north-west, and central; 2. Wirksworth west and central; 3. Scarsdale, east and central; 4. Morleston and Litchurch, south-east; 5. Appletree, south-west and central; 6. Repington or Repton and Gresley, south.

There is in Derbyshire only one parliamentary borough and market-town, Derby; the other market-towns are sixteen. Of the following an account will be found under their respective articles:—Alfreton, between Derby and Chesterfield, Ashbourne, Ashover, near the East Moor, Bakewell, on the Wye, Belper, on the Derwent, Buxton near the head of the Wye, Chapel-on-le-Fritli, in the High Peak, Chesterfield, on the Rother, Crich, between the Amber and Derwent, Ilkeston, in the valley of the Erewash, and Wirksworth, between Derby and Matlock. Of the other towns, namely, Cromford, Bronfield, Heanor, Tideswell, and Winster, with the town of Melbourne, we subjoin an account. There are several other places which formerly had markets.

Cromford is chiefly on the right bank of the Derwent; 15 miles N. from Derby; population of the township 1190. It lies in a deep valley, inclosed on the north, south, and west, by lofty limestone rocks. The late Sir Richard Arkwright erected here a spacious cotton-mill on the left bank of the Derwent; it is now occupied by the Messrs. Arkwright, his grandsons, who employ in these mills and those at Masson, a little higher up the Derwent, several hundred persons. The houses and mills are chiefly built of gritstone. The church is a plain building, begun by the late Sir R. Arkwright, and finished by his son. There are places of worship belonging to the Wesleyan Methodists; National and British schools; and almshouses for six poor widows. Lead-mines are worked in the neighbourhood;

lapis calaminaris is ground and prepared, and red lead manufactured. There is here a station of the Manchester and Matlock Junction railway. The Cromford canal terminates here, and the Cromford and High Peak railway joins the canal a short distance south of the town. The market is held on Saturday, and there are two fairs in the course of the year.

Dronfield is on the road between Chesterfield and Sheffield, about 30 miles N. from Derby: population of the township, 2469. The parish church is beautifully situated on a hill; it has a fine tower and spire, chiefly in the decorated style. There are meeting-houses for Quakers, Wesleyans, and Independents. Some manufactures are carried on, chiefly of iron goods, as railway wheels, cast-iron chains and nails, axes, chisels, and other edge-tools, and agricultural implements. The market has been discontinued.

Heanor is 9 miles N.E. from Derby: population of the township 3427. The church is of the early English style. There are Independent, Baptist, and Wesleyan and Primitive Methodist meeting-houses in the parish. Heanor is well situated for trade, the Erewash Canal passing through the parish, and the neighbouring district having many coal-pits. There are manufactories for cotton goods, hosiery, and bobbin-net lace. The market was on Wednesday, but has, we believe, been discontinued.

Melbourne, 8 miles S.S.E. from Derby; population of the town 2227. The church, which is partly Norman, contains several monuments of the Hardinge family. The Independents, Baptists, Wesleyan Methodists, and Swedenborgians have chapels. There are here a mechanics institute and a National school. A customary market is held on Saturday. Viscount Melbourne has a handsome seat here.

Tideswell is about 35 miles N.N.W. from Derby; population of the township 2035. It is a small town situated in a bottom amid bleak naked hills. The houses are low, irregularly situated, and ill-built. A rivulet of clear water runs through the town; the ebbing well, which is supposed to have given name to the town, has ceased to flow. The church is a fine building in the form of a cross, built about the middle of the 14th century. The chancel is lighted by nine richly ornamented gothic windows, and contains the monument of Robert Pursglove, suffragan bishop of Hull in the reign of Mary, and founder of a Free school and almshouses for twelve poor people at Tideswell. The Roman Catholics, Independents, and Wesleyan and Primitive Methodists have places of worship in the town. The market is on Wednesday.

Winster is 24 miles N.N.W. from Derby: population of the township 928. This little town runs along the side of a steep eminence. The houses are built of limestone, and are partly thatched and partly covered with stone: they are intermingled with orchards and gardens. The church has been recently rebuilt. The Wesleyan and Primitive Methodists have chapels. The market is on Saturday. The inhabitants are chiefly engaged in mining. On the commons in the neighbourhood of Winster are numerous barrows.

The following are some of the more important villages, with their population in 1851, and a few other particulars:—

Ashford, 25 miles N.W. from Derby, population 777, adjoins Bakewell, of which parish it is a chapelry. The church is ancient. In the village are extensive marble works. There are also quarries of limestone, and lead mines. The scenery of the Wye about Ashford, particularly along Monsal Dale, is exceedingly beautiful, and is much resorted to by tourists and anglers. *Beauchief*, 32 miles N. from Derby, population 133, is noteworthy as containing some remains of Beauchief Abbey, a Premonstratensian monastery founded in 1133 by Robert Fitz Randolph. *Beighton*, 34 miles N. by E. from Derby, on the north-eastern border of the county: population of the parish, 1123. The church is ancient. There are Methodist chapels and a Free school. Scytbes and reaping-hooks are largely manufactured here, and at Hackington, a hamlet to Beighton. At Birley is a spring of mineral waters, which has been much resorted to for bathing and drinking. The North Midland railway crosses the river Rother at Beighton by a very large and substantial bridge, and enters Yorkshire. There is a station here. *Bradwell*, a large village 34 miles N.N.W. from Derby: population, 1334. The inhabitants are chiefly miners; some hatmaking is carried on. The Wesleyan and Primitive Methodists and Unitarians have places of worship. The village possesses an Endowed Free school, and some parochial charities. Bradwell cavern is an extensive natural cavern containing many recesses or grottoes, and is remarkable for the beauty of its stalactites. *Brailesford*, a large village 7 miles W.N.W. from Derby: population of the parish, 708. The church is handsome and has a lofty tower. The Wesleyan and Primitive Methodists have places of worship, and there is a National school. *Brampton*, 27 miles N. from Derby; the parish is very extensive, being 7 miles by 3½ miles; population, 4400. Besides the parish church there is a new church at New Brampton. The Wesleyan and Primitive Methodists have places of worship, and there is a National school. There are large factories of iron, earthenware, and needles. *Brimmington*, 26 miles N. by E. from Derby: population of the chapelry, 1103. There are here a church built in 1847, chapels for Wesleyan and Primitive Methodists, and a National school. *Castleton*, 35 miles N.N.W. from Derby: population of the township, 867. The church is ancient, and has a tower with eight bells. There is a Wesleyan chapel. In the parish are some lead

mines which employ many of the inhabitants. Twine-spinning is carried on. The village is chiefly dependent upon tourists and other visitors; the houses are mostly of a very poor description. At Castleton are the Peak and other caverns mentioned more fully elsewhere. Peveril Castle, on the summit of the lofty hill directly over the entrance to the Peak cavern, appears to have been erected by William Peveril, a natural son of William the Conqueror: only the keep of the castle now remains, and it is in a very ruinous condition. *Chellaston*, 4 miles S. by E. from Derby: population of the parish, 499. The church was rebuilt in 1842. The Wesleyans and Baptists have places of worship here. Gypsum is extensively worked. *Chelmorton*, 25 miles N.W. by N. from Derby: population of the chapelry, 233. The church is ancient; it contains a good stone font. The Independents, Primitive Methodists, and Unitarians have places of worship. There are some barrows in the vicinity. *Claylane*, 20 miles N. from Derby: population of the township, 2278. The Midland railway has a principal station here. The village is situated on elevated ground in the midst of an important mineral district. There are a church, a Wesleyan chapel, a British school, and a mechanics institute. There are here extensive collieries and iron-works. *Codnor and Loscoe*, 9 miles N.N.E. from Derby: population of the hamlet of Codnor, 1439; of Loscoe, 451. A church and school-house were erected in 1844. The Methodists and Baptists have places of worship. At Loscoe there is a colliery. The Erewash railway has a station at Codnor. *Codnor Park*: population, 735. The Buttery Iron Company have extensive iron-works and collieries here. Iron, lead, limestone, and coal are abundant. The railway runs to Codnor Park. Some remains of the walls of Codnor Castle are still standing. *Cubley or Big Cubley*, 13 miles W. from Derby: population, 387. The church is Norman, with a lofty tower. There is a National school. A market was formerly held here. *Darley*, 22 miles N.N.W. from Derby: population of the township, 1375; a village picturesquely situated on the left bank of the Derwent. The church is a spacious edifice of the Norman style; in the churchyard is a yew-tree of very large size. The Wesleyan Methodists have a chapel, and there is a National school. There are here extensive flax-spinning mills. *Darley Dale* is exceedingly beautiful, and of considerable extent. *Derby*, 7 miles N.N.E. from Derby: population, 1208. The church is in the early English style, and contains some good monuments. There are a Wesleyan chapel and a Free school: also some parochial charities. In the parish are extensive collieries. Iron-stone and cement are found. *Dethick*, 17 miles N. from Derby: population of the chapelry of Dethick and Lea, 866. The church is in the perpendicular style. The inhabitants are employed in lead-smelting, and the manufacture of hats and hosiery. There are Wesleyan and Unitarian chapels, and a Free school. *Duffield*, 4 miles N. from Derby, population of the township, 2926, is situated on the right bank of the river Derwent. The church, which has been lately restored, is a spacious and very handsome building, with a lofty spire. The Wesleyans, Baptists, and Unitarians have places of worship. In the neighbourhood are some good mansions. *Little Eaton*, 3½ miles N. from Derby: population of the chapelry, 692. Besides the church there are places of worship belonging to Independents and Wesleyan Methodists; also a National school. Paper-mills and stone quarries give employment to many of the inhabitants. *Long Eaton*, 10 miles E. from Derby: population of the township, 933. Besides the church, which has been lately repaired, there is a Wesleyan chapel. Fancy net-making is carried on. At Long Eaton several lines of railway meet. *Eckington*, 31 miles N.N.E. from Derby: population of the parish, 4958. The inhabitants are chiefly occupied in the manufacture of nails, spades, edge-tools, and cutlery. There is an iron foundry. The church is large and ancient. Wesleyan and Primitive Methodists have places of worship. There is a Free school. A small market for butter and eggs is held on Friday. Two cattle fairs are held annually. *Edensor*, 24 miles N.N.W. from Derby: population of Edensor and Chatsworth township, 346. The ancient church has several costly monuments to members of the Devonshire family. The houses and cottages are modern, built by the present Duke of Devonshire in the Elizabethan, Italian, and Swiss styles. Chatsworth is in the parish of Edensor. *Eyam*, 30 miles N.N.W. from Derby: population of the township, 1079. The church is ancient, and covered with ivy: in the churchyard is an antique stone cross, richly carved. The village acquired a painful celebrity from the ravages of the plague in 1666: the tomb of Mrs. Mompesson, whose devotedness during the visitation is so well known, is in the churchyard. The country around Eyam is exceedingly picturesque, and abounds in caverns and rocky scenery. There are many quarries and mines. Some druidical remains exist in the neighbourhood. *Church Gresley*, population 1257, and *Castle Gresley*, population 190, situated 12 miles S.S.W. from Derby. Besides the church, which is ancient, there are chapels belonging to Wesleyan and Primitive Methodists. The inhabitants are chiefly employed in the collieries, potteries, and fire-brick works. *Hartington*, 22 miles N.W. from Derby: population of the parish, 2089. The church is old. The Wesleyan Methodists have a place of worship. A market for butter and eggs is held on Wednesday. In the neighbourhood are tumuli and other antiquities. *Hathersage*, 32 miles N.N.W. from Derby, population of the township, 832, is situated in a wild mountainous district. The church is in the perpendicular

style; in it are several curious old tombs. In the churchyard, according to local tradition, Little John, the companion of Robin Hood, was buried; two upright stones about 11 feet apart are said to mark the grave. The Wesleyans and Roman Catholics have chapels. Needles, pins, edge-tools, and mill-stones are manufactured here. *Heage*, 9 miles N. from Derby: population of the chapelry, 2278. The chapel of ease was enlarged in 1836. There are Independent and Wesleyan and Primitive Methodist chapels, a Free school, and a National school. The iron, marble, and stone works are on an extensive scale. On the Cromford Canal are large warehouses and wharfs. *Higham*, population 417: about 15 miles N. by E. from Derby. A market formerly held here was discontinued in 1785; the market-cross is still standing. A cattle fair is held in January. The Wesleyan Methodists have a place of worship. The parish possesses Free and Infant schools, and several parochial charities. *Holbrook*, 5½ miles N.E. from Derby: population of the chapelry, 981. The church was rebuilt in 1841, by W. Evans, Esq., M.P., who also supports a Free school and an Infant school. The Independents and Methodists have chapels here. There are several stone quarries of considerable extent. In the neighbourhood are some good mansions. *Hope*, 35 miles N.N.W. from Derby: population of the township, 429. The church is ancient and very handsome. The Wesleyans have a chapel. There are a National school and some parochial charities. The inhabitants are employed in the quarries and cotton-mills. *Ironville*, 12 miles N.N.E. from Derby: the population of the ecclesiastical district, formed in 1850, was 2276 in 1851. Ironville is a busy and populous district. The inhabitants are employed in the iron-works, smelting, &c. There are National and Infant schools, and a mechanics institute. *Killamarsh*, 32 miles N.N.E. from Derby: population, 1070. The church, which is of the Norman style, stands outside the village; the chancel has been lately rebuilt. There is an Industrial Free school. Collieries and iron-works give employment to many of the inhabitants. The Chesterfield Canal passes through the village. *Measham*, 15 miles S. from Derby: population of the township, 1607. The church is large and handsome. There are Wesleyan Methodist and Baptist chapels, and National and British schools. Several silk-mills are in the village. *Middleton*, population 1012, about 15 miles N.N.W. from Derby, possesses a small chapel of ease, and chapels for Independents and Wesleyan and Primitive Methodists. There are several marble quarries. *Stoney Middleton*, 29 miles N.W. from Derby: population, 593. The chapel of ease was built in the last century. There are chapels for Wesleyan Methodists and Unitarians, and an Endowed school. The village is picturesque, and the scenery in the vicinity is exceedingly beautiful. In the neighbourhood are smelting-works and limekilns. *Milford*, 6 miles N. from Derby: population of the ecclesiastical district, 1933. Besides the church there are Wesleyan and Primitive Methodist chapels, and schools founded by the Messrs. Strutt. There are extensive cotton and bleaching-works, and an iron-foundry, in which all the machinery for the cotton-mills is cast and made. Gas-works at Milford supply the town of Belper. *Monyash*, 24 miles N.W. from Derby: population, 473. The church is ancient. The Primitive Methodists and Quakers have chapels, and there is an Endowed Free school. The market is held on Thursday; fairs are held in February, September, and October. *New Mills*, a large village, 39 miles N.W. from Derby: population of the ecclesiastical district 4366. Besides the church, there are Wesleyan, Primitive, and Association Methodist chapels, also a handsome Roman Catholic chapel of recent erection, in the early English style. The inhabitants are mostly employed in the extensive calico-printing works. *South Normanton*, 14 miles N.N.E. from Derby: population of the parish, 1340. The church, which is spacious, is of the decorated style. There are chapels for Primitive and Wesleyan Methodists, and a National school. *Ockbrook*, 5 miles E. from Derby: population, 1703. The church, partly Norman, was repaired and enlarged in 1835. There are chapels for Wesleyan and Primitive Methodists, and a National school. The Moravians have a large establishment, comprising, besides dwellings, schools for boys and girls, a chapel, &c. *Pleasley*, on the border of Nottinghamshire, 26 miles N.E. by N. from Derby: population, 654. The church is of considerable antiquity. There is a mechanics institute. A market was formerly held here; the market-cross is still standing. In Pleasley Vale are two large cotton and morino-mills. *Repton*, 6¼ miles S.S.W. from Derby: population, 1863. The church is remarkable for its elegant spire 188 feet in height. The chancel, partly of Anglo-Saxon date, is more ancient than the other parts of the building, except the crypt, which is probably the most perfect remaining example of an Anglo-Saxon crypt. The Wesleyans and Independents have places of worship. Part of the refectory of the Augustinian priory is still standing, and the gateway forms the entrance of the Grammar school. This school was founded in 1556 by Sir John Porter, who devoted all his estates in Derbyshire and Lancashire to founding and endowing this school, and an hospital at Etwell. The income from the endowment is about 3000*l.* a year; there are several exhibitions to Oxford and Cambridge. The school is free to the sons of inhabitants of Etwell and Repton parishes, and to eight scholars on the foundation, appointed by the governors in rotation. The number of scholars in 1853 was 60, of whom 34 were free. Repton is a place of great antiquity. It was the

residence of the Mercian kings, whose place of sepulture was the original priory. *Ripley*, 10 miles N. by E. from Derby: population of the chapelry, 3071. Besides the church, erected in 1820, there are chapels for Baptists, Wesleyan Methodists, and Unitarians, and a National school. The town is well built, and contains some good houses and shops. A customary market is held on Saturday: fairs are held on Wednesday in Easter week and the 23rd of October. In the neighbourhood are several large collieries and a cotton factory; also the extensive works of the Butterly Iron Company. The Cromford Canal and the Erewash railway pass close by Ripley. *Sandiacre*, 9 miles E. from Derby: population, 1065. Besides the church, there are places of worship belonging to the Wesleyan and Primitive Methodists; also a National school. The principal manufacture is that of lace and warp net. There is a starch factory. The Erewash railway and canal pass through the village. *Sawley*, 8½ miles E. by S. from Derby: population of the township, 1001. Besides the church, which was enlarged in 1838, there are chapels belonging to the Baptists and Wesleyan Methodists, and a National school. The Midland railway has a station here. *Stapenhill*, 11 miles S.S.W. from Derby: population, 2604; is situated on the right bank of the Trent opposite the town of Burton-upon-Trent. The church, an elegant edifice, standing on an eminence, was erected in 1830, at the expense of the vicar. There are a Wesleyan chapel, and National and Infant schools. *Staveley*, 28 miles N.N.W. from Derby: population, 3998, is a busy and populous place. There are very extensive iron-works and coal-mines. The Chesterfield Canal passes through the village; and there are tram-roads from the collieries. Staveley is a station on the Midland railway. The church contains some ancient monuments and stained-glass windows. There is a chapel for Methodists. A good school-house has been recently erected by the Duke of Devonshire. At Netherthorpe, a hamlet of Staveley, is an Endowed Grammar school, founded in 1586. *Tansley*, 18 miles N. from Derby, in the parish of Crich: population, 593. There are here a church, erected in 1840, a chapel for Wesleyan Methodists, and a National school. There are several cotton-mills and a small-ware manufactory. *Tickenhall*, or *Ticknall*, 8 miles S. from Derby: population, 1241. The village is a mile and a half long. There are here a church, a very handsome structure, rebuilt in 1842, chapels for Wesleyan Methodists and Baptists, an Endowed school, and a hospital for decayed housekeepers. In the neighbourhood are extensive lime-kilns. *Whittington*, 26 miles N. by E. from Derby, and 2½ miles from the Chesterfield station of the Midland railway: population, 874. In addition to the church, there are chapels belonging to the Wesleyan and Primitive Methodists. The Grammar school, founded in 1674, has an income from endowment of 63*l.* a year, and is free to 30 poor children. The number of scholars in 1852 was 80. There are manufactures of stone bottles and earthenware. *Whitwell*, 34 miles N.N.W. from Derby: population, 1355. The church, which is spacious, is cruciform, and contains several ancient monuments. There is a National school. The village is scattered, and the population chiefly agricultural. At Steeley Farm, one mile and a half from Whitwell, are the picturesque remains of a Norman church. *South Wingfield*, 14 miles N. by E. from Derby: population, 1092. Besides the church there is a Wesleyan chapel; the parochial charities are of considerable value. A castellated manor-house was erected at Wingfield about the middle of the 15th century by Ralph Cromwell, secretary to Henry VI. The ruins are now greatly dilapidated, but are still very beautiful. The inhabitants are chiefly employed in framework knitting. *Youlgreave*, 21 miles N.N.W. from Derby: population of the parish, which is very extensive, 3764. The church, which is partly Norman, contains a curious font. There are two Dissenting meeting-houses. On the Derwent, at Youlgreave, is a large paper-mill. In the parish are many antiquities of the British period.

Divisions for Ecclesiastical and Legal Purposes.—Derbyshire is in the diocese of Lichfield: it constitutes the archdeaconry of Derby, which is subdivided into 19 rural deaneries. According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 776 places of worship, of which 404 belonged to various bodies of Methodists, 250 to the Established Church, 45 to Independents, 39 to Baptists, and 38 to minor bodies. The total number of sittings provided was 184,093. By the Poor-Law Commissioners the county is divided into nine Unions: Ashbourne, Bakewell, Belper, Chapel-en-le-Frith, Chesterfield, Derby, Glossop, Hayfield, and Shardlow. These Unions include 272 parishes and townships, with an area of 509,220 acres, and a population in 1851 of 259,967; but the boundaries of the Unions are not strictly co-extensive with those of the county.

Derbyshire is in the midland circuit: the assizes and the quarter sessions are held at Derby, except the Easter sessions, which are held at Chesterfield. Until the year 1569 this county and Nottinghamshire formed but one shirevalty. Until the reign of Henry III. the assizes for both counties were held at Nottingham: afterwards, until Derby was made a distinct shirevalty, they were held alternately at Nottingham and Derby. County courts are held at Alfreton, Ashbourne, Bakewell, Belper, Chapel-en-le-Frith, Chesterfield, Derby, and Wirksworth.

Derbyshire has some peculiar laws and regulations of very high

antiquity in reference to the working of the lead-mines. The principal part of the county where lead ore is found in any considerable quantity is called the 'King's Field,' and comprehends nearly all the wapentake of Wirksworth and a considerable part of the High Peak hundred. The 'King's Field' has been from time immemorial let on lease. The lessees have each in his respective district a steward and barmasters. The steward presides as judge in the barmote courts, and, with 24 jurymen, chosen every half-year, determines all disputes which arise respecting the working of the mines. Debts incurred in working the mines are cognisable in these courts. The courts meet twice a year, or oftener if need be. The court for the High Peak district meets at Monyash, that for the wapentake district at the town of Wirksworth. The office of the barmaster is principally to put miners into the possession of veins that they have discovered, and to collect the proportion of ore to which the lessee of the crown or the lord of the manor has a claim.

There are four members of parliament returned for the county (two for the northern and two for the southern division), and two for the borough of Derby.

History and Antiquities.—Before the Roman conquest Derbyshire appears to have been included in the territory of the Coritani, who, with the Cornabii, occupied the whole of the midland district from the Lincolnshire coast to the upper part of the Severn and the Dee. Upon the conquest of South Britain by the Romans, and its division into provinces, Derbyshire was included in the province of Flavia Casariensis, not (as Pilkington, and after him, Messrs. Lysons state) of Britannia Prima.

The barren moors of this county abound in masses of gritstone; and single stones of vast size appear above the surface: many tors (as Mock Beggar Hall, on Stanton moor, between Winster and Bakewell, Robin Hood's Mark, or Ashover common, &c.) and rocking stones have been found, and many rock basins; but all these, to which it was once common to ascribe a druidical origin, seem referrible, like the grauite tors of Cornwall and Devonshire, rather to natural causes. There are however many circles of stones, some upright stones, and tumuli or barrows of earth and stones (called in Derbyshire 'lows'), and some rude military works which are unquestionably memorials of the early inhabitants. The most remarkable of these monuments is the stone circle of Arbelow, or Arbor-low, 5 or 6 miles north-west of the town of Winster. An elliptical area of 52 yards by 46 (having the greater diameter in a direction north and south), is inclosed by a ditch 6 yards broad, and an outer bank formed of the soil thrown out from the ditch, 5 yards high on the inside. About 30 rough unhewn stones about 6 to 8 feet long by 3 feet broad, and one foot thick, lie irregularly round the inclosure, having their smaller ends pointing towards the centre: there is reason to think these once stood obliquely on one end. About 14 smaller stones are intermingled with these in an irregular manner, and there are two stones lying near the centre, one of which is larger than any other within the area. Near this circle are some tumuli, one of which is of large size. Numerous tumuli occur on Stanton Moor, north of Winster, where are also many rocking stones, locally called roo-tors, and some upright stones. The tumuli and other primeval antiquities of this county are fully described in Bateman's 'Vestiges of the Antiquities of Derbyshire.'

The ancient British road, the Rykneld-street, and the Roman road, which usually coincided with it, cross this county in its whole extent from south-west to north-east, from the borders of Staffordshire to those of Yorkshire. Chesterfield has been supposed to be a Roman station, the Lutudarum of Ravennas; and the first part of the name of the town (Chester, which with its kindred forms cester and caster usually indicates the site of a Roman station), and the discovery of Roman coins there, give probability to the supposition. A second Roman road has been traced from Brough in Hope Dale to Buxton, both of which are supposed to have been Roman stations. At Brough three sides of the station, which was an oblong 310 feet by 270 feet, are still perfect; and the foundations of a temple and another large building, with other antiquities, have been discovered. At Buxton several Roman baths have been discovered, and three of their roads meet here. Another Roman road, locally designated Long-lane, runs through the county from the river Dove near Boecoster, which from its name was probably a station, to Derventio, and appears to have continued in the same line thence into Nottinghamshire. There are some traces of other roads.

Derventio, now Little Chester, appears to have been the most considerable Roman station in the county. Melandra Castle station is on a moderate elevation at the meeting of two mountain streams: it is nearly square, 366 feet by 336 feet; the ramparts and part of the ditch still remain, and the gates and the site of the Prætorium may be discovered: there are the foundations of many buildings on the side sloping to the water. It has been conjectured that there were Roman stations at several other places in the county.

Of Roman antiquities the most remarkable are an altar preserved at Haddon Hall, a silver plate found in Risley Park, and the pigs of lead found near Matlock. In the Saxon division of England, Derbyshire was comprehended in the kingdom of Mercia; and Repaudun, or Repton, on the south bank of the Trent, was one of the royal residences. Derbyshire was overrun by the Danes in their great invasion of England in the time of Ethelred I. and Alfred. At the

Norman conquest considerable grants of land within the county were made to Henry de Ferrers, whose son Robert was the first Earl Ferrers. Another Robert, son of the first Earl Ferrers, was created Earl of Derby in 1188. William Peveril, a natural son of the Conqueror, received also considerable grants. He built the castle of the Peak, and he or his son is supposed to have built the original Bolsover Castle. [BOLSOVER.] The Peak Castle is now an 'ill-shapen ruin,' situated on the verge of the rocky precipice that forms the roof of the Peak cavern at Castleton. In the civil war in the time of John, William earl Ferrers, who had obtained a new grant of the earldom of Derby, and who was one of the king's party, took the castles of the Peak and Bolsover. In the reign of Henry III. the Earl of Ferrers and Derby was one of the most active of the insurgent barons; but having been worsted and taken prisoner by Henry, the king's nephew, at the battle of Chesterfield, he was deprived of the earldom of Derby, with the vast possessions attached to it. These were afterwards given to Edmund, earl of Lancaster, son of Henry III., and thus eventually formed part of the domains of the duchy of Lancaster. No public events of interest are connected with Derbyshire until after the Reformation. The earldom of Derby was conferred by Henry VII. upon his supporter, Lord Stanley, in whose family it has ever since continued.

Derbyshire contains various relics of the middle ages—baronial, ecclesiastical, and monastic. Besides the Peak Castle there are some remains of Codnor Castle, near Heanor, the ancient residence of the Greys of Codnor; these remains are partly converted into a farmhouse. Haddon Hall, the seat of the Duke of Rutland, is on the left bank of the Wye, below BAKEWELL. Hardwick Hall is a curious specimen of the style of domestic architecture in Elizabeth's reign, and has remained unaltered since the time of its erection; it is between Chesterfield and Mansfield, and belongs to the Duke of Devonshire. Some of the furniture is perhaps older than the house itself, and was removed from the old hall, now in ruins, near the present mansion. Hardwick contains some embroidery done by Mary queen of Scots, who was imprisoned here and at Chatsworth and South Wingfield for some time. South Wingfield manor-house was built in the reign of Henry VI., and ruined in the civil wars of Charles I.: the remains present some beautiful features.

The churches of Derbyshire contain some very ancient portions. Repton church has under the chancel a very curious Anglo-Saxon crypt, which there is reason to suppose was a part of the conventual church destroyed here by the Danes in 874. The rest of the church is of a later period; the architecture is varied, partly Norman, partly early English, and partly decorated English; the tower and spire, which are very lofty and of fine outline, are in the perpendicular English style. Melbourne church, near the border of Leicestershire, is a fine example of early Norman architecture, and is nearly in its original state. It has been conjectured, but without sufficient reason, to be as ancient as the 7th century. Brassington and Streetly churches also contain some interesting features of early Norman date. The desecrated chapel at Streetly is a Norman edifice, perfect, with the exception of the windows, which have been enlarged, and the roof: the ornaments are elaborate and well executed. The remains of early pointed architecture in Derbyshire are few, and by no means remarkable; the best are perhaps All Saints church at DERBY, and the parish churches of ASHBOURNE, BAKEWELL, CHESTERFIELD, and Dronfield.

Of the monastic establishments of Derbyshire there are very few remains. Some remains of Repton priory may be seen in the school at Repton and in the master's house. After the old Saxon priory was destroyed by the Danes, a monastery of Black (or Augustinian) Canons was founded here by Maud, widow of Rannulph, second earl of Chester. There are at Yeaveley, 4 miles south of Ashbourne, some ruins of a chapel, formerly a preceptory of the order of St. John of Jerusalem. Of Dale Abbey, 6½ miles east from Derby, founded in 1204, for Premonstratensian Canons, there only remains the arch of the east window of the church. Beauchief Abbey, Norton, near Sheffield, is just within the boundary of Derbyshire: it was founded in 1183 for Premonstratensian or White Canons. The only part of the abbey now remaining is the west end of the conventual church, which is used as the chapel of the extra-parochial district of Beauchief. The architecture is plain, but the situation amidst woods and hills is delightful.

The principal historical events connected with Derbyshire since the Reformation occurred during the civil war of Charles I. The county at first declared for the king, who after setting up his standard at Nottingham marched to Derby; but it was soon brought over to the side of the Parliament by the activity and influence of Sir John Gell, who marching from Hull into Derbyshire (October 1642) with a regiment of foot, consisting of only 140 men, raised 200 men at Chesterfield, and proceeding to Derby garrisoned that town. South Wingfield manor-house was also garrisoned for the Parliament. In 1643 Sir John took Bolsover Castle, which the Earl of Newcastle had fortified for the king; and his brother, Colonel Gell, took Sutton House, near Chesterfield, which had been also garrisoned for the king by Lord Deincourt. The Earl of Newcastle for the king took South Wingfield manor-house; and the Royalists possessed themselves of the northern parts of the county. In the summer of 1644 Sir John Gell took South Wingfield manor-house, and defeated the forces sent to relieve

it; and General Crawford, another parliamentary commander, took Bolsover Castle and Staveley House.

Derbyshire is both an agricultural and manufacturing county, but its population has for some time been more decidedly manufacturing and mining than agricultural. In 1851 the county had ten savings banks, at Alfreton, Ashbourne, Bakewell, Belper, Chapel-en-le-Frith, Chesterfield, Derby, Eekington, Glossop, and Wirksworth. The amount owing to depositors on the 20th of November 1851 was 419,752*l.* 13*s.* 5*d.*

DEREHAM, EAST, Norfolk, a market-town in the parish of East Dereham and hundred of Mitford, is situated in 52° 40' N. lat., 0° 56' E. long., distant 16 miles W.N.W. from Norwich, 100 miles from London by road, and 125 miles by the Eastern Counties and East Anglian railways, via Lynn. The population of the town in 1851 was 3372. The living, a vicarage with the curacy of Hoo and a sinecure rectory annexed, is in the archdeaconry of Norfolk and diocese of Norwich.

The town of Dereham is pleasantly situated, and has a clean and neat appearance. The streets are wide, lighted with gas, and paved with pebbles. The parish church is a spacious cruciform building of ancient date, and has a nave with side aisles, transepts, and a choir, with a tower rising from the intersection of the nave and transept. The font in the church is rich and handsome; it was placed here in the 15th century. A monument to the poet Cowper, who is buried here, is in the north transept. The Independents, Baptists, and Wesleyan and Primitive Methodists have places of worship. There are National and British schools and a mechanics institution. Numerous gardens and orchards are in the vicinity of the town. Agricultural machines are manufactured at East Dereham. There are malt-houses and breweries. The market is held on Friday for cattle, provisions, and grain. There are two yearly fairs, in July and September. Petty sessions are held fortnightly.

(Blomefield, *Norfolk*; *General History of Norfolk*.)

DERG, LOUGH. [DONEYAL.]

DERRY, with Raphoe, a bishop's see in the archdiocese of Armagh, in Ireland. The diocese of Derry and Raphoe embraces the greater part of the counties of Londonderry, Donegal, and Tyrone, and a small portion of Antrim. It contains 62 benefices in Derry and 35 in Raphoe. The income of the united dioceses is 8000*l.* a year. The chapter of the diocese of Derry consists of a dean, archdeacon, and three prebendaries; that of Raphoe of a dean, archdeacon, and four prebendaries.

Derry signifies 'a place of oaks.' In Pagan times the emulcne on which the city and cathedral now stand was known as Derry-Calgaich, or the Oak Grove of Calgaich. Towards the end of the 6th century Columba came hither from Iona and founded a church. From this period down to the plantation of Ulster it was called from him Derry-Columbkil, and was famous for its abbey and religious foundations. In 1118, when the council of Rath-breasil was held, this district seems to have been included in the ancient diocese of Ardstraw or Rathlury. The see of Derry was established in 1158, when Flaheartach O'Brolcain, the then abbot of the monastery, was raised to the dignity of bishop. This see remained unreformed, together with those of Raphoe and Clogher, down to the time of the plantation of Ulster. The first Protestant bishop was George Montgomery, nominated to the succession in 1603. There is a very full account of the history and antiquities of this see in the first part of a 'Memoir of the Ordnance Survey of Ireland,' 4to., 1837. [LONDONDERRY.]

DERWENT. [DERBYSHIRE.]

DERWENT-WATER. [CUMBERLAND.]

DESAGUADERO. [BOLIVIA.]

DESENZANO. [BRESCIA.]

DESMOND. [KERRY.]

DESSAU, the capital of the duchy of Anhalt-Dessau, in Germany, is situated on the left bank of the Mulde, about two miles from its junction with the Elbe, in 51° 48' N. lat., 12° 18' E. long., at a distance of 80 miles by railway S.W. from Berlin, 54 miles N. from Leipzig by railroad through Halle and Cöthen, and has about 12,000 inhabitants, of whom some 800 are Jews. The town is about half a league in circumference; three sides of it are inclosed by a wall, and the fourth, towards the east, is bounded by the Mulde, which is crossed by a handsome bridge. Dessau has six gates, and is divided into the Altstadt, Neustadt, and the Sand, and three suburbs: it contains seven public squares, and thirty streets, which upon the whole are well and regularly built. The Cavalier-street would be an ornament to any capital, and some of the public buildings are handsome. The ducal palace, which is a noble edifice, contains a picture-gallery and collection of art; the chapel contains a chef-d'œuvre of Lucas Cranach, the Last Supper, in which he has introduced portraits of Luther, Melancthon, and others. Among the other buildings may be mentioned the town-hall; four churches, two of which belong to the Reformed Lutherans, one to the Lutherans, and one to the Roman Catholics; one synagogue, two hospitals, a poor-house, orphan asylum, infirmary, an elegant theatre with concert-room attached, and the riding-school. The public cemetery is laid out with great taste, and embellished with an elegant entrance in the Roman style. Dessau is well supplied with schools of public instruction. Among them are the Franz school for the education of

Jews; the gymnasium consisting of an elementary, a commercial, and a classical school; the seminary for school-masters; and the school of industry for the spinning of flax and cotton. The manufactures are unimportant; they consist principally of woollen cloth, stockings, hats, tobacco, spirits, and beer: the retail trade is almost exclusively in the hands of the Jews. The town however carries on a considerable trade in corn. In the environs are the ducal villas of Louisium and Georginum, the gardens about which are much admired, as are also the gardens of Wörlitz, about six miles from the town. The Drehberg, which is the burying-place of the dukes of Anhalt-Dessau, is planted with shrubs, and surmounted by a building with a lantern and cupola. On the Stieglitzberg near the Elbe, is a monument to the Duke of Dessau, who fell at the battle of Torgau.

DETMOLD. [LIPPE.]

DETROIT, the principal city and port of Michigan, United States of North America, stands on the right bank of the Detroit River, or Strait, which connects lakes St. Clair and Erie, in 42° 19' N. lat., 83° W. long., 526 miles N.W. from Washington. The population in 1810 was 770, in 1820 it was 1442, in 1840 it was 9192, in 1850 it had increased to 21,019.

The city occupies a convenient site, rising from the river, along which it extends for a mile and a half with a depth of nearly a mile. The streets are laid out upon a somewhat elaborate plan, that of a rectangle for 1200 feet from the river, while farther back it forms a triangle. Eight principal streets, each 200 feet wide, diverge from a spacious open area called the Grand Circus, and divide the back part of the city into triangular portions; the secondary streets are 120 feet, the others 60 feet wide, and they usually intersect at right angles. The private houses are mostly of wood; the public buildings, many of which line a main avenue which runs parallel with the river, are generally substantial edifices of brick or stone. Of these the chief are the United States land-office, the old state-house, the state buildings, law courts, and penitentiary, county and city courts and markets, the Roman Catholic cathedral, &c. Detroit contains four Roman Catholic, two Episcopalian, three Methodist, two Presbyterian, and two Baptist churches, and a Congregational, a German Lutheran, and a sailors' church; a branch of the State university, several public and primary schools, a Protestant and a Roman Catholic orphan asylum, and numerous other religious and benevolent institutions; a museum, and historical, medical, and literary institutes; and supports thirteen newspapers, three of which are published daily. Several of the churches are large and handsome buildings. The city is well supplied with water, but badly drained and paved; there are several public squares and open spaces; the most noted is known as the Campus Martius.

Detroit is a rapidly increasing place, being admirably situated for the purposes of commerce and manufactures. The river is above half a mile wide opposite the city, and has a depth varying from 12 to 48 feet; the harbour is secure and accessible at all seasons. Steamers ply regularly every day from all parts, and the inland traffic is greatly facilitated by the Michigan Central, and Detroit and Pontiac railways. Most of the agricultural products of Michigan are shipped from Detroit. The coast trade is very considerable, and an extensive trade both legal and contraband is carried on with Canada. The shipping belonging to Detroit amounts to about 25,000 tons, a large proportion being propelled by steam. Ship-building is an important branch of the industry of the place. In the town are five large steam saw-mills, which are said to cut 9,000,000 feet of lumber and 4,000,000 laths annually. There are besides several foundries, steam-engine and boiler-factories, iron-works, brass-works, nail-factories, sash-works, steam flour-mills, tanneries, breweries, potteries, &c. There is also a large wholesale trade for the supply of the interior of the state. The town contains four banks, with a capital (Dec. 31, 1851) of 761,223 dollars, and a circulation of 607,588 dollars.

Detroit was founded by some French from Canada in 1683. It was taken by the English in 1759. After the declaration of American independence, Detroit was twice taken by English troops. It has been once entirely destroyed, and several times severely injured by fire. In 1802 it was incorporated, but the act of incorporation was repealed in 1810. Its present charter of incorporation as a city was granted in 1815; since which date its population has multiplied more than twenty-fold. Until 1847 Detroit was the capital of Michigan, but in that year the seat of government was removed to Lansing; Detroit however is by far the largest and most important place in the state.

(Colton, *Statistical Gazetteer of the United States*, 1853; Haskell and Smith, &c.)

DEULIE. [NORD.]

DEUXPONTS (Germ. *Zweibrücken*), formerly a duchy but now a bailiwick in the south-western part of the Bavarian Palatinate, is bounded S. by France, and W. by the Prussian Rhein-Provinz. It has an area of about 1181 square miles, and a population of about 150,000. The general character of the country is mountainous, with many gentle eminences, whose declivities and lowest parts are rich in woods, corn-fields, pastures, and vineyards. The principal river is the Blies, into which flow the Erlbach, Hornbach, Schwob, and other small streams. Deuxpontos produces rye, barley, oats, and other grain; rapeseed, flax, and hemp are cultivated in large quantities. Much

attention is paid to the rearing of horses and cattle, and to the breeding of sheep. There is abundance of wood. The minerals are iron, copper, and freestone. There are few manufactures. The duchy formerly belonged to the crown of Sweden; but came by inheritance to the kings of Bavaria.

DEUXPONTS, a town in the Bavarian Palatinate, capital of the former duchy of Deuxpontos, situated in 49° 16' N. lat., 7° 20' E. long., is a pretty town on the Erlbach, 50 miles W. from Spire, 5 miles S. from the Homburg station on the railway from Speyer to Paris through Saarbruck and Metz: population, 7300. It is very prettily situated among gardeus and luxuriant meadows, encircled by eminences and woods. The town, which consists of the Old and New Towns, is surrounded by a wall, has a pleasant suburb, and is regularly built. The dukes of Zweibrücken resided in the old palace, which was partially destroyed by the French; part of the remains have been converted into a Catholic church. There are two Protestant churches, a gymnasium and lyceum, an orphan asylum, an hospital, and a school of industry. The inhabitants are engaged in agriculture, sheep-farming, and in the manufacture of woollen cloth, linen, cotton, leather, oil, tobacco, and steel-ware. The Bipont edition of the Greek and Latin classics was printed here from 1779. Deuxpontos is the seat of the judicial tribunals for the bailiwick as well as of its local government. Close to the town is Schifflick, a country-seat built by Stanislaus Leszczinski, king of Poland, which has been converted into an establishment for breeding horses.

Deuxpontos, Zweibrücken, or in its Latinised form, Bipontium, derives its name from the site of its old castle between two bridges. Its origin is unknown, nor is it mentioned in history until the year 1197, when it was the property of the counts bearing its name. On the extinction of the direct line, in 1394, the earldom fell into the possession of Ruprecht, the elector-palatine, who divided it among his three sons in 1410, all of whom being dukes, the country itself was thenceforward denominated a duchy. During the Thirty Years' War it was besieged by the Imperialists. Deuxpontos suffered also severely during the campaigns of Louis XIV., and the French held it until 1697. As the duke in the meantime had died childless, it fell to the next heir, Charles XII. of Sweden, and, upon his decease, to the count-palatine; this prince also dying without children in 1723, the duchy reverted to the house of Birkenfeld, the ancestors of the family who now occupy the throne of Bavaria. In 1793 Deuxpontos was taken possession of by the French, but it was restored to Bavaria in 1816, when other adjacent territories were added to it, and the whole was annexed to its dominion by the name of the Palatinate or the Province of the Rhine.

DEVENTER, a fortified town in the province of Overijssel, in Holland, is situated on the right bank of the Yssel, at the point where that river is joined by the Schipbeek, 9 miles S. from Zwoll, 50 miles E. by S. from Amsterdam, and has about 15,000 inhabitants, including the garrison. Deventer was formerly a free imperial city, and a member of the Hanseatic league. The town is surrounded by a wall flanked with numerous towers, and defended by a broad deep ditch. The cathedral is a fine gothic building, with an excellent set of bells. There are six other churches in the town, which has also a handsome town-hall. The athenæum or college contains a well-chosen and extensive library. An observatory was founded here in 1839. The industrial products of Deventer are iron-ware, hosiery, carpets, and linen. It is famous for its gingerbread called Deventer Koek, many thousands of pounds of which are exported. The town trades largely in cattle, corn, butter, cheese, beer, wool, and turf. The environs are fertile and well cultivated; the banks of the Yssel are dotted with pretty country-houses. Assize courts are held in the town.

DEVIZES, Wiltshire, a borough and market-town, having separate jurisdiction, and the seat of a Poor-Law Union, in the hundred of Potterne and Cannings, in 51° 20' N. lat., 1° 58' W. long., 22 miles N.W. by N. from Salisbury, and 89 miles W. by S. from Loudon. The borough is governed by 6 aldermen and 18 councillors, and returns two members to the Imperial Parliament. The population of the borough in 1851 was 6554. The living of St. John, a rectory with the vicarage of St. Mary attached, is in the archdeaconry of Wilts and diocese of Salisbury. Devizes Poor-Law Union contains 28 parishes and townships, with an area of 59,396 acres, and a population in 1851 of 22,236.

In ancient records this place is called *Devisa*, *De Vies*, *Divisis*, &c. In the reign of Henry I. a strong fortress was erected here by Roger, bishop of Salisbury, which his nephew Nigel, bishop of Ely, garrisoned with troops, but he was obliged to surrender the fortress to Stephen, together with 40,000 marks, the bishop's treasure. The castle was afterwards seized by Robert Fitz-Herbert for Matilda, but on her arrival she refused to deliver it up, and was subsequently hanged as a traitor to both parties. About the end of the reign of Edward III. the castle was dismantled.

Devizes was besieged by Sir William Waller in the Parliamentary war, but just as the Royalists were preparing to capitulate, Lord Wilmot, who had been dispatched by the king from Oxford, appeared on Roundway Hill with 1500 horse and two pieces of artillery. Sir William withdrew his forces from the town, and attacked Lord Wilmot, but was totally discomfited.

The first charter of incorporation was by the Empress Matilda,

granting to her burgesses 'De Divisis' freedom of toll throughout all England and the ports of the sea. Devizes returned members to the parliaments of Edward I., to two of Edward II., and constantly since the 4th of Edward III. The summer assizes for the county are held at Devizes. The quarter sessions of the county are held here in rotation with Salisbury, Warminster, and Marlborough. A county court is held in the town.

Devizes is situated nearly in the centre of the county, on the Kennet Canal: it consists of several streets well paved, and lighted with gas, and contains many good houses. Being built on an elevated site, the town is well drained. The town-hall is a handsome modern building, in the basement of which a cheese-market is held.

St. John's church is built partly in the Norman and partly in the perpendicular style of architecture, with a square embattled tower, and consists of a nave, transept, chancel, and two chantry chapels. Of St. Mary's church the chancel is supposed to have been built soon after the Conquest, but nearly all the rest of the structure was rebuilt by William Smyth, who died in 1436. There are chapels for Wesleyan Methodists, Baptists, Independents, Presbyterians, and Quakers. There are a church charity school, a British school, a literary institution, a savings bank, and a dispensary.

The woollen manufacture, once of considerable importance, is now extinct. The silk manufacture, malting, and the manufacture of snuff, afford employment. The market is on Thursday, and is the largest in the west of England for corn. A large cross, erected in 1815 by Lord Sidmouth, is in the market-place. Fairs are held on the 4th of February, for horses; Holy Thursday and April 20th, for cattle; and June 13th, July 5th, and October 2nd and 20th, for cattle, bops, cloth, &c. Richard of Devizes, a Benedictine monk of the 12th century, who wrote a chronicle of English history, was a native of this place.

(Hoare, *Wiltshire*; *Communication from Devizes*.)

DEVONPORT. [PLYMOUTH.]

DEVONSHIRE, a maritime county in the south-west part of England. Its form approximates to that of an irregular quadrangle, having for its angles—on the west Hartland Point on the Bristol Channel; on the north the boundary of Devonshire and Somersetshire, near Oare, on the coast of the same channel; on the east the boundary of Devonshire and Dorsetshire, on the coast of the English Channel, near Lyme Regis; and on the south Prawle Point, near the Start Point, on the coast of the English Channel. Devonshire lies between 50° 12' and 51° 15' N. lat., 2° 54' and 4° 33' W. long. The county is bounded N. and N.W. by the Bristol Channel; N.E. by Somersetshire; E. by Dorsetshire; S.E. and S. by the English Channel; and W. by Cornwall, from which it is separated along part of the boundary-line by the river Tamer. An insulated portion of the county is inclosed between Dorsetshire and Somersetshire, and the boundaries as given above include an insulated portion of Dorsetshire which is entirely surrounded by Devonshire. The length of this county from north to south is about 71 miles; the breadth from east to west is about 68 miles. The area of the county is about 2590 square miles. The population in 1841 was 532,959; in 1851 it was 567,098, being an increase of 6.4 per cent.

Coast-line, Islands.—The coast of the Bristol Channel which bounds Devonshire to the north and north-west is for the most part steep and rocky. On the side towards Somersetshire the coast-line runs nearly east and west for about twenty-two miles, measured in a straight line from the border of Somersetshire to Bull Point, west of Ilfracombe: along one part of this line there are cliffs, in the other parts the coast though steep is not broken or precipitous: there are no marked headlands. From Bull Point to Morte Point the coast forms a small bay bounded by cliffs; from Morte Point to Baggy Point it forms a larger and deeper bay, with cliffs at each extremity and a low shelving beach in the middle. From Baggy Point to Hartland Point the coast forms the deep bay, Barnstaple or Bideford Bay, into which the united stream of the Torridge and the Taw empties itself. From Baggy Point to the estuary of the Taw and Torridge the coast is shelving and sandy, with a multitude of sand-hills, called Braunton Barrows; from the estuary of the rivers to Hartland Point the coast is lined with steep cliffs and rocks. From Hartland Point the coast, still lined with cliffs, runs south or south by west to the border of Cornwall. This coast presents in several places very picturesque views, especially about Lynmouth (the mouth of the river Lymn), on the border towards Somersetshire, and at Clovelly in Bideford Bay.

The coast of the English Channel, which bounds the county on the south, runs west-south-west from the neighbourhood of Lyme Regis (in Dorsetshire), 22 miles measured in a direct line, to the mouth of the river Ex. This coast is lined with cliffs throughout its whole extent, and is marked by one headland, Beer Head, at the western extremity of Senton Bay. The rivers Axe and Otter enter the sea in the course of this line. From the mouth of the Ex the coast, lined with cliffs, runs south-south-west 6 miles to the mouth of the Teign, and thence 5 miles south or south by east to the headland called Hope's Nose, at the northern extremity of Tor Bay. Tor Bay is a deep bay bounded on the south by Berry Head, having a shelving beach at the bottom of the bay, interrupted by a bluff headland called Roundham Head, and an abrupt coast towards each extremity. Berry

Head appears to have been the Promontorium Hellenis of the ancients (Richard of Cirencester.) From Berry Head to Plymouth Sound the general character of the coast is rocky. In this part of the coast-line there are several bays. About two or three miles of coast on the west side of Plymouth Sound belong to Devonshire. Plymouth Sound is three miles wide and extends many miles inland. It receives from the north-west the Tamer (united with the Llynher or St. German's River), upon the estuary of which, called Hamoaze, is the town of Devonport, formerly 'Dock,' the royal dockyard of which ranks next in importance to that of Portsmouth; and from the north-east the Plym, the estuary of which is called Catwater. Mill Bay and Snton Pool are small inlets at the bottom of Plymouth Sound; the latter is almost encircled by the town of Plymouth. [PLYMOUTH.] The Devonshire coast may be estimated at from 155 to 160 miles; 55 to 60 miles on the Bristol Channel, and about 100 miles on the English Channel.

Lundy Island, in the Bristol Channel, 10 to 11 miles N.N.W. from Hartland Point, is a mass of granite, except the extreme southern end, which is grauwacke, 2½ miles long from north to south, and about 1 mile from east to west. Its area is about 1000 acres. It is surrounded on every side with rocks; the landing-place, up which two men can scarcely walk abreast, is on the eastern side. The southern point is occupied by a lighthouse. The northern part of Lundy Island rises considerably above the level of the sea, the highest part being 200 feet high. There is an abundance of puffins and rabbits, and the island is much infested with rats. The number of inhabitants in 1851 was 34. Their principal business is shooting rabbits for their skins, and puffins for their feathers. The island was sold in 1840 for about 9870*l.* St. Nicholas Island, which is fortified, is in Plymouth Sound.

Surface, Hydrography.—Devonshire is more uniformly hilly than any other of the large counties of England. The principal ranges of hills may be considered as offsets from the elevated districts of Dartmoor, Exmoor, and Blackdown. Dartmoor is a granitic table-land of irregular elevation, having its greatest elevation towards the north, and containing the highest ground in Devonshire. The highest part of Dartmoor is Yeo Tor, which attains a height of 2050 feet above the sea. Other hills in different parts of Dartmoor vary in height from 2000 feet down to 658 feet.

Dartmoor extends nearly 22 miles from north to south (from Belstou, near Okehampton, to the Plymouth road between the rivers Erme and Avon or Aunc); and 14 miles from east to west, from the neighbourhood of Moreton Hampstead to that of Tavistock. This immense waste is thus described by Dr. Berger ('*Geol. Trans.*, vol. i. p. 119):—"From Harford church (near the southern limit of Dartmoor) the country assumes quite a bare and alpine appearance, presenting a vast plain, extending beyond the visible horizon. The face of the country is formed by swellings and undulations gradually overtopping each other, without ever forming distinct mountains. There is neither vegetation nor any human dwelling; we tread upon a boggy soil of very little depth, and scarcely affording sufficient food to support some dwarf colts as wild as the country they inhabit." The area of Dartmoor Forest has been estimated at from 80,000 to 100,000 acres. Part of the waste is appropriated by the surrounding parishes, the freeholders of which possess the right of common, or as it is termed the right of venville, on these appropriated parts. The rest of Dartmoor, to which the name of Dartmoor Forest (frequently given to the whole waste) strictly applies, and which belongs to the duchy of Cornwall, has been found by survey to contain 53,644 acres. It was on this part that the prison was built during the last war for the prisoners of war. The highest part of Dartmoor Forest, in which some of the most important rivers of the county (the Taw, the Dart, the Teign, &c.) have their rise, consists of a succession of morasses formed by the decay of the successive crops of aquatic plants with which this part teems: these morasses are in some parts 40 to 50 feet deep, in others not more than 5 feet. In several places there have been land-slips, owing to the over-accumulation of marshy soil: these slips would be more frequent but for the granite rocks or 'tors' which continually rise to the surface. Peat is dug in this forest; and many sheep are pastured there in summer, and some all the year round. The elevation of Dartmoor Forest causes it to have a much lower average temperature than other parts of the county. The average difference of the temperature at Ilfracombe, on the north coast of the county, and Okehampton, just on the northern border of Dartmoor, is 10° 5' of Fahrenheit: in summer the difference is small, but in winter it rises to 16° or 18°. Numerous stone circles, cairns, maenirs or rude upright stones, cromlechs, stone circular huts, and other antiquities of the earliest period abound in various parts of the forest, and the whole district is full of interest. Dartmoor has been excellently described and its natural history and antiquities illustrated by the Rev. Samuel Rowe, in his '*Perambulation of the Ancient Forest of Dartmoor.*' Amicombe Hill, Okemeut Hill, and others, are elevated parts of Dartmoor. Brent Tor (802 feet, according to Dr. Berger) and Blackdown, both near Tavistock, border upon Dartmoor, but are not composed of granite.

Dartmoor has been described as an elevated plain: the descent to the lower country all round is rapid. From Dartmoor several ranges of hills, composed chiefly of rocks of the transition series branch off

one from the north-west part of it, near Okehampton, runs in the direction of Hartland Point, dividing the basin of the Tamer from that of the Torridge, and sending out branches which separate the valleys of the various feeders of the Tamer. Another branch running northward separates the valley of the Okement and afterwards of the Torridge from that of the Taw, and terminates near the junction of these last two rivers. Another branch runs eastward towards Exeter, turns to the south-south-east near that city, and separates the valleys of the Ex and the Teign. A branch which this range sends off soon after leaving Dartmoor runs north-eastward, separates the basin of the Ex from that of the Taw, and connects the heights of Dartmoor with those of Exmoor. Another range running south-east from Dartmoor separates the valleys of the Teign and the Dart.

Exmoor is a tract of high land, having its greatest elevation towards the north. It is composed of rocks of the transition class, and is chiefly included in Somersetshire, but extends into the north and north-east parts of Devon. Its highest point, Dunkerry Beacon, Somersetshire, attains to the height of 1668 feet, according to the Ordnance Survey; on the west Chapman Barrows attains a height of 1540 feet. A range of hills extends from Exmoor along the north coast of Devonshire to Morte Bay; some of the summits are probably 1000 feet high. The ridges of Exmoor Forest and the branches which it sends off towards the south separate the valleys of the upper waters of the Ex.

A third system of hills consists of Blackdown, in the eastern part of the county, on the border of Somersetshire, between Taunton and Honiton; and of the ranges of hills which it sends off, chiefly to the southward, separating the basin of the Otter from those of the Ex on one side, and the Axe on the other, and dividing from each other the valleys watered by the several affluents of the Otter and the Axe. These hills have flat tabular summits; their steeper side is toward the west. This line of high lands varies in height from about 600 to 750 feet.

The rivers of Devonshire are numerous, and some of them are important. The *Ex* rises at Exhead in Exmoor, Somersetshire, and flows south-east to Exton, where it turns to the south, and reaches the border of Devonshire about 18 or 19 miles from its source. For about 2 miles it divides Devonshire from Somersetshire, being joined in this part by the river Barle, which also rises in Exmoor, and has a south-east course of 22 to 24 miles through Somersetshire before it falls into the Ex. A little below the junction of the Barle the Ex enters Devonshire, and flows in a southerly direction, but with a very circuitous course, to Tiverton, receiving in its way several feeders, of which the chief are the Batham, which flows from the border of Somersetshire past Bampton, and falls into the Ex on its left or eastern bank; and the Loman which flows from the hills on the Somersetshire border, near Bampton, and joins the Ex on its left bank at Tiverton. From Tiverton the Ex flows still southward, 13 miles, to the junction of the Culm, receiving by the way, on its right bank, the Dart from the moors between Tiverton and South Molton; and about 2 miles lower down, on its right bank, the Creedy, which passes near Crediton, and is joined by the Yeo below that town. From the junction of the Creedy the Ex flows southward to Exeter, and then south-east to Topsham, where it receives the Clist: just above Topsham the Ex becomes a tide-river. The tideway of it is about 5 miles long and about a mile wide at high water. A sand-bank, dry at low-water, divides its mouth into two channels. The whole length of the Ex is 54½ miles. A canal, formed in the reign of Henry VIII., runs by the side of this river between Exeter and Topsham: this canal, which was originally more than 3 miles long, has been lengthened so as to enter the tideway lower down. By this canal and the tideway of the river vessels can get up to Exeter.

The *Culm*, mentioned above, rises near Church Staunton, in the Blackdown hills, just within the border of Somersetshire, and flows westward to the village of Uffculm; thence south-west to the town of Collumpton, or Cullumpton, and thence south-west into the Ex. The total length of the Culm is about 25 miles.

The *Torridge* rises on the borders of Devonshire and Cornwall, at the Ditchen hills near Clovelly, and not far from the head of the Tamer [CORNWALL], and flows eastward to the neighbourhood of the villages of East and West Putford; it then turns to the south-east, and runs to Bradford Mill, where it receives the Waldon on its right bank. From Bradford Mill it runs eastward past Sheepwash, or Shipwash, to the junction of the stream which passes Hatherleigh; and thence north-east to the junction of the Okement, which is formed of two brooks (East and West Okement) that rise on Dartmoor and unite at Okehampton. From the junction of the Okement the Torridge has a very sinuous course in a north-west direction, past Torrington to Bideford, where it becomes a tide-river. The tideway from Bideford to Appledore, where the Torridge and the Taw unite, is 3 miles, the whole course of the Torridge being 53 miles. The Torridge is navigable for vessels up to Bideford, and for boats to Wear Giffard, 4 or 5 miles higher up.

The *Taw* rises at Taw-Head, Dartmoor, on the slope of Okement Hill, and has a northward course to hew the mill and village of Brushford: thence it has a winding course in a north-north-west direction to the junction of the Little Dart, which rises in the range of hills connecting Dartmoor with Exmoor, and flows westward past

Chumleigh into the Taw. From the junction of the Little Dart the Taw flows northward to the junction of the Mole, which rises on North Molton ridge, Exmoor, on the border of Devonshire and Somersetshire, passes North and South Molton, and after receiving the Bray, which also rises on Exmoor, joins the Taw on its right bank. After the junction of the Mole the Taw flows north-north-west to Barnstaple, where it becomes a tide river. The tideway is about 5 miles in length from Barnstaple to the junction of the Torridge, and the total length of the Taw is 48 miles. It is navigable for small vessels up to Barnstaple, and for boats to New Bridge, 3 or 4 miles higher. The estuary of the united rivers Taw and Torridge is not two miles long.

The *Dart* rises at Dart-Head on Dartmoor. The head of the East Dart, which may be considered as the true head, is on the southern slope of Okement Hill, near the springs of the Okement and the Taw. It flows south-east to the junction of the West Dart at Dartmeet Bridge, between Ashhurton and Tavistock. From Dartmeet Bridge the river flows south-east past Buckfastleigh and Totnes, to its outfall just below Dartmouth. Its whole course is 36 miles. The tide flows up to Totnes 10 or 11 miles from the mouth of the river: above this place the river is not navigable. The navigation is chiefly used to convey coal and shelly-sand manure to Totnes and the neighbourhood, and to export the produce of the tin, lead, and copper-mines, worked on the border of Dartmoor Forest. The entrance to the river forms a good harbour.

The *Teign* (the North Teign) rises near Siddaford Tor, Dartmoor, at a little distance from the head of the Dart, and after flowing to the north turns eastward and flows to Dunsford, between Exeter and Moreton Hampstead. It then runs south to near Chudleigh, receiving by the way the West Teign or Bovey River from North Bovey to the neighbourhood of Newton Bushel and Newton Ahhot; below Newton Bushel it has an eastward course (chiefly tideway) into the sea at Teignmouth. Its whole course is 33 miles: it is navigable up to Newton Bushel, 5 miles from the mouth.

The *Otter* rises on the southern slope of Blackdown, near the village of Otterford, and flows south-south-west past Honiton, Ottery St. Mary, and Otterton, into the sea about 5 miles east of the mouth of the Ex. It is not navigable, and has no tributary worthy of note. The *Axe* rises in Dorsetshire, not far from Beaminster, and has a circuitous course (north-west, west, and south-west) of 16 miles, through Dorsetshire, Somersetshire, and Devonshire to Axminster. Below Axminster it flows 7 or 8 miles south-south-west into the sea at Axmouth, receiving the Yart from the hills adjacent to Blackdown. Its whole length is 26 miles.

The *Avon*, or *Aune*, the *Erme*, and the *Yealm* rise on the southern side of Dartmoor, and flow southward into the sea between Plymouth Sound and Bolt Head. They are respectively 23, 14½, and 14 miles long. The Aune and the Yealm have each a navigable tideway of 3 miles, the Erme of 2 miles. The *Plym* rises near the Erme, and flows south-south-west 16 miles into Plymouth Sound at Plymouth. Its tideway, Catwater, is 3 miles long. The Tamer, which divides Cornwall from Devonshire, has been already described. [CORNWALL.] Its principal Devonshire feeders are the Deer (9 miles long), which flows past Holsworthy; the Carey (13 miles long), and the Lyd (13½ miles long), which rises on Dartmoor; both these join the Tamer near Launceston; and the Tavy, or Tay (23 miles long), which rises on Dartmoor, and flows past Tavistock. The Tavy joins the tideway of the Tamer, and has itself a tideway of more than 3 miles. The Lew Water (9 miles long) and the Thistle Brook (10 or 11 miles long) are feeders of the Lyd; and the Wallcomb (13 miles long) is a feeder of the Tavy. There is a picturesque fall on the Lyd, near Lidford, 4 or 5 miles from its source. The other rivers of the county are too small to require particular notice. It will suffice to mention the Lynn (11 miles long) on the north coast, and the Sid (6 miles long) on the south coast. Salcombe harbour, between Bolt Head and Prawle Point, is the estuary of several small streams to which the maps do not assign a name. This estuary is navigable up to Kingsbridge, 4 miles from the mouth.

Communications.—The Bude and Holsworthy Canal, with which is connected the Bude and Launceston Canal, enters this county from Cornwall, near the head of the Tamer, and proceeds in a very circuitous course of more than 15½ miles to Thornhury on the river Waldon, where the canal terminates. It has two inclined planes in Devonshire and two in Cornwall: part of its course is through a tunnel. A short canal extends from Torrington along the valley of the Torridge for about 4 miles, and opens into that river at Wear Giffard, between Torrington and Bideford, where the navigation of the river begins. The Stover, or Teigngrace Canal is connected with the Teign at Newton Bushel, and extends about 4 miles up the valley of that river towards Bovey Tracey. The Tavistock Canal extends 4 miles from Tavistock to the tideway of the Tamer; it has a tunnel one mile and a half long, and a branch 2 miles long, to Millhill slate-quarries. The Exeter Canal has been noticed. The Grand Western Canal from Taunton in Somersetshire extends to Tiverton, and thence to Exeter where it joins the Exeter Canal.

The Bristol and Exeter railway, a continuation of the Great Western line, enters the county 3 miles west of Wellington, and runs in a south-west direction to Exeter, about 20 miles. A branch of about 5 miles

runs off from it to Tiverton. The main line is continued by the South Devon line, which runs along the valley of the Ex to its mouth, whence it is carried by the coast to Teignmouth, then up the valley of the Teign to Newton Bushel, where a branch 5 miles long runs off to Torquay, while the main line proceeds by Totnes to Plymouth: its whole length is 53 miles. A short line runs from Exeter to Crediton. [CREDITON.] There is a railway from Dartmoor, near the prison, originally built for prisoners of war, to the river Plym near Plymouth: a branch from Catdown and Sutton Pool, close to Plymouth, joins this railway at its termination on the Plym. The length of the railway and branch together is about 25½ miles. A tram-road, 8 miles long, formed of granite blocks, extends from the Haytor quarries to the Teigngrace Canal.

There are four roads between London and Exeter, which were prior to the construction of the railways traversed by the mails. The Devonport, Exeter, and Bath mail-road enters this county between Wellington and Collumpton, and passes south-west through Bradninch to Exeter, and thence by Chudleigh, Newton, and Totnes to Devonport. The Exeter mail-road enters Devonshire between Chard and Houghton, from which place it runs to Exeter. The Penzance, Falmouth, and Exeter mail-road enters Devonshire between Bridport and Axminster, and proceeds by Houghton to Exeter, and thence by Okehampton, skirting the north side of Dartmoor, to Poulston Bridge, where it crosses the Tamer into Cornwall. The Falmouth, Devonport, and Exeter mail-road enters the county between Ilminster and Houghton and runs to Exeter, and thence by Chudleigh and Ashburton to Plymouth and Devonport, whence the mail is conveyed across the estuary of the Tamer into Cornwall. There are several other roads of inferior importance.

Geological Structure.—A few spots occur in the eastern portion of the county and along the coast between Sidmouth and the border of Dorsetshire, which are occupied by outlying portions of the chalk formation. The sections of these portions on the coast present the last chalk cliffs toward the west. In the cliffs eastward of the Axe, the chalk occupies only the upper portion of the cliff; the central part of the cliff is composed of green-sand and the lower part of the lias: for the chalk and green-sand in their extension westward overlie the other formations, which elsewhere are found beneath them and rest immediately upon the lias. Westward of the Axe, where the chalk cliffs reappear, the chalk dips rapidly towards the west: a portion of the upper part of the cliff has been detached and has subsided toward the beach, the shattered mass of chalk exhibiting a variety of picturesque forms.

The green-sand formation presents on the confines of Dorsetshire and Devonshire many outlying masses forming considerable hills. To this formation belong the flat-topped hills of Blackdown, the range connected with them which separates the valleys of the Otter and the Axe, and the branches of this range which separate the smaller valleys watered by the tributaries of the Axe and by the Sid. A range extending westward from the Blackdown hills, and bounding the valley of the Culm on the north, also belongs to the green-sand formation: and beyond Exeter the range of the Haldon hills, divided only by the valley of the Teign from the granite of Dartmoor, is capped by green-sand; thus affording a remarkable instance of the approximation of primitive rocks and those of much later formation. The green-sand heights in Devonshire are for the most part in the state of unreclaimed heath.

On the eastern side of the Blackdown and connected ranges, the green-sand rests upon lias, the lowest of the oolitic series of formations. Lias occupies the valley of the Axe above Axminster, and the upper part of the valley of the Yart. On the western and southern sides of Blackdown the green-sand overlies all the oolitic formations, and rests immediately upon the red marl, which, with the accompanying sandstone and conglomerate, constituting the formation designated the new red-sandstone, occupies the tract from the Blackdown hills westward to the valley of the Loman and the Ex: it constitutes the bed of the Loman, but extends not quite to the bank of the Ex, which flows for the most part over a bed of transition rocks. Between Silvertown and Exeter the red marl is found extending westward across the Ex and the Creedy, and along the valley of the Yeo, nearly to the valley of the Taw. It extends southward from the Blackdown hills along the valley of the Otter, and across the country between the Otter and the Ex to the coast; crosses the Ex immediately below Exeter, and extends along the coast with some interval to Torbay; it forms the valley of the Sid and the Coly, and the lower part of the valleys of the Axe and the Yart, and the picturesque cliffs about Babbacombe Bay. The green-sand which caps the Haldon hills rests chiefly on this formation.

The district occupied by the various formations enumerated above is small, compared with that which consists of the rocks of the transition class. These, the carbonaceous series of De la Beche, the Devonian system of Sedgwick and Murchison, occupy all the county northward and westward of the new red-sandstone, except the primitive district of Dartmoor. The western side of Great Haldon (green sand) rests upon the transition rocks. These transition rocks consist of an argillaceous slate, grauwacke, which in the neighbourhood of Dartmoor does not attain to an average elevation of more than 500 feet; except on the western flank of the moor, where it

forms a steep eminence of more than 1100 feet. In the north of Devon it rises considerably higher, and the heights of Exmoor (which are in some parts 1800 feet high) consist of it. In this part of the county the rocks which compose the formation differ materially in their mineralogical characters: they have for the most part the structure of sandstones, and are essentially composed of quartz and clay, but in different proportions; quartz predominating in the coarser and clay in the finer grained varieties; these last graduate into a fine slate, the laminae of which are as thin as paper. The strata of grauwacke near Clovelly incline in every direction, and describe the most capricious and picturesque forms. The undulating surface of the country may be partly ascribed to the predominance of the argillaceous slate, which is, of all the rocks of earlier formation, the most subject to decomposition. These slate rocks are quarried for roofing-slates; they are metalliferous, affording ironstone and veins of tin, copper, and lead; the veins or lodes which yield tin or copper, run, as in Cornwall, from north-east to south-west (approaching more or less to east and west), and those which afford lead run nearly at right angles to these. The strata in the mining field about Tavistock which yields tin, copper, lead, and manganese, are traversed by porphyritic (elvau) beds, bearing nearly east and west. A few lead and copper mines are wrought in North Devon: the lead is combined with silver. In many parts of the transition district, beds of limestone and masses of greenstone occur. The limestone rocks in the vicinity of Plymouth, Tor Bay, Ashburton, Newton Bushel, and Chudleigh, as containing organic remains and alternating with argillaceous slate, may be referred to the transition series; the limestone is quarried for building and burnt for manure; beautifully veined marble is worked in different places. The limestone of the north of Devon which crosses the county in parallel courses east and west, may be referred to the same series.

It is in the transition district that the imperfect coal or lignite, called Bovey coal, is found. It occurs at Bovey Heathfield, on the right or south-west bank of the West Teign or Bovey River, in a plain where the strata of it rise to the surface. It lies in parallel seams from 4 to 16 feet thick, at 6 or 8 feet distance from each other, to the depth of 60 feet, and exhibits a gradation from the most perfect ligneous texture to a substance nearly approaching the character of pit coal. Potters'-clay and pipe-clay are found in the same neighbourhood. These various substances are of a later formation, and are deposited with intermingled beds in a basin formed of older rocks. The Bovey coal is used for fuel in the potteries on Boven heath, and by the poorer people of the neighbourhood; but its difficult and imperfect combustion, and fetid gas, render it unfit for domestic use.

Mica and chlorite slate form the bold rocky coast from Start Point to Bolt Tail. Granite forms the mass of Dartmoor. Numerous rifted rocks, called tors, are scattered over the surface of this moor: they appear to occupy their primitive sites and to owe their present figure to the resistance which their more perfect crystallisation has enabled them to offer to the influence of the atmosphere. The Dartmoor granite is remarkable for the size of the felspar crystals which it contains; it is much valued for its durability, fineness of texture, and the size of the blocks; it is quarried and exported to a considerable extent, especially to London. It is metalliferous, containing veins of tin, even the rock itself being sometimes impregnated with this metal. (Conybeare and Phillip's 'Outlines of the Geology of England and Wales;' 'Geological Transactions;' De la Beche's 'Report on the Geology of Cornwall and Devon;' Murchison's 'Silurian System;' 'Geological Map of the Society for the Diffusion of Useful Knowledge.')

Climate, Soil, Agriculture.—The climate of Devonshire is generally humid; the temperature however varies considerably in different parts of the county. Along the south coast it is mild and equable, and this part of the county is in consequence much resorted to by invalids, especially such as have a tendency to pulmonary diseases. The south coast is moist, being very subject to light misty rains, known as the 'Devonshire drizzle;' it is also liable to gales. Myrtles and other tender plants grow freely in the open air; and snow seldom lies long on the ground. On the north coast the winds are very keen, and the climate is generally colder. The moorland country about Dartmoor is also cold and very bleak, but healthy.

The lower hills which occupy so large a part of the surface of this county are covered with grass; the higher with moor and rock. The county contains along its numerous rivers many fertile meadows, some of which are only imperfectly irrigated, and others not at all. Grass seems to be the natural product of a mild moist climate, like that of Devonshire, in which corn is everywhere a secondary object. The improvements in the cultivation of arable land which have been rapidly introduced into other counties, especially in the north, have not been so generally received in Devonshire. The oldest system of Devonshire cultivation is a rude species of convertible husbandry, very different from what is called by that name in the north of England and south of Scotland. When grass land begins to wear out by injudicious management, or from a natural defect in the soil, the surface is pared thin, and the sod when dried is burnt in heaps. The ashes thus produced stimulate the soil and enable it to bear a few crops, frequently three corn crops in succession. When the land is thus nearly exhausted, it is laid down again in grass, and is

pastured for eight or nine years, when the same process is repeated. This system has been so commonly adopted in Devonshire, that the operation of paring and burning is frequently called 'Devonshiring,' or as contracted, 'Denshiring.' It is now however less practised than formerly, and no doubt will in time be confined to land abounding in vegetable matter in that state in which it is not fertile, as in peat or turf.

The soil of Devonshire consists of the substance of the rocks of which the hills are composed, which are granite, grauwacke, red-sandstone and slate, and marble. The decomposed slate gives the argillaceous part, which binds the siliceous and calcareous sand produced from the other rocks. The waters have mixed these substances in every proportion; but the best and most fertile soils are composed of a mixture in the proportions which form a good sound loam, very favourable to the growth of wheat and of potatoes. A great part of North Devon is of more than average fertility: and portions of the southern part of the county are highly productive. Considerable wastes and heaths have been gradually brought into cultivation; and although many wastes and commons still remain, and there are extensive moors and bogs scarcely susceptible of improvement, the quantity of land which is productive in grass or corn is very considerable for so hilly a country. The grass land occupies more than four-fifths of the soil under cultivation. Some of the lands on the hills are so steep that the crop must be brought home upon horses, which carry a pack-saddle with large hooks on each side, in which the sheaves are laid. A horse so loaded looks at a distance like a little moving stack, being almost entirely covered with sheaves.

A considerable quantity of potatoes is raised in Devonshire and sent to Loudon, where they obtain good prices. They were formerly planted in lazy-beds, as in Ireland, but the superior method of single rows moulded up is now generally adopted. The rich brown loam on a rocky subsoil, which gives a dry sound bottom, especially if it has been for some time in grass, whether pared and burnt, or only ploughed and well worked, produces an abundant crop of very good potatoes.

Grass land being far more abundant in Devonshire than arable land, the chief articles of agricultural produce for exportation are butter, cheese, and live stock. The finest and richest meadows are situated on the alluvial borders of the principal rivers. The upland meadows are less productive, and require occasional manuring.

The clouted or clotted cream of Devonshire is a well-known delicacy. It is made by heating the milk on the hearth, or by means of a stove, to a degree a little below the boiling point, when the clouted cream rises to the top like a thick scum, and is taken off when cooled. This cream being merely stirred briskly with the hand or a stick, is converted into butter. The butter thus produced is inferior to that made from cream which has risen slowly and spontaneously. In the largest and best dairies in the vale of Honiton the cream is never clouted, except to be eaten in that state as a luxury.

The cows used for the dairy are almost exclusively of the breed of the county, and of a red colour. They are handsomely shaped, and some of them give much good rich milk. In general however they have too great an aptitude to become fat to be good milkers. Cheese is made of skimmed milk, and is consequently inferior in quality. Where porkers are in request, as in the neighbourhood of great towns, they are profitably fattened on the skim-milk, or on the whey, with the addition of meal.

A great many oxen are reared and annually exported from all parts of Devonshire, but chiefly the northern parts. About Barnstaple and South Molton the best breeds are met with. The North Devon oxen are famed for their docility and activity at work, and especially for their great aptitude to fatten. The cows of the pure North Devon are chiefly kept to breed; for the dairy they are improved by a cross with a short-horn. Some very fine cows of a mixed breed may be seen in the vale of the Ex: they are fine in the coat, horn, and bone, and short in the legs.

The sheep fed on the hills and wastes of this county are distinguished by fine wool and excellent flesh. The Exmoor sheep are extremely hardy, and well adapted to cold bleak mountains. In the valleys some remarkably fine sheep have been produced by crosses of the native sheep with the Leicester. In consequence of the wet state of the low meadows the higher pastures are resorted to for breeding flocks, but it requires a hardy race to withstand the wet and cold winters on the Devonshire hills; for frost is not so hurtful to lambs as continued rains. The pasture on Dartmoor Forest is very good, and the rot is almost unknown there.

The race of pigs in Devonshire is very good generally; and in some districts, where care has been taken to select the best animals and cross the breeds with judgment, as fine hogs are fattened as in any part of England.

The farm buildings in Devonshire are frequently very inconveniently situated with respect to the farm. The object seems to have been to choose a sheltered spot, without regard to the situation of the land attached to the farm. The materials of which the buildings are constructed are stone or earth, made into a species of mortar, and

formed into thick walls, which dry and harden gradually, and are called by a provincial term, 'cob walls.'

The farms are not so extensive as in the more level parts of England; 150 to 200 acres, of which at least three-fourths are pasture, are considered a large farm. There are also in this county many more small proprietors and lessees for 99 years, which is nearly the same, than in most other parts of Britain. They are mostly frugal and industrious, and if they do not cultivate their land in the most approved manner, they at least contrive to live comfortably. This is chiefly owing to the rearing of cattle, which requires constant attention and the eye of the master much more than the cultivation of the soil, and in which small occupiers are generally more successful in proportion than large farmers.

The chief beverage of the Devonshire people is cider; the cider made in this county is considered to be superior to any other in England. The soil on the slopes of the hills is peculiarly adapted to the growth of fruit-trees, especially on a loose rocky bottom, where the roots may insinuate themselves and find moisture at all times.

The progress of cultivation has greatly diminished the timber which formerly abounded in Devonshire, and except in sheltered situations trees do not thrive and acquire so great a size as they seem to have done when they sheltered one another. Coppice-wood however is plentiful, most of the steep sides of hills towards the banks of the rivers being covered with this growth, which adds considerably to the beauty of the valleys. The best of the coppice-wood is used for fencing, hurdles, and hop-poles. In some parts there are extensive furze brakes, which are usually cut every five years for fuel. The wood grown in Devonshire is chiefly oak, but beech, ash, and elder are interspersed, according to the soil and situation.

Trees planted on the summit of the hills in Devonshire seldom thrive owing to the violence of the winds; but on the slopes of the hills they succeed well, and as they ascend they protect each other; and thus in time the tops may be covered. Where the Scotch fir and larch have been planted in sheltered situations they grow well.

Divisions, Towns, &c.—In the Exon Domesday (a description of the five western counties, Wilts, Dorset, Somerset, Devon, and Cornwall, which is supposed to contain an exact transcript of the returns made by the Conqueror's commissioners at the time of the general survey from which the great 'Domesday' itself was compiled), which is preserved among the records belonging to the Dean and Chapter of Exeter, mention is made of at least 33 hundreds into which Devonshire was then divided. In the hundred roll, a document of the time of Edward I., 33 hundreds (including that of Lovetot, incidentally mentioned as co-extensive with the manor of Fremington) are noticed. The present number is 33. The county is divided into two parts, the northern and the southern divisions, for the purpose of parliamentary representation: each division sends two members.

Devonshire contains 40 market-towns. Of the most important we subjoin a list, adding the locality of each:—

ASHBURTON, a parliamentary borough on a small feeder of the Dart; AXMINSTER, on the Axe; BAMPFON, on the Bathern, a feeder of the Ex; BARNSTAPLE, a parliamentary borough on the Tav; BEER ALSTON, between the Tamer and Tavy; BIDEFORD, on the Torridge; BRIKHAM, near Berry Head, the southern extremity of Tor Bay; South Brent, on the Aune; Chagford, on the Teign; CHUDLEIGH, on the Teign; Chulmleigh, on the Dart; COLLUMPTON, on the Culm; COLYTON, on the Coly, a feeder of the Axe; CREDITON, on the Creedy; Culmstock, on the border of Somersetshire; DARTMOUTH, a parliamentary borough on the Dart; Devonport, formerly called Plymouth Dock, or colloquially Dock, on the estuary of the Tamer, near Plymouth, a parliamentary borough; EXETER, a city, and the county town, on the Ex; Hatherleigh, on the Torridge; HOLSWORTHY, on a feeder of the Tamer; HONITON, a parliamentary borough on the Otter; LLFRACOMBE, on the Bristol Channel; KINOSBRIDGE, near Star Point; Modbury, on a feeder of the Erme; SOUTH MOLTON, on the Molc; Moreton Hampstead, on the easterly edge of Dartmoor; NEWTON, on the Teign; OKEHAMPTON, on the Okemot; OTTERY ST. MARY, on the Otter; PLYMOUTH, on Plymouth Sound, a parliamentary borough, and one of the great naval ports of England; PLYMPTON, on the Tavy, a feeder of the Plym; SIDMOUTH, on the English Channel; Stonehouse, between Plymouth and Devonport; TAVISTOCK, a parliamentary borough on the Tavy; TEIGNMOUTH, at the mouth of the Teign; TIVERTON, on the Ex, a parliamentary borough; TOPSHAM, on the Ex; TORRINGTON, on the Torridge; TORNES, a parliamentary borough on the Dart; and Uffculme, on the Culme. The towns which have their names printed in small capitals will be found described under their respective titles; the remainder we notice here, with the population of each in 1851. Devonport and Stonehouse will be found described under PLYMOUTH.

South Brent, population of the parish 1203, is a small town on the road from Exeter to Plymouth, and on the river Avon or Aune, 26 miles S.S.W. from Exeter by road, and 36 miles by the South Devon railway. The town is situated near the south-east corner of Dartmoor Forest. The market is on Friday; and there are two fairs in the year.

Chagford, population 1557, is an ancient stannary town, situated near the right bank of the Teign, and not far from the border of Dartmoor Forest at its north-eastern angle, 16 miles W. by S. from Exeter. This small town lies in a picturesque situation at the foot of some rugged and lofty hills. The houses, irregularly arranged, are of antique appearance. A brook flows through the middle of the street. The church is an ancient structure of the native granite. There is a bridge of three arches over the Teign, half a mile above the town. Many of the population are engaged in agriculture. A few are employed in the woollen manufacture. The market is on Thursday, and there are four fairs in the year. There are places of worship for Wesleyan Methodists and Calvinistic Baptists. Towards the close of the 17th century the town was partly destroyed by fire.

Chulmleigh, or *Chumleigh*, population 1711, is a small town on the right bank of the Little Dart, just above its junction with the Taw. It is on the road from Exeter to Barnstaple, about 21½ miles N.W. from Exeter. Many of the population are engaged in agriculture. The church, dedicated to St. Mary Magdalen, was much damaged by lightning in 1797. It has a fine tower, and contains some ancient screen work. The church was formerly collegiate. There are two chapels for Dissenters, two Endowed Charity schools, and a British school. The manor of Chulmleigh once belonged to the Courtenays, earls of Devon, who had a castle here. The market is on Thursday; there are three fairs in the year.

Culmstock, or *Columbstock*, population 1224, is on the border of Somersetshire, on the upper part of the river Culm, 19 miles N.E. from Exeter. There is a market-house. The market is held on Friday. There are two fairs in the year. The clothing trade, which once flourished in this place, has much decreased. The church contains a fine stone screen, and a rich doorway, canopied with foliage. There are places of worship for Quakers and Wesleyan Methodists.

Hatherleigh, population 1710, situated about 28 miles W.N.W. from Exeter, is on the right bank of a branch of the Torridge, a short distance from its junction with the Okement. Most of the inhabitants are engaged in agriculture; a few are employed in the manufacture of woollens. The town is very irregularly laid out, and the houses have a mean appearance. The market is on Friday; there are four cattle fairs in the year, and a large cattle market on the Friday nearest the 21st of March. Petty sessions are held here. There are five almshouses and a Free school in the town.

Modbury, population of the parish 1858, is on a rivulet whose waters flow into the Erme: 34 miles S.W. from Exeter. The population is chiefly engaged in agriculture. The town consists principally of four streets crossing each other at right angles. The houses are in general fronted with slate. The church is spacious and handsome, the spire is 134 feet high. There are meeting-houses for Baptists, Independents, Quakers, and Methodists. Some ruins are left of the ancient mansion of the Champernownes, who held the manor of Modbury, and lived here in great splendour in the reign of Edward II. Modbury is a borough, though without a charter of incorporation: it sent representatives to Parliament in the reign of Edward I. There was an alien priory of Benedictines here as early as the reign of Stephen; it was suppressed by Henry VI. and its revenues given to Eton College. The market is on Thursday: there is a great market the second Tuesday in every month; also a fair in the month of May. There are here a Charity school, a British school, and two Infant schools. A barrack stands in the outskirts of the town.

Moreton Hampstead, population of the parish 1858, is 11 miles W.S.W. from Exeter, near the eastern border of Dartmoor Forest. The town is romantically situated on a gentle eminence bounded on almost every side by lofty hills. The principal street runs for about half a mile along the Exeter and Plymouth road. Besides the church, which is ancient, there are meeting-houses for Independents, Baptists, Methodists, and Unitarians; also a Free school, a school partly supported by endowment, and Infant schools. There are several tan-yards, a rope manufactory, and some granite quarries in the neighbourhood. The market is on Saturday; and there are two great markets and two cattle fairs in the year. The townspeople are in general strong and healthy, and remarkable for singularity of dialect and manners, owing probably to their secluded situation. In the vicinity are a rocking stone, a cromlech, and the remains of a Druidical temple.

Uffculm, or *Uffculme*, population 2098, is on the right bank of the river Culm, a feeder of the Ex, 16 miles N.E. by E. from Exeter. Many of the inhabitants are engaged in agriculture. Uffculm was until towards the close of the last century, a considerable manufacturing town; a great quantity of serge was made and exported to Holland by the Tiverton merchants. Flannels were afterwards made, but these manufactures have ceased. The market is on Wednesday: there are three fairs in the year, but the fairs have declined. The church, dedicated to St. Mary, contains some ancient monuments and a richly-carved wood screen. There are places of worship for Independents and Baptists. The Grammar school, founded in 1701, has an income of 46l. 10s. 6d., and had 10 scholars in 1851, of whom one was free.

The following are some of the more important villages, with the

population in 1851, and a few other particulars:—*Azmoth*, population 680, is situated at the mouth of the river Axe, 21 miles E. from Exeter. The mouth of the river has, by means of piers, been converted into a harbour capable of receiving vessels of 100 tons burden. About a mile E. from Azmoth occurred some very remarkable landslips on the 26th of December, 1839, which caused a chasm 200 feet in width and 250 feet in depth, extending for a distance of three-quarters of a mile parallel with the shore. At Whitlands, a little more than a mile farther to the east, occurred a second but much smaller landslip on the 3rd of the following February. *Beer*, 19 miles E. by S. from Exeter, population 1281, a small cove and village, inhabited by fishermen, and celebrated formerly for smuggling, is situated in a narrow glen through which a stream runs and falls into the sea in a beautiful cascade. A small church and an Independent chapel are in the village; the sum of 7000l. was left by the late Lady Rolle for the purpose of founding and endowing various charitable institutions. About a mile from the village is a large cavern extending a quarter of a mile under ground; its depth is about 300 feet from the surface. *Berry Pomeroy*, 23 miles S. by W. from Exeter: population of the parish, 1038. The church is a fine structure, and contains a handsome screen and several monuments. On an elevated rock in a narrow valley are the picturesque and ivy-covered ruins of Berry Pomeroy Castle, the oldest part of which was built in the reign of William I. by Ralph de la Pomeroy. The ruins are of great extent, and have a very impressive appearance. *Bovey Tracey*, 18 miles S.S.W. from Exeter: population of the parish, 2086. The church is ancient, and contains a coloured stone pulpit. In an open space in the village are the shaft and steps of an ancient cross. Close to the village is a pottery, established in 1772. In the vicinity are found sands and clays suitable for the manufacture of fine porcelain. It is here that the lignite, known as Bovey coal, which is used for fuel, is found. The market has been discontinued: there are two fairs, one in March and one in November. *Bow*, 16 miles E.N.E. from Exeter, population of parish 994, a small town; many of the houses are cob-built, and the place has a poor appearance. A great market is held in March, and fairs are held in May and November. *Branscombe*, 18 miles W. by S. from Exeter, population 1017, is beautifully situated at the junction of three valleys, through each of which a stream descends, and uniting here flow together into the sea at Branscombe Mouth. In the neighbourhood are numerous petrifying springs. *Buckland Monachorum*, 32 miles S.W. by W. from Exeter: population, 1548. The church, a very handsome building, contains a monument by Bacon to Lord Heathfield, the heroic defender of Gibraltar. A little to the south of the village is Buckland Abbey, the favourite residence of Sir Francis Drake. *Budleigh Salterton*, 12 miles S.E. from Exeter, population included in East Budleigh, is a small but favourite watering-place. The village is built along the bottom of a valley running to the sea, and the buildings extend on both sides up the hill: a small brook of water runs through the main street, over which are placed at intervals rustic wooden bridges. About a mile to the north is the cob-built village of *Budleigh East*: population of the parish, 2447. In this parish is Hayes Barton, the birthplace of Sir Walter Raleigh; it is now a farmhouse. *Clovelly*, 47 miles N.W. from Exeter, population 937, a picturesque little fishing village on the side of a steep rock adjoining the sea. The church is a neat building. Clovelly is celebrated for its herring-fishery; as many as 9000 herrings have been taken off here at a haul. Above the village is Clovelly Court, the seat of the lord of the manor. *Combe Martin*, 42 miles N.N.W. from Exeter: population, 1441. The church is in the perpendicular style, constructed of light red stone, and is distinguished by a very handsome tower. There is a chapel for Wesleyan Methodists. The trade of Combe Martin is inconsiderable. Welsh coal is imported, and corn and bark are exported. The market formerly held here has been long discontinued. In the neighbourhood are several silver-lead mines, which have been worked at various times since the reign of Edward I. *Dreweington*, 12 miles W. from Exeter: population, 1232. This village is chiefly remarkable for its numerous Druidical remains. Besides these there are some remains of British camps on the river, and some other antiquities in the neighbourhood. *Hartland*, 54 miles N.W. from Exeter: population of the parish, which is extensive and contains several villages, 2183. A market is held on Saturdays, and there are two cattle fairs in the year. The church stands about a mile from the town, near the sea. At Hartland quay corn is exported, and coal and limestone imported. The Independents have a chapel here. Hartland Abbey was founded by the wife of Earl Godwin for secular priests; some portions of the cloisters still remain: they are in the early English style. *Hemyock*, 20 miles N.E. from Exeter: population, 1185. The church has been lately rebuilt; it contains an old font of Purbeck stone in the early decorated style. There are some slight remains of a Norman castle in the neighbourhood. *Kenton*, 6½ miles S. by E. from Exeter, population 2067, anciently a borough town: a market and fair were formerly held here, but have long been discontinued. The church appears to have been built in the reign of Edward III.; it is a handsome building constructed of red stone; the tower is 100 feet high; the church contains a fine screen. *Lidford*, 31 miles W. by S. from Exeter: population, 271. During the Saxon Heptarchy this was one of the principal towns in Devonshire; it consists now of merely a few small cottages. In the village are the ruins

of an old castle and the weather-beaten church. Lidford castle was formerly used as the stannary prison for the Devonshire mining districts. A bridge extends by a single arch of only a few feet span over a dark and deep chasm, under which the river Lid is heard falling 50 or 60 feet beneath. There is also a very beautiful waterfall at Lidford, 200 feet in height, and the scenery in the neighbourhood is very grand. *Linton*, or *Lynton*, 48 miles N.N.W. from Exeter, population 1059, a beautiful and picturesque watering-place, celebrated for its magnificent scenery; it is situated on the Lynn Cliff, and has a fine view of the sea. There is a small pier at Linton, and fishing is carried on to some extent. The Valley of Rocks, a spot celebrated for its picturesque beauty, is about a mile north-west of Linton. *Lynmouth* is situated at the mouth of the streams East and West Lynn, which form a pretty cascade a little to the east of Linton. The view of the sea is very extensive. The neighbourhood of Lynmouth and Linton is much frequented by anglers: the Lynn abounds with trout. *Otton*, 11 miles S.E. from Exeter, population 1231; the village, which is situated on an elevated site on the left bank of the river Otter, is principally composed of cob-built cottages. The church is very ancient, with a tower at the east end; it has been partly restored: adjoining to it is the Mansion, a part of an old religious house, belonging to the abbey of St. Michael in Normandy: it was founded by King John. The manufacture of pillow-lace is carried on here. *Paignton*, 23 miles S. by W. from Exeter, population 2746, a small but rapidly increasing watering-place. Before the Conquest the manor belonged to the see of Exeter, and some slight vestiges of the bishop's palace are still to be seen. The church is spacious and very ancient; it contains a curious stone pulpit carved and painted; on the exterior of the tower is an arch with a zigzag moulding. In the churchyard are the steps and shafts of an ancient cross. Paignton is celebrated for an early cabbage sent to all parts of the kingdom. Cider is made here in large quantities. The beach is excellent; a pier was constructed in 1838, at which vessels of 200 tons burden can load. *Prince Town*, 25 miles S.W. from Exeter, a very small hamlet on Dartmoor. Near Prince Town is the government prison, built in 1806, for the confinement of prisoners of war: the prison consists of seven buildings, each 300 feet long, and 50 feet wide, capable of holding together 9600 men. Attached to the prison is a neat chapel to contain 500 persons. This place is the field of an important experiment on the application of convict labour. In the autumn of 1850 a number of convicts were sent down here to be employed in the reclamation of a portion of the moor and other useful works. The prison being of such extent, and so well constructed as to afford abundance of room, security, and facility of supervision, and the situation, though bleak and dreary, being healthy, while it is sufficiently removed from any populous neighbourhood, the experiment is made under very favourable conditions. In 1852 the available accommodation was raised from 1000 to 1274. On December 31st, 1852, there were in the prison 1133. The average number for the year was 1027. In the course of the year 339 were sent with tickets of leave to Van Diemen's Land and Western Australia, and 37 received free pardons. The total expense for the year ending March 31st, 1853, was 30,042*l.*; the total value of the labour applied in and about the prison, and for making roads, reclaiming lands, &c. was estimated at 15,473*l.* Seventy acres of land were reclaimed from the waste in 1852. There are now under cultivation 98 acres, well drained, and surrounded with stone walls. Flax, barley, oats, turnips, mangold-wurzel, and carrots are grown, but potatoes have not hitherto succeeded. Sixty cows are kept, and the grass-land furnishes pasture and hay sufficient for them. A considerable number of pigs are also kept. In the garden within the prison there are vegetables grown for the use of the prisoners. Belts of forest-trees have been planted. Peat is dug for fuel, and is also used for the manufacture of gas. The sewerage is used for manure. In the yearly report the governor bears testimony to the general good conduct of the prisoners. Men who have received sentences for short periods, whose crimes have not been heinous, and who have behaved well, are selected for special service, such as looking after the cattle, driving carts, &c., without being in charge of an officer. Of such 18 have been employed outside the prison walls, and 35 within them: the dress of this class of men is blue instead of brown, and those employed outside the prison have in addition a red collar to their jackets. *Salcombe*, 38 miles S. by W. from Exeter, population of the ecclesiastical district 1656, is a very picturesque town, pleasantly situated, and so sheltered by high lands as to be one of the warmest in the kingdom. Myrtle-trees grow along the shore, and lemon and orange-trees in the gardens. The harbour is sheltered, but it has a bar at low water, and sunken rocks at the mouth, which render the entrance dangerous. Salcombe was a few years back celebrated for its white ale, a beverage peculiar to this part of Devonshire. *Sheepwash*, or *Shipwash*, population of the parish 525, on the north bank of the Torridge, 30 miles W. by N. from Exeter, had a considerable market in the middle of the last century, but is now a place of no consequence. *Silvertown*, 6½ miles N. from Exeter, population of the parish 1376, was formerly a market-town. Besides the church there is an Endowed school. This place suffered much from a fire in 1837, which destroyed nearly half the houses. Sir Thomas Fairfax quartered with his army here in 1645. About one mile to the right is *Silvertown Park*, a seat of the late Earl of Egremont. *Starcross*, 8 miles

S. by E. from Exeter, population 936, is in some reports as a watering-place. It derives its name from a cross that formerly stood near the landing-place on the bank of the river. A district chapel was built here in 1826; there is also a chapel for Wesleyan Methodists. *Starcross* is celebrated for its oysters and cockles. There is a station here of the South Devon railway, also a good stone pier for the use of steam-vessels. *North Tawton*, 21 miles W. by S. from Exeter, population of the parish 1906, was anciently a borough and market-town, and still boasts of its portreeve. The market has been long discontinued; the woollen manufacture, which it formerly possessed, is gone, and the place is of no importance.

Divisions for Ecclesiastical and Legal Purposes.—From the introduction of Christianity among the Anglo-Saxons to the year 703, the southern part of England, from Kent to Cornwall, was under one bishop. Upon the ecclesiastical division which took place in 703, Devonshire became part of the diocese of Sherbourne. About 910 Devonshire formed a diocese of itself, the see being at Crediton. About the year 1040, in the reign of Harold I. or Hardicanute, Cornwall, which had previously formed the separate diocese of St. Germans, was united with Devonshire, and the see was soon afterwards (1050) removed to Exeter, where it has ever since continued. That part of the diocese which is in Devonshire is divided into three archdeaconries—Exeter, Barnstaple, and Totnes—which are subdivided into 23 rural deaneries.

The number of benefices in the county is given by Messrs. Lysons's 'Magna Britannia' at 471, of which 258 are rectories, 130 vicarages, 42 donatives or curacies, and 41 parochial chapelries. There are several chapels of ease. The diocese of Exeter is in the ecclesiastical province of Canterbury. According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 1297 places of worship, which belonged to the various religious societies in the following proportions:—Church of England, 549; Methodists (four sections), 379; Independents, 142; Baptists, 112; Brethren, 36; Unitarians, 12; Quakers, 8; Roman Catholics, 8; other bodies, 51. The total number of sittings provided was 334,372, of which the Established Church provided 191,710.

Devonshire is included in the western circuit: the assizes and quarter sessions for the county are held at Exeter, which city is a county of itself, having been made so by statute 2 & 3 Edward VI. The stannary laws [CORNWALL] have been in force from a very early period in the mining district in the south-west part of the county. The stannary towns are Ashburton, Chagford, Plympton, and Tavistock. County courts are held at Axminster, Barnstaple, Bideford, Crediton, Exeter, Holsworthy, Honiton, King's-bridge, South Molton, Newton Abbot, Okehampton, Plymouth, Tavistock, Tiverton, Torrington, and Totnes.

The county returns four members to Parliament—two for the northern and two for the southern division. The city of Exeter returns two members, as do the following boroughs: Barnstaple, Devonport, Honiton, Plymouth, Tavistock, Tiverton, and Totnes. The boroughs of Ashburton and Dartmouth return one member each; making the total number of members for the county, city, and boroughs, 22—four less than before the Reform Act. Exmouth and Teignmouth sent representatives to the great councils for maritime affairs.

History and Antiquities.—The earliest ascertained inhabitants of this county were the Damnonii (Richard of Cirencester), or Dumnonii ('Itin. Antoninus'). The many ancient encampments in Devonshire mark it as the scene of early encounters: some of these camps are evidently Roman. After the Roman conquest Devonshire was included in the province of Britannia Prima.

Of this remote period there are many remains. Circular inclosures formed by low stone walls occur in various parts of Dartmoor. Grimpsound, as it is called, about three miles from the village of Manaton, on the east side of the moor, is a circular inclosure of four acres: it has two entrances directly facing the north and south: at these points the wall, which appears to have been about 12 feet high, was the thickest. In the inclosure are several circles of stone of 12 feet diameter, especially near the south side of the inclosure. At Gidleigh Park, near Scorhill Tor, Dartmoor, is a very remarkable stone circle known as the Scorhill Circle. "The two principal columnar masses in this granite peristyle stand at nearly opposite points of the circle; the highest rising nearly 8 feet from the surface, and the other standing upwards of 6 feet. The lowest are about 3 feet high; several have fallen, but twenty of these time-worn obelisks still maintain their erect position, and circumscribe an area of about 100 feet in diameter." (Rowe's 'Dartmoor.') There are in the parish of Bratton Fleming, between South Molton and Ifracombe, six upright stones, the remains apparently of an ancient circle. Near Merivale Bridge, on the Walkham, are 'hut circles,' as they are called, and other aboriginal remains, which indeed, as before mentioned, abound in different parts of Dartmoor. The granite tors of Dartmoor are natural. There are some sepulchral stones on Maddock's Down (south of Combe Martin), and a very fine cromlech at Drewsteignton, or Drew's Teignton, between Exeter and Okehampton. Numerous barrows, or tumuli, occur on Haldon and other downs, particularly in North Devon, and some cairns or piles of stones. Roman antiquities have been found in some barrows when opened.

Of Roman stations in Devonshire the most important appears to have been *Isca Damnoiorum*, which the name and the antiquities discovered concur in fixing at Exeter. Another Roman station, *Moridunum*, or *Muridunum* ('*Itin. Anton.*'), is agreed by most to have been in this county. Two other stations are mentioned by Richard of Cirencester: '*ad Durium*' (the station on the *Durium* or *Dart*), supposed to be Totnes; and *Tamara*, the name of which indicates its situation somewhere on the river *Tainara* (*Taiver*), and which was probably at *Tamerton Folliot*, on the estuary of the river some miles above *Devonport*. Richard also mentions two British towns, *Terinulus* and *Artavia*, in the territory of the *Cimbri*, and probably in the north of Devon. It has been conjectured that *Deubury*, near *Newton Abbot*, is the place called *Devoniaso* by the geographer *Ravennas*.

An ancient British road, afterwards converted by the Romans to their own use, traversed the whole county from east to west, passing near *Axminster* and *Honiton* to the camp at *Hombury*, and by a subsequent bend to *Isca* or *Exeter*. From *Isca* it ran south-west over *Haldon* and near *Newton Abbot* to *Totnes*, and thence west to the *Tamara*, or *Taiver*. Many other roads may be traced. The Roman antiquities found in the county have not been numerous: the principal seem to have been at *Exeter*, where a tessellated pavement was found, some bronzes, coins, and other remains. Some antiquities have been found at *Seaton* and other places.

In the Saxon invasion this county became the scene of contest. *Cynegils*, king of the West Saxons, is said by the Saxon chronicle to have beaten the Britons, A.D. 614, at *Beamdean*, supposed to have been *Bampton*, though it is by no means clear whether it is the *Bampton* in Devonshire or that in Oxfordshire. The pressure of the West Saxons gradually constrained the Britons to retire westward. Devonshire was for a long period debateable ground; it probably was not until the reign of *Athelstan*, who is said to have defeated *Howell*, king of Cornwall, near *Exeter*, A.D. 926, that the Britons were finally compelled to retire beyond the *Taiver*. In A.D. 876, 877, the Danes seem to have wintered at *Exeter*, and were in 877 besieged by *Alfred*, who compelled them to make peace and to give hostages for the observance of it. In 873, when *Alfred* had been compelled by a Danish invasion to conceal himself, *Ubbo*, or *Hubba*, one of the sons of *Ragnar Lodhrog*, and one of the chiefs of the invaders, landed in the north of Devon and blockaded *Kynwith Castle*, near *Appledore*. *Odun* (who is styled earl of Devon), who occupied the castle, made a vigorous sally just about daybreak, slew *Ubbo* and nearly 1000 of his men, and captured the magical standard of the Danes, woven by the sisters of *Ubbo* and worked with the figure of a raven. In 894 the Danes were again in Devonshire; those of them whom *Alfred* had settled in East Anglia and Northumbria, induced by *Hasting*, who was then infesting England, took ship, and sailing round the headlands of Kent and along the Channel, besieged *Exeter*; but on the approach of *Alfred's* army they fled to their ships. The great battle of *Brunanburh*, which has been by some placed in Northumberland, has been by others supposed to have been fought near *Axminster* in Devonshire. In 997, 1001, and 1003 the Danes committed considerable ravages in the district.

When *William* of Normandy attacked England his second campaign was in the west. *Exeter* yielded on his approach. In the next two years, when the Saxons of the neighbourhood rose in revolt, or rather renewed the struggle for independence, under the sons of *Harold*, who had fallen at *Hastings*, the citizens refused to admit them. *William* sent some troops to relieve the city, and the Saxons were defeated with great slaughter.

The coasts of Devonshire were about this time laid waste by the Irish, and the civil broils which arose during the next hundred years between the children and descendants of the Conqueror rendered Devonshire the scene of contest. The succeeding centuries are marked by few historical events except occasional attacks by the French on the towns along the coast, and some contests of inferior moment during the wars of the Roses. The nobility of the county were divided between the rival houses; the *Courtenays*, earls of Devon, were *Lancasterians*, and three brothers who successively enjoyed the title fell in the field or died on the scaffold.

In the rebellion of the Cornish men under *Lord Audley* and *Flammock* [CORNWALL], and in the rebellion under *Perkin Warbeck*, *Exeter* was the object of attack; but in both cases the attack failed. The last siege was raised by *Courtenay*, earl of Devon, attended by several Devonshire knights and the '*posse comitatus*.' *Warbeck* retired to *Tannton*.

Of the troubled periods to which the foregoing sketch refers Devonshire contains several memorials in the baronial castles, the ruins of which are still in existence. At *Exeter*, *Plympton*, *Okehampton*, and *Tiverton* were castles, all of which belonged to the *Courtenays*. [EXETER; TIVERTON.] Some of the walls of the keep of *Plympton Castle* yet remain, and some scanty ruins of that of *Okehampton*. *Berry Pomeroy Castle*, near *Totnes*, is an ancient mansion on the brow of a steep hill in a well-wooded country; it was the seat first of the *Pomeroy*s, afterwards of the *Seymour*s. *Compton Castle* near *Torbay*, and *Aiton Castle* near *Chulmleigh*, are still standing but converted into farm-houses; and there are remains of *Gidley Castle*; *Hemyock Castle*, near the upper waters of the *Culm*; *Dartmouth Castle*; *Kingswear Castle*, near *Dartmouth*; and

Lidford Castle, between *Tavistock* and *Okehampton*. Of ancient mansion-houses *Dartington*, near *Totnes*, built in the reign of *Richard II.*, about the end of the 14th century, and an old mansion at *Bradley*, near *Newton Bushel*, built in the 15th century, are among the most remarkable.

When the alteration of the church service took place at the Reformation, 1549, great disturbances broke out in Devonshire. They began at *Sampford Courtenay*, between *Okehampton* and *Chulmleigh*, and gradually assumed a serious aspect, as some of the gentry joined in the revolt. The spirit of disaffection spread into Cornwall. *Exeter* was besieged by the rebels; and it was not until several severe actions had taken place that *Lord Russell*, who had been sent down to suppress the revolt, succeeded in doing so. In 1554 *Exeter* was occupied by *Sir Peter* and *Sir Gawen Carew*, who had taken up arms to oppose the coming of *Philip of Spain*.

Of the monastic establishments of Devonshire, *Tavistock Benedictine Abbey*; *Buckland*, *Buckfaste*, *Dunkeswell*, *Ford*, and *Newton-hau*, *Cistercian* abbeys; *Plympton* and *Hartland*, the former a priory and the latter an abbey of *Augustinian* Canons; and *Tor Abbey* for *Premonstratensian* Canons, were the chief. The ruins of these buildings are inconspicuous: the chapel and other parts of *Ford Abbey*, on the river *Axe*; the refectory and abbot's hall, and the gate-house at *Tavistock*; part of the conventual church of *Tor Abbey*; and some remains of *Buckland*, *Hartland*, and other establishments, are yet standing. There are considerable remains of *St. Nicholas's Priory* at *Exeter*; the crypt, which has massive Norman arches, has been converted into a kitchen.

In the great civil war of *Charles I.* the county seems generally to have embraced the cause of the Parliament. *Plymouth* was seized by the townsmen during the absence of the governor appointed by the king, and the *Earl of Ruthen* was soon after made governor. *Exeter* was the head-quarters of the *Earl of Stamford*, the parliamentary general. In 1643 the Royalists besieged *Exeter*, which the *Earl of Warwick*, who commanded the fleet for the Parliament, was unable to relieve. *Colonel Digby*, a royalist, defeated the Parliamentarians at *Torrington*; and *Barnstaple*, *Bideford*, and a strong fort at *Appledore*, which were held for the Parliament, surrendered. *Exeter* also was compelled to surrender about the same time. *Prince Maurice* blockaded *Plymouth*, but without success; two assaults made in December 1643 were repulsed, and the siege was for a time abandoned. In the spring of 1644 several fresh attempts were made upon it with a like result. In 1644 the *Earl of Essex* with his army reached Devonshire, but no great or decisive event took place until *Essex* marched into Cornwall, where his infantry was obliged to capitulate to the king, who had followed him thither. [CORNWALL.] The king, returning from Cornwall, summoned *Plymouth* to surrender; and on its refusal *Sir Richard Grenville* was left to carry on the siege. In October 1645 *Sir Thomas Fairfax*, commander-in-chief for the Parliament, entered the county with his army, and in the course of the following winter and spring entirely put down the opposite party.

At the revolution of 1688 the *Prince of Orange* landed at *Torbay*, November 5th; and on the 8th he made a public entry into *Exeter*, where he remained for some days before any of the principal people of the county joined him. On the 21st he quitted *Exeter* on his march to *London*.

Teignmouth was burned by the French in 1690. In 1719, upon the apprehension of a French invasion, an encampment was formed on *Clist Heath*, 4 or 5 miles N.E. from *Exeter*. In 1779 the appearance of the combined French and Spanish fleets off *Plymouth* caused great alarm, and the prisoners of war were removed to *Exeter*. In 1793, upon the alarm of a French invasion, several regiments of volunteers were raised, artillery was brought from *Plymouth* for the defence of *Exeter* and placed in an ancient intrenchment on *Woodbury Down*, a few miles south-east of *Exeter*, where a camp was formed. Similar measures were taken upon the renewal of the alarm in 1803.

Devonshire is an agricultural county. It has but few manufactures, but many of its inhabitants are employed in quarrying stone, or in obtaining some other of the valuable minerals it contains. In 1851 the county possessed six savings banks, of which two were established in connection with the dockyards, and four in the towns of *Devonport*, *Exeter*, *Plymouth*, and *Tavistock*: the amount owing to depositors on 20th November 1851 was £504,805*l.* 19*s.* 8*d.*

DEVYNOCK. [BRECKNOCKSHIRE.]

DEWSBURY, West Riding of Yorkshire, a market-town and the seat of a Poor-Law Union, in the parish of *Dewsbury*, is situated at the base of a hill rising from the left bank of the river *Calder*, in 53° 42' N. lat., 1° 39' W. long., distant 32 miles S.W. from *York*, 159 miles N.N.W. from *London* by road, and 186 miles by the Great Northern and Lancashire and Yorkshire railways. The population of the town of *Dewsbury* in 1851 was 5033. The living is a vicarage in the archdeaconry of *Craven* and diocese of *Ripon*. *Dewsbury Poor-Law Union* contains 11 parishes and townships, with an area of 24,165 acres, and a population in 1851 of 71,768.

In the time of the Saxons the parish of *Dewsbury* was one of the most extensive in England, comprising an area of 400 square miles. That area is now divided into nine parishes, including those of *Huddersfield*, *Bradford*, and *Halifax*. *Paulinus*, the first archbishop of *York*, resided at this place, and some have supposed that from the

success which accompanied his preaching the place of his residence received the name of Duisborough, 'God's town.' In the vicarage garden, near the church, are some Saxon tombs; other Saxon relics have been found. At the east end of the chancel outside the church is a cross, inscribed "Paulinus hic predicavit et celebravit, A.D. 627." This cross is a recent erection, but it is a fac-simile of a Saxon wheel-cross which formerly stood in the same place. The inscription is supposed to refer to the conversion of Edwin, king of Northumbria, with his court, by the preaching of Paulinus in 627.

The town of Dewsbury is pleasantly situated: the increasing importance of its manufactures has caused a great extension of the buildings and much improvement in the general aspect of the place; there are numerous good streets, and the town is lighted with gas. A new court-house has been recently erected, in which petty sessions and a county court are held.

The parish church of All Saints, Dewsbury, is an ancient structure: part of the building having fallen about the middle of last century it was rebuilt in conformity with the original style. A new church at the west end of the town is in the perpendicular style. The Baptists, Independents, Wesleyan and New Connexion Methodists, Quakers, and Roman Catholics have places of worship. There are here a Grammar school, National, Wesleyan, and Infant schools, a mechanics institution, and several subscription libraries and newspapers.

Wednesday and Saturday are the market-days, the Saturday market being the most important. Three fairs are held in the course of the year. The town is conveniently situated for manufacturing operations. There are extensive establishments for the manufacture of blankets, carpets, and inferior descriptions of woollen cloth; worsted yarn manufactories; and wool-carding establishments. Wool-stapling, iron-founding, tanning, malting, and nail-making are extensively carried on. Several corn-mills and lime-works are in the neighbourhood.

(Allen, *History of Yorkshire*; Baines, *Directory of Yorkshire*.)

DHALAC, an island in the Red Sea, situated in 15° 53' 50" N. lat., 40° 40' 30" E. long., is about 35 miles long and 18 miles wide. It is the largest island in the Red Sea. It is low and its surface level, being formed of coralline rocks covered with sand, but destitute of all herbage during the summer heat, except a small quantity of bent-grass just sufficient to feed the few antelopes and goats that are on the island. In many places there are large plantations of acacia-trees, but they seldom attain above eight feet in height. There are no springs, and the rain-water is preserved in numerous cisterns. There are also some tanks. This island contains two harbours for small vessels, Dhalac el Kibeer and Dobelow. No kind of agriculture is carried on. According to Bruce, one-half of the male population of the island are always employed in work on the opposite shores of Arabia, and by their labour furnish their families with dhurra and other provisions; when their time is expired they are relieved by the other half. They are good seamen and fishermen. Very elegant baskets are made of the leaves of the doum-tree, and sent to Loheiba and Jidda. The island contains 12 villages of from 50 to 100 houses each. (*London Geographical Journal*, vol. v.)

DHAR, a small state in the province of Malwa, Hindustan, in 22° 35' N. lat., 75° 20' E. long. The city of Dhar covers a space three-quarters of a mile long and half a mile broad, is surrounded by a mud wall 30 feet high fortified with towers, and is the residence of the raja. The pettah or fort is detached from the city, and stands on a rising ground. The district in the possession of the Dhar raja comprehends about 1070 square miles, containing a population of 104,860. The state was taken under British protection in 1819 on condition of allegiance and military service; at that time the whole revenue of the Dhar rajs, then a minor, was only 35,000 rupees; it is now about 475,000 rupees, or about 47,500%. The most important article of cultivation is opium, but the soil is capable of yielding every kind of tropical production. Some of the villages are inhabited by Bheels; of the remaining population by far the larger part are Hindoos; there are a few Mohammedans.

DIARBEKR, or DIYAR-BEKER, a town in Turkish Armenia, is situated on a commanding eminence of black basalt at a distance of 55 miles S.E. from Kharput and about 80 miles N.E. from Urfah, in 37° 55' N. lat., 39° 52' E. long. It stands at a short distance from the right bank of the Tigris, the intervening space being occupied by gardens. The area of the town is considerable and nearly circular in form; the walls, which are pierced by four gates, are lofty and substantial, built of the ruins of more ancient edifices, surmounted by a castellated parapet, and strengthened by numerous round and square towers, which are most thickly placed on the northern side. Formerly the town was inhabited by 40,000 families; had extensive manufactures, especially of cotton goods; and carried on a very active commerce with India through Baghdad, and with Europe through Aleppo. But the fertile plain in which it stands, and which was cultivated in every part and studded with villages of 400 to 500 houses each, has in the present century been laid waste by the Kurds; the commerce with Baghdad was annihilated, and that with Aleppo reduced to insignificance. Still it contains about 8000 families (1500 are Armenian, 85 Catholic, 70 Greek, 50 Jewish, and 6300 Turkish), and some manufactures of cotton, silk, and morocco leather. The town is

admirably situated for commerce, and to restore its prosperity nothing is required but to secure safe communication with Baghdad and Aleppo. The Tigris cannot be used as a means of transport so high up as Diyar-Bekr, but rafts of timber are sometimes floated down from the mountains above the town. The streets of Diyar-Bekr are well built and well paved, but narrow, as in most hot climates. The houses generally are built in their lower stories with black basalt and in the upper with dark-coloured brick. The principal buildings are the 20 mosques; 15 khans, the bazaars, 20 baths, and the citadel, built on the highest part of the rock above the river in the north-east part of the town, in which the pasha formerly resided. The citadel is now in ruins; its site commands a most extensive view, including the Karajah-Dagh to the west, the Moosh-Dagh to the north, the plain of the Upper Tigris, the Mardin hills to the south-east, and the plain of Urfah to the south. [ARMENIA.] The climate is very hot in summer; in winter it is delightful.

Diyar-Bekr occupies the site of the ancient *Amida*, which is said to have been of great antiquity. The Turks still call Diyar-Bekr by the name of *Kara Amid*, or Black Amid, in allusion to the material of which it is built. Amida was enlarged and strengthened by the emperor Constantine, in whose reign it was taken by Sapor, the Persian king, in 359. The Persians again took it under their king Cabades, 502; but the Romans soon recovered it again, and Justinian repaired the walls and fortifications. The town was pillaged and burnt by Tamerlane, 1393. The kings of Persia in after times frequently rendered themselves masters of it. Sultan Selim took it from Shah Ismael, and made it the capital of a province in 1515. The Persians again held it for several years subsequent to 1665.

Diyar-Bekr was formerly the name of an extensive pashalic or province of Turkey in Asia, comprising the basin of the Upper Tigris, and stretching from the Euphrates to the mountains of Kurdistan, between 37° and 39° N. lat. Its principal towns were Diyar-Bekr, Mardin, and Urfah or Orfah. The town is now included in the pashalic of Kharput or Erz-Rum, we do not know which. A British consul resides in Diyar-Bekr.

(*London Geog. Journal*, vol. vi.; Buckingham, *Travels*; Ammianus Marcellinus; Procopius; Gibbon, *Decline and Fall*.)

DIDCOT. [BERKSHIRE.]

DIE. [DRÔME.]

DIE, ST. [VOSGES.]

DIEMEN'S LAND. [VAN DIEMEN'S LAND.]

DIEPPE, a sea-port and bathing town in France, capital of the second arrondissement in the department of Seine-Inférieure, is situated on the south coast of the English Channel, at the mouth of a small river formed by the junction of the Arques, the Bêthune, and the Eaulne, in 49° 55' 35" N. lat., 1° 4' 52" E. long., and has 16,216 inhabitants within the commune. The town lies N. of Rouen and N.N.W. of Paris, and is 38 miles and 125 miles distant by railway from these cities respectively.

The town extends about a mile along the coast, having the harbour at the north-east end, and the castle, which stands on a tall chalk cliff and commands the town and the harbour, to the westward. It is regularly built; the streets are wide and well paved with round stones; the houses are picturesque, built of brick and stone, with high slanting roofs. The principal street, called the Grand Rue, runs right through the town to the harbour; it contains the best hotels, and presents in the bathing season a busy and animated appearance. There are six places, or squares, and two interesting churches, St. Jacques and St. Remi. Dieppe has a public library, a theatre, assembly-rooms, and a splendid bathing establishment; 68 fountains adorn the streets, which are supplied by an aqueduct 3 miles long. The castle is an irregular pile of considerable extent. The town walls are yet standing, but Dieppe is not a fortress. The port, which is formed by two jetties and defended by the castle, is sufficiently large and secure, but the entrance is narrow; it admits vessels of 600 tons. There is a lighthouse on the western jetty.

The population of the suburb of Pollet, which lies to the east of the town and is joined to it by a flying bridge, are all engaged in the herring, oyster, and cod fisheries. The quantity of herrings cured has in some years amounted to 36,000 barrels, and of mackerel to 12,000 barrels. There are sugar-refineries, rope-walks, paper-mills, and ship-building yards in the town. Fine linen, lace, and articles of ornament in bone, horn, shell-work, and ivory are made. Wine, brandy, vinegar, salt, nails, iron, steel, millstones, and colonial produce also enter into the commerce of the town. The coasting trade is active. Fishing boats and coasting vessels are built. Steamers ply daily to Brighton in Sussex. The number of vessels of all kinds that entered and left the harbour in 1852 was 2017, with cargoes amounting to 191,021 tons.

Dieppe has tribunals of first instance and of commerce, a chamber of commerce, a college, and a school of navigation. It is rather a favourite landing-place with tourists between France and England; but in this respect it is far surpassed by Boulogne and Calais. The railroad to Rouen however still throws a good share of this source of profit into the town. The most interesting places in the neighbourhood are an ancient camp attributed to Cæsar, and now called La Cité des Limes; and the ruins of the castle of Arques, near which Henri IV. defeated the Duke of Mayenne.

In the 9th century the site of Dieppe was occupied only by a few fishermen's huts; in the 11th century it had increased to a small town under the name of Bertheville. Henry II. of England erected in 1188 a castle at Dieppe, which was demolished by his son Richard I. In the 16th century the fisheries, and especially the herring fishery, furnished its inhabitants with their chief occupation and wealth; their vessels went as far north as Schonen in Sweden to take the fish, which after curing they exported to the Mediterranean in their own vessels, called 'druggers,' because they brought back from the Levant spices and drugs. In the middle of the 16th century the Dieppois undertook the expedition in which Canada was discovered, and in 1637 they formed the first French settlements on the banks of the Senegal. In 1694 the town was bombarded by the English, and with the exception of the ancient church nearly destroyed. After that event the town was regularly built.

DIEST. [BRABANT, SOUTH.]

DIEU-LE-FIT. [DRÔME.]

DIEUZE. [MEURTHE.]

DIGNE, the ancient *Dinia*, capital of the department of Basses-Alpes, in France, the seat of tribunals of first instance and of commerce, of an agricultural society, communal college, and diocesan seminary, is situated at the foot of the Alps and at the junction of several brooks with the river or torrent Bléoune, a feeder of the Durance, about 60 miles N.E. from Marseille and the same distance E. by N. from Avignon; and has 4119 inhabitants, including the commune. The town stands on a little hill surmounted by a rock on which stands the cathedral and the prison. The cathedral has an iron dome and is a very conspicuous object; the prison is girt with strong walls. The streets are narrow, crooked, and dirty; and the houses are generally ill-built. The principal structures are the residence of the prefect of the department, the bishop's palace, the court-house, the college, the seminary, and the barracks. At the foot of the hill there is a well-built suburb named Gassardi, which is planted with fine plane-trees, and adorned with waterworks and a handsome fountain. There are remains of old buildings of the age of Charlemagne near the town; among others the ruins of an old cathedral. The town has no manufactures of any importance; but there is some trade in dried fruits and preserves, clover and hemp seeds, honey, wax, wool, hemp, goatskins, &c. Digne has been always famous for its hot springs and baths, which are about a mile from the town, and are frequented from May to September.

Of *Dinia*, which was (according to Pliny, iii. 4.) the capital of two Inalpine tribes, the Bodiontici and the Avautici, there are no remains. It was entirely destroyed in the invasion of the barbarians. The city early embraced Christianity, and has given title to a bishop since A.D. 340. On its destruction by the barbarians the inhabitants fled to a neighbouring height where they laid the foundation of the present town. Digne was frequently sacked during the religious wars of the 16th century. It had a population of 10,000 in 1629, in which year a plague reduced the number to 1500. The diocese of Digne comprises the department of Basses-Alpes; the bishop is a suffragan of the archbishop of Aix.

DIGOIN. [SAÔNE-ET-LOIRE.]

DIJON, capital formerly of the duchy of Bourgogne, now of the department of Côte-d'Or in France, is situated on the right bank of the Ouche, a tributary of the Saône, at the distance of 162 miles in a direct line, 195 miles by railway S.E. from Paris, in 47° 19' 19" N. lat., 5° 2' 16" E. long., and has 28,998 inhabitants including the commune.

Dijon existed, during the Roman dominion, under the name of *Dibio* or *Divio*. An ancient legend, attested by Gregory of Tours, relates that the emperor Aurelian made of *Dibio* a considerable fortress. From the dominion of the Romans Dijon passed, in the 5th century, under that of the Burgundians, and subsequently of the Franks. Under the Carolingian princes, Dijon was a lordship of the bishops of Langres, who often resided here. In the 9th century it was under counts of its own, who held it of the bishops as suzerains. In the 11th century the lordship of Dijon was united to the duchy of Bourgogne. In the 12th century the dukes caused the city to be rebuilt after it had been burned down, and subsequently bestowed upon it a municipal constitution. In the 14th century new walls were erected, inclosing the Roman town and the greater part of the suburbs. Under the dukes of Bourgogne, of the first race, Dijon was erected into a viscounty, but this came to an end A.D. 1276, and the rights of the viscounts were subsequently bestowed on the municipality and citizens. The dukes of Bourgogne, both of the first and second races, usually resided here, and when Louis XI. of France took possession of Bourgogne, and established the provincial parliament, he fixed its sittings in this town.

Dijon is situated in a plain on the eastern side of the Côte-d'Or hills. It is surrounded by walls and by ramparts which are planted with fine trees. The town is entered by five gates; it is traversed from north to south by the Suzon, which flows in a channel formed under the streets, and joins the Ouche close to the ramparts. The streets are well-built, clean, and cheerful. The houses, which are of freestone, are only of one or two stories. Of the public buildings the most imposing is the cathedral, which is dedicated to St. Benigne, and dates from 1291. The structure is a fine specimen of the gothic style. The interior is 233 feet long, 85 feet wide, and 92 feet high.

The west front presents the usual triple portals with rich rose window and niches over the central door, flanked by two handsome towers; and at the intersection of the nave and transept springs up a light and graceful spire 330 feet high. In this church the dukes of Bourgogne were inaugurated; it contains some handsome monuments. The church of Notre Dame, which was erected in the interval 1282-1334, is also a fine gothic edifice, remarkable for the elegant gallery which runs round the nave, transepts, and choir. The apse end behind the high altar is adorned with a finely sculptured group representing the Assumption of the Blessed Virgin. The intersection of the nave and transepts is surmounted by a lofty tower, which dates from the beginning of the 16th century. The principal square, called Place-d'Armes, is in the form of a horse-shoe and fronts the palace of the dukes of Bourgogne, in which also the parliament of Bourgogne held its sessions. The palace is surmounted by a lofty tower, now used as an observatory, and contains collections of paintings, sculptures, antiquities, and natural history, and also a library of 40,000 volumes. Among the other note-worthy public structures are the church of St. Michel, which dates from the beginning of the 16th century, with the exception of the two towers and the dome which were completed in 1667; the church of the Chartreux, in which some of the dukes of Bourgogne are buried; the court-house; the theatre, which is built after the model of that of Bordeaux; the residence of the prefect of the department; the town-house; the general hospital and the orphan asylum of Sainte-Anne.

The manufactures of Dijon are woollen cloth, hosiery, blankets, wollen and cotton yarn, leather, vinegar, mustard, and starch; there are also brandy distilleries, salt refineries, and breweries. A large trade is carried on in corn, flour, the excellent wine of the Côte-d'Or, wool, hemp, and wax candles. Dijon is well situated for trade at the junction of several roads; the Canal de Bourgogne passes along the valley of the Ouche, close to the town, which has communication also by railway with Paris and Lyon. [CÔTE-D'OR.] A chamber of commerce was accorded to Dijon in 1853.

Dijon is the seat of a bishop, whose see is co-extensive with the department of Côte-d'Or. It is also the seat of a university academy and of a high court of justice, which has jurisdiction over the departments of Côte-d'Or, Haute-Marne, and Saône-et-Loire. In connection with the university there are in Dijon three faculties of law, science, and letters, a secondary school of medicine, and a royal college. The town also possesses an ecclesiastical college, a botanic garden, and an excellent school of design, in which lectures are delivered gratuitously. It is the head-quarters of a subdivision of the 7th Military Division.

Few cities in France can vie with Dijon in beauty of site, or in the number and variety of its promenades, the plantations of which form a belt of foliage about the town. Among the latter are the ramparts, which afford a fine view of the town and the surrounding country; the Chemins-Couverts; the Allées-de-la-Retraite on the east side of the town, formed by four rows of noble lime-trees; the Creux d'Eufer and the Fontaine Suisse, two beautiful fountains surrounded by fine plantations; the Promenade de l'Arquebuse; and above all the Cours du Parc, which is nearly a mile in length, divided midway by a spacious circle, and leads to the great park laid out by Le Nôtre on the banks of the Ouche.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

DILMAN, a town in Persia, is situated on the caravan route from Tabriz to Erz-rum, 70 miles W. from Tabriz, 10 miles W. from the north-west angle of Lake Urumiyeh, and has about 15,000 inhabitants. It is situated in the wide and fertile plain of Selmas, which stretches westward from the lake to the base of the Kurdistan Mountains. The town is surrounded by gardens and orchards, and has clean streets. The plain about it is inhabited by Nestorians, Armenians, Catholics, Kurdish Leks, and Russian emigrants. About 4 miles to the westward is the old town of Dilman, a great portion of which is in ruins. From the number of mounds in the neighbourhood it seems to have been once of considerable extent, and it is described by St. Martin as being a very ancient Armean city. (Colonel Sheil, in *London Geographical Journal*, vol. vi.)

DINAGPORE, a district of Bengal, lying between 25° and 27° N. lat., 88° and 89° E. long., bounded N. by Rungpoor and Purneah, E. by Rungpoor and Mymensingh, S. by Mymensingh and Rajshahy, and W. by Purneah and Boglipoor. The form of the district is triangular, the base being to the south; its greatest length from south to north is 105 miles, and its extreme breadth from east to west is 82 miles. The area is about 2374 square miles: the population is estimated at about 2,500,000. About seven-tenths of the inhabitants are Mohammedans, and the remainder Hindoos.

The principal rivers by which the district is intersected are the Teesta, the Mahananda, and the Korotoya. During the rainy season, which usually sets in about the middle of June, and lasts for four months, these and many smaller tributary streams admit the passage of boats to almost every village in the district.

The surface of the country is undulating, but the greatest inequality of surface does not exceed 100 feet. The soil is generally light, and the principal cultivation being rice, the success of the harvest depends mainly on the quantity of rain. Hemp, sugar, indigo, and a small quantity of cotton are also cultivated; the hemp being grown in

order to prepare from its buds and leaves an intoxicating drug. The horses and oxen bred in Dinapore are of very degenerate kinds. Tigers, bears, wild buffaloes, and wild hogs are very troublesome to the cultivators of land. Otters and the common porcupine are also numerous. Wild water-fowl of various kinds are seen in large flocks; the common wild geese is considered good eating. During the periodical inundation of the rice-fields great numbers of small fishes are taken in them, and on the subsidence of the water many are left behind in the mud.

The principal towns are Dinapore, the capital; Malda, Gour, and Raygunge; besides which the district contains a great number of villages. *Dinapore*, the capital of the district, is situated in 25° 37' N. lat., 88° 43' E. long., about 100 miles N.N.E. from Moorshedabad. The houses are mostly of a mean description; a few dwellings of European residents are large and commodious. The population of the town is computed at 30,000.

(Buchanan, *Statistical Survey; Parliamentary Papers.*)

DINAN. [CÔTES-DU-NORD.]

DINANT, a very old town in the province of Namur, about 12 miles S. from the city of Namur, is situated partly on the right bank of the Mense, at the base of a line of limestone cliffs, and partly on some islands in the river. On the cliff a strong citadel and a handsome chapel is built, and winding stairs cut in the rock render the heights accessible to the townsfolk. The population amounts to 5650. The principal church is distinguished by a bulb-shaped steeple; it is an ancient structure, some parts of it dating from the 10th century; and the interior is richly decorated. The town contains several salt-refineries, four mills for sawing marble, some quarries of which are worked in the neighborhood, several grist-mills, paper-mills, breweries, and tanneries. Dinant formerly contained many extensive copper foundries, but this branch of industry has almost entirely disappeared. A considerable quantity of gingerbread is made in the town.

In 559 Dinant was enumerated among the possessions of the bishopric of Liège. In 870 it came into the possession of Charles the Bald. In the 12th century the town was fortified and considered a place of great strength. In 1466 Dinant was besieged by Philip the Good, and when summoned to surrender, the townsfolk hanged the duke's messengers. The duke then prepared to take the town by assault, when it surrendered and was given up to pillage during three days. On this occasion 800 of the inhabitants were tied back to back and thrown into the Maas; at the same time the town was burnt and its walls levelled to the ground. Charles the Bald a few years afterwards allowed the town to be rebuilt. In 1554 it was taken and pillaged by the French, and again in 1575 after a siege of eight days. At the treaty of Ryswick it was restored to the Bishop of Liège, but was again taken by the French in the war of the revolution, and became the capital of an arrondissement in the department of Sambret-Mense. It was occupied by the allies in 1813. Dinant is on the high road between Namur and Givet. A railroad is in course of construction from Namur through Dinant to Luxembourg, and will probably be continued thence to Metz.

(*Dictionnaire Géographique de la Province de Namur; Handbook for Belgium and the Rhine.*)

DINARIC ALPS. [AUSTRIA.]

DINAS MOWDDY. [MERIONETHSHIRE.]

DINGLE, county of Kerry, Ireland, a market and post-town and the seat of a Poor-Law Union, is situated on the north side of Dingle Bay, in 52° 8' N. lat., 10° 15' W. long.; distant 208 miles S.W. from Dublin. The population of the town in 1851 was 3261. Dingle Poor-Law Union comprises 19 electoral divisions, with an area of 125,276 acres, and a population in 1851 of 26,725.

The ancient name was Dangan-I-Cushy, or the fortress of Hussey, an adventurer of English descent, to whom one of the family of Desmond granted the tract of country on which the town stands. In the 17th century Dingle enjoyed a considerable traffic with Spain, from whence large quantities of wines and spices were annually imported here in return for exports of tanned hides, Irish friezes, woollen stockings, salt-beef, butter, and salmon. The town was erected into a corporation by Queen Elizabeth in 1555, at which time it sent members to the Irish Parliament.

The town has an antique appearance. Some of the old houses are in the Spanish taste, with stone balconies, &c., and several bear date as early as the reign of Elizabeth. The parish church dedicated to St. James is said to have been built at the charge of the Spanish who frequented the port; it is now much decayed. The residence of the proprietor, the Knight of Kerry, is the principal modern building, attached to which are some well-laid-out gardens. A bridewell, a market-house, and a small barrack, are the principal buildings of the town.

The harbour, a land-locked creek on the northern side of the great estuary called Dingle Bay, is capable of floating vessels of 300 tons up to the town, and is pretty well protected from the westerly winds which prevail on this coast. From the difficulty however of distinguishing the entrance, vessels bound for Dingle run a risk in a westerly gale of going to leeward on the dangerous shoals of Castle-main harbour at the head of the estuary. The chief trade consists in the export of butter and corn to Liverpool.

(Smith, *History of the County of Kerry.*)

DINGWALL. [ROSS AND CROMARTYSHIRE.]

GEOG. DIV. VOL. II.

DIOIS, a district in the former province of Dauphiné in France, of which Die was the capital. It now forms the arrondissement of Die in the department of Drôme. [DRÔME.]

DIOMEDES ISLANDS. [BEHRING'S STRAIT.]

DIOU. [ALLIER.]

DISMAL SWAMP. [CAROLINA, NORTH; VIRGINIA.]

DISS, Norfolk, a market-town in the parish of Diss, is situated in 52° 22' N. lat., 1° 7' E. long.; distant 22 miles S.S.W. from Norwob, 86 miles N.E. by N. from London by road, and 94½ miles by the Eastern Counties and Eastern Union railways. The population of the town in 1851 was 2419. For sanitary purposes the parish is under the management of a Local Board of Health. The living is a rectory in the archdeaconry of Norfolk and diocese of Norwich.

Diss, anciently Disce or Dice, was held in royal demesne in the reign of Henry I. In the reign of Edward I. it became the property of Robert Fitzwalter. The town of Diss consists chiefly of three streets, rather irregularly laid out on an uneven site; many of the houses are of considerable antiquity. The town is lighted with gas. The river Waveney runs past the town, on the south, and separates here the counties of Norfolk and Suffolk. The parish church is a spacious edifice of early English date and style, and is built partly of flints. It has been recently thoroughly repaired and reseated. The Wesleyan Methodists, Baptists, Independents, and Unitarians have places of worship. There are here National schools; a public school for general education; a public library and scientific institution; and a branch savings bank.

Diss is the centre of an extensive agricultural district. The manufacture of coarse hempen cloth for sacking employs some of the inhabitants. There are several breweries in the town and vicinity. The market is held weekly on Friday, and there is a cattle fair on November 8th.

(Blomefield, *Norfolk; General History of Norfolk; Communication from Diss.*)

DITHMARSH (*Ditmarsken*, Dan.), the most westerly of the four districts of the Danish duchy of Holstein, has the German Ocean for its western boundary and Holstein Proper for its eastern, to which last it was united in 1459. On the north the Eider separates it from the duchy of Schleswig, and on the south the Elbe divides it from the Hanoverian duchy of Bremen. Its area is about 500 square miles, and its population about 64,000. It is protected against the inroads of the sea by strong dykes, is very productive in corn, pulse, linseed, &c., and rears a considerable number of cattle. Its subdivisions are the bailiwicks of North and South Dithmarsh. North Dithmarsh has an area of 230 square miles, with a population in 1847 of about 33,500. The principal town is *Heyde*, in the heart of the bailiwick, which has a spacious market-place, a church, and public school, with about 4000 inhabitants; it is the seat of administration. South Dithmarsh has an area of 275 square miles, with a population of 33,400 in 1847. The chief town is *Meldorf*, at the mouth of the Miele, which forms a small harbour. It is well built, and was formerly fortified, has a handsome church, a grammar-school, public gardens, and about 2020 inhabitants.

DIXMUDE. [FLANDERS, WEST.]

DIZIER, ST. [MARNE, HAUTE.]

DNIEPER, the ancient *Borysthenes*. From the swampy forest highlands of Volkonsky, on the confines of the Russian governments of Tver and Smolensk rise three great rivers, the Volga, the Düna, and the Dnieper, which form the arteries of the internal navigation of Russia, carrying their waters respectively to the Caspian, the Baltic, and the Black seas, and flowing throughout their whole course within the limits of the Russian empire. Of these the Dnieper, rising in the circle of Viasma, in the northern part of Smolensk, flows south to the town of Smolensk, whence it turns west as far as Orcha, in the government of Mohilev; here it resumes a southern course, and after running for several miles through that government, it reaches the boundary and divides Mohilev from Minsk. In this part of its course it is increased by many tributary streams, the chief of which are the Droutz, the Soj, and the Berezina, which last is united to the Düna by means of a canal. [DÜNA.] After forming the boundary between the governments of Minsk and Czernigoff, the Dnieper enters the government of Kiev, where it receives the Pripet (which the King's and Oginski canals connect with the Bug, the Vistula, and the Niemen), the Desna, the Teterev, and the Irpen. Soon after its junction with the Desna, the Dnieper forms the western limit of the government of Pultava, and turning to the south-east, it enters that of Ekaterinoslav, having received in this part of its course the Pajol, Vorskia, Orel, Soula, and other streams. Having passed the town of Ekaterinoslav, the river runs south for about 60 miles, and in this part of its course forms thirteen rapids which impede the navigation for above 40 miles; below the rapids the river flows south-west between the governments of Kherson and Taurida, and enters the Black Sea by a wide embouchure, through which also the Bog, the ancient *Hypanis* (which rises in Galicia, and drains the provinces of Podolia and Kherson), pours itself into the same sea. The embouchure is in fact rather a lake or gulf; it extends from Kherson to Oczakoff, about 50 miles, with a breadth of from one to six miles. It is for the most part shallow, and its shores are very unhealthy in summer, during which season salt is gathered from the dried-up swamps.

The entire length of the Dnieper, with its windings, is above 1000 miles; its average width is estimated at 700 paces. Its basin comprises fourteen of the finest provinces of Russia, with all of which it has communication by its navigable branches and by canals. The Dnieper flows for the most part between high banks, the greatest elevation of which is along the eastern side. The upper part of its course is through a marshy forest country, and in the middle and lower course it passes over many rocks. The river is navigable almost from its source to its mouth; even the obstructions presented by the cataracts have been removed by the magnificent hydraulic works of the Russian government; several of the ledges of rocks having been entirely removed, and channels formed which are protected from winds by lofty dikes of granite. Produce is generally conveyed down the river to the cities on the Black Sea, but fleets of large barks also pass annually by the cauals mentioned (and those that connect the Dniina with the Neva) to Riga and St. Petersburg. The freights consist chiefly of timber, corn, iron, linen, hemp, salt, &c. Below the cataracts upwards of 70 islands occur, which produce a grape resembling the currant; they are full of serpents and wild cats.

As the Dnieper flows through more than nine degrees of latitude, there is great diversity of climate in various parts of its basin: at Smolensk the waters freeze in November, and continue ice-bound until April; at Kiev they are frozen from January to March only. The river abounds in sturgeon, carp, pike, and shad. There are bridges across it at Smolensk and Kiev, the latter, which is 1638 yards in length, and constructed with rafts, is removed about the end of October and replaced in the spring, as it would otherwise be destroyed on the breaking up of the ice.

The root syllable (Don or Dan) in the names of almost all the great rivers that flow into the mouth of the Black Sea—Don (Tan-ais), Dnieper (Dou-iever), Dniester (Don-iestr), Don-au (Dan-ube)—is probably an old Scythian or Slavic word for 'water.'

DNIESTER, a river of European Russia, has its source in a small lake on the north-eastern slope of the Carpathian Mountains, in the circle of Sambor, in the Austrian crownland of Galicia, near 49° 12' N. lat., 23° E. long. Within Galicia the Dniester receives the Tismana, Stry, Swica, Lomnica, and Bistrizza on its right, and the Lipa, Stripa, and Sered on its left bank. Its course is north-easterly from its source to Sambor, after passing which it pursues a south-easterly course to Halicz, Mariampol, and Zaleszeykl. Thence it runs in an east-south-east direction to Chotym, at the north-western extremity of Bessarabia, where, leaving the Austrian, it enters the Russian territory. At Chotym it receives the Podhorze, which separates Galicia from the government of Podolia, and thence flows between Podolia and Bessarabia, first in an eastern then in a south-eastern direction, and with many windings to about 42° 52' N. lat., 29° 3' E. long. From this point to its mouth in the Black Sea the course of the river is south-south-east, the river separating for about 100 miles of its course the boundary between Bessarabia and the government of Kherson. Its tributaries in Russia are small, and its basin narrow. From Ushtiza, where it takes a southern course, it passes the towns of Yampol, Dubossari, Bender, and Tiraspol. It enters the Black Sea by a broad liman, or shore-lake, about 19 miles in length and 5 miles in breadth, but not more than 7 feet in depth, which lies between Akerman and Ovidiopol, and communicates with the Black Sea by the Otkhakov and Tsarigrad channels, which are separated by a series of low sandy islands.

The current of the Dniester is exceedingly rapid. The navigation commences at Halicz, but is interrupted two miles below Yampol by two considerable falls and several whirlpools; and it does not become free again until it reaches Bender. As far as Old Sambor it flows through a deep broad valley, which afterwards expands on its eastern bank into an extensive plain; while on its right bank it is occasionally skirted by offsets from the Carpathian chain, varying from 180 to 250 feet in height. These elevations accompany its course as low down as Chotym, from which point the river flows through an open flat country. The bed is muddy, and its waters, which are turbid and of a yellowish hue, and often broken by masses of rock, are frequently covered with foam. The whole length of the river is about 600 miles. Wood, grain, and other products are conveyed down the Dniester to Odessa. The principal places at which vessels load and unload are Stria and Salotchl on the Austrian, and Zranetz and Dubossari on the Russian side. The Dniester abounds in sturgeon. Herodotus (iv. 51), calls the river *Tyras*; and it was subsequently named *Danastria*.

DOAB, a word signifying 'two waters,' is used in Hindustan to denote any tract of land included between two rivers. Three districts to which the name of Doab is applied are situated in the province of Lahore. One of these, the Doab or Doabeh Barry, is included between the Ravey and Beyah rivers and contains the cities of Lahore and Amritsar; the second, the Doabeh Jallinder, is included between the Beyah and the Sutlej, and forms the most fertile portion of the Panjab district; the third, the Doabeh Rechna, comprehends the Ravey and the Chinab. The district however to which the name is most commonly applied is situated between the Ganges and the Jumna. This district has its eastern extremity at Allahabad, whence it proceeds in a north-west direction to the hilly

country in northern Hindustan, the northern frontier of the district of Saharunpore in the province of Delhi forming its north-western boundary. The length of this tract is more than 500 miles, and its mean breadth about 55 miles; its prevailing character is flatness and nakedness. The principal productions are millet and barley, sugar, tobacco, cotton, and indigo. The straw of the millet is very serviceable as provender for cattle. The temperature of the air in this part of India is liable to sudden and violent alternations; the range of the thermometer between the morning and afternoon is sometimes 40 degrees. In April and May, when the hot winds prevail, the thermometer often rises higher than 120° in the shade, and at other seasons the temperature at daybreak is sometimes below the freezing point.

The southern part of the Doab came into the possession of the English in 1801, when it was acquired from the king of Oude. In 1803 the more northern part was ceded to the English by Dowlut Ron Scindia. The population is of a very mixed character, and consists of Jhats, Rajpoots, Patans, Thugs, and various other tribes, who, previous to the acquisition of the country by the English, had been much addicted to plunder, and dacoity or gang robbery was of frequent occurrence; this has been greatly remedied.

DOBERAN. [MECKLENBURG.]

DOBOKA. [TRANSYLVANIA.]

DOBRUDSCHA, a district in European Turkey, forms the north-eastern part of Bulgaria, and comprises the country north of the earthen rampart called Trajan's Wall, between the Danube on the west and north, and the Black Sea on the east. Trajan's Wall leaves the Danube between Rassova and Czernavoda, and runs across to the Black Sea a little south of Kusteuje, a distance of about 35 miles. In its western part the wall skirts a small stream, the Kara-Su (Black-water), that connects several small lakes, and enters the Danube above Czernavoda. At the head of the valley of the Kara-Su, near Bourlak, a line of hills or downs composed chiefly of a porous limestone rock runs north and south 164 feet above the level of the Black Sea. Along the coast at Kustenje also there is an uninterrupted range of low hills and cliffs, so that it is certain the Danube never had an outlet across the Dobrudscha in this direction. The formation of a canal from Czernavoda to Kustenje has been long a favourite project; but on the summit-level, which consists of porous limestone, no water ever rests to feed such a canal if it were cut. Besides, the only water communication between these two points that would be of much use would be a ship-canal, or, in other words, the opening of a new bed for the Danube; and this the nature of the ground renders all but physically impossible.

The low undulating down runs northward all through the Dobrudscha, forming a small watershed between the Danube and the sea; on the north it joins a lofty mountainous mass which covers the north of the district between Baba-Dagh and Matchin. [BESSARABIA.] On the eastern side the Dobrudscha is marshy, and contains several lakes. There is a great scarcity of drinkable water in this district. It contains however many fertile spots, although in the hot season of the year, like all the countries near it, it resembles a desert. In the spring, on the melting of the snows, the soil is saturated with wet, and in most parts is converted into a sea of mud. The inhabitants are chiefly Bulgarians, Tartars, and runaway Cossaks, who rear sheep and buffaloes. Eagles, hussards, cranes, wild geese, partridges, kites, ducks, wild swans, and wild dogs are extremely numerous in the Dobrudscha. Along the Danube are the fortresses of Hirsova, Matchin, Isaakteha, and Tulcha. Tulcha stands at the head of the St. George mouth of the Danube, which forms part of the boundary between the Dobrudscha and Russia. In the interior is the town of Baba-Dagh, between the mountains of that name and Lake Rassein. Kustenje is a mere village. At the time we write (April, 1854) the Russians are in possession of the Dobrudscha, and the Turks are posted in strong force behind Trajan's Wall, which they have repaired and strengthened.

DOCKING, Norfolk, a village and the seat of a Poor-Law Union in the parish of Docking, is situated in 52° 55' N. lat., 0° 33' E. long., distant 33 miles N.W. from Norwich, 113 miles N. by E. from London by road. The population of the parish of Docking in 1851 was 1640. The living is a vicarage in the archdeaconry of Norfolk and diocese of Norwich. Docking Poor-Law Union contains 36 parishes and townships, with an area of 80,653 acres, and a population in 1851 of 18,140. Docking parish church is chiefly of perpendicular style and date. The Wesleyan and Primitive Methodists have places of worship. There is a National school. Petty sessions are held monthly in the village.

(General County History of Norfolk; Communication from Docking.)

DODBROOK. [DEVONSHIRE.]

DODDINGTON. [CAMBRIDGESHIRE.]

DODONA, the most ancient oracle of Greece, was probably situated in the valley of Joannina in Epirus, but its exact position has never been ascertained. Colonel Leake places it at the south-east extremity of the lake of Joannina, near Kastritza, and there are many reasons for believing that the Dodonean territory corresponded to the valley at the south of that sheet of water. It is true that there is no mention of a lake in the neighbourhood of the ancient Dodona; but it is described as surrounded by marshes, and it is not unlikely that the lake of Joannina may have been increased in later times from the

catavothra in the country. The temple at Dodona was dedicated to Jupiter, and was of Pelasgian origin. (Homer, 'Iliad,' xvi. 233; Herod. ii. 52.) Strabo is of opinion (vii. p. 328) that the priests at this temple were originally men, but that the duties of the office were afterwards performed by three old women. The people who had the management of the temple are called Selli or Helli. The oracles were delivered from an oak (Sophocles, 'Trachin.' 1171) or beech (Hesiod, 'ap. Strabon.' p. 327; Sophocles, 'Trach.' 173). The temple at Dodona was entirely destroyed by Dosimachus, the Ætolian prætor, B.C. 219 (Polyb. iv. 67), and probably was never restored, for it did not exist in the time of Strabo; but there was a town of the name in the 7th century A.D., and a bishop of Dodona is mentioned in the council of Ephesus. (Stephanus Byzantinus; Wesseling; Crenzer; Leake, *Northern Greece*.)

DOGGERBANK, a very extensive sandbank in the North Sea, lying between the east coast of England and the west coast of Holland, and situated between the Wellbank and the Broad-fourteen. The western part of the Doggerbank is about twelve leagues east from Flamborough Head, in the East Riding of Yorkshire, whence the bank extends in a direction nearly east-north-east to within twenty leagues of Jutland. In some places this bank is twenty leagues broad, but it is contracted towards the east, and terminates nearly in a point. The shoalest part is that nearest the English coast, where it has nine fathoms water, so that it presents no dangers or difficulties to navigators; in other parts the surface rises generally towards the centre; in some places the depth of water is as great as twenty-seven fathoms.

The Doggerbank is a noted station for the cod-fishery, and is much frequented by both English and Dutch fishermen. It is also known in history as the scene of an obstinate naval engagement which took place in the summer of 1781 between the English and Dutch fleets under the respective commands of Admirals Parker and Zontman. The disabled condition of the ships on both sides put an end to the battle, in which neither side could claim a victory.

DOGMAELS, ST. [Pembrokeshire.]

DOL [ILLE-ET-VILAINE.]

DOLCIGNO, or **DULCIGNO**, a town in Upper Albania, 12 miles W. from Scutari, is situated on the rocky peninsula or cape of Kadili, on the coast of the Adriatic, and has a population of about 6000. The inhabitants, who were formerly notorious for piracy, are chiefly engaged in the oil-trade of the neighbourhood, and in conveying to Scutari in lighters the cargoes of such coasting-vessels as cannot enter the Bojana, which forms the outlet of the lake of Scutari. This town, or perhaps Dulcigno Vecchie, which is five or six miles more to the north, was anciently called *Olcinium*. The Illyrians of *Olcinium* were also pirates.

DÔLE, a town in the department of Jura in France, stands on the right bank of the Doubs, a feeder of the Saône, at a distance of 221 miles S.E. from Paris on the road to Geneva, 28 miles S.E. from Dijon, in 47° 5' 33" N. lat., 5° 29' 52" E. long., and has 9913 inhabitants, including the commune. It is pleasantly situated on the crest and slope of a hill; the streets are rather steep, but well built, and ornamented with fountains; and the neighbourhood is prettily laid out in gardens, vineyards, and promenades. The parish church on the Place Royale is a handsome gothic building. The ancient tower of Vergy still stands, and is now used as a prison. The other remarkable buildings are—the new prison, the former Jesuit college, the court-house, the museum, and the bridge over the Doubs. The town has tribunals of first instance and of commerce, a college, a public library of above 6000 volumes, a museum, a school of design, several hospitals, and a theatre. It is well situated for trade on the canal that joins the Rhône and Rhine. Hosiery, tiles and pottery, chemical products, vinegar, and beer are manufactured; there are also iron-smelting furnaces supplied with ore from the neighbouring mines of the Jura, flour-mills, and establishments for the rearing of silkworms; corn, flour, wine, wood, charcoal, marble, and iron enter into the commerce of the town. Large quantities of roses, tulips, and other flowers are grown in the vicinity. A railway has been projected from Dijon through Dôle to Salins near the Swiss frontier. A ruined aqueduct and amphitheatre, and some remains of the old Roman road from Lyon to the Rhine, mark the place as having been a Roman station.

The town formerly belonged to the dukes of Burgundy, and is famous for its sieges. In 1435 the inhabitants gallantly repulsed the Duke of Bourbon, who wished to wrest the place from Mary of Burgundy; but in 1479 the French took it by treachery, massacred the inhabitants, and burnt the town. Of the few buildings that escaped this destruction the tower of Vergy alone still exists. Dôle afterwards came into the hands of the Spaniards with the rest of Franche-Comté, of which it was for some time the capital. Charles V. added to the fortifications in 1530. In 1636 it was fiercely but ineffectually besieged by the Prince of Condé; Louis XIV. took it in 1668, and again in 1674, when he demolished the fortifications. By the treaty of Nimeguen the town, together with the whole of Franche-Comté, was made over to France.

(*Dictionnaire de la France*.)

DOLGELLEY, Merionethshire, North Wales, an assize and market-town, and the seat of a Poor-Law Union, in the parish of Dolgelley, is situated on the left bank of the river Wnion, in 52° 44' N. lat., 8° 52' W. long.; distant 18 miles S.W. by S. from Bala, and 208 miles

N.W. by W. from London by road. The population of the town of Dolgelley in 1851 was 2041. The living is a rectory in the arch-deaconry of Merioneth and diocese of Bangor. Dolgelley Poor-Law Union contains 18 parishes and townships, with an area of 132,270 acres, and a population in 1851 of 12,909.

The town of Dolgelley is but a poor and mean place, although, when seen from a distance, it presents an agreeable and interesting appearance. Its beauty is chiefly owing to the picturesque character of the surrounding scenery. Several good houses and shops have been recently built. The parish church is a neat and unpretending structure; it has a large tower. A handsome monument has been lately erected to Baron Richards, who was a native of the parish. The Wesleyan and Calvistic Methodists, Baptists, and Independents have places of worship in the town. The Free school founded in 1665 has an income from endowment of 40*l.* a year, and had 20 scholars in 1853. The county hall is a convenient modern structure built of stone, near the river Wnion. The market-place is a low square building. Over the river Wnion is a neat stone bridge of 7 arches.

In the town coarse woollen cloths and flannels are made by weavers in their own houses. The webs are bought by agents, who send them to Liverpool for exportation, or to Shrewsbury for home sale. In the neighbourhood are fulling-mills and bleaching-grounds. Some business is done in tanning and dressing lambskins and kidskins for the Worcester market. The summer assizes are held at Dolgelley. Markets are held on Tuesday and Saturday; and there are nine fairs in the course of the year.

(Parry, *Cambrian Guide*; *Land We Live In*, vol. iii.)

DOLLART BAY. [EMS.]

DOLWYDDELLAN. [CAERNARVONSHIRE.]

DOMBES, a principality in France in ante-revolutionary times, consisted of two portions separated from each other by an intervening part of the district of Bresse, by which the eastern portion was entirely surrounded. The western portion was bounded W. by the Saône; S. by the districts of Franc-Comtois and Bresse; and N. and E. by Bresse. It is now comprehended in the department of the Ain. Its capital was Trévoux. Dombes was possessed and governed by sovereign princes of the house of Bourbon until the year 1762, when the reigning prince exchanged his principality for the duchy of Gisors in Normandy, and other lands. Dombes was then united to the crown; but retained its 'parlement,' or civil court, which sat in Trévoux. [AIN.]

DOMINGO, ST. [HISPANIOLA.]

DOMINI'CA, one of the English Antilles, but lying between the French islands of Martinique and Guadaloupe: the parallel of 15° 18' N. lat., and the meridian of 61° 24' W. long. pass through the island. Dominica was discovered by Columbus in 1493, and received its name in consequence of its being first seen on a Sunday. The right of occupancy was long claimed equally by England, Spain, and France, but the island was virtually a kind of neutral ground until the year 1759, when its possession was assumed by the English, and their right to hold it was formally recognised in 1763 by the treaty of Paris. In 1778 Dominica was taken by a French squadron under the Marquis de Bouillé, but was restored to England at the peace in 1783. In 1805 the island was again attacked by the French fleet under Admiral Villeneuve, but was successfully defended by the garrison under Sir George Prevost.

Dominica is 28 miles long and 16 miles broad at the widest part; but its mean breadth is not more than 9 miles. The area is computed at 260 square miles. The origin of the island is volcanic. Pumice-stone, sulphur, and other volcanic productions are found. There are numerous quarries of a volcanic lava, sufficiently durable for the purpose of ordinary buildings, which are worked for the use of the colony. The surface of the island is mountainous. Morne Diablotin, the highest summit, is 5300 feet above the sea. The valleys are very fertile, and watered by numerous streams. Near the centre of the island, and about 6 miles from the town of Roseau, on the top of a high mountain, is a fresh-water lake, with an area of several acres, and said to be in parts unfathomable. The island contains an abundance of large timber-trees of the kinds commonly found in the West India Islands; the trunks of the gum-trees are hollowed out to form canoes. The streams abound with excellent fish, among which are mullets, pike, eels, and cray-fish; the fishery on the coast is also very productive.

The principal produce of Dominica consists of sugar, molasses, rum, coffee, cocoa, oranges, and cotton. The island is unequally divided into 10 parishes. *Roseau*, the principal town, is situated on a tongue of land on the south-west side of the island, in 15° 19' N. lat., 61° 23' W. long. It is regularly built, with long and wide paved streets, which intersect each other at right angles. The population is about 4000. The roadstead is safe, although the anchorage is far from good, from October to August; but during the hurricane months a heavy sea frequently rolls in from the south. Prince Rupert's Bay, on the north-west side of the island, is at all times safe and commodious.

The population in 1844 was 22,200. The government consists of a lieutenant-governor, council, and assembly of 20 members. There are chapels for Episcopals, Wesleyan Methodists, and Roman Catholics

A board of education has been recently appointed, and has established 7 schools, at which there is an attendance of 905 children. There are also 3 free schools in Roseau with 285 scholars. Other schools are under the superintendence of the Wesleyan missionaries and the Roman Catholic clergy.

The imports consist principally of plantation stores, cotton, linen, and woollen manufactures from England; corn, fish, and lumber from the British North American colonies and the United States, and live stock from the neighbouring continent of America. The exports are principally coffee, cocoa, sugar, rum, and oranges.

(Parliamentary Papers.)

DOMPIERRE. [ALLIER.]

DON, the ancient *Tdnais* and the Tartar *Tuna*, a river of European Russia, rises in the small lake Ivanofskoe, in the government of Tula, and thence flows in a general south-south-east direction, through the governments of Ryazan, Tambouf, and Voronezh, to the town of Paulovsk, receiving within these limits the Sosva, the Voronezh, and the Sosna. Below Paulovsk it runs east through the territory of the Don-Cossaks to within about 35 miles of the Volga. Repulsed by the mountainous region on the west bank of that river, the Don then proceeds in a south-western direction to the Sea of Azof, which it enters by three mouths, having received in this part of its course, from the right bank the Donez, or Donetz, the most considerable of its tributaries, and from the left bank the Medwiedicza, the Manitah, and the Sal, the last of which flows from the Caucasian mountains. The length of its course is estimated at about 880 miles. The width varies from 350 to 1200 feet. This river has a slow current, and abounds in shallows and sand-banks, but has neither falls nor whirlpools. In spring it overflows its banks, and forms broad and unwholesome swamps; it is navigable as high as Zadonsk on the north-western border of Voronezh, and has depth of water enough from the middle of April to the end of June for large vessels, but is so shallow during the remainder of the year, that there is scarcely two feet of water on the sand-banks. Its mouths are so much choked with sand as to be unnavigable for any but flat boats. The waters of the Don abound in fish. A canal projected by Peter the Great, and partly executed, is intended to join the Don and the Volga. It commences a little north of 50° N. lat., in the Ilavlia, which enters the Don near its most eastern point, and is to terminate in the Kamychenka, a feeder of the Volga, its whole length, including the canalisation of the two rivers, being about 90 miles.

The currents of the tributaries of the Don are also sluggish, and none of them but the Donez is navigable. As far as the town of Veronezh the Don flows between fertile hills; but from that point until it strikes the chain of the Volga, its left bank is skirted by lowlands, and its right by a range of uplands; thence to its confluence with the Donez its right bank is skirted by chalk hills, and its left by a continued steppe. The waters of the Don are impregnated with chalk, and are muddy, and prejudicial to the health of those who are unused to them. The *Myrgia*, which Herodotus mentions as a tributary of the Don, is probably the Donez.

DON-COSSAKS. The territory of the Don-Cossaks forms a province of South Russia, lying between 47° and 51° 10' N. lat., 37° 20' and 44° 45' E. long.; and is bounded N. by the governments of Voronezh and Saratov, E. by Astrakhan, S. by Circassia and the Sea of Azof, and W. by the governments of Ekaterinoslav and Voronezh. The area is stated to be 62,276 square miles, and the population in 1846 amounted to 704,300.

The general character of the country is that of a plain, in many parts consisting entirely of steppes. The interior is a complete flat, but in the north and along the banks of the Don there are slight elevations, and the south-eastern parts bordering on Lake Bolskoi are traversed by low hills. The rest of the country, with the exception of the parts immediately adjacent to the banks of the larger rivers, is a broad steppe traversed by numerous sluggish streams and abounding in luxuriant pasturage intermixed with tracts of sand. The whole territory does not contain a single forest, and even brushwood is only occasionally found. The northern districts are best adapted for agriculture: the southern, where the soil is saline and sandy, for grazing. On the steppes are many low artificial mounds and ancient tumuli, which are supposed, from the features and head-dress of the rude stone images erected over some of them, to be of Mongolian origin. Many of these tombs have been opened, and found to contain gold and silver urns, rings, buckles, &c.

The chief river is the Don, which enters the territory on the west from Voronezh, winds across it to the east to within a few miles of the Volga, and then turning suddenly round, flows through the eastern and southern districts to the Sea of Azof. In its course through this government it is joined by the Medwiedicza, Ilavlia, Sal, Manitah, and several minor streams, all on the left bank. The Donez, or Little Don, which flows south-east between Ekaterinoslav and Voronezh and joins the Don in the interior of this government, a little east of Tcherkask, is the most important tributary on the right bank. A few miles below Old Tcherkask the Don leaves the government of the Don-Cossaks and traverses an insulated part of that of Ekaterinoslav which encircles the Bay of Taganrog, leaving the Don-Cossaks only two small strips of coast on the Sea of Azof. Besides these there are several other rivers which discharge their

waters into the Sea of Azof, and there are numerous streams in the steppes, of which the greater part terminate in marshes, and are dry in summer. The principal lake is the Polskoi, an enlarged bed of the Manitah, about 70 miles long and 9 miles broad, the length of which forms for that distance the boundary between the territory of the Don-Cossaks and Circassia. Next to this the most considerable lakes are those of Nowoe and Staroe-Osero, which are covered in summer with an incrustation of salt from one to two inches in thickness.

The country enjoys a mild climate. The spring sets in early, and in the summer, which is of long continuance, the land is refreshed by frequent showers; the autumn is at times damp and foggy, and the winter, though clear and not accompanied with much snow, is severe and attended by stormy weather. The rivers are closed by ice from November to February. Failures of the harvest are rare, but the inhabitants often suffer severely from the ravages of the locust, which is the scourge of the country.

All the north and east of the country is inhabited by the Cossaks of the Don, Calmucks, and Nogay Tartars, who have exchanged the roving life of nomads for the settled habits of the agriculturist. The western district lying between the Don, the Douce, and Ekaterinoslav, is inhabited by German colonists, chiefly Mennonites from Prussia, and is one of the most prosperous and best cultivated portions of Russia. The Nogays also have been compelled to settle in villages and devote themselves to agriculture, the processes of which as well as of other common industrial arts, they have learnt from their German neighbours. The Cossaks of the Don have always been in some degree agriculturists, but their chief occupation was, and is, cattle breeding; indeed these are the leading employments of the three great divisions of the population. Vast quantities of wheat, the most important article of cultivation, are produced, and large exports are made at the ports of the Sea of Azof. After wheat, merino wool is the most important product. The Mennonites possess immense flocks of sheep.

Agriculture, cattle-breeding, fishing, and the cultivation of the vine constitute the principal occupations of the Don-Cossaks. In the lowlands of the north, which lie along the banks of rivers, the soil is very fertile, and produces grain of various kinds, such as rye, barley, wheat, oats, maize, and buckwheat; also peas, flax, and hemp. But even in the south, fields are found in the heart of the steppes at a distance of 30 miles and even 40 miles from the Don, with rich crops of grain upon them.

The vine, the culture of which was introduced among the Cossaks by Peter the Great, is cultivated to a considerable extent, and wine of a good quality to the value of 100,000*l.* a year finds its way to Moscow and other towns in the interior. The Mennonites and Cossaks are allowed to distil brandy for their own use, which is a great favour in Russia, where the distillation of spirits is a monopoly of the crown. The former are also exempt from military service, and appoint their own judges. The settlements of this people are on the left bank of the Moloschna, the right bank of which is occupied by German Lutherans, from Wurtemberg, Baden, and Switzerland, but these do not enjoy the same privileges as the Mennonites. Horses are very numerous. The native Cossak horse is small and spare in flesh, with a thin neck and narrow croup; he is, on the whole, an ill-looking animal, but strong, fleet, and hardy. The poorer Cossaks have each three or four horses, but many of the Tabunes, or herds, of the wealthier breeders, contain 1000 or more. All, with the exception of the saddle-horses, are kept on the pasture-grounds throughout the year, and in winter are forced to seek for their food either beneath the snow or from the high reeds on the banks of rivers. Dromedaries are reared by the Calmucks, and thrive well on the saline plants of the steppes. The ox is used for draught; goats are bred principally by the Calmucks, and are used as leaders to the sheep over the steppe. Fish in large quantities are taken in the Don and its tributaries, and along the shores of the Sea of Azof. Honey and wax to the amount of 300,000 lbs. are annually gathered. The exports consist of horses, cattle, fish, tallow, hides, and skins, the agricultural produce named above, and also of caviar and isinglass. Salt is gathered in summer from the evaporated lagunes along the sea.

The steppes are not the usual resort of wild animals or of much game; wolves, foxes, marsh-cats, dwarf otters, martens, marmots, jerboas, and hares are occasionally met with. Of wildfowl there are the steppie-fowl (*Olis tetraz*), water-staring, Muscovy duck, swan, snipe, pelican, and falcon. The principal amphibious animals are tortoises. The steppes also breed the Polish cochineal insect, of which however no use is made, the silkworm, and the cantharides.

The chief towns are—*Old Tcherkask*, which stands on an island formed by a branch of the Don called Aksai, in 47° 27' N. lat., 39° 58' E. long., and has 15,000 inhabitants, chiefly Cossaks. Owing to the inundations of the Don, and the unhealthiness of the site, it was resolved in 1804 to remove to a healthier spot about 4 miles distant, on which New Tcherkask now stands; but the Cossaks are said still to be attached to the old site. *New Tcherkask*, which in 1840 contained about 2000 houses and 11,327 inhabitants, is well laid out with broad regular streets; the houses are only one story high, most of them of wood. This town is the seat of the government offices, and the residence of the attaman or hetman of the Cossaks. It has a gymnasium and eight churches, several schools, and hospitals.

Perdjauk, on the Sea of Azof, is a still more modern town; it stands on the Moloschna in the district of the Mennonites, and has a population of about 3000, composed of Italians, Russians, and Greeks. Its port is better than that of Taganrog. The inhabitants are chiefly engaged in the corn trade.

Trades and mechanical pursuits are carried on only in the two chief towns, New and Old Tscherkask, and the larger stanitzes, or villages; for as the Cossak depends upon himself for the supply of his daily wants, there is consequently little encouragement for the manufacturer and mechanic. The only large manufactures are caviar, wax, and isinglass. The exports are sent to Taganrog, which is the chief mart for the sale of what the country produces; periodical fairs are held in Old and New Tscherkask, &c.

The territory of the Cossaks is divided into seven notchalstoe, or provinces, namely, 1. Aksai, on the Don, in which are Old Tscherkask and New Tscherkask, the only towns in the country; 2. The First District of the Don, containing the large villages of Troilinskaya, Bistrianskaya, Tsiemlianskaya, &c.; 3. The Second District of the Don, with the large villages of Tscherskaya and Gelubinskaya; 4. Medwiedicza, with the large villages of Ust-Mestwiedicza, Bere-sofska, and Ostiofskaya; 5. Koperskye, with the large villages of Urupinskaya, Kotofskaya, and Dobrinskaya; 6. Doneczkaya, with the large villages of Kasanskaya, Luganskaya, and Mikitenska; and 7. Minsk, with the large villages of Grabova and Alexiefkaya.

The territory of the Don-Cossaks contains but 2 towns and 120 stanitzes. The villages, many of which have markets, are always placed on the banks of rivers and composed of from 50 to 300 houses, well built, clean, and conveniently arranged, with one or more churches of stone or wood. Some of these stanitzes are large and resemble towns, and are surrounded by a wall and narrow ditch; the khutors, or stables, stalls, &c., lie outside of them. The Cossaks, who have been settled in the country since 1569, are genuine Little Russians, and speak pure Russian mixed with occasional provincialisms. They are proverbially hospitable and cheerful, but violent when excited; and although they consider the plunder of their enemies lawful in war, theft is almost unknown among them. Their mode of life is in general very simple and frugal, and the enjoyment of civil freedom has given them an independence of mind which places them far higher in the social scale than the abject Russian. Their starchines, or nobles, are in general well educated. Their educational establishments, of which they have several, are within the jurisdiction of the university of Charkov.

In respect to church matters, this territory forms the diocese or eparchate of New Tscherkask, and contains about 400 churches and several monasteries. The majority of the people are of the Russo-Greek Church. The Calmucks are Lamaists, and the Nogay and other Tartars are Mohammedans.

The history and government of the Don-Cossaks is given in the article *COSSAKS*. They are exempt from taxes and crown monopolies, and enjoy other privileges; in return for which they are bound to furnish a large force of cavalry for the service of the emperor. They are governed by a hetman or attaman, who is now generally a Russian officer; and every stanitze has its local hetman, who is elected by the inhabitants. The civil and military affairs of the province are managed by a council or chancery presided over by the attaman. The Calmucks are governed by the same laws, and subject to the authority of the attaman. They are equally bound to serve with their Cossak fellow countrymen, by whom however they are held in great contempt. They dwell in tents of skins, and are exclusively occupied in rearing cattle, sheep, camels, and especially horses, with which they supply the Russian light cavalry.

The Cossaks pay much attention to their dress, which consists of a blue jacket frequently laced with gold and lined with silk, a silk vest and girdle, full white trowsers, and black woollen cap, with a large red bag dangling behind. The females, who are inferior in symmetry of form to the males, have agreeable features, a florid complexion, and fine black eyes. They wear a long falling tunic of cotton or silk partly open in front, and confined by an ornamental waistband. Beneath this upper garment appear broad trowsers, with which yellow hoots are usually worn. The hair of the unmarried female floats in long braided tresses over the shoulder, but when married she conceals it under a cap richly embroidered with gold and pearls. Their dances resemble those of the Russian gipsies, and are performed by two persons only, who accompany their movements with loud cries.

DONAGHADEE, county of Down, Ireland, a market and sea-port town in the barony of Ards, is situated in 54° 35' N. lat., 5° 30' W. long., distant 119 miles N. by E. from Dublin, 17 miles E. by N. from Belfast, and 21 miles from Portpatrick, on the opposite coast of Great Britain. The population in 1851 was 2821.

Donaghadee owes its rise to being the most convenient point of communication between the latest colonists of Ards and their countrymen in Scotland, with whom they carried on a sufficient traffic to induce the proprietor, the Lord Montgomery, about 1650, to erect a quay 128 yards in length and from 21 feet to 22 feet broad. The Scottish mails landed here from before 1744, at which time Donaghadee enjoyed a large share of the imports and exports of this part of the country. A new pier was constructed a few years back at the expense

of government. It incloses a hasin of seven acres, and is calculated to hold sixty vessels of the larger class. The expense was upwards of 150,000*l.*; the work is executed in the best manner, but it has not proved as serviceable as was anticipated. The town, which consists of two principal streets, is well built and airy; it has a considerable export trade in cattle and grain, and a large import of coal. The town is the head-quarters of a fishery district. Some of the female inhabitants are employed in embroidering muslin chiefly for Glasgow manufacturers. Fairs are held in June, July, August, October, and December. There are a handsome church, several chapels for Presbyterians, and one chapel for Wesleyan Methodists. Petty sessions are held here. The coast-guard have a station at the port.

On the north-east side of the town stands a remarkable artificial mound, or rath, surrounded by a dry fosse from 27 feet to 32 feet broad. The circumference of the mound at the bottom is 480 feet, at the top 219 feet, and its greatest conical height 140 feet. A powder magazine has been built on the summit. From the top of the mound Scotland and the Isle of Man are visible in fair weather. The submarine telegraph, affording a communication between Donaghadee and Portpatrick, on the west coast of Scotland, was brought into operation on May 23rd, 1853.

(Harris, *History of the County of Down; Northern Tourist*.)

DONCASTER, West Riding of Yorkshire, a market-town, borough, and the seat of a Poor-Law Union, in the parish of Doncaster, is situated on the right bank of the river Don, on the great north road which passes through the town, in 53° 31' N. lat., 1° 8' W. long., distant 37 miles S. by W. from York, 162 miles N.N.W. from London by road, and 156 miles by the Great Northern railway. The population of the borough and township, which are co-extensive, was 12,052 in 1851. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor. For sanitary purposes the borough is under the management of a Local Board of Health. The livings are in the archdeaconry and diocese of York. Doncaster Poor-Law Union contains 54 parishes and townships, with an area of 107,340 acres, and a population in 1851 of 35,269.

Doncaster was the *Danum* of Antoninus, and was called *Donna Ceastre* by the Saxons, from which its present name is derived. Doncaster is one of the cleanest, most airy, and most beautiful towns in the kingdom. The approach from London is by a wide and nearly level road, ornamented with ancient elm-trees. The town stands on the Watling-street of the Romans. Coins, urns, and other Roman remains are occasionally dug up in the vicinity.

Doncaster had its first charter of incorporation from Richard I., the privileges granted by whom were confirmed and enlarged by several of his successors. The town of Doncaster is kept in excellent order, the streets being well paved, and lighted with gas.

Among the public buildings of Doncaster are the mansion-house, a handsome edifice, which cost about 10,000*l.*; it is used for the meetings of the corporation, for concerts, assemblies, and public meetings; the guildhall, and a covered market-place, both recently finished; and the jail, which has arrangements for the classification of prisoners. A county court is held in the town.

The parish church, dedicated to St. George, was burnt down in 1850. A handsome subscription has been raised for the purpose of rebuilding the edifice; the first stone of the new building has been recently laid, and the work is now being proceeded with. Christ church was erected some years ago from a bequest of 13,000*l.* left for that purpose by the late John Jarratt, Esq., a native of Doncaster. The spire, 160 feet high, was much injured by lightning in November, 1836. The Independents, Baptists, Wesleyan and Primitive Methodists, Quakers, Roman Catholics, and Unitarians have places of worship. The educational establishments of Doncaster are numerous and well supported. The Grammar school, which has an endowment of 19*l.* a year and a voluntary payment from the corporation of 80*l.* a year, had 32 scholars in 1853. There are also National and British schools. The Yorkshire institution for the deaf and dumb is a school of instruction and industry, and is very successfully conducted. Other institutions are the subscription library, the mechanics and apprentices library, and the Lyceum literary and scientific society. A valuable library also belongs to the church, which is accessible to all the inhabitants. There is a savings bank. The public charities are numerous. St. Thomas's hospital, endowed in 1588 by Thomas Ellis, is an asylum for six "poor and decayed housekeepers of good name and fame." Quintin Kay's charity of 300*l.* per annum is chiefly devoted to the relief of poor and reduced persons, and to the apprenticing of six poor children to mechanical or handicraft trades. Jarratt's charity is for the relief of six reduced housekeepers. The other charities in Doncaster are the dispensary, the lying-in, clothing, sick, and soup charities.

Doncaster has some iron and brass foundries, sacking and linen manufactories, rope-works, a flax spinning-mill, and manufactories of agricultural machiues. The market is held on Saturday. There are four annual fairs for cattle, horses, sheep, and woollen cloth. A wool market is held weekly, on Saturday, in June and July; also on the first Saturdays of August, September, and October. The corn market is one of the largest in the kingdom. A covered corn exchange was erected in 1843. The walks and drives in the vicinity of the town, and the pleasing character of the surrounding scenery, render

Doncaster a desirable place for visitors. Another cause of attraction is furnished by the annual races. These are held in the third week of September, and continue for five days. It is said that they are a source of great emolument to the town, but this has been doubted. It is certain that they are productive of much immorality. The race-ground, which is about a mile from the town, is perhaps unrivalled. The grand stand, a handsome and commodious edifice, was erected by the corporation of Doncaster. The St. Leger stakes excite great interest not only throughout the kingdom, but in all parts of the world. The municipal body subscribes largely to the maintenance of the races, under the idea that they tend to the prosperity of the town.

DONEGAL, a maritime county of the province of Ulster in Ireland, lies between 54° 27' and 55° 22' N. lat., 6° 55' and 8° 48' W. long.; it is bounded E. and S. on the inland side by parts of the counties of Londonderry, Tyrone, Fermanagh, and Leitrim, and S.W., W., and N. by the Atlantic Ocean. The greatest length from Inishowen Head on the north-east to Malin Beg Head (sometimes called Teelin Head) on the south-west is 85 statute miles; the greatest breadth from Fearn Hill on the south-east to Horn Head on the north-west is 41 statute miles. The area, according to the Ordnance Survey of Ireland, comprises 1865 square miles, or 1,193,443 acres, of which 393,191 acres are arable, 769,587 uncultivated, 7079 in plantations, 479 in towns, and 23,107 under water. The population in 1851 was 255,160.

Surface, Hydrography, Communications.—Donegal forms the north-western extremity of Ireland. The inland boundary preserves a general direction of south-west by north-east, and from Lifford northward is formed by the navigable river and harbour of Lough Foyle. The maritime boundary is extremely irregular, being deeply indented on the north by the estuaries of Lough Swilly, Mulroy, and Sheep Haven, and on the south by Donegal Bay. The whole county is uneven and mountainous, with the exception of the midland district extending from the liberties of Londonderry westward to Letterkenny and Rathmelton, on Lough Swilly, and southward along the Foyle to Lifford and Castle Finn; and some other inconsiderable tracts around Ballyshannon and Donegal on the south and Dunfanaghy and Buncrana on the north. The mountain groups of Donegal, together with the highlands of Tyrone and Derry, present a deeply withdrawn amphitheatre to the north-east inclosing the basin of the Foyle. That portion of the mountainous circuit which lies within this county is broken only in the north by the openings of Lough Swilly and Mulroy Bay; and on the south (where the connecting highlands of Donegal and Tyrone are narrowed between the valley of the Finn and the Bay of Donegal) by the gap of Barnesmore. Slieve Snaght, which rises to a height of 2019 feet in the centre of the peninsula of Inishowen, forms the extremity of this chain on the north. Westward from Slieve Snaght, and similarly situated in the centre of the peninsula of Fanad between Lough Swilly and Mulroy Bay, is Knockalla, 1196 feet, hacked in like manner by Lough Salt Mountain, 1541 feet, between the head of Mulroy Bay and the low country stretching inland from Sheep Haven. Westward again from Sheep Haven is Muckish, 2190 feet in height, which slopes down on the north to the promontory of Horn Head; and Carnreana (1306 feet), which extends to the sea at Bloody Foreland. Southward from Muckish stretches a vast region of highlands, which expands towards the west in wide-extended tracts of bog, interspersed with small lakes and covered with black heaths down to the sandy beach of the Atlantic: on the east it presents a series of bold continuous eminences overhanging the basin of the Foyle. The chief eminences of the chain are Erigal and Dooish on the north, the first 2462 feet in height (the highest ground in the county), the second 2143 feet; and Bluestack, 2213 feet, and Silverhill, 1967 feet, both on the south. From Bluestack extends a series of considerable elevations westward, along the northern boundary of the Bay of Donegal, terminating in the precipices of Slieve League and the promontory of Malin Beg; the Barnesmore Mountains sweeping eastward continue the chain into Tyrone. This mountainous tract covers upwards of 700 square miles. It contains several spots of great interest to the tourist, such as Lough Salt, the prospect from which over Horn Head and Tory Island has been justly celebrated; and Glen Veagh, under the eastern declivity of Dooish, where cliffs of 1000 feet hang for upwards of two miles over a glen and lake, the opposite bank being clothed with a natural forest, which is still the retreat of the red deer.

From the liberties of Londonderry northward the coast of Lough Foyle between the mountains of Inishowen and the sea is well inhabited and improved. From Inishowen Head, at the entrance of Lough Foyle, the coast, which from this point is very rocky and precipitous, bends north-west to Malin Head, the most northern point of this county and of Ireland. The cliffs at Inishowen Head are 313 feet in height; at Bin Head, about half-way between Culdaff and Malin, they rise to the altitude of 814 feet above the sea. On the Lough Swilly side of the peninsula the coast is low, and in many places covered with sand, which the north-westerly gales heap up in immense quantities on all the exposed beaches of this coast. Lough Swilly extends inland upwards of 20 miles, and forms a spacious and secure harbour; the average breadth is about a mile and a half, and the inner basin is completely land-locked; but the vicinity of Lough

Foyle, which floats vessels of 900 tons up to the bridge of Derry, renders Lough Swilly of less importance as a harbour. Westward from Lough Swilly the coast of Fanad, which is peninsulated by the Bay of Mulroy, is very rugged, and in many parts overspread with sand blown in between the higher points of rock. The Bay of Mulroy is encumbered with sand-banks and intricate windings; it extends inland upwards of 10 miles, and is completely land-locked, being scarcely half a quarter of a mile wide at the entrance. The small peninsula of Roanuil, intercepted between this bay and Sheep Haven, has been almost obliterated by the sands which have been blown in here within the last century. On the opposite shore of Sheep Haven stand Doe Castle, and the house and demesne of Ardes, the most remote and at the same time the most splendid seat in this quarter of Ulster. On a creek of Sheep Haven is the little port-town of Dunfanaghy, immediately under Horn Head, which rises north of it to the height of 833 feet, with a cliff to the ocean of 626 feet. In the sound between Horn Head and Bloody Foreland are the islands of Innisboffin, Luishdoony, and Tory Island, which last is at a distance of 8 miles from the shore. Tory Island is 3½ miles in length, by half a mile to three-quarters of a mile in breadth, and is inhabited by perhaps the most primitive race of people in the United Kingdom. The average elevation of the western part of the island is no more than from 50 to 60 feet above the level of the sea, and the want of shelter is felt very severely in those north-westerly gales which set in with such violence on this coast.

From Bloody Foreland south to Malin Beg Head, a distance of 40 miles in a straight line, nothing can be more desolate than the aspect of the western coast of Donegal. Vast moors studded with pools of bog water descend to the Atlantic between barren deltas of sand, through which each river and rivulet of the coast winds its way to the sea. In winter when these sandy channels are overflowed it is impossible to proceed by the coast-line, as there are no bridges over any of the larger streams north of the village of Glenties. The wildest part of this district is called the Rosses, in which the village of Dungloe, or Cloghanca, is the principal place. A great number of islands lie off this coast, separated from the mainland and from one another by narrow sounds and sand-banks. Of these eleven are inhabited, of which the principal are:—Aranmore, or the north Island of Aran; Rutland, or Innismacdrum; Innisfree, and Owey. The herring fishery was very successful here in 1784 and 1785; each winter's fishing was calculated to have produced the inhabitants of the Rosses a sum of 40,000*l.* They loaded with herrings upwards of 300 vessels in each of these years. These successes induced the government, in conjunction with the Marquis of Conyngham, the proprietor, to expend a large sum of money in the improvements necessary to erect a permanent fishing station on the island of Innismacdrum. A small town was built and called Rutland, but it was scarcely completed when the herrings began to desert the coast; at the same time the sands began to accumulate: at present the island is nearly half covered with sand, and the fishing station is quite obliterated. Below high-water mark on the coast of Luishfree grows a marine grass peculiarly sweet and nutritive for cattle, which watch the ebb of the tide and feed upon it at every low water.

The district of the Rosses is separated from the more reclaimed country about Glenties and Ardara on the south by the river Gweeharra, the sandy channel of which is from a mile and a half to a quarter of a mile in breadth throughout the last eight miles of its course, and can only be passed by fording in dry weather. Westward from Ardara the coast is lined with cliffs from 500 to 600 feet in height on the northern side of the great promontory terminated by Malin Beg Head. The loftiest cliffs however on the whole line of coast are those of Slieve League immediately east of Malin Beg, where the height from the sea to the summit of the shelving rock above is at one point 1964 feet. Eastward from Slieve League to the town of Donegal the northern shore of Donegal Bay affords excellent shelter from the north-west gales in several successive creeks. Of these the harbour of Killybeggs is very much the most sheltered and commodious, being the only one secure from a gale from the west or the south-west. The harbour of Donegal itself at the head of the bay is sufficiently good for a much more busy trading place; and 10 miles S. from it is the embouchure of the navigable river Erne, which flows from Lough Erne through Ballyshannon. Round the head of Donegal Bay from Killybeggs to Bundoran cultivation extends more or less up all the seaward declivities: the neighbourhood of Ballyshannon is well improved; and north-east from the town of Donegal a good tract of arable land stretches inland to the picturesque lake of Lough Esak and the Gap of Barnesmore, where a mountain defile of the most romantic character, about seven miles in length, connects it with the south-western extremity of the district of the Foyle.

The *Finn*, which is the chief feeder of the Foyle on this side, issues from a lake of 438 feet above the level of the sea, situated in the centre of the mountain chain extending south of Erigal, and after a course of about 30 miles eastward joins the Foyle at Lifford bridge, 8 miles below Castlefinn, where it is navigable for boats of 14 tons. Other feeders of the Foyle out of Donegal are:—the Derg, which comes from Lough Derg, in the south-eastern extremity of the county of Donegal, and joins the main stream in Tyrone; the Doeck, which

has a course nearly parallel to the Finn, and descends upwards of 800 feet in its course from Lough Deels to the Foyle, which it joins a mile below Lifford; and the Swilly burn or brook, which passes by Raphoe, and is navigable for a few miles above its junction. Lough Derg is about 2½ miles wide each way, and surrounded on all sides except the south by steep and barren mountains: it is 467 feet above the level of the sea, and its greatest depth is 75 feet. This lake is subject to violent gusts of wind. It abounds in excellent trout. The Swilly River, although it has a course of little more than 15 miles, brings down a good body of water through Letterkenny to Lough Swilly. The Leannan River, which likewise flows into Lough Swilly by Rathmelton, is a considerable stream, as is also the Lackagh, which discharges the waters of the lakes of Gartan, Lough Veagh, Lough Salt, and Glen Lough into Sheep Haven. The waters of Lough Salt, which is perhaps the deepest pool in Ireland, descend 731 feet in a course of little more than three miles to Glen Lough. Of the rivers of the western coast the chief is the Gweebarra, already mentioned: of a similar character is the Gweedore, which separates the Rosses on the north from the district of Cloghanealy. The Oweness, which flows through Ardara, is the only other considerable river on this coast; the minor streams issuing from small lakes and the torrents which descend from the moors in winter are almost innumerable.

The general direction of all the valleys which intersect the highlands of Donegal is north-east and south-west, and this natural disposition marks out the three chief lines of mountain road; namely, from Ballyshannon and Donegal to Lifford and Londonderry, through the Gap of Barmore; from Ardara to Lifford and Letterkenny, by the head of the Finn; and from Dunfanaghy and the cultivated country about Sheep Haven into the Rosses, by the passes between Doosh and Erigal. These latter roads are little frequented, so that west of Enniskillen the Gap of Barmore is the only ordinary communication between Connaught and Ulster. The district along the Foyle and round the head of Lough Swilly is as well supplied with means of communication by land and water as any other part of Ireland. Throughout the county the roads are good.

Geology, Mineralogy, &c.—The Floetz limestone field, which occupies the central plain of Ireland, extends over the borders of this county from Bundoran, where the limestone cliff rises to the height of 100 feet over the Atlantic, 10 miles north-east to Ballintra, where the extreme edge of the stratum is perforated by a subterraneous river. Limestone gravel is also found along the flanks of the primitive district as far as some miles north of Donegal town, and to the presence of this valuable substance may be chiefly attributed the cultivation which distinguishes this part of the county from the sterile tract that separates it from the basin of the Foyle. From the mountains of Barmore, north, the whole formation of this county, with the exception of the transition tract along the basin of the Foyle, is primitive.

The prevalent rocks are granite and mica-slate, passing into gneiss, quartz-slate, and clay-slate. The granite is a coarse granular sienite, the detritus of which gives a strong reddish tinge to the sands washed down by the streams that traverse it. It occurs supporting flanks of mica-slate along the whole line of mountains from Lough Salt to Barmore. On the eastern flanks of this range the mica-slate passes into grauwacke, which forms the substratum of the valley of the Foyle: the same rock occurs over the lower parts of Inishowen, and also appears on the southern side of the range near Donegal town. Granular limestone is found in beds throughout the whole mountain district in great quantity and variety of colour, as, among various other indications, gray at Malin Head; grayish-blue at Lough Salt; fawn granular, pearl-white, pearl-gray, flesh-red, and bright bluish-gray at the marble hill near Muckish; yellowish-white, grayish-white, and rose-red at Ballymore; pearl-white and pale rose-colour at Dunlewy, under Erigal; pearl-gray in extensive beds at the head of the river Finn; and grayish fine blue at Killybegs. Siliciferous, magnesian, and marly limestone also occur in various parts of the baronies of Inishowen and Raphoe, with a remarkable steatite near Convooy, on the Deelo, which cuts under the knife like wood, and is used by the country people for the bowls of tobacco-pipes. Beds of greenstone and greenstone-porphry are sometimes found resting on the deposits of granular limestone, and occasionally on the mica-slate and granite, and the dikes from which these originate may be seen traversing the primitive rock at Horn Head and Bloody Foreland. Among the rarer minerals occurring in this remarkable region are columnar idocrase, malacolithe, epidote, and essonite (cinnamon-stone), from a bed of mica-slate in the Rosses, and from the bar of the Gweebarra River; garnet in hornblende-slate over the marble of Dunlewy, and cherry-red garnet from Glenties; also plumbago from the shore of Ardes; copper pyrites from Horn Head; lead-earth and iron-ochre from Kildrum in Cloghanealy; pearl-white and yellowish-whits porcelain clay from Aranmore Island; potter's-clay from Drumardagh, on Lough Swilly; iron pyrites from Barmore; lead-ore from Finntown, Letterkenny, Glentogher, and various other places; and pips-clay from Drumboe, near Stranorlar. The whits marble of Dunlewy, near the mountain Erigal, is stated to be of an excellent quality, and its bed very extensive; it has been traced over a space of half a mile square, and is so finely granular that it may be employed in the nicest works of sculpture. "Its texture and whiteness," says Mr. Griffith, "approach more

to those of the Parian than of the Carrara marbles. It is very well known that perfect blocks of the Carrara marble are procured with great difficulty, and I firmly believe that the marble of Dunlewy is free from mica, quartz grains, and other substances interfering with the chisel, which so frequently disappoint the artists who work upon the marble from Carrara." A large supply of fine siliceous sand was formerly drawn from the mountain of Muckish by the glass-houses of Belfast, and considerable quantities have been exported to Dumbarton for the manufacture of plate and crown glass.

Climate, Soil, Agriculture, &c.—The climate of Donegal is raw and boisterous, except in the sheltered country along the Foyle. The prevalent winds are from the west and north-west, and they sometimes blow with extreme violence. In a storm on December 4, 1811, H.M. ship Salhander was lost in Lough Swilly. The maws and gills of all the fish cast on shore by the violence of the storm—eels, cod, haddock, lobsters, &c.—were filled with sand; from which it would appear that by the furious agitation of the sea the sand had become so blended with it that the fish were suffocated. From the remains of natural forests in many situations where no timber will at present rise against the north-west blast, it has been inferred that the climate is now more severe than it formerly was, a conjecture which would seem to be corroborated by numerous ruins of churches and houses, overwhelmed by sand blown in on situations where, had such events been common at the time of their foundation, no one would have ventured to build.

The soil of the primitive district is generally cold, moory, and thin. The limestone tract from Ballyshannon to Donegal is covered with a warm friable soil, varying from a deep rich mould to a light-brown gravelly earth. The soil of the transition district, arising chiefly from the decomposition of slaty rock, is a light but manageable clay, which is very well adapted for crops of potatoes, flax, oats, and barley, and in some situations, as along the rivers Finn and Foyle, bears wheat abundantly. In 1851 the area under crops in the county was 227,453 acres, of which 6470 acres grew wheat, 100,882 oats, 10,141 barley, bere, and rye, 1254 beans and peas, 34,432 potatoes, 19,595 turnips, and 2086 green crops. The number of holdings was 32,752. Donegal is not a grazing county: the good land is almost all under tillage; and the grasses of the remainder are generally too sour for feeding. The Raphoe and Tyrhugh farming societies originated about A.D. 1800, and have been of service in the encouragement of green crops and nurseries. The principal plantations are at Ardes and Tyrallen, a fine seat near Stranorlar. Improvements have been introduced of late years by various public-spirited proprietors.

The linen manufacture is increasing in the cultivated country about Raphoe and Lifford, and also in the neighbourhood of Ballyshannon. Bleachgreens are numerous in the neighbourhood of Stranorlar. Strabane, in the county of Tyrone, within two miles of Lifford, is the principal linen market for the southern district. Londonderry and Letterkenny are the markets for the district to the north. Burning kelp continues to be a profitable occupation along the coast. Considerable numbers of whales have from time to time been taken off this coast; but this, as well as the herring-fishery, is now neglected.

There is considerable fishing in Lough Foyle and at various points around the coast. Turbot, cod, soles, and plaice are taken in large numbers; herrings, mackerel, and various other fish are also largely taken.

The condition of the peasantry in the south and west of the county is not much better than that of the wretched inhabitants of northern Connaught. All the butter and eggs of the poorer farmers go to market to make up the rent, and buttermilk and potatoes constitute their diet.

Donegal is divided into six baronies: Tyrhugh on the south, Bannagh and Boylagh on the west, Kilmacrennan on the north-west, Inishowen on the north-east, and Raphoe on the east and centre. BALLYSHANNON, Killybegs, and DONEGAL were erected into corporations in the reign of James I.; these corporations are now extinct. Lifford, which is the assize-town of the county, is governed by a charter of the 27th February, 10th James I. The vicinity of Strabane has prevented Lifford from increasing: the court-house and county jail constitute the greater part of the town. The other towns are LETTERKENNY, Rathmelton, Buncrana, Ballybofey, and STRANORLAR. DUNFANAGHY, GLENTIES, and MILLFORD are seats of Poor-Law Unions. RAPHOE, in conjunction with Derry, gives name to a bishop. The places whose names are printed in small capitals will be found described under their respective titles; the other towns and villages claiming notices are the following:—

Ardara, population 651, occupies a romantic site at the head of Loughros-beg Bay, about 17 miles N.W. from Donegal. Besides the Episcopal church there are here chapels for Roman Catholics and Wesleyan Methodists. Petty sessions are held monthly, and fairs in May, August, and December. *Ballintra*, 6 miles S. by W. from Donegal, lies in a very beautiful country, but is itself a poor village: population, 458 in 1851. Six fairs are held in the course of the year. There is a dispensary. In the neighbourhood are some good villa residences. *Ballybofey* is a market-town about half a mile from Stranorlar, of which it is generally considered the market part: population, 985. The town is pleasantly situated on the Finn River, and, with Stranorlar, is the most westerly town in the county, lying

just at the commencement of the wild, rugged mountain-tract. The town has very little trade. In the neighbourhood are some bleaching-grounds. The extensive demesne of Drumboe adjoins Ballybofey. *Ballygorman*, situated on the peninsula of Malin Head, is the most northerly village in Ireland: population of the townland, 467. Near the village is Malin Head, the extreme point of the peninsula. *Buncrana*, 14 miles N.N.W. from Londonderry, a market and post-town on the right bank of Lough Swilly, population 797, is an agreeable little town, much frequented by summer visitors as a bathing-place. The church, which has a fine spire, some Dissenting chapels, the sessions-house, and infantry barracks, are the chief public buildings. Flax and corn-mills in the vicinity are worked by water-power obtained from the Castle and Mill rivulets. *Buncrana* is an inconsiderable fishing-station. *Buncrana Castle*, in the immediate vicinity, was founded by the O'Donnells, the ancient chieftains of the district. Fairs are held on May 9th and July 27th. *Carndonagh*, or *Carn*, 20 miles N. by E. from Londonderry, a small market-town on the road from Londonderry to Malin Head, population 708, and Inishowen workhouse 647, is a neat, well-built town, with some trade. *Castletinn*, population 637, is a small market-town, situated on the river Finn, about 7 miles S.W. from Lifford. The tide-water flows up to the town. The valley of the Finn is well cultivated. Manor courts are held here, and there are seven fairs in the course of the year. *Dungloe*, 25 miles N.N.W. from Donegal, population 484, is a small and sequestered village, which, from its being the largest within an extensive and dreary tract of wild country, is a place of some importance. It contains a church, a chapel, and police-barracks. Large portions of the surrounding bogs have been reclaimed by the villagers. Fishing is carried on, but the bay being shallow the takings are small. *Killybegs*, 15 miles W. from Donegal, is a market and sea-port town: population, 819. The town is irregularly built, and the streets are narrow and inconvenient. The harbour is good, but the exports are few and of little value: at some seasons large numbers of fishing-boats resort to the harbour. The market is held on Tuesday, and there are fairs in January, April, June, August, and November. The town was formerly called *Callegge*, and is a place of considerable antiquity: it was created a borough in the reign of James II., and sent two members to Parliament, but it has long been disfranchised. *Lifford*, 13 miles E.N.E. from Londonderry, is a market and assize-town; it was formerly a parliamentary borough: population, including the suburb of Strabane, 570, and 183 inmates of the jail. It is a very small and poor town, consisting principally of two streets, and is built on the river Foyle, formed here by the junction of the rivers Finn and Mourne. The town has scarcely any trade, and bears evident marks of decline. The old jail was used until very lately as a place of confinement for idiots and lunatics; the new jail is a semicircular building of considerable extent, and is remarkable for neatness, cleanliness, and good order. The county infirmary is situated here. *Lifford* gives the title of viscount to the Hewitt family. *Mountcharles*, 4 miles W. by S. from Donegal, population 444, is situated on the Bay of Donegal, and is built along the summit of a rocky eminence. The Hall, a small residence of the Marquis of Conyngham, to whom *Mountcharles* gives the title of viscount, is close to the village. Fairs are held here monthly. *Moville*, population 776, situated on the west shore of Lough Foyle, about 20 miles S.E. from Carndonagh, is a pleasant little watering-place. During the summer there is regular communication with Londonderry by steam-vessels. The neighbourhood is exceedingly picturesque. There are several chapels in the town. Petty sessions are held monthly, and seven fairs are held in the course of the year. *Pettigoe*, population 390, is prettily situated about a mile from the embouchure of the Tarmon into Lough Erne. Besides the church there are here chapels for Roman Catholics and Wesleyan Methodists. Petty sessions are held in the town: there are fairs on the 20th of each month. *Rathmelton*, or *Ramelton*, 25 miles N.E. from Donegal, population 1428, is a market-town, situated on the right bank of the river Leanan, near the place where it falls into Lough Swilly. The town has a clean and somewhat cheerful appearance. There are corn-mills, a hewery, and bleaching-grounds; linen is woven in the weavers' houses. Besides the church there are Presbyterian and Methodist chapels. Three annual fairs are held. The valley of the Leanan in the neighbourhood of Rathmelton is extremely beautiful: the river flows through a picturesque and well-wooded glen, and the heights on either hand are considerably diversified. A few miles from Rathmelton, on the same side of Lough Swilly, is the fishing village of *Rathmullen*: population, 639. It is a poor place of one irregular street. There are some ruins of a Carmelite monastery.

The southern part of Donegal, down to the plantation of Ulster, was known as Tyrconnell, and was the patrimony of the O'Donnells. The most distinguished of the chieftains of Tyrconnell was Hugh O'Donnell, surnamed the Red, whose entrapment by Sir John Perrot, and subsequent imprisonment at Dublin as a hostage for the good conduct of his clan, caused much hostility against the government of Queen Elizabeth in this part of Ulster. O'Donnell, after more than three years' confinement, escaped, and took an active part in the rebellion of the Earl of Tyrone. In December, 1601, Tyrone and O'Donnell attempted the relief of Kinsale, in which their Spanish auxiliaries were besieged by the lord deputy, but owing, it is said, to

a dispute about precedence, their armies did not act in concert, and a total defeat was the consequence. O'Donnell then sailed for Spain, to solicit in person new succours from Philip. After spending a year and a half in fruitless negotiation, he was seized with fever and died at Valladolid, where he was interred with royal honours in the church of St. Francis. In the meantime a town had been walled in at Derry by Sir Henry Doekwra, who had also built a castle at Lifford for the control of Tyrconnell. The levity of an English garrison proved so unsatisfactory to the proprietor of Inishowen, Sir Cahir O'Dogherty, that on some vague assurances of aid from Spain, communicated by the exiled earls, he broke into open revolt May 1st, 1608, and having surprised Culmore and put the garrison to the sword, advanced on Derry next day, which he carried with little resistance and burned to the ground. He then fell back on Kilmacrenau, and took up a strong position on the rock of Doune, where he held out for five months until he was killed by a Scotch settler, who shot him as he leaned over the edge of the rock. O'Dogherty being thus slain in rebellion and the exiled earls attainted of high treason, Donegal, along with five other counties of Ulster, escheated to the crown. On the plantation of Ulster, the district about Lifford was allotted to English undertakers, of whom the chief were Sir Ralph Bingley and Sir John Kingsmill. In Inishowen Muff was granted to Grocers' Hall. Letterkenny owes its origin to Sir George Marburie, and Rathmelton to Sir William Stewart. There were some few forfeitures among the proprietors of Irish descent at the time of the Act of Settlement. The forfeitures consequent on the war of the revolution of 1688 did not extend into Donegal. The last historical event connected with this county was the capture of the French fleet off Tory Island by Sir John B. Warren in 1798.

The most remarkable piece of antiquity in Donegal is the Grianan of Ailceach, the palace of the northern Irish kings from the most remote antiquity down to the 12th century. It stands on a small mountain 802 feet in height, near the head of Lough Swilly. The summit of the mountain, which commands a noble prospect, is surrounded by three concentric ramparts of earth intermixed with uncemented stones. The approach by an ancient paved road leads through these by a hollow way to a dun or stone fortress in the centre. This part of the work consists of a circular wall of Cyclopean architecture, varying in breadth from 15 feet to 11 feet 6 inches, and at present about 6 feet high, inclosing an area of 77 feet 6 inches in diameter. The thickness of this wall is diminished at about 5 feet from the base by a terrace extending round the interior, from which there are flights of steps somewhat similar to those at Steague Fort, another remarkable Cyclopean erection in the county of Kerry. There was probably a succession of several such terraces before the upper part of the wall was demolished. Within the thickness of this wall, opening off the interior, are two galleries, 2 feet 2 inches wide at bottom and 1 foot 11 inches at top by 5 feet in height, which extend round one-half of the circumference on each side of the entrance doorway, with which however they do not communicate: their use has not been determined. The remains of a small oblong building of more recent date, but of uncertain origin, occupy the centre. The space contained within the outer inclosure is about 5½ acres; within the second, about 4 acres; within the third, about 1 acre; and within the central building, or eschell, a quarter of an acre. The stones of the wall are generally of about 2 feet in length, polygonal, not laid in courses, or chiselled, and without cement of any kind.

The description is thus minute, as from an ancient Irish poem published in the first part of the 'Memoir of the Ordnance Survey of Ireland,' and which bears conclusive internal evidence of having been written before A.D. 1101, the building of Ailceach ('the stone fortress') is attributed with every appearance of accuracy to Eochy Ollahir, whose reign is one of the very earliest historical epochs in Irish history. In this poem are preserved the names of the architects, the number of the ramparts, and the occasion of the undertaking. Until the publication of the Memoir, the uses and history of this remarkable edifice were totally unknown. It was reduced to its present state of ruin in 1101, by Murtagh O'Brien, king of Munster, who, in revenge for the destruction of Kincora by Donnell Mac Loughlin, king of Ulster, A.D. 1088, invaded this district and caused a stone of the demolished fortress of Ailceach to be brought to Limerick for every sack of plunder carried home by his soldiery. This event was remembered as late as 1599, when the plunder of Thomond by Hugh O'Donnell was regarded as a just retaliation. On Tory Island also are some Cyclopean remains, not improbably connected with the very ancient tradition of the glass tower mentioned by Nennius. Tory signifies the 'island of the tower.' On the same island are also a round-tower and the remains of seven churches and two stone crosses. Throughout the county are numerous memorials of St. Columba, or St. Columbkille, the name by which he is more usually known in Ireland. This distinguished saint, the apostle of the Piets and founder of the Church of Iona, was born at Gratan, a small village south of Kilmacrenan, where he founded an abbey which was afterwards richly endowed by the O'Donnells. Near Kilmacrenan is the rock of Doune, on which the O'Donnell was always inaugurated. The remains of the abbey of Donegal still possess interest for the antiquary, and on the north of Glen Veach are some very ancient remains of churches. But by much the most celebrated ecclesiastical locality in this county is the

Purgatory of St. Patrick, situated on an island in Lough Derg. The ancient purgatory was in high repute during the middle ages: the penitent was supposed to pass through ordeals and undergo temptations similar to those ascribed to the Egyptian mysteries. (See O'Sullivan's 'Hist. Cathol. Hib.' and Thomas Wright's 'St. Patrick's Purgatory.') On St. Patrick's Day, in 1497, the cave and buildings on the island were demolished by order of Pope Alexander VI., but were soon after repaired: they were again razed by Sir James Balfour and Sir William Stewart, who were commissioned for that purpose by the Irish government in 1632. At this time the establishment consisted of an abbot and forty friars, and the daily resort of pilgrims averaged four hundred and fifty. The cave was again opened in the time of James II., and again closed in 1730. At present the Purgatory, which has been a fourth time set up, but on an island at a greater distance from the shore than the two former, draws an immense concourse of the lower orders of Roman Catholics from all parts of Ireland, and many from Great Britain and America every year. The establishment consists during the time of the station (from the 1st of June to the 15th of August), of twenty-four priests: the pilgrims remain there six or nine days: the penances consist of prayer, maceration, fasting, and a vigil of twenty-four hours in a sort of vault called the 'prison.' During the time the pilgrims remain on the island they are not permitted to eat anything but oaten bread and water. Water warmed in a large boiler on the island is given to those who are faint; this hot water is called 'wine,' and is supposed to possess many virtues. One of the pilgrims whom Mr. Inglis saw here, had her lips covered with blisters from the heat of the 'wine' she had drunk. The number of pilgrims is variously estimated from 10,000 to 20,000 annually.

The county of Donegal is chiefly in the diocese of Derry and Raphoe, but partly in that of Clogher. The county returns two members to the Imperial Parliament. Quarter Sessions are held at Buncrana, Donegal, Glenties, Letterkenny, and Lifford. Assizes are held twice a year at Lifford, where there is a county jail: there are bridewells at Donegal, Letterkenny, Lifford, Buncrana, and Glenties. The county infirmary is at Lifford. The district lunatic asylum, to which the county of Donegal sends 85 patients, is at Londonderry. Fever hospitals are at Letterkenny, Rathmelton, and Dunfanaghy, and there are 25 dispensaries in the county. The county is divided into six Poor-Law Unions, and portions of two other Unions. Donegal county is within the military district of Belfast. There are artillery stations at the forts of Rathmullen, Knockalla, Macomish, Dunree, Inch and Ned's Point, on Lough Swilly, and at Greencastle on Lough Foyle. Barracks for infantry are at Ballyshannon and Lifford. The County Constabulary force, numbering 275, officers included, has its head-quarters at Letterkenny. The county is divided into 8 constabulary districts, of which the head-quarters are—Rathmelton, Raphoe, Buncrana, Ballyshannon, Killybegs, Glenties, Dunfanaghy, and Carnadonagh. There are 32 stations of the coast-guard, and 18 stations of the revenue police.

(*Statistical Survey of Donegal; Memoirs of Ordnance Survey of Ireland; Thom, Irish Almanac; Parliamentary Papers, &c.*)

DONEGAL, county of Donegal, Ireland, a market and sea-port town, and the seat of a Poor-Law Union, chiefly in the parish of Donegal and barony of Tyrhugh, is situated in 54° 8' N. lat., 8° 1' W. long.; 120 miles N.W. by N. from Dublin. The population in 1851 was 1580. Donegal Poor-Law Union comprises 18 electoral divisions, with an area of 160,158 acres, and a population in 1851 of 33,703.

Donegal is situated at the mouth of the river Esk, and is surrounded on three sides by lofty hills, while the fourth side is open to the sea. Besides the parish church, which is a neat edifice, there are chapels for Roman Catholics, Presbyterians, Independents, and Methodists. There are here a bridewell and a dispensary. Petty sessions are held monthly. A fair is held on the second Friday in each month.

The town contains a spacious market-place. A good market-quay, with 9 feet of water, was built some years ago at the expense of the Earl of Arran; the harbour has a sufficient depth at low-water for vessels drawing 12 feet. Donegal was incorporated as a borough in the reign of James I., and sent two members to the Irish Parliament, but at the union the corporation became extinct.

Donegal Castle, a former seat of the O'Donnells, earls of Tyrconnell, is situated close to the river side, and is still in tolerable preservation; it is now carefully protected from further dilapidation. A monastery for Franciscans was founded here in 1474; the ruins are still standing on the shore below the town. A sulphureous spa of considerable celebrity adjoins the town. The neighbourhood of Donegal is of a very romantic character.

(*Fraser, Handbook of Ireland; Thom, Irish Almanac.*)

DONERAILE. [CORK.]

DO'NGOLA, a province of Upper Nubia, extending southward from 19° 30' N. lat., along the banks of the Nile as far as Korti, about 18° N. lat., where it borders on the country of the Sheygia Arabs. The Nile coming from Sennaar flows in a northern direction through Halfay, Sheudy, and the Barabra country to about 19° N. lat., 33° E. long., where it suddenly turns to the south-south-west, passing through the Sheygia country. After passing below the rock of Barkal, as it reaches the town or village of Korti, its course assumes a direction nearly due west, which it continues for about 20 or 30 miles and

then resumes its north direction towards Egypt. The province called Dongola stretches along the banks of the river from Korti first to the westward and then northward, following the bend of the stream to below the island of Argo, where it borders on Dar-Mahass, which last is a distant province of Nubia.

The island of Argo, 30 miles long and about 7 miles wide at its broadest part, is formed by the rich alluvial deposit of the Nile. It contains several villages, but the population, as in other parts of the country, is too scanty to cultivate all the fertile soil. The chief products of the island—corn, cotton, indigo, and dates—are grown along the margin of the island, the interior being useless without irrigation; indeed such is the deficiency of labour and capital that not more than one-tenth of this magnificent island is under cultivation.

The whole length of Dongola is about 150 miles, and its breadth may be considered as extending no farther than the strip of cultivable land on each bank, which varies from 1 to 3 miles in breadth, beyond which is the desert. The left or west bank is the more fertile, the eastern being in most places barren, and the sands of the desert stretching close to the water's edge. The principal town is Marakah, or New Dongola, which stands on the left bank of the Nile, in 19° 10' 19" N. lat., 30° 22' 15" E. long. It was in great measure built by the Mamclukes during their possession of the country from 1812 to 1820, when they were driven away by Ismail, son of the pasha of Egypt. The town is populous, and important for its trade and as a military station. Its exports are chiefly slaves in return for a variety of goods from Cairo. The pasha has an indigo factory in Dongola. Caravans from Kordofan, Khartoum, and Sennaar pass through the town. The bazaar is supplied with coarse calicoes, printed cotton handkerchiefs, rice, sugar, coffee, hardware, shoes, and perfumes, all of which are brought here from Cairo. Agriculture is much neglected in the vicinity of the town, chiefly in consequence of the difficulty of irrigation. Farther south and on the right bank of the Nile is Dongola Agous, or Old Dongola, formerly a considerable town, but now reduced to about 300 inhabitants. From the prevalence of northerly winds the sand of the desert has been heaped up about the houses of Old Dongola, so that many of them are entered from the roof. From the village of Debbah, a little south of Old Dongola, on the left bank of the Nile, caravans start for Kordofan. Ambukol, another village, is farther south and about a mile from the river. Between this place and New Dongola the land is less waste on the islands than on the banks. Most of the islands are well cultivated and produce abundant crops, but in consequence of excessive taxation and the government monopolising the sale of most of the products the peasantry are very poor. There is a bazaar at Ambukol; and dhurra, cattle, sheep, goats, asses, butter, grease, and excellent cotton are sold. At Korti, a few hours eastward of Ambukol, there are bazaars for the sale of cattle, sheep, goats, asses, dates, coarse cotton-cloth, perfumes, grease, &c.

Dongola was a Christian country till the 14th century, and Ibn Batuta speaks of it as such. Makrizi in the 15th century describes Dongola as a fertile and rich country with many towns; and Poncet, who in 1693 visited Old Dongola and its king and court, speaks of it as a considerable place. After Poncet's time the Sheygia Arabs desolated Dongola, and reduced it to subjection during a great part of the 18th century. Dongola is now a Beylik dependent on the pasha of Egypt; the bey resides at Marakah, and has jurisdiction also over the country of the Sheygia Arabs, who from being independent have been reduced to abject poverty under the Turkish rule. The natives of Dongola resemble those of Lower Nubia in appearance; they are black but not negroes; they produce indigo, dhurra, barley, beans, and have sheep, goats, and some large cattle. All the indigo grown must be sold to the pasha. The fine horses which in Egypt are known by the name of Dongola come chiefly from the Sheygia or Barabra countries. The houses are built of unbaked bricks, made of clay and chopped straw.

(Waddington and Hanbury, *Travels*; Caillaud, *Travels*; Ruppel Macgregor, *Commercial Statistics*.)

DONINGTON. [LINCOLNSHIRE.]

DONINGTON CASTLE. [LEICESTERSHIRE.]

DONJON, LE. [ALLIER.]

DONNYBROOK. [DUBLIN, COUNTY OF.]

DOON, a lake and river in Ayrshire, Scotland. Loch Doon, which at its nearest extremity is about 15 or 16 miles S.E. from Ayr, derives its waters from the neighbouring hills in Kirkcudbright. It is upwards of 7 miles in length, and little more than half a mile broad, and is inclosed by lofty hills, totally destitute of trees, but affording pasturage to sheep. On a small island near its head stands a timeworn castle, which it is said was a residence of Edward, brother of Robert Bruce. The loch abounds with trout.

The river Doon is formed by the discharge of the water from the loch, which is regulated by sluices. For upwards of a mile, after leaving the loch, the river makes its way through Ness Glen, a huge gully or ravine in the rocks, which almost appear to have split asunder in order to form a course for the river. The river pursues a north-westerly course of about 17 miles, and falls into the Frith of Clyde, nearly 2 miles S. from the town of Ayr. Near its right bank, about a mile from the sea, stand the remains of Alloway Kirk, and on a

slightly elevated site, close to the river side, is the monument to Robert Burns.

DOONGURPORE, a small principality tributary to the British, is situated in the district of Bagur and province of Gujerat, in a hilly tract, of which very little is known. The greater part of the inhabitants of Doongurpore are Bheels, who are considered to be the aborigines of the country. Some years ago the raja, to preserve his authority, which was threatened by the more powerful among his subjects, took some bands of Sindes into his pay, but they soon usurped all power, and were proving destructive to the country, when the raja sought and obtained the protection of the English, under whose intervention the country has recovered from the desolate condition to which it had been reduced. Its relation to the Company's government is now that of a protected and tributary state. The area of the territory is about 1000 square miles; the population is about 100,000; the revenue about 10,900*l.*; the tribute is not to exceed three-eighths of the annual revenue. The town of *Doongurpore*, the capital, is situated in 23° 45' N. lat., 73° 40' E. long.; about 95 miles N.E. from Ahmedabad. Near this town is situated a lake, of which it is said that its bounds are constructed with solid blocks of marble.

DOORNIK. [TOURNAY.]

DORCHESTER, the county town of Dorsetshire, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, is situated in 50° 43' N. lat., 2° 25' W. long., distant 120 miles S.W. by W. from London by road, and 141 miles by the London and South-Western railway. The population of the borough of Dorchester in 1851 was 6394. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are rectories in the archdeaconry of Dorset and diocese of Salisbury. Dorchester Poor-Law Union contains 39 parishes and townships, with an area of 64,315 acres, and a population in 1851 of 17,210.

Dorchester was called by the Romans *Durnovaria* and *Durinum*. By the Saxons it was called 'Dornceaster,' whence we have the modern name Dorchester. It has also been called 'Villa Regalis,' to distinguish it from Dorchester in Oxfordshire, called 'Villa Episcopalis.' Two mints were established here by King Athelstan. The town was nearly destroyed by fire in 1613; about 300 houses, with the churches of the Holy Trinity and All Saints, were totally consumed.

Many severe battles were fought in the vicinity of Dorchester between the contending forces during the civil war. At the assizes held here on the 3rd of September, 1685, by Judge Jefferies and four other judges, out of 30 persons tried on a charge of being implicated in Monmouth's rebellion, 29 were found guilty and sentenced to death. The following day 292 persons pleaded guilty, and 80 were ordered for execution. John Tutchin, who wrote the 'Ohservator' in Queen Anne's time, was sentenced to be whipped in every town in the county once a year; but on his petitioning to be hanged as a mitigation of his punishment, he was reprieved and subsequently pardoned. The manor of Dorchester has passed through the hands of numerous families. The corporation claim a prescriptive right, but they have charters of Edward III., Charles I., and other sovereigns. The assizes and courts of quarter-sessions for the county and for the borough are held here. A county court is also held. The borough has returned two members to Parliament since the 23rd year of the reign of King Edward I.

The town of Dorchester is pleasantly situated on a slight elevation near the river Frome, and consists principally of three spacious streets, which are paved and lighted. A delightful walk, well shaded, surrounds two-thirds of the town. The shire-hall is a plain building of Portland stone, and is commodiously fitted up. The guildhall, erected in 1847, is a convenient and handsome building in the Elizabethan style. The jail, built in 1795, contains the county jail, the house of correction, and the penitentiary. Adjoining the town are cavalry barracks. The terminus of the Southampton and Dorchester railway is in the town.

There is a considerable trade carried on in beer. Butter is also sent hence to the metropolis. In the reigns of King Charles I. and James I. cloth was manufactured in Dorchester. The market-day is Saturday. There are fairs on February 14th, Trinity Monday, St. John the Baptist's, and St. James's days; the three last are principally for sheep and lambs, for which Dorchester is celebrated.

The borough of Dorchester includes four parishes—All Saints, St. Peter's, the Holy Trinity, and Fordington. St. Peter's church, a spacious building in the perpendicular style, contains some curious monuments; it is well built, and consists of a chancel, nave, aisles, and an embattled tower 90 feet in height. All Saints, rebuilt in 1845, is a handsome structure in the decorated style. Fordington church is ancient, and has a south doorway of interesting character. There are places of worship for Baptists, Independents, Wesleyan Methodists, and Unitarians. A Free Grammar school was founded and endowed by Mr. Thomas Hardy in 1569. It has an income from endowment of 52*l.* 10*s.* a year, with two exhibitions at either university, and two scholarships at Cambridge. The number of scholars in 1853 was 36. A school of elder date was re-founded in 1623 by the corporation; the endowment is small. The number of scholars in 1853 was 60. There are also National and British schools. The county hospital, an

excellent institution, was founded in 1841. A county museum is well sustained. There are several almshouses and a savings bank.

The town was strongly fortified and entirely surrounded by a wall when in possession of the Romans, and the site where an ancient castle stood is still called Castle Green. The castle was demolished, and a priory for Franciscan monks was constructed out of the materials in the reign of Edward III., near the site of the old castle. The church of the priory was pulled down at the Reformation, and the house was subsequently converted into a Presbyterian meeting-house.

Tessellated pavements, Roman urns, and a quantity of coins of the Roman emperors have been dug up in the vicinity of Dorchester. Remains of a Roman amphitheatre, of a Roman camp called Pound-hury, and of a large British station called Maiden Castle, are in the neighbourhood.

(Hutchins, *Dorsetshire*; *Communication from Dorchester*.)

DORCHESTER. [OXFORDSHIRE.]

DORDOGNE, a department in the south of France, named from its principal river the Dordogne, extends from 44° 35' to 45° 43' N. lat., 1° 28' E. to 0° 2' W. long., and is bounded N. by the department of Haute-Vienne, E. by those of Lot and Corrèze, S. by Lot-et-Garonne, and W. by the departments of Gironde, Charente-Inférieure, and Charente. Its length from north to south is about 77 miles, its breadth from east to west about 69 miles. The area of the department is 3536 square miles; in extent of surface it is surpassed by only two departments—Gironde and Landes. The population according to the census of 1851 was 505,789, which gives 143 inhabitants to a square mile, being 31.71 below the average per square mile for the whole of France. The department is formed out of the old province of Périgord, with a small portion of the Limousin and some communes from Angoumois and Saintonge.

The department belongs almost wholly to the basin of the Dordogne. Two mountain torrents, the *Dor* and the *Dogne*, springing from the gorges of the Mont-d'Or, in Puy-de-Dôme, unite near the village of Bains their waters and names to form the *Dordogne*, which from this point flows first north and then west for a few miles, till it reaches the western border of the department of Puy-de-Dôme, where it is joined on the right bank by the Chavanon, which rises in the south of the department of Creuse. Here turning nearly due south it separates for many miles the departments of Puy-de-Dôme from Corrèze, and this from Cantal, receiving on either bank numerous streams from the Auvergne Mountains and the mountains of the Limousin. [CANTAL; CORRÈZE.] Crossing in a general south-west direction the south-eastern angle of Corrèze and the north of Lot, it gains the eastern border of the department of Dordogne, a little below Souillac, whence it runs almost due west across the department to which it gives name, and to its junction with the Garonne near Bourg, in the department of Gironde. The point of land between the two rivers at their junction is called Bec-d'Ambes. The whole length of this river is 250 miles, 182 miles of which are navigable; vessels of 300 tons go up as far as Libourne. The periodical high tide or bore in the Gironde ascends 20 miles above the mouth of the Dordogne. [BORE; GIRONDE.] Its principal feeders in the lower part of its course are—the *Vézère* [CORRÈZE]; the *Isle*, which flows south from Haute-Vienne as far as Périgueux, whence it turns nearly due west to Coutras; here it is joined on the right bank by the Dronne, which rises also in Haute-Vienne, and drains the north-west of the department of Dordogne; a little below Coutras the Isle runs south, and enters the Dordogne at Libourne in the department of Gironde, after a course of 124 miles, being navigable from Périgueux. The northern angle of the department belongs to the basin of the Charente, and is drained by the Bandiat. [CHARENTE.] A narrow strip on the southern border is drained by the Dropt, a feeder of the Garonne. Besides these there are a vast number of smaller streams, several lakes, and excellent springs. In all the waters of the department, pike, trout, and eels abound. Some of the springs form jets, and others have a periodical ebh and flow.

The surface is hilly; the last western slopes of the Limousin and Auvergne Mountains cover the greater part of it. The ranges north of the Dordogne springing from the Limousin run generally towards the south-west; those south of that river spring from the mountain masses of Cantal, and run nearly due west along the southern boundary of the department. The hills are generally overgrown with woods, broom, or heath; but in many places they are bare, rocky, and very steep. The valleys of the department are long, narrow, and winding; some of them of great beauty and fertility, the slopes of the hills that close them in being generally covered with vineyards; this is especially the case with the valleys of the Isle and the Dordogne. The general character of the soil of the uplands is barrenness. The northern portion, which forms the arrondissement of Nontron, consists almost entirely of high forest-land and irremediable moors, the only cover of which is broom and underwood; the chief exception to this is some good grass-land between the Bandiat and the Tardoire. In the more central part, which constitutes the arrondissement of Périgueux, though the hills are not so high, the soil is similar, forests and moors covering two-thirds of the surface. Rye and buckwheat are almost the only cereals grown in these

districts. The deficiency of corn is supplied by the immense produce of chestnuts, which are used as human food, and also for fattening hogs, a source of great profit to the farmer. The highest land in the department is in the arrondissement of Sarlat, the hills rising to the height of 700 to 800 feet, with sides in some places perpendicular. About Bergerac the hills having subsided, the valley of the Dordogne opens out into an extensive plain, and here maize, wheat, peas, beans, and other farm produce are abundantly raised. Of the arrondissement of Ribérac, which is watered by the Dronne, about one-third consists of rich heavy wheat land, and the remainder of arid gravelly soil, or hungry barren sand. The vines in this district are trained to creep along the branches of elms and walnut-trees, which present a beautiful appearance in the autumn, bending with the weight of the ripe grape-clusters; but by this method, though more grapes are produced, the wine is said not to be so good.

Besides the products already named, truffles (the famous Truffles de Périgord), the best in France, medicinal and aromatic plants are abundant; fruit-trees are cultivated to a great extent, especially the walnut for making oil. In the forests oak and chestnut are the prevailing trees. The annual produce of wine is 16,940,000 gallons, one-half of which is used for home consumption, and the rest exported or distilled into brandy and liqueurs; the best kinds are the white wines of the arrondissement of Bergerac. On account of the deficiency of grass-land, horses, cattle, and sheep are not numerous; pigs and goats are; poultry and game are abundant and excellent. Mules and asses are the common beasts of burden. The climate is generally mild, but the cold on the hills is sometimes very great in winter. Snow sometimes falls, but seldom lies more than a day or two; winter and spring are rainy; summer is excessively hot in the valleys; the autumn is very delightful. Violent winds from the north and west are not unusual, and hailstorms often do great harm to the crops in summer. The department is traversed by 5 state, 20 departmental, and 55 communal roads. The Paris-Bordeaux railroad runs for a few miles along the left bank of the Dronne, in the extreme west of the department.

Mines of iron, coal, and manganese are worked; marble, alabaster, millstones, building and lithographic stones are quarried; lead, antimony, magnesia, slate, fullers' earth, chalk, gypsum, &c. are found. There are 59 smelting furnaces and forges for the manufacture of hammered iron and steel; 1413 wind- and water-mills; and 450 establishments of different kinds for the production of coarse woollens, serge, hosiery, brandy, oil, paper, leather, cutlery, &c. The commerce of the department consists of its iron, wine, hams, truffled turkeys, and leather.

The department contains 2,263,582 acres, about one-half of which is capable of cultivation; 222,138 acres are under vine-culture. It is divided into five arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Périgueux . . .	9	118	110,748
2. Bergerac . . .	13	187	118,247
3. Nontron . . .	8	87	88,697
4. Ribérac . . .	7	93	73,177
5. Sarlat . . .	10	146	118,920
Total . . .	47	629	505,789

1. In the first arrondissement the chief town, *Périgueux*, which is also the capital of the department, stands on the right bank of the Isle, at a distance of 296 miles from Paris, in 45° 11' 4" N. lat., 0° 43' 29" E. long., and has 12,483 inhabitants, including the commune. The interior of the town is gloomy; the houses are high, large, and well-built of freestone, but the streets are so narrow and tortuous, that the height of the houses serves to make them cheerless. The site of the old ramparts is now occupied by two handsome boulevards. The streets of the town present some curiously ornamented houses of the 16th century. The principal buildings are—the cathedral of St. Front, the former church of the Jesuits, the town-house, the court-house, and the bridge over the Isle. *Périgueux* is the seat of a bishop, has tribunals of first instance and of commerce, a college, a public library of 16,000 volumes, an hospital, barracks, a theatre, a museum of antiquities, and also a garden of antiquities, in which the various fragments of Roman sculpture and architecture found in the neighbourhood are arranged in order. It is supplied with water by public fountains, which are fed by an aqueduct lately completed. There are several pretty promenades ornamented with statues. The industrial products of the town are paper, woollen-cloths, cutlery, hosiery, brandy, leather, nails, and the celebrated *Pâtés de Périgueux*, a confection made of partridges and truffles, which is largely exported; the town also trades in flour, salt, iron, wood, pork, groceries, poultry, and cattle. The market for pigs held here is the largest in France. *Périgueux* occupies the site of ancient *Vesunna*, the capital of the *Petrocorii*, whose name it subsequently bore. Its importance in ancient times is evidenced by its site at the junction of five Roman roads, and by the remains of a vast amphitheatre, aqueducts, baths, and several temples; but the most remarkable Roman building remaining is the circular tower called *La Tour de Vesune*, which is

still 67 feet high, 200 feet round, and has walls 6 feet thick; it has neither doors nor windows, and the purpose of its erection is unknown.

Among the other towns we give the following: the population throughout is that of the commune—*St. Astier*, which was formerly defended by a strong castle, still partly remaining, stands on the Isle, 11 miles W. from Périgueux, and has 2600 inhabitants. *Brantôme*, on an island in the Dronne, was formerly famous for its Benedictine abbey. The abbey church, which dates from the 11th century, is a very interesting structure. A crypt hollowed out of the rock to the north of the abbey contains some colossal bas-reliefs. The other remarkable structures are the abbey buildings, which are of vast extent, and the parish church, which dates from the 15th century, and contains fine specimens of wood carving. The town was formerly fortified, and was the scene of many a foray between the French, Normans, and English: population, 2800. *Pierre de Bourdeilles*, commonly called *Brantôme*, was abbot of the abbey of *Brantôme*, and wrote his historical memoirs in it. *Excideuil*, the birthplace of Marshal Bugeaud, on the Loue, a feeder of the Isle; *Hautefort*, 25 miles E. from Périgueux, on a hill, the crest of which is surmounted by a fine old castle; *Savignac-les-Eglises*, on the Isle; *St. Jean-de-Vergt*, 12 miles S. from Périgueux; and *Thenon*, 17 miles E.S.E. from it, are small places which give names to cantons.

2. In the second arrondissement, the chief town *Bergerac*, is situated in a fertile plain on the right bank of the Dordogne, 28 miles S.S.W. from Périgueux, and has 9971 inhabitants, including the commune. It is an ill-built place; the streets are narrow winding lanes; some good houses are seen in the market square, and near the bridge across the Dordogne. This bridge (which has five arches), the theatre, and the public library, are the most remarkable objects in the town, which has also tribunals of first instance and of commerce, a college, and an ecclesiastical school. In the neighbourhood there are several iron-foundries and smelting furnaces. The English took *Bergerac* in A.D. 1345, and fortified it; they were driven out of it by Louis d'Anjou, but made themselves masters of it a second time, and were not finally dispossessed of it till 1450. It suffered greatly in the religious wars of France, during which it was a stronghold of the Calvinists. The citadel and fortifications were demolished by Louis XIII. in 1621. *Beaumont*, on the crest of a hill above the Couze, a feeder of the Dordogne, originated in a church erected here in 1272. The present town which is of square form, surrounded by turreted walls with a central square, in which the four principal streets meet at right angles, was built by the English when they were masters of Guienne: population, 1835. *Eymet*, on the left bank of the Dropt; *Latinde*, 12 miles E. from Bergerac on the Dordogne; *Monpazier*, a well-built place on the Dropt; and *St. Alvaire*, 20 miles E. from Bergerac, are small places with a little over 1000 inhabitants each.

3. In the third arrondissement, the chief town, *Nontron*, an ill-built place, prettily situated on the slopes of two hills on the right bank of the Bandiat, has a tribunal of first instance, an hospital, and 3704 inhabitants, who manufacture cutlery and leather, and are employed in the iron and manganese mines and iron-works of the neighbourhood. The town existed in the 8th century; it was plundered several times by the Northmen. The English took it in 1420. The Huguenots under Coligni sacked *Nontron* in 1570, and slew a great number of the inhabitants, who resisted to the last extremity. *Jumillac-le-Grand*, 20 miles E. from *Nontron*, on the left bank of the Isle, has several iron-foundries and smelting-furnaces, a fine old castle, from which the English were chased by Duguesclin in 1379, and 3194 inhabitants. *Thiviers*, an ill-built town, 15 miles S.E. from *Nontron*, stands on a steep hill, has tan-yards, paper-mills, potteries, tile-works, and iron-foundries; it trades in corn, wine, hides, cheese, truffles, &c., and has a population of 2400. The other cantons are named from mere villages.

4. In the fourth arrondissement, the chief town, *Ribérac*, stands in a fertile district, on the Dronne, 23 miles W. from Périgueux; it is irregularly built, and has 2942 inhabitants, who trade in corn, linen, pigs, and leather. The old castle of the dukes of Turenne is the only interesting structure in the place. A tribunal of first instance is held here. *Neuic*, on the left bank of the Isle, has 2254 inhabitants. *St. Aulaye*, on the Dronne; *Monpont*, on the left bank of the Isle, near which there is a large Roman camp; *Mussidan*, at the junction of the Crempre with the Isle; and *Bourdeilles*, on a high rock overhanging the left bank of the Dronne, are the most important of the other towns, each having under 2000 inhabitants.

5. In the fifth arrondissement the chief town is *Sarlat*, which stands 32 miles S.E. from Périgueux, in a hollow closed in by steep arid hills, and watered by the river Sarlat, a small feeder of the Dordogne. The streets are narrow and crooked, the houses old and ill-built, the site gloomy and unhealthy. The town has tribunals of first instance and of commerce, a college, an ecclesiastical school, and 5800 inhabitants, including the commune. The college, the hospital, and the parish church are the best of the public buildings. A good deal of paper and walnut-oil are made here. *Sarlat* was formerly a strong place and sustained several sieges, one of which, though directed by Turenne, was unsuccessful. It is still surrounded by old walls. The bishopric of Sarlat, which was created by Pope John XXII., was

suppressed after the first French revolution. *Belvès* stands on a hill 13 miles S.W. from Sarlat, and has 2529 inhabitants, who manufacture paper, leather, hosiery, coarse woollens, and nut-oil. The town consists of a spacious square on the crest of the hill, and of several steep irregular streets, which lead into it. *Le Bugue*, a pretty little town near the confluence of the Vézère and the Dordogne, has 2398 inhabitants, who manufacture woollens and nut-oil, and trade in wine and provisions with Bordeaux. There are also near the town at the village of Miremont, several iron-foundries, and one of the largest grottoes in France. *St.-Cyprien*, S.W. from Sarlat, on the right bank of the Dordogne, stands at the foot of a hill bristling with rocks, and at the entrance of a rich valley; it has 2324 inhabitants, and a much frequented mineral spring. *Montignac*, a considerable town on the Vézère, which here becomes navigable, has 3752 inhabitants; on a hill above it are the remains of a fine old castle, which played an important part in the wars with the English in the 14th century. *Terrasson*, higher up the Vézère, stands on the slope of a steep hill on the left bank of the river, which is passed by a fine bridge of recent erection; the streets are narrow and steep, but some of the buildings are good: the population is 2393. *Domme*, once an important fortress, on a high hill above the Dordogne and *Villefranche-de-Belvès*, in the south-eastern angle of the department, are the most important of the other towns, with about 2000 inhabitants each.

The department forms the see of the Bishop of Périgueux; it is comprised in the jurisdiction of the High Court of Bordeaux, and belongs to the 14th Military Division, of which Bordeaux is headquarters.

(*Dictionnaire de la France*; Balbi, *Géographie*; *Annuaire pour l'An 1853*.)

DORDRECHT. [DOR.]

DORÉ-ABBEY, sometimes called ABBEY-DORÉ, Herefordshire, a village and the seat of a Poor-Law Union in the parish of Dore-Abbey, is situated on the right bank of the little river Dore, in 51° 58' N. lat., 2° 51' W. long.; 12 miles S.W. from Hereford, and 135 miles W.N.W. from London. The population of the parish in 1851 was 588, including 87 inmates of the Union workhouse. The living is a rectory in the archdeaconry and diocese of Hereford. Dore-Abbey Poor-Law Union contains 29 parishes and townships, with an area of 74,917 acres, and a population in 1851 of 9203. The village is pleasantly situated, but is a place of little consequence. In the reign of Stephen a monastery for Cistercian monks was founded here, whence the village received its appellation of Abbey-Dore. The abbey church, which now forms the parish church, is a spacious and handsome cruciform structure with a massive tower.

DORIS, DORIANIANS. Doris is a small district of Ancient Greece, the seat of the Dorians, the most powerful of the Hellenic tribes. It occupied the valley of the Pindus (now the Apostolia) between the mountain ranges of Œtia and Parnassus, lying between 38° 30' and 38° 50' N. lat., and 22° 10' and 22° 40' E. long., and was bounded N. by Southern Thessaly, W. by Ætolia, S. by Ozolian Locris, and E. by Phocis. The country is a narrow gently undulating valley, open towards Phocis; and through this valley the Pindus, a tributary of the Cephissus, flows to join the latter stream; which it does after a short course at no very great distance from the source of the Cephissus. The valley itself is tolerably level and well watered by numerous small streams which swell the volume of the Pindus; but the mountains on both sides are lofty, rugged, and precipitous, rendering the winters in the valley long and severe. The soil is fertile and productive in grain. The valley of the Pindus stands higher than that of the Cephissus, and is naturally separated from it by the hills which on either side approach and leave only a narrow passage for the river. (Leake's 'Northern Greece,' ii. 70.) It was in this valley that the four towns which formed the Doric Tetrapolis—Erineus, or Dorium, the principal town, Boium, Cytinium, and Piudus—were situated. The Dorians did not however confine themselves to the plain. From various passages in ancient writers it is evident that they at one time extended across Mount Œta to the Gulf of Malianus, while as Mr. Grote has shown ('Hist. of Greece,' i. 141) it is probable that prior to their conquest of the Peloponnesus they also occupied the country along the northern shores of the Coriuthian Gulf, comprising a large part of Ætolia, the Ozoline Locris, and Phocis. In the historical period the Dorians were in possession of the entire eastern and southern parts of Peloponnesus.

Doris is said to have been originally called Dryopis, from the Dryopes who occupied the country before its conquest by the Dorians. The plain is entered by two mountain passes from the north, one crossing the eastern side of Mount Œta, the other a portion of the same ridge farther west. On the south was an important pass leading from Doris to Amphissa, at the head of which stood the commanding military town of Cytinium, the site of which appears to be now occupied by Gravia. The ruins of Mariolates, Col. Leake supposes to mark the site of Boium.

The history of Doris proper is of little importance. It submitted to the Persians in the invasion of Xerxes, and its towns were spared. In the various Ætolian, Phocian, and Macedonian wars it suffered greatly. The towns are mentioned as existing by Strabo and Pliny.

The Dorians derive their origin from a mythical personage named

Dorus, who is generally made the son of Hellen, though he is described as the son of Xuthus by Euripides (Ion., 1590). Herodotus mentions (i. 52) five successive migrations of this race. Their first settlement was in Phthiotis, in the time of Deucalion; the next, under Dorus, in Hestiotis, at the foot of Ossa and Olympus; the third, on Mount Pindus, after they had been expelled by the Cadmeans from Hestiotis. In this settlement, says Herodotus, they were called the Macedonian people; and he elsewhere (viii. 43) attributes to the Dorians a Macedonian origin; but there does not appear to have been any real connection between the Dorians and the Macedonians (who, it has been shown, were of Illyrian extraction: Müller, 'Dor,' i. p. 2) beyond this vicinity of abode. The fourth settlement of the Dorians, according to Herodotus, was in Dryopis, the country noticed above and subsequently known as Doris, or the Dorian Tetrapolis; and their last migration was to the Peloponnesus. Another, and most remarkable expedition, not mentioned by Herodotus, was the voyage of a Dorian colony to Crete, which is stated to have taken place while they were in their second settlement at the foot of Olympus ('Androm.' apud Strabon, p. 475 D); and Dorians are mentioned among the inhabitants of that island even by Homer ('Od.' xix. 174). This early settlement in Crete must not be confused with the two subsequent expeditions of the Dorians to that island, which took place after they were well settled in the Peloponnesus, the one from Laconia under the guidance of Pollis and Delphus, the other from Argolis under Althameus. The migration of the Dorians to the Peloponnesus which is generally called 'the return of the descendants of Hercules,' is stated to have occurred 80 years after the Trojan war, that is, in B.C. 1104 (Thucyd. i. 12). The origin and nature of the connection which subsisted between the Heracleidae and the Dorians are involved in much obscurity, but we cannot here enter into the question.

The Dorians must have been very inferior in number to the inhabitants of the countries which they conquered; but the superiority of their peculiar tactics ensured them an easy victory in the field, and they appear to have taken all the strong places either by a long blockade or by some lucky surprise; for they were altogether unskilled in the art of taking walled towns. The governments which the Dorians established in all the countries which they thus invaded and conquered was, as might have been expected, very analogous to that which the Norman invasion introduced into England, namely, an aristocracy of conquest; for while the successful invaders remained on a footing of equality among themselves, all the old inhabitants of the country were reduced to an inferior condition, like the Saxons in England. They were called *πελοποναι*, or 'dwellers round about the city,' a name corresponding exactly to the Pfalzbürger, or 'citizens of the Palisade,' at Augsburg, who dwelt in the city suburbs without the wall of the city; to the 'pale' in Ireland before the time of James I.; to the people of the contado in Italy; and to the *fauxbourgeois* in France. (Niebuhr, 'Hist. of Rome,' i. p. 398, Eng. tr.; Arnold's 'Thucydides,' i. p. 626; and Borghini, 'Origine della Città di Firenze,' p. 230, ed. 1534.) All the members of the one class were gentle, all those of the other class were simple. The constitution of Sparta in particular was an aristocracy of conquest as far as the relations between the Spartans and Lacedæmonians were concerned, while the Spartans themselves lived under a democracy with two head magistrates, who were indeed called kings, but possessed very little kingly power.

One of the most remarkable of the Doric institutions was that of the *Ephori*, or Overseers, a body of magistrates who possessed extraordinary privileges. The institution of this office is usually ascribed to Theopompus, the grandson of Charilaus the Proclid; but we agree with Dr. Arnold ('Thucyd.' vol. i. 616, and see Müller's 'Dorians,' ii. 550, Eng. trans.), in thinking that the Ephori, who were five in number, were coeval with the first settlement of the Dorians in Sparta, and were merely the municipal magistrates of the five hamlets which composed the city; but that afterwards when the Heracleidae began to encroach upon the privileges of the other Dorians, and it would seem in the reign of Theopompus, the Dorians gained for the Ephori an extension of authority which placed them virtually at the head of the state, although the nominal authority was still left in the hands of the Heracleidae. Thus the Ephori were popular magistrates as far as the Dorians themselves were concerned, and the guardians of their rights, yet in relation to the *πελοποναι* they were the oppressive instruments of an overbearing aristocracy. (Plato, 'Leg.' iv. 712.) The Ephori were chosen in the autumn of every year; and the first in rank gave his name to the year. Every Spartan without regard to age or wealth was eligible to the office. The Ephori possessed judicial rights, generally presiding in causes of great importance; they held also a censorial office, and were empowered to fine whom they pleased, and exact immediate payment of the fine; they could suspend the functions of any other magistrate, and arrest and bring to trial, or, under certain circumstances, depose even the kings. They presided and put the vote in the public assemblies, and performed all the functions of sovereignty in receiving and dismissing embassies, treating with foreign states, and sending out military expeditions. The king, when he commanded, was always attended by two of the Ephori, who exercised a controlling power over his movements. The usurpations of the Ephori became at length almost unbearable, and they were murdered on their seats of justice by Cleomenes II. and their office

overthrown. It was however subsequently restored, though with diminished powers, and existed under the Romans.

The usual name for a constitution in a Dorian state was an order or regulative principle (*κόσμος*), and this name appears to have arisen from the circumstance that the attention of the Dorian legislators was principally, if not solely, directed to the establishment of a system of military discipline and to the encouragement of that strict subordination which is the result of it. It was by superior prowess and discipline that the Dorians had acquired their rank, and it was only by a continuance of this superiority that they could hope to maintain themselves in the same position. Accordingly, it was important that while the bulk of the population was occupied as much as possible in agricultural employments, the Dorian aristocracy should enjoy sufficient leisure and have every inducement of religion and amusement to practise those martial exercises in which it was so needful for them to excel. The same occasion for strict discipline may also account for the extraordinary austerity which prevailed in most Dorian communities. The Dorian women enjoyed a degree of consideration unusual among the Greeks. The *Syssitia*, or common tables, which were established in most Dorian states, were designed to admonish those of the privileged class that, living as they did in the midst of a conquered but numerous population, they must not consider themselves to have any individual existence, but must live only for the sake of their order (*κόσμος*). The Delphian oracle regulated all the Dorian law systems.

The Dorians used a peculiar variety of the Greek language known as the *Doric dialect*. It was spoken in the Dorian Tetrapolis; in the greater part of the Peloponnesus, and in the numerous Dorian colonies. The lyric poets of Greece in general wrote in the Doric dialect; and the choruses in the Attic plays are written in a kind of Doric. On this dialect the reader may consult, in addition to Mattaire and Gregory of Corinth, who have written on the Greek dialects in general, the excellent remarks of Müller, 'Dorians,' v. ii. App. VIII. p. 484, Eng. trans.

In addition to the Dorian settlements which have been mentioned, this race sent out many colonies: of these the most important were established along the south-west coast of Asia Minor and the western coast of Greece. Among the more important on this coast were Ambracia, Anactorium, Apollonia, Epidamnus, and Leucas. Rhodes, Cyprus, Coreyra, and Sicily also boasted a Dorian population; Byzantium and Chalcedon were Megarean colonies; and the celebrated cities, Tarentum and Crotona, in Italy, were founded under the authority of Sparta.

(Müller, *Dorians*; K. F. Hermann, *Lehrbuch der Griechischen Staatsalterthümer*, Eng. trans.; Lachmann, *Spartanische Staatsverfassung*; Leake, *Northern Greece*; Dodwell; Smith, *Dict. of Greek and Roman Geography*; Thirlwall, *Hist. of Greece*, vol. i.; Grote, *Hist. of Greece*; Wordsworth, *Greece*.)

DORKING, Surrey, a market-town and the seat of a Poor-Law Union in the parish of Dorking, is situated in 51° 14' N. lat., 0° 19' W. long.; distant 12 miles E. by S. from Guildford, 23 miles S. by W. from London by road, and 29 miles by the Reading branch of the South-Eastern railway. The population of the town of Dorking in 1851 was 3490. The living is a vicarage in the archdeaconry of Surrey and diocese of Winchester. Dorking Poor-Law Union contains eight parishes and townships, with an area of 37,970 acres, and a population in 1851 of 11,362.

Dorking occupies an agreeable and healthy situation in the valley on the south side of the North Downs, near the river Mole. The town has a neat and clean appearance, the streets are well laid out, lighted with gas, and paved. The parish church, a spacious edifice, rebuilt in 1837, consists of nave, aisles, transept, and chancel, and has a tower rising from the intersection of the nave and transept; the tower is surmounted with an octagonal spire of considerable height. The Independents, Wesleyan Methodists, and Quakers have places of worship. There are National, British, and Infant schools, and a savings bank.

The chief trade of Dorking is in flour, lime, and chalk. Poultry of a peculiar kind is reared for the London market, though less extensively now than formerly. The Dorking fowl is distinguished by having five claws to each foot. The weekly market is on Thursday; a monthly stock market is held on the second Thursday of the month; an annual fair is held on the day before Holy Thursday. Petty sessions and a county court are held in Dorking. Many Roman coins have been found in the neighbourhood, including silver coins of Tiberius and Antoninus. In the neighbourhood of Dorking are many handsome mansions, among which is Deepdeue, the residence of Henry Thomas Hope, Esq.

(Manning and Bray, *Surrey*; Brayley, *Surrey*.)

DORNOCH. [SUTHERLAND.]

DORPAT, or DERPT (in Livonian, Tehrpat), a town in the government of Livonia in Russia, is situated at the foot and on the declivity of a hill on the Embach, a feeder of Lake Peipus, in 58° 22' N. lat., 26° 45' E. long., 138 miles N.E. from Riga, and 163 miles S.W. from St. Petersburg, and has about 14,000 inhabitants, including the Riga and St. Petersburg suburbs. The river is crossed by a handsome bridge of granite of three massive arches, and the town, which is embellished with gardens, forms a semicircle, laid out in straight

broad streets, which are kept very clean, and adorned with some handsome public buildings of freestone, particularly the government offices and university buildings. The houses, constructed either of bricks or wood, the walls and roofs of which are painted in showy colours, do not in general exceed one story in height. The Domberg Hill, at the north-western extremity of the town, is approached from one of the principal squares, and is laid out in avenues and walks; the summit is called Cathedral Place, from its having been the site of a cathedral, which was burned down in 1775, and is at present the site of an observatory, of the university library, of schools of anatomy and natural history, museums, &c. The observatory of Dorpat, long presided over by Struve, is one of the most celebrated in Europe. Among its excellent astronomical apparatus is a great refracting telescope by Fraunhofer, which was placed here by the Emperor Alexander. In the middle of the 16th century Dorpat had a cathedral and seven churches within the walls, besides three outside of them. Of the town as it then existed there remains little except the ruins of the old cathedral, the whole city having been almost destroyed in the great fire of 1775. The ramparts still exist but they are converted into public walks. Internal trade, the navigation of the Embach, and the wants of those who are connected with the university, afford employment to the people of the town. They also hold a large annual fair in January for the sale of Russian and foreign manufactures. The university was founded in 1632 by Gustavus Adolphus, at a time when Livonia, Esthonia, and Ingria, belonged to the Swedish crown, but was suppressed by Alexis Michaelovitch in 1656. The Swedes having however recovered possession of Livonia, it was re-established in 1690; in 1699 they transferred it to Perna, and in December 1802, it was reconstituted by the Emperor Alexander for the benefit of Livonia, Esthonia, and Courland, the nobility of which elect a curator or superintendent, who conjointly with its heads, administers its revenue, which amounts to about 5800*l.* a year. The university, which is open to students of every religious persuasion, but is particularly a Protestant institution, consists of the four faculties of theology, law, medicine, and philosophy; had 45 professors in 1848, and was attended by about 600 students. It has a library of nearly 60,000 volumes, and suitable collections for natural and experimental philosophy, mineralogy, zoology, anatomy, and pathology, &c.; a botanical garden, containing above 18,000 plants, a theological and a philological seminary, a gymnasium, and a training school.

DORSETSHIRE, an English county included between 50° 30' and 51° 5' N. lat., and 1° 48' and 3° 7' W. long.; is bounded E. by Hampshire, N. by Wiltshire, N.W. by Somersetshire, and W. by Devonshire: along all its southern borders it is washed by the English Channel. Dorsetshire is for a short distance separated from Hampshire by a rivulet which joins the Avon of Wiltshire and Hampshire above Christchurch: for a short distance it is separated from Somersetshire by the Ivel or Yeo, and the brooks that run into it; and in the west it is separated from Somersetshire and Devonshire by the Axe and some small streams that run into that river.

The form of the county is very irregular, and one small part is entirely detached from the rest and inclosed by Devonshire. Its greatest length is from east to west, from Alderholt, near Fordingbridge, in Hampshire, to the western extremity of the detached part, which is inclosed within the boundary of Devonshire, 57 or 58 miles; but from the irregular course of the boundary, the line joining these two points is not wholly in Dorsetshire. The breadth from north to south varies much; the greatest breadth is from the spot where the river Stour enters Dorsetshire to Portland Bill or Point, 40 miles; at the eastern extremity, along the Hampshire border, the breadth is 16 miles; at the western extremity, near Lyme Regis, only 5 miles. The area is 987 square miles; the population in 1851 was 134,207.

Coast, Bays, and Islands.—At the eastern end of Dorsetshire the coast is precipitous; but the cliffs extend scarcely a mile south-west from the border of Hampshire, and are succeeded by a low sandy tongue of land, running about a mile farther in the same direction to the narrow entrance of Poole harbour. This bay penetrates 6 miles inland towards the west, and expands to a breadth of 4 or 5 miles. Its outline is very irregular, and it forms several small bays, as Hole's Bay, Lytchet Bay, Arne Bay, &c. It receives the Frome, the Piddle, and other streams; it consists for the most part of banks of mud, which are dry at low water, and covered with sea-weed, and are separated from each other by deeper channels. The town of Poole is on a peninsula at the entrance of Hole's Bay, on the north side of the harbour. There are several islands in Poole harbour; Brownsea or Brownsey, the largest, which lies near the entrance of the harbour, is a mile and a half long from east to west, and nearly a mile broad. It is sandy, partly covered with heath, furze, and fern, and partly cultivated or laid out in a plantation. There are on it an old castle and one or two tenements. The water is so shallow in Poole harbour, except in the channels, that only small or lightly-laden boats can pass over the banks, even at high water; several of the channels are only sufficient for fishing boats and small craft; the Wareham and Main channels, the south or Wych channel, and that which leads to the town of Poole, are navigable for larger vessels. The shore round Poole harbour is low, and near where the Frome falls into it the land is protected from inundation by an embankment.

From the entrance of Poole harbour a low shore runs southward

nearly 3 miles, and then becomes steep, and turns eastward, forming Studland Bay, the southern limit of which is Handfast Point; it then runs about 4 miles south by west to Peverel Point and Durlston Head, thence west by south 5 miles to St. Aldhelm's or St. Alban's Head, 344 feet high, and continues in an irregular line west by north 17 or 18 miles to Weymouth Bay, forming along the line of coast several small bays.

The shore of Weymouth Bay is low, and extends 2 miles south to the towns of Melcombe Regis and Weymouth; here the cliffs recommence, and run 1 mile south-west to Sandsfoot Castle, whence a low shore extends 2 miles south by east to Portland Castle, on the peninsula or Isle of Portland. The lofty coast of this island takes a circuit of 5 or 6 miles to the Bill of Portland, the southernmost point of the county, and thence above 3 miles northward to the commencement of the Chesil Bank, which connects the north-west extremity of the Isle of Portland with the main-land. The bay between Weymouth and the Isle of Portland is called Portland Road.

The Isle of Portland is about 4 miles long, and in the widest part nearly a mile and a half broad. It is one continued bed of rock of freestone. The highest point in the island is 458 feet above the level of the sea; the cliffs on the western side are very lofty; those at the Bill are not more than 20 or 30 feet high. The island supplies the greater part of the provisions requisite for the sustenance of the population. Water is plentiful and good; one stream has sufficient volume to turn a mill. The herbage is very fine, and affords pasturage to a number of sheep, whose flesh is considered to be excellent mutton. The arable land is mostly common field; the inclosures are bounded by stone fences. Wheat, oats, pease, and a little barley are grown; sainfoin is also cultivated. There are few trees in the island. The islanders are a robust race, peculiarly adapted to the hard labour of quarrying stone, in which a considerable number are employed. They occasionally engage in fishing, and a few are employed in agriculture, trade, and handicraft. The custom of gavelkind prevails here. The island has one village, Chesilton, at the commencement of the Chesil bank, on the north-west side of Portland. There are two castles; one, on the east shore of the isle, is very ancient, and built in the form of a pentagon, with a number of small loop-holes, whence it has been vulgarly called 'Bow and Arrow Castle'; it is sometimes called Rufus's Castle. The other is on the northern side of the island, built by Henry VIII., and, in connection with Sandsfoot Castle, commands Portland Road; a few guns are still mounted. Near the Bill are two lighthouses. The quarries will be noticed hereafter. Masses of rocks extend under water to a considerable distance from the island. A dangerous surf, called 'The Race of Portland,' extends from the west of the island eastward to St. Aldhelm's Head. Portland Road is sheltered from the south-west wind, and affords good holding ground at 8 or 9 fathoms. In 1847 an act was passed for the formation of a harbour of refuge off the Isle of Portland by the construction of a breakwater, extending northward from the north-eastern point of the island for a mile and a quarter, so as to include a large part of Portland Road. A considerable number of convicts are employed on the works, a convict establishment having been formed on the island for the purpose. The works are now steadily advancing.

Leland, Hollinshed, and Camden agree in speaking of Portland as having been once separated from the mainland; but it has long been united to it by the Chesil Bank, one of the longest and most extraordinary ridges of pebbles in Europe. From its commencement at the Isle of Portland it extends in a remarkably straight line north-west for many miles, running parallel to the coast, from which it is separated by a narrow arm of the sea called 'The Fleet,' as far as Abbotsbury, 10 miles from Portland: here it unites with the mainland and runs along the shore nearly six miles further to the commencement of the cliffs at Burton Castle, not far from Bridport. The breadth of the Chesil Bank is in some places near a quarter of a mile, but commonly much less. The base is formed of a mound of blue clay, which is covered to the depth of four, five, or six feet by a coat of smooth round pebbles, chiefly of white calcareous spar (these are called Portland pebbles), but partly of quartz, chert, jasper, &c., so loose that a horse's legs sink almost knee deep at every step. Marine plants grow in patches along the edge of the bank by the water-side. The pebbly covering is continually shifting, in consequence of the action of the winds and the sea. The fleet receives the water of several rivulets, and runs into the open sea at its south-eastern extremity by a narrow channel called 'Small Mouth.' At the north-western extremity it forms a 'swannery,' which once consisted of 7,000 swans. The Fleet is much frequented by water-fowl, among which Dr. Maton observed the wild swan.

From Burton Castle the coast, generally abrupt and frequently high, runs west-north-west 10 or 12 miles to the border of Devonshire; the cliffs in this part are remarkable for the beauty and variety of the fossils which they contain. The whole extent of the Dorsetshire coast, including the circuit of the Isle of Portland, may be estimated at above 75 miles.

Surface, Hydrography, Communications.—The surface of this county is for the most part uneven. The principal elevations are the chalk downs, which, entering Dorsetshire from Wiltshire on the northern side of Cranbourne Chase, 2 or 3 miles S.E. from Shaftesbury, turn

to the south and run to the valley of the Stour, in the neighbourhood of Blandford. From the valley of the Stour the chalk downs run nearly west to the neighbourhood of Beaminster, and form the northern boundary of the basin whose drainage is received by Poole Harbour. The hills near Beaminster form, with the exception of some outlying masses, the western extremity of the great chalk formation. The chalk hills from Beaminster run south-east or east and form the 'South Downs,' the highest points in which are along the southern escarpment. The hills gradually approach the coast a few miles north-east of Melcombe Regis. From Lulworth the chalk hills run eastward to Handfast Point, the headland which separates Studland and Swanage bays. Pilsedou Pen, west of Beaminster, which is 934 feet high, is the highest point in the county, and belongs to the greensand formation. Swyre Hill, on the coast, near Kilmington, in the Isle of Purbeck, is 669 feet high.

The *Stour*, the chief river of Dorsetshire, rises in Wiltshire, in Stourhead Park, on the border of Somersetshire, and running south by east enters Dorsetshire between three and four miles from its source. Its course in Dorsetshire is generally in a south-east direction and by a very winding channel. Its feeders are the Shreen, the Lidden, the Cale, and the Allen. After it receives the Allen the Stour flows east-south-east 6 or 7 miles into Hampshire, after entering which it receives a considerable stream, 16 or 18 miles long, from Craubourne; and about 4 miles lower it joins the Avon near Christchurch, in Hampshire. The whole course of the Stour is nearly 65 miles. It is navigable for about 40 miles to Sturminster Newton.

The river *Yeo*, *Ive*, or *Ivel*, is formed by two brooks, one rising in Somersetshire and one in Dorsetshire, which uniting near Milbourne Port (Somersetshire), and flowing south-west, enter Dorsetshire between Milbourne Port and Sherbourne, about 3 miles from their respective sources. The Yeo then flows first west-south-west, then west-north-west for about 7 miles, when it again touches the border of Somersetshire, along which it winds for about 3 miles, and then entering Somersetshire flows north-west into the Parret. The Stour and the Yeo carry off the drainage of all that part of the county which lies north of the North Downs.

The North and South Downs inclose the basin of the two rivers Piddle, or Trent, and Frome, which unite in Poole Harbour below Wareham, and from their situation with respect to that town are respectively called Wareham North and Wareham South River. The *Piddle* rises in the village of Alton on the southern declivity of the North Downs, and flows south and south-east past Piddletrentside and Piddlehiton to Piddletown. From Piddletown it has a general east-south-east course about 22 miles in length to its entrance into Poole Harbour. The *Frome* rises on the Downs near Corscombe, north-east of Beaminster, and flows south-east. At Maiden Newton it receives a stream from the Downs near Beaminster. From Maiden Newton the Frome flows south-east 8 miles to Dorchester. From Dorchester it flows east nearly 20 miles into Poole Harbour, just upon entering which it unites with the Piddle, and has the same low-water channel as that river: its whole length to Poole Harbour is about 35 miles. For a considerable part of their course both the Frome and the Piddle flow through low meadows; the channel of each is repeatedly divided and reunited. They are not navigable above Wareham.

The western extremity of the county is watered by the Bredy, the Brit, the Char, and the Axe, which last rather belongs to Devonshire. The *Bredy* flows westward 7 or 8 miles from Little Bredy into the sea near Burton Bradstock, at the north-west extremity of the Chesil Bank. The *Brit* rises near Beaminster, on the southern slope of the chalk hills, near the junction of the North and South Downs, and flows south about 9 miles into the sea below Bridport; the mouth of it forms Bridport Harbour. The *Char* is about as long as the Brit; it rises near Pilsedon Pen, and flows south and south-west into the sea at Charmouth. The *Axe* rises in Dorsetshire and flows for some miles along the border of the county.

Dorsetshire has no canals. The Dorset and Somerset Canal, for which acts were obtained in 1796 and 1803, but which was never executed, was to have entered the county near Stalbridge and to have followed the valley of the Stour till it opened into that river above Blandford Forum. The intended English and Bristol Channels Ship Canal was to cross the western extremity of the county.

The only passenger railway in Dorsetshire is the most western portion completed of the main line of the Loudon and South-Western. It enters the county a few miles west of Ringwood, and proceeds in a south-westerly direction past Poole, where it crosses a portion of Poole Harbour, and sends off a short branch to the town of Poole, and forwards to Wareham, whence it proceeds in a westerly direction to Dorchester. Its total length in Dorsetshire is about 33 miles.

The Penzance, Falmouth, and Exeter mail-road crosses the county in nearly its whole extent. It enters it near Woodyates Inn, between Salisbury and Blandford, and runs south-west through Whitechurch and Piddletown to Dorchester, and thence west by Bridport and Charmouth to Axminster, in Devonshire. The Exeter mail-road crosses the northern part of the county, entering it near Shaftesbury, and running thence sometimes in Somersetshire and sometimes in Dorsetshire by Sherbourne to Yeovil, in Somersetshire. It just crosses the western extremity and the detached portion of the county

between Chard and Honiton. The Falmouth, Devonport, and Exeter mail-road also just crosses the western part of the county. The Southampton and Poole mail-road enters the county beyond Ringwood, and runs by Wimbourne Minster to Poole. There are several other important roads in the county.

Geological Character.—The direction of the chalk-hills, which has been already noticed, furnishes the key to the geological structure of Dorsetshire. The North and South Downs respectively extend westward from the neighbourhood of Shaftesbury and the peninsula, which, although a part of the mainland, is called the Isle of Purbeck. The Downs unite at their western extremity near Beaminster, and inclose a basin, the 'Trough of Poole,' in which we have the formations superior to the chalk; beyond or without this basin we have the formations which underlie the chalk.

The eastern part of the county, as far as Cranbourne, Chalbury and Wimbourne Minster, and the Trough of Poole, are occupied by the plastic clay. Potter's clay in beds of various thickness and at different depths alternates with loose sand in this formation in the Trough of Poole. The potter's clay is sent to Staffordshire, where it is mixed with ground flints and employed in the finer kinds of pottery. Beneath the potter's clay lies a seam of very friable earthy brown coal, which crumbles when put into water, burns with a weak flame, emitting a particular and rather bituminous smell, somewhat like Bovey coal. An extensive horizontal bed of pipeclay skirts the northern declivity of the South Downs, and contains a bed of coal exactly resembling that of Alum Bay in the Isle of Wight; clay of the same bed, but not of equal quality, may be found in other parts of the Trough of Poole; it is quarried extensively near the town of Poole, where clay for fire-bricks is also dug. Near Handfast Point the sand of this formation passes into sandstone. The plastic clay is found capping one or two hills south-west of Dorchester.

The chalk formation bounds the plastic clay. In the North Downs the chalk occupies a breadth of nearly ten miles, namely, from Shaftesbury to Cranbourne, and along the valley of the Stour from above Blandford to Wimbourne Minster: at its western extremity the formation is still broader, extending about 18 miles beyond Beaminster to Stinsford, near Dorchester. On the southern side of the Trough of Poole it becomes much narrower, scarcely averaging two miles in breadth. The cliffs along the south coast are partly chalk: the strata are in some places curved and occasionally vertical. The valleys drained by the upper part of the Frome and its tributaries are occupied by the greensand, so that the mass of the chalk hills about Beaminster is cut off from the rest of the formation. In the district south of the chalk range and extending to the coast the chalk-marl, greensand, weald clay, and iron sand are found skirting the chalk in the order in which we have named them in the Isle of Purbeck, and extending along the coast between the chalk and the Purbeck and Portland limestone, next to be noticed. The iron-sand near Lulworth contains imperfect beds of wood-coal. The weald clay is not found along the coast west of the Isle of Purbeck.

The Purbeck strata, belonging to the upper series of the oolitic formation, consist of argillaceous limestone alternating with schistose marl: they crop out from under the iron-sand in the Isle of Purbeck. A variety of the Purbeck stone known as Purbeck marble was formerly much used for columns and ornaments in our cathedrals and old churches. The thickness of the Purbeck beds is estimated at 290 feet. The Portland oolite, another member of the same series which succeeds the Purbeck stone, occupies the remainder of the Isle of Purbeck and the whole of the Isle of Portland. It consists of a number of beds of a yellowish white calcareous freestone, generally mixed with a small quantity of silicious sand. But the different beds of which it is composed often vary in their characters, nor are the same beds of a uniform character in different localities. The varieties of this formation afford a great part of the stone used for architectural purposes in London. The Portland stone came into repute in the time of James I., who used it by the advice of his architects in rebuilding the banqueting-house at Whitehall. After the great fire of London, A.D. 1666, vast quantities of this stone were used in rebuilding St. Paul's and other public edifices. A considerable portion of Westminster bridge and the whole of Blackfriars bridge are built of it.

The strata of stone of all kinds on the east side of Portland have an aggregate thickness of 93 feet, on the west side of 112 feet. The upper stratum or 'cap stone' is employed in building the Portland breakwater. The Kimmeridge clay, a blue slaty or grayish yellow clay, which also belongs to the upper oolitic series, underlies the Portland stone; it sometimes contains beds of a highly bituminous shale, which, from their being found near Kimmeridge in the Isle of Purbeck, have obtained the name of Kimmeridge coal, and have given to the whole formation the name of Kimmeridge clay. The thickness of the Kimmeridge clay is estimated at 600 or 700 feet. It forms the base of the Portland oolite in the Isle of Portland, and the line of junction between the two formations is elevated on the north side of the island far above the level of the sea. The coasts of the island are here formed by a sloping bank of Kimmeridge clay, surmounted by an abrupt escarpment of oolite. On the south side of the island by the dip of the strata towards the south, the line of junction is brought down to the level of the sea.

Towards the south-western shore of the Isle of Purbeck, where

the chalk downs approach the sea, and are skirted only by a very narrow belt occupied by the iron sand, and beyond that seaward by the Portland oolite, the sea has formed several singular coves, at the entrance of which are lofty headlands of oolite; while the cove or basin is excavated inland as far as the chalk. The precipitous sides of these basins exhibit in a most striking manner the formations between the chalk and the oolite.

Westward of the coves just described, extending from Weymouth Bay towards the river Brit, occurs what is termed by geologists 'a saddle,' a double series of formations. After the greensand, Purbeck and Portland beds, and Kimmeridge clay, have successively cropped out from beneath the chalk, the coral rag, and Oxford clay, members of the middle series of oolites, rise to the surface in succession, and are succeeded by the forest marble and the great oolite, which belong to the lowest series of the oolitic formations. To the southward of the great oolite and forest marble, the superior strata reappear in reverse order of succession; the Oxford clay, then the coral rag, and then the Kimmeridge clay, which runs down to the shore at Weymouth, and rises again from the sea in the Isle of Portland, where it appears capped with the Portland oolite.

In the north-western and western parts of the county, the chalk formation is succeeded by the greensand, which crops out from beneath it, and skirts the northern side and the western extremity of the North Downs. The greensand forms the outlying masses of Pillesdon and Lewston hills, and of others yet farther west along the borders of Dorsetshire and in the county of Devon. [DEVONSHIRE.] West of Shaftesbury extends a bed of Kimmeridge clay, which crops out from under the greensand: west of the Kimmeridge clay is a range of coral rag hills; and still farther west occur the Oxford clay and the great oolite. All these formations are overlaid by the westward extension of the chalk and greensand from the valley of the Stour to Beaminster; but some of them re-appear in the cliffs which line the coast westward of the Chesil bank. The western extremity of the county is occupied by the lowest members of the oolitic series and by the lias. The line of junction of these formations extends nearly north and south from Ilminster in Somersetshire to the sea. The detached part of the county which is inclosed within Devonshire is partly occupied by the red marl formation.

Climate, Soil, Agriculture.—The climate of Dorsetshire, though mild and healthy, is not so warm as its geographical situation would lead us to expect; a circumstance owing to the nature of the soil and the bareness of its chalk hills, there being little or nothing to break the force of the winds that sweep over them. The air is somewhat keen and bracing. In the valleys the climate resembles that of the valleys of Devonshire, and the vegetation is very similar. It appears from Domesday Book that in the 11th century there were vineyards in several parts of this county.

A considerable portion of the soil in the south-eastern part of Dorsetshire is composed of a loose sand and gravel, with a portion of ferruginous loam. The whole surface of the county consists chiefly of this loose sand and gravel, clay and chalk. The most fertile spots are those where all the three have been mixed in the valleys by the rivulets which run down the hills carrying the soil with them. The poor sandy soil occupies that part of the county which joins Hampshire. In the centre and towards Wiltshire lies the chalk; and along the coast, over a more solid chalky rock, is a stratum of clay, which likewise covers the western part towards Devonshire, and the northern towards Somersetshire.

The chalk hills to the west of Dorchester, and along the borders of the vale of Blackmore, are of considerable elevation, and contain several narrow vales and deep hollows. The most elevated parts of the chalk district are most profitably retained as sheep-walk, the pasture being fine and short. In the bottom of the vale of Blackmore are some extremely fertile meadows watered by the river Stour. The hills which look down upon this valley are high and bare; but the lower sides are beautifully varied with woods and fields. The quantity of arable land throughout the county bears but a small proportion to the pasture; and greater attention is paid to the rearing of sheep and feeding of cattle than to the raising of corn.

On the larger farms the farm-houses are old buildings of, and covered with, stone tiles; in the smaller they are mostly thatched with reed. Many cottages are built with mud walls composed of road scrapings, chalk, and straw, the foundation being of stone or brick. Garden walls are frequently built of these cheap materials, their top being protected from the weather by a small roof of thatch, which extends a few inches over each side.

The introduction of sainfoin on the dry chalky soils has been a great advantage, as it produces a rich fodder, requires little manure, and lasts many years. In this soil the wheat is generally sown after clover which has stood one or two years, but sometimes also after turnips or rape fed off. The folding of the land saves manure, and the vicinity of sheep downs gives an opportunity of having large folds and repeating the folding often, both before and after sowing the seed. The tread of the sheep consolidates loose soils better than the heaviest roller.

Barley is here a more important crop than wheat. It is sown from the middle of March to the middle of May. The earliest sown is generally the best. The produce averages 30 bushels per acre. Oats

are sown on the heavier and moister soils. Potatoes are cultivated to a considerable extent in the rich loams about Bridport, Beaminster, Abbotsbury, &c. Sainfoin is sown with a spring crop: four bushels of seed are required for an acre. It is cut before the blossom is fully expanded, and made into hay, which is excellent fodder for sheep in winter. After several years, when it begins to go off, it is ploughed up, and the land sown with oats. Hemp is cultivated to some extent in the richest soils, which contain a considerable proportion of sand, and are too light for beans. Flax is likewise cultivated in the sound deep loams which have been gradually enriched by manuring the preceding crops.

The meadows along the vale of Blackmore are extremely rich, and produce much hay, which is used to feed the dairy cows in winter. The upland meadows are well managed, and frequently dressed with lime and dung. Many sheep which feed on the downs in summer are wintered in the vales. The pastures on the hills are well adapted to feed dairy cows. The Dorset butter is in good repute in London and Portsmouth for ship provision as well as domestic use. Dorset salt butter, when well washed, is very commonly sold in London for fresh butter. The butter is made from the cream, and the skimmed milk is made into cheese.

The Dorset sheep are noted as a profitable breed to those who rear house-lambs for the London market. They give much milk, and fatten their lambs better than any other breed. There is another very small breed in the Isle of Purbeck, and near Weymouth, of which the flesh is in repute with epicures: some consider them as the real and original Dorsetshire breed. They resemble the small forest sheep formerly found on all the commons of the Forest of Windsor, and on Bagshot Heath, the mutton of which was in equal repute as Bagshot mutton. The wool is fine, but the fleece does not weigh above 1½ or 2 lbs. on an average. The Southdown breed is very generally found in Dorsetshire, and suits the pasture and climate better than the Leicester.

Divisions, Towns, &c.—The county of Dorset previous to the year 1740 was divided into five more considerable parts, or as they were termed 'divisions,' which took their names from the towns of—1. Blandford, II. Bridport, III. Dorchester, IV. Shaftesbury, and V. Sherborne. These were further subdivided into 35 hundreds, 24 liberties, and 10 boroughs.

Since 1740 a new arrangement of the county has been adopted. The five divisions have been increased to nine, namely:—Blandford, north and south, Bridport, Cerne, Dorchester, Shaftesbury, or Shaston, east and west, Sherborne, or Sherborne, and Sturminster. These divisions are further subdivided into 36 hundreds, 22 liberties, and 9 boroughs. The borough of Poole is considered as a county in itself.

The following are market-towns:—DORCHESTER, the county town, and a municipal and parliamentary borough, on the river Frome; the parliamentary boroughs of BRIDPORT, on the Brit; LYME REGIS, on the Sea; MELCOMBE REGIS, on the Sea, united with that of WEYMOUTH; POOLE, on Poole Harbour; SHAFTESBURY, on the border of the county adjacent to Wiltshire; WAREHAM, between the Piddle and the Frome; and the municipal borough of BLANDFORD FORUM, on the Stour. Of these places, and of the market-towns of BEAMINSTER, on the Brit, near its source, CERNE Abbas, on the Cerne, CRANBOURNE, SHERBORNE, on the Yeo, STURMINSTER, on the Stour, and WIMBOURNE MINSTER, on the Allen, as well as CORFE CASTLE, a diafranchised borough in the Isle of Purbeck, an account is given under their respective titles. Of Milton Abbas, Stalbridge, and Swanage, we give a brief notice here.

Milton Abbas, or Abbot, is said to derive its name (which is a contraction of Middleton Abbot) from its situation near the centre of the county. It is in a deep vale inclosed by steep chalk hills on the north and south side. The parish had in 1851 a population of 915 persons. Its market and fairs have been given up. An abbey founded here by King Athelstan formerly gave importance to the town. The buildings of the abbey were preserved for a long time, but were gradually pulled down, chiefly to be replaced by more modern erections. The hall yet remains, a noble and magnificent old room, part of the mansion of Milton Abbey, belonging to the Damer family. This family enjoyed for some time the title of Earl of Dorchester, now extinct. The conventual church is now a private chapel. It consists of the choir, transepts, and tower of the old abbey church: the choir is chiefly of early decorated character; the transepts and tower are perpendicular. The general appearance of this edifice is very fine.

Stalbridge is situated about 21 miles N. by E. from Dorchester. The population of the township in 1851 was 1326. The market is held every alternate Tuesday; and there are two cattle fairs in the year. The town is irregularly laid out. In the market-place is a very dilapidated ancient cross, 22 feet high, or including the base of three steps 30 feet. The church, a large ancient structure, with a high embattled tower at the west end, has been recently repaired. There are an Independent chapel, and a free school. Stone is quarried in the parish, and used for building and roofing.

Swanage, 29 miles E.S.E. from Dorchester, population 2014, a decayed market-town and sea-port. The church, which is spacious, is of different periods; some parts are very ancient. There are chapels belonging to the Independents and Wesleyan Methodists.

The town consists of a street a mile in length, containing many good shops. Swanage is much resorted to during the summer for sea-bathing. Many of the inhabitants are employed in extensive stone-quarries in the neighbourhood.

The following are the more important villages, with their population in 1851, and a few other particulars:—

Ajffuddle, 8 miles E.N.E. from Dorchester: population of the parish, 488. The church, which is a very handsome specimen of the decorated style, originally belonged to Cerne Abbey; in the interior is some fine carving. On Bladen Heath, in this parish, are several curious excavations. *Beer Regis*, 10½ miles E.N.E. from Dorchester, population 1242, is a decayed market-town. The church has a noble carved oak roof; in the interior are remains of several fine altars. The Independents and Wesleyan Methodists have places of worship, and there is a Free school. A fair is held on September 10th and the four following days. Beer Regis now forms part of the borough of Wareham. *Broadway*, 5 miles S. by W. from Dorchester: population of the parish, 610. Besides the church, which was rebuilt in 1836, there are a Wesleyan Methodist chapel and a National school. The village is much resorted to on account of a mineral sulphureous spring, known as Nottingham Spa. *Broad Windsor*, 18 miles N.E. from Dorchester: population, 1661. Besides the parish church, which is ancient, there is a new church at Blackdown, a hamlet of Broad Windsor; there are also a Dissenting chapel and a Free school. Sailcloth is manufactured. *Buckland Newton, or Buckland Abbas*, 11 miles N. from Dorchester, formerly a market-town, now an extensive village: population of the parish, 990. There are here an ancient parish church, a chapel for Dissenters, and a Free school. *Charmouth*, 21 miles W. from Dorchester, population 664, a village situated on the coast at the mouth of the river Char, is much resorted to during the summer for sea-bathing. It has a modern church, an Independent and a Wesleyan Methodist chapel, and National and British schools. *West Chickerell*, 7 miles S.S.W. from Dorchester: population of the parish, 577. The church, which is in the early English style, originally belonged to Bindon Abbey. In the interior is a Norman font. At the west end of the church are two large bells, suspended under stone arches. The Independents have a chapel in the village. There is a fishery here, of which the proceeds, chiefly mackerel, are forwarded to London and elsewhere by railway from Dorchester. *Davlish*, 8 miles N.E. from Dorchester: population, 442. The village, which lies in a hollow, and has a brook running through it, contains a very ancient and interesting church, a Wesleyan Methodist chapel, and a Free school. An extensive business was formerly carried on in making wire shirt-buttons. Several Roman remains, including a tessellated pavement, have been discovered in the neighbourhood. *Evershot*, 13 miles N.N.W. from Dorchester, population 606, formerly a market-town; two fairs are held in the course of the year. The church is ancient. Near the south side of the church is St. John's Spring, generally called the source of the river Frome. The Free Grammar school, founded in 1623, has an income from endowment of about 90l. a year, and had 53 scholars in 1851. *Gillingham*, 26 miles N. by E. from Dorchester, population 2306, contains a spacious and handsome church, recently rebuilt; chapels for Baptists, and Wesleyan and Primitive Methodists, a Free school, a National school, and a Temperance hall. A small market is held on Friday, a fair for cattle on Trinity Monday, and a pleasure fair on September 12th. The town is lighted with gas. There are silk manufactures, flour-mills, and an extensive brewery. *Hampreston, or Ham Chamberlayne*, 24 miles E.N.E. from Dorchester: population of the entire parish, which is partly in Hampshire, 1193. The church is very ancient. There are a new Independent chapel, with a spire and clock, a Methodist chapel, and a National school. At Stape Hill is a Roman Catholic nunnery. *Lytecht Matravers*, population 878, about 10 miles E. by N. from Dorchester, has a fine old church, in which are some good monuments. In the village are chapels for Wesleyan and Primitive Methodists, and a National school. *Lytecht Minster*, an adjoining village, population of the parish 878, being the same number as Lytecht Matravers, possesses a parish church, erected in 1834. The Baptists and Wesleyan Methodists have places of worship; there are also a National school and some parochial charities. Lytecht Beacon commands an extensive and beautiful view of the coast. *Marnhull*, 22 miles N.N.E. from Dorchester: population, 1481. The church is a spacious edifice in the early English style. There are a Wesleyan Methodist and a Roman Catholic chapel, a Free school, and a Roman Catholic school. In the neighbourhood is Nash House, a fine mansion, containing some good pictures. *Motcombe*, 30 miles N.N.E. from Dorchester: population, 1535. The church was rebuilt in 1846; attached to it is a National school built and supported by the Marquis of Westminster. The Wesleyans and Primitive Methodists have chapels. The Marquis of Westminster has a fine seat here called Motcombe Hall. *Netherbury* is situated on the right bank of the Brit, between Beaminster and Bridport, 19 miles W.N.W. from Dorchester: population, 2066. The church, which is in the perpendicular style, has been partly restored. There are a Dissenting chapel and a Free school. In the neighbourhood are several good mansions. *Parkstone*, 32 miles E. from Dorchester, population of the chapelry 899, a village in a picturesque situation near Poole harbour. Besides the church, which was built in 1833, there is an Independent chapel. The neighbourhood affords

some fine views, and the village is much resorted to in the summer. *Piddletown*, 5 miles N.E. from Dorchester, population 1297, a small well-built town situated on the river Piddle. The church is perpendicular, and contains a very rich Norman font and several interesting tombs. The Independents and Wesleyan Methodists have places of worship. A market formerly held here has been long discontinued. Fairs for cattle are held on Easter Tuesday and October 29th. *Radi-pole*, 6 miles S. by W. from Dorchester, population 609, a pleasant little village on the left bank of the Wey. Besides the church, which is very handsome, there are chapels belonging to the Independents and Roman Catholics. In the neighbourhood are many villas and genteel residences, and the place is much resorted to by summer visitors. *Shapwick*, 17 miles N.E. by E. from Dorchester: population, 444. The church is a curious old building. Shapwick once possessed a market: part of an ancient cross is still left. A priory was founded here in 1414. Some remains of an ancient camp are to be seen in the neighbourhood. *Spetisbury*, 15 miles N.E. from Dorchester: population, 660. The church is ancient, and has an embattled tower. There are places of worship for Independents and Wesleyan Methodists. The Roman Catholics have a church, convent, and school at Middle-street, a hamlet of Spetisbury. An alien priory formerly existed here. In the vicinity are some remains of an earthwork. *Sydling St. Nicholas*, 8 miles N.W. by W. from Dorchester: population, 675. Besides the church, there are Independent and Methodist chapels, and a Free school. A singular custom lately prevailed here of the farmers meeting every Sunday after service under an old elm, known as the Old Cross Tree, to hear the complaints of their farm-labourers. *Winterbourne St. Martin*, or *Martinstown*, 2½ miles W.S.W. from Dorchester: population, 434. The church is ancient, but of different dates. The village stands in the midst of an agricultural district, and has a considerable trade. Winterbourne formerly had a market; a fair which is well supplied with cattle, is held on St. Martin's day. Maiden Castle, the remains of a Roman camp, is situated in this parish. There are several other villages and parishes in Dorsetshire which are named Winterbourne. *Witchampton*, situated on the right bank of the river Allen, 22 miles N.E. from Dorchester, population 504, was formerly a market-town. The church is a large and handsome specimen of the decorated style. There are a Wesleyan chapel, an Infant and a Charity school, and four almshouses. A paper-mill gives employment to some of the inhabitants. *Wyke Regis*, 9 miles S. by W. from Dorchester, population 1898, a small village on the sea-coast. The houses are good, and the church is a very fine Norman edifice, with a square embattled tower, which serves as a landmark for vessels in the channel. In the interior are some good monuments and rich stained glass windows. Wyke Regis church is the mother-church of Weymouth. There is a Free school. From the heights in the vicinity some extensive prospects are obtained. *Yetminster*, 16 miles N.N.W. from Dorchester, population 666, formerly a market-town. Two fairs are held here annually.

Divisions for Ecclesiastical and Legal Purposes.—In the earlier period of the ecclesiastical constitution of England, Dorsetshire was included in the bishopric of Dorchester in Oxfordshire, a see founded by Birinus, first bishop of the West Saxons, about 626, and afterwards removed to Winchester. In the year 705, when Ina, king of Wessex, divided his kingdom into dioceses, Dorsetshire was comprehended in that of Sherborne, from which place the see was removed about the middle of the 11th century to Sarum. Upon the erection of the see of Bristol in 1542 Dorsetshire was transferred to the new diocese, of which it constituted the chief part, and it continued to be so until transferred back by the late act to the diocese of Salisbury. According to the 'Census of Religious Worship' taken in 1851 it appears that there were then in the county 563 places of worship, namely, 304 of the Church of England; 147 of four sections of Methodists; 69 of Independents; 15 of Baptists; and 28 of minor bodies. The total number of sittings provided was 121,206. By the Poor-Law Commissioners the county is divided into 12 unions:—Beaminster, Blandford, Bridport, Cerne, Dorchester, Poole, Shaftesbury, Sherbourne, Sturminster, Wareham and Purbeck, Weymouth, and Wimbourne and Cranbourne. These Unions include 282 parishes and townships, with an area of 596,413 acres, and a population in 1851 of 173,332; but the boundaries of the Unions are not strictly co-extensive with those of the county. This county is included in the western circuit. The assizes were anciently held at Sherbourne; sometimes, though rarely, at Shaftesbury; but generally, especially in latter times, at Dorchester, where they may be considered as now fixed. The shire-hall and county jail are at Dorchester. The quarter-sessions are also held at Dorchester; and county courts are held at Blandford, Bridport, Dorchester, Poole, Wareham, and Weymouth.

Before the passing of the Reform Act 20 members were returned to the House of Commons from Dorsetshire. The county now returns 14 members, namely, 3 for the county; 2 each for the boroughs of Bridport, Dorchester, Poole, and Weymouth united with Melcombe Regis; and one each for the boroughs of Shaftesbury, Lyme Regis, and Wareham. Corfe Castle was disfranchised by the Reform Act, and included in the neighbouring parliamentary borough of Wareham.

History and Antiquities.—This county was in the earliest period noticed by history inhabited by a people whom Ptolemæus calls

Durotriges, a name which Mr. Hutchins (after Camden) derives from the British words *dwr*, water, and *trig*, an inhabitant, and interprets to mean 'dwellers by the water side.' According to Assor Menevensis the Britons called this people *Dwr Gwyr*; the Saxons called them *Dorsettan*, whence the modern name of the county. The Durotriges appear to have been of Belgic race. Upon the conquest of South Britain by the Romans Dorsetshire was included in *Britannia Prima*.

Of this early period of our history there are several remains in various camps and earth-works, stone-circles, cromlechs, and barrows. [CERNE ABBAS.] In the north-eastern part of the county, and the adjacent part of Wiltshire, are several embankments with ditches; they all run in a winding and irregular manner mostly from south-east to north-west, having the ditch on the north-east side. At Sutton Walrond are two hills which appear to have been Celtic earth-works.

There are several Roman camps in the county. Mr. Hutchins enumerates 25; and the walls and amphitheatre of Dorchester, and the coins and pavements found there, are monuments of the same victorious people. There were at least two Roman stations in the county, namely, *Durnovaria* ('Itin.' Antoninus), or *Dunium* (Ptolemæus), Dorchester; and *Vindocladia*, or *Vindogladia*, *Vindelia* in Richard of Cirencester, which some are disposed to fix at Wimbourne, others more probably at Gussage, between Blandford Forum and Cranbourne. To these Dr. Stukeley would add a third, *Ibernium* (mentioned by the anonymous *Ravennas*), which he fixes at Bere Regis.

The Ikenield or Icknield way enters the county at its western extremity, coming from Hembury Fort [DEVONSHIRE], and runs east by south to Dorchester, near which it is very perfect, high and broad, and paved with flint and stone; from Dorchester it runs by Sheep-wick and Sturminster Marshall, and the Gussages into Wiltshire. The remains of a Roman road may be traced on the south-west side of the Frome, leading from Dorchester in a north-west direction as far as Bradford Peverel and Stratton, soon after which it disappears; another road may be traced from Dorchester on the other bank of Frome, parallel to the former road, and uniting with it at Stratton; and there are traces of several others.

When the Saxons established their octarchy Dorsetshire was included in the kingdom of Wessex; and even after the West Saxon princes acquired the sovereignty of England they resided occasionally in this county. Ethelbald and Ethelbert, the elder brothers of Alfred the Great, were buried at Sherbourne; and Ethelred I., another brother of the same prince, at Wimbourne.

In the invasions of the Danes this county suffered severely. In 876 they made themselves masters of Wareham, where they were besieged by Alfred, who obliged them to quit that place the next year, when 120 of their vessels were wrecked at Swanage. In 1002 Sweyn, king of Denmark, in his invasion of England, destroyed Dorchester, Sherbourne, and Shaaston or Shaftesbury.

Throughout the middle ages few events of historical interest connected with the county occur. The contest of the Roses little affected this part of the kingdom. The towns on the coast were flourishing, as appears from the following list of the vessels which they furnished to the fleet of Edward III. at the siege of Calais, 1347:—Weymouth, 20 ships and 264 mariners, or, according to Hackluyt, 15 ships and 263 mariners; Lyme, 4 ships, 62 mariners; Poole, 4 ships, 94 mariners; Wareham, 3 ships, 59 mariners. Weymouth furnished only 2 vessels less than Bristol and only 5 less than London; they were however more weakly manned and probably smaller. To the fleet of the lord high admiral (Howard of Effingham), at the time of the armada, 1588, this county furnished 8 vessels (3 of them volunteers) and 340 men. The second engagement of the English fleet with the armada was off Portland Bill.

In the civil war of Charles I. the gentry were mostly for the king; but the people of the towns, where the clothing trade was then carried on, and of the ports, were for the parliament. In the beginning of the war, Sir Walter Earle and Sir Thomas Trenchard, partisans of the parliament, possessed themselves of Dorchester, Weymouth, Portland, Lyme, Wareham, and Poole, while Sherbourne Castle, Chideock Castle, and Corfe Castle were garrisoned by the king. Corfe Castle held out for the king till 1645-6. The year 1645 was distinguished by the rising of the club-men in the counties of Dorset, Wilts, and Somerset; their object was to defend this part of the county from the outrages of both parties. Their assembling excited the jealousy of the parliamentarians, whose superiority was now established. Cromwell defeated a considerable body of them at Hamilton Hill, and other bodies were persuaded to disperse.

In 1851 the county had 10 savings banks—at Blandford Forum, Bridport, Dorchester, Lyme Regis, Poole, Shaftesbury, Sherbourne, Wareham, Weymouth, and Wimbourne. The amount due to depositors on the 20th of November, 1851, was 432,946l. 11s.

DORT, (*Dordrecht*, formerly *Thuredrecht*), a city of South Holland, is situated on an island formed by the Maas, 11 miles S.E. from Rotterdam, in 51° 49' N. lat., 4° 42' E. long., and has about 21,000 inhabitants. The island on which it stands was separated from the opposite shore in November, 1421, by an irruption of the waters. By this irruption the dykes were broken down, more than 70 villages were destroyed, and a great number of the inhabitants drowned. Dort is one of the most ancient cities in Holland, and was formerly the capital of the

province, and the residence of the counts of Holland. The independence of the United Dutch Provinces was first declared at Dort in 1572; and here in 1618 and 1619 sat the Synod of Dort which condemned the doctrines of Arminius. The old gothic structure in which the synod was held is now a public-house. The situation of Dort is naturally so strong, that although frequently invested it has always made successful resistance to the besiegers. It has a safe and good harbour, and is well situated for trade, having two canals, by means of which goods can be conveyed to warehouses in the heart of the city. East Indiamen heavily laden can come up to the quays. The chief industrial establishments are shipbuilding docks, saw-mills, sugar-refineries, tobacco factories, salt-refineries, white-lead works, and in the neighbourhood numerous linen bleaching-grounds. There is a large trade also in corn, flax, train-oil, salt-fish, and wood; large rafts of timber are brought down the Rhine from German forests to this place, and broken up for sale. The brothers De Witt were natives of the town. The town-hall is a handsome building, and the principal church is a gothic structure 300 feet long and 125 feet wide, with lofty towers and chimneys. The electro-telegraphic wires laid down along the projected line of railway between Antwerp and Rotterdam pass through Dordrecht.

DORTMUND. [ARNSBERG, vol. i. col. 531.]

DOTIS, a town in the north-west of Hungary, is situated about 12 miles S.E. from Comorn, in 47° 38' N. lat., 18° 20' E. long., and has about 5000 inhabitants. Between the town and its suburb (called Tovaros, 'Lake Town,' from its situation on a small lake), are the ruins of an ancient castle, which was a favourite residence of Mathias Corvinus, king of Hungary. Among the buildings of note are three churches, one of which is very old, a Capuchin and a Piarist monastery (the latter having a grammar-school), a head-district school, a military hospital, and a bath-house. The inhabitants have several flour- and saw-mills, and manufacture coarse woollen cloths, earthenware and pottery, beer, &c. The Esterhazy family have a splendid castle here, with grounds laid out in the English style. There are vineyards, large sheep-grounds, and extensive forests, in the neighbourhood. Dotis and much of the surrounding land are the property of the Esterhazy family.

DOUAI, or DOUAY, a large, ancient, and important town on the Scarpe, in the French department of Nord, stands in 50° 22' N. lat., 3° 4' E. long., at a distance of 21 miles by railway S. from Lille, 80 miles S.W. from Brussels, and 149 N. by E. from Paris by the railroad which joins these two cities, and has 18,018 inhabitants including only the commune. It is surrounded by ancient walls, flanked with towers and laid out in agreeable promenades. The town is further defended by a fort on the left bank of the Scarpe. The streets are well laid out. The town-hall, the church of St. Pierre, the cannon-foundry, and the arsenal, are the principal buildings. The inhabitants are engaged in the manufacture of linen, lace, thread, gauze, cotton, soap, glass, leather, beer, gin, pottery, paper, oil, chemical products, and refined sugar. A considerable trade is carried on also in corn, wine, brandy, chicory, wool, hops, flax, woollen cloth, and cattle. Douai is the seat of a University Academy, and of a High Court of Justice, which has jurisdiction over the departments of Nord and Pas-de-Calais; it has also a college for English Roman Catholic priests, founded by Cardinal Allen, an Englishman; a royal college; a school of artillery; a school of drawing and music; a public library, which contains 27,000 volumes; a museum of natural history; a botanic garden; and a collection of paintings and antiquities; several hospitals; and a theatre. A tribunal of first instance is held here. Exhibitions of the industrial products take place every two years. The commerce of the town is more active than formerly, in consequence of its connection by railroads with the chief towns of France and Belgium. Douai has also extensive communication by means of the Scarpe, which falls into the Schelde, and by numerous canals that connect it with the principal trading towns of France, Belgium, and Holland.

Douai is a place of great antiquity: it existed in the time of the Romans, and became under the counts of Flanders a place of considerable importance. Philip the Fair took the town from the count of Flanders, A.D. 1297, but it was restored to the counts in 1368 by Charles V. of France. With the rest of Flanders it passed under the dominion of the kings of Spain; and in 1552 Philip II. of Spain founded a university here. In 1667 Louis XIV. took possession of Douai: it was taken in 1710 by the allies under Marlborough and Eugene, but the French retook it after the English withdrew from the coalition against France. Much flax is grown, and coal is dug, in the neighbourhood of the town.

DOUBS, a department in the east of France, takes its name from the river Doubs, which has its source and a considerable part of its course within its boundaries. It lies between 46° 35' and 47° 31' N. lat., 5° 30' and 6° 58' E. long., and is bounded N.W. and N. by the departments of Haute-Saône and Haut-Rhin; E. by Switzerland, and S.W. and S. by the department of Jura. This department is irregularly shaped; its greatest length from north to south is 66 miles, from east to west 60 miles: the area according to the latest cadastral returns of the French government is 2019 square miles, and the population according to the census of 1851 was 296,679, which gives 146.94 to the square mile, being 27.77 below the average per square mile for the whole of France. The population however is

very unequally distributed: in the plains it is far above the average, but very thin indeed in the mountainous parts. The department is formed out of a portion of the old province of Franche-Comté.

The department presents high mountains, forests, narrow valleys, heaths, rocks, and marshes. It is crossed from north-east to south-west by four parallel chains of the Jura Mountains; in the highest of these, which runs along the Swiss frontier, are the summits Mout-d'Or and Mont-Suchet, respectively 4920 and 5248 feet high; the other chains become successively lower, so that the highest point in the western chain, Roche-d'Or, is only 2860 feet in height. The two more eastern chains have their sides clothed with pine forests, the perpetual verdure of which forms a strong contrast with the snows that cover the mountain tops during six months of the year, or in the absence of snow, with the bare rocky crags which occupy the crests of these chains: on their southern slopes there is good pasturage during the summer and autumn, to which numerous herds of cattle are driven; and here in the 'chalets' or shepherds' huts (the only habitation met with in these regions) a great quantity of excellent butter and cheese is made. Even in the valleys of this region little attention is paid to the cultivation of the soil, in consequence of the length of the winter, the depth of the snow, and the short continuance of the fine season. The only crop is oats, of which a good deal is grown, but even this crop is sometimes lost under the early snow. The other two chains, though they present many bare rocky heights, have a milder climate, forests of oak (*quercus robur*) and beech instead of pine, and a more fertile soil in the valleys, which yield wheat, but in no great quantity; the vine is cultivated on sheltered spots facing the south. The west of the department, between the Doubs and the Oignon, is comparatively level, very fertile, and much more densely peopled than the highlands; here the hills are covered with vineyards, and the plains abundantly produce wheat, maize, hemp, flax, fruits, and other crops. The valleys which separate the mountain chains are longitudinal, that is, they run in the direction of those chains; they vary greatly in width, in some places opening out into tolerably wide basins, but frequently contracting into deep narrow gorges. The climate is cold but healthy in the mountainous districts, where the snow lies commonly from October till April; in the western plains the temperature is more genial; west and north-west winds are frequent, and bring rain; the south-west wind is ordinarily violent and dry.

The production of bread-stuffs is not sufficient for the consumption; of wine the annual produce is only 3,784,000 gallons; walnuts, cherries, and other fruit-trees are extensively cultivated. Horned cattle, resembling the Swiss breed, and horses, are reared in great numbers. The rivers contain trout, perch, tench, eel, carp, pike, crab, &c. A silver mine was formerly worked on the flanks of the Mout-d'Or. Iron and coal mines are worked; shell-marble, gypsum, and building-stone are quarried; lignite, marl, fuller's and potter's clay are found; and peat for fuel is dug in many places. The mountain pastures abound with medicinal and aromatic plants, and of these large quantities are gathered.

In the mountainous districts the rearing of cattle and the making of cheese and butter, are the chief occupations of the population; the annual value of the cheese made in the department is estimated at 1,650,000 francs, of the butter at 260,000 francs. The cheese is of good quality, and resembles Gruyère. Of manufacturing industry, properly so called, the products furnished by the department are—watch and clock movements, cotton and woollen cloths, cotton yarn, bosiers, paper, glass, glue, leather, beer, hammered iron, steel, iron-wire, files, scythes, and other agricultural implements. A good deal of kirsch-wasser and extract of wormwood is made. The commerce, a large proportion of which is carried on with Switzerland, consists in the articles named, and in hides, cattle, timber, deals, oak staves, tin and iron-ware, &c. There are 433 corn and other mills in the department, most of which are worked by water power; 35 iron-foundries and smelting furnaces, and 156 factories of different kinds. Fairs to the number of 270 are held yearly. Roadway accommodation to the extent of 310 miles is afforded by 5 royal and 21 departmental roads. The department has as yet no railroads, but the electro-telegraphic wires connecting Paris with Lausanne and the chief towns of Switzerland, are laid down through Besançon and Portarlier.

The department takes its name from the river Doubs, which traverses it twice throughout its entire length. This river rises at the foot of Mout Rixon, in the south-east of the department, and runs in a north-east direction for about 70 miles. For 10 miles of this distance below Chaux-de-Fonds the river forms the eastern boundary of France; then entering the Swiss canton of Neuchâtel it runs about 8 miles to the east of north-east striking against Mont-Terrible, the highest part of the chain that connects the Vosges and the Jura Mountains, it glances off to westwards for about 16 miles as far as St. Hippolyte, where it receives the Dessoubre on the left bank, and takes a northern direction to within 4 miles of Montbelliard. From this point the river making a rapid semicircular sweep, first to the east and then to the north-west, finally flows south-west, passing Clerval, Baume-les-Dames, and Besançon; a few miles below this last town it enters the department of Jura, where it receives the Loue on its left bank, and taking a more southerly course, reaches the department of Saône-et-Loire, in which it joins

the Saône on its left bank at Verdun, after a course of 211 miles, and a descent of 2605 feet. In its upper course the Doubs flows between pine-clad mountains over a limestone bed, in the cavities of which the clear rapid stream sometimes disappears altogether. On approaching the Swiss frontier in the lower part of the canton of Morteau, the river, increased by numerous streams, forms a fine broad sheet of water, pent in at its northern extremity by the mutual approach of wild rocky precipices on each side, which leave a passage only 27 feet in width; through this gorge the river dashes perpendicularly down a space of 87 feet, and forms a magnificent cataract, the snowy foam and thundering roar of which strikingly contrast with the gloom and silence of the frowning rocks and dark forests above. This cataract called *Le Saut-du-Doubs*, or 'the Doubs' Leap,' is the finest in this part of France. A great deal of timber is floated down the river. The navigable reaches of its south-western course form part of the canal from the Rhône to the Rhine, which, leaving the Saône near St.-Jean-de-Losne and running along the western valley of the Doubs, joins the Rhine near Mulhausen. The only other river worth notice is the *Oignon*, which rising in Haute-Saône, and flowing due south to near Villers-Sexel, then turns south-west, separating the department of Haute-Saône from those of Douba and Jura, and enters the Saône just within the department of Côte-d'Or after a course of 68 miles.

The surface of the department contains 1,292,151 acres. About 478,900 are more or less capable of cultivation, 301,000 are under woods and forests, 176,000 are mountain pasture, and 254,000 are irreclaimable heaths and marshes. The whole department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Besançon	8	209	110,826
2. Pontarlier	5	89	52,195
3. Baume	7	189	68,354
4. Montbelliard . . .	7	162	65,304
Total	27	649	296,679

1. In the first arrondissement the chief town is *Besançon* [BESANÇON]. *Ornans*, the only other town worth notice, is prettily situated on the Loue, which is crossed by two stone bridges, at a distance of 10 miles S.E. from Besançon, and has a population of about 3000, including the commune. It is a well-built town. The most remarkable structures are the church of St.-Lanrent and the town-house, in connection with which are the market-hall and prison. On an elevated platform commanded by high hills, and just outside the town, are the ruins of a strong castle, one of the residences of the old dukes of Bourgogne. The town has an ecclesiastical college, a large trade in cheese, and manufactures of paper, leather, and kirschwasser, which is distilled from the cherries abundantly grown in the neighbourhood.

2. In the second arrondissement the chief town is *Pontarlier*, which stands in a valley between the Jura Mountains, at the junction of the Dragoon with the Doubs, 35 miles S.E. from Besançon, in 46° 54' 9" N. lat., 6° 21' 37" E. long., and has 4936 inhabitants. It is well built, with neat houses arranged in wide straight streets; the principal buildings are the cavalry barracks, the college, the market-house, and the town-hall. The town is the seat of a tribunal of first instance, and has a public library, a communal college, large iron-foundries and smelting furnaces, hydraulic saw-mills, a copper-foundry, a brewery, and several tanyards. Besides the products intimated, cheese, cattle, horses, watches, extract of wormwood, paper, and agricultural implements enter into the commerce of the town. *Mont-Benoît*, a small place 9 miles from Pontarlier, deserves mention only on account of the large buildings of the Benedictine abbey from which it takes its name, and which are classed among the historical monuments of France. The abbey existed from the beginning of the 12th century to the first French revolution, when it was suppressed. *Morteau*, a small place of great manufacturing industry, on the left bank of the Upper Doubs; and *Mouthé*, near its source, the inhabitants of which are engaged in felling timber and in rearing cattle and horses, are the only other places worth notice.

3. In the third arrondissement the chief town is *Baume*, or *Baumeles-Dames*, which stands in 47° 22' 9" N. lat., 6° 21' 43" E. long., on the right bank of the Doubs, and on the Canal du-Rhône-au-Rhin, at the extremity of a fine plain inclosed by vine-clad hills. It is a neat little town, and contains a fine church, an hospital, a college, a small public library, and a tribunal of first instance. The population is 2544; who manufacture iron, glass, paper, leather, &c. From the 5th century to 1789 Baume was celebrated for its Benedictine nunnery, the inmates of which had to give proof of noble descent, and were not cloistered. *Clerval*, higher up the Doubs; *Isle-sur-Doubs*, still more to the northward; *Rougemont*, near which there are extensive stalactitic caverns; and *Vercel*, 13 miles E. of Baume, are small places, which give name to some of the other cantons, and have about 1500 inhabitants each.

4. In the fourth arrondissement the chief town *Montbelliard*, or *Montbelliard*, stands in the northern angle of the department, in a valley between the Vosges and the Jura Mountains, 48 miles N.E.

from Besançon, in 47° 30' 36" N. lat., 6° 48' 19" E. long., and has a tribunal of first instance, a college, and 5605 inhabitants, including the commune. It is situated at the confluence of the Alan and the Lusine, about three miles north of the point where their united waters enter the Doubs. The town is well built, and ornamented with several fountains: the most remarkable buildings are—an old castle flanked by strong towers (which now serves for a prison), the church of St.-Martin, the town-house, the market-house, and the hospital. Watch and clock movements, hosiery, files, cotton-yarn, leather, scythes, and other agricultural implements are manufactured; there is also a brisk trade in corn, colonial produce, cheese, linen, deals, oak planks and staves, timber, &c. Montbelliard was formerly a place of great strength. It was the capital of a county which, after having formed part of the kingdom of Bourgogne, was included with the latter in the estates of the Emperor Courad II., but was soon after governed again by its own counts. In 1395 the county came by marriage to the Würtemberg family. The town was taken by a surprise by the French under Marshal de Luxembourg in 1647; Louis XIV. took it in 1674, and demolished the ramparts. The eldest son of the dukes of Würtemberg resided in Montbelliard from 1723 till the outbreak of the first French revolution. French troops occupied the town in 1793, and it was ceded with its territory to France by Würtemberg in 1796. There is an Anabaptist chapel at Montbelliard. *Audincourt*, 3½ miles from Montbelliard, is a small place of about 2000 inhabitants, but it has one of the finest establishments in France for the manufacture of iron, yielding annually 500 tons of pig, 2000 tons of hammered, and 500 tons of sheet iron, besides 20,000 cases of tinned plates. There is a Calvinistic church in Audincourt. The places that give name to the other cantons are mere hamlets.

The department, together with that of Haute-Saône, forms the arch-diocese of Besançon; it is under the jurisdiction of the High Court of Besançon, and belongs to the 7th Military Division, of which Besançon is head-quarters. There is a university academy, an endowed college, and a consistorial church at Besançon. (*Dictionnaire de la France; Balbi, Géographie; Annuaire pour l'An 1853.*)

DOUGLAS, the capital of the Isle of Man, a market-town, seaport, and watering-place, is situated on the south-east coast of the island, in 54° 10' N. lat., 4° 27' W. long., distant 75 miles N.W. from Liverpool, and 281 miles N.W. from London. The population of the town of Douglas in 1851 was 9880. The town is chiefly in the parish of Onchan, or Conchan: a small portion is in the parish of Braddan, or Kirk Braddan. The livings of both parishes are vicarages in the archdeaconry and diocese of Sodor and Man.

The name of the town was formerly written Dufglass, which is supposed by some to have been derived from the two rivers Doo and Glass, which run close to the town. The view which is obtained on approaching the bay is extremely interesting and beautiful. The bay is about three miles in extent, reaching from Clayhead to Douglas Promontory, in the form of a crescent, and sheltered from all winds except the south-east. Much improvement has taken place in Douglas of late years, especially since the establishment, in 1830, of regular communication by steam-vessels between Liverpool and the Isle of Man. The steamers ply daily in summer and twice a week during the winter. Steamers also ply occasionally to Fleetwood and Dublin. Douglas has become a favourite residence and watering-place. The new town has a well-arranged square and several handsome terraces, and is being extended northwards. The margin of the bay is studded with numerous fine marine villas. Castle Mona, erected by the Duke of Athol, and formerly one of his seats, but now used as an hotel, is a large and handsome building. The pier, which is 520 feet long, and upwards of 40 feet broad, was built by government at the cost of 25,000*l.*

Among the public buildings may be noticed the court-house on the pier; the custom-house for the island, an extensive building in the market-place; the Wellington market, a commodious erection with a large room for public entertainments; the House of Industry, which affords an asylum for upwards of seventy aged and infirm persons, and is supported by subscriptions and annual collections in the churches; the Odd-Fellows Hall, a large and elegant structure, erected by a body of shareholders for public dinners, balls, concerts, &c.; and a public hospital in Fore-street, with a dispensary attached.

The parish church of Braddan, an ancient structure, was partially rebuilt in 1773. In Keith's 'Catalogue' it is said that "Mark, bishop of Man, held a synod at Kirk Braddan in 1292, when 39 canons were made." There are 4 chapels, the oldest being St. Matthew's; St. George's is pleasantly situated on an eminence at the west end of the town; a third is dedicated to St. Barnabas; the fourth is St. Thomas's, a very handsome edifice recently erected. The Wesleyan Methodists have two chapels, and the Primitive Methodists, Scotch Presbyterians, Independents, Roman Catholics, Baptists, Plymouth Brethren, and Mormons have each a place of worship. There are National and Infant schools; a Free Grammar school connected with St. Matthew's chapel; a school supported by the Wesleyan Methodists; two savings banks; and a mechanics institute with library; and four public libraries.

The manufacture of lineu and canvas is carried out to a considerable extent. There are paper, woollen, and rope-works. On the shore are numerous bathing-machines. By an act of the Insular legislature, or

Deemster (which holds its sessions at Castletown), in 1851, the government of the town of Douglas is vested in the hands of nine commissioners, with power to levy rates for sewerage, watching, lighting, &c.

In the neighbourhood of Douglas are remains of a nunnery erected by St. Bridget in the early part of the 6th century. In Braddan churchyard are some very ancient stones, the inscription on one of which is in runic characters, and very perfect; others are of a rude description.

(Townley, *Journal in the Isle of Man; Parliamentary Papers; Communication from Douglas.*)

DOUGLAS. [LANARKSHIRE.]

DOULLENS. [SOMME, dep.]

DOUNE. [PERTSHIRE.]

DOUR. [HAINAULT.]

DOURO (in Portuguese), DUERO (in Spanish), are the names of one of the largest rivers of Spain and Portugal. The Duero rises in the province of Castilla la Vieja, about 30 miles W.N.W. from the town of Soria. Its course to Soria is very irregular, along the slopes of a series of bleak ridges which extend north-westwards from the great mountain mass of the Moncayo. From Soria to the village of Almaral, where it receives the Rituerto, it flows southward. Its course is afterwards to the west through the central parts of Castilla la Vieja and Leon, during which it receives the Ucero, the Pisuerga, the Rio Seco, the Esia, and other large affluents, besides numerous smaller ones. Soon after receiving the Esia it turns to the south, and flows in that direction about sixty miles, forming the boundary between Spain and Portugal, till it meets the Agueda. In this part of its course it receives the Tormes and other tributaries. After its junction with the Agueda it enters Portugal, takes the name of the Douro, and flowing across the country in a western direction enters the sea below Oporto. During its course through Portugal it receives the Sabor, the Tua, the Corga, the Tamega, and other rivers, on the north bank; and the Coa, the Tavora, and Pavia, on the south bank. It divides the province of Beira on the south from the provinces of Tras os Montes and Entre Douro e Minho on the north. The entire length of the river is about 500 miles. The bridges which cross it amount to about 20, of which about 16 are of stone.

The navigation of the Douro extends from Oporto to Saõ Joã de Pesqueira, a little below the mouth of the Sabor. During heavy rains, or when the snow is melting on the mountains, and especially when the rains and melting snow act in combination, the river becomes very deep, and the current extremely rapid. It sometimes rises to such a height as to inundate the whole of the lower part of Oporto, rushing over the bar at the mouth of the harbour with a roaring noise, and occasionally forcing the vessels out to sea, no cable and anchor being then strong enough to hold them. The vessels however are usually secured by a strong boom, one end of which is made fast on board and the other end on the shore. The navigation of the river is generally difficult, and when full is very dangerous, not only from the rapidity of the current, but from the masses of broken rocks which in some places obstruct the bed of the river. The wine-boats which navigate the Douro are flat-bottomed; the largest will contain about 70 pipes, the smallest about 30 pipes. By these boats the whole of the wine of the Upper Douro is conveyed to Oporto, where it is stored for exportation, chiefly to England.

DOVEDALE. [DERBYSHIRE.]

DOVER, Kent, one of the Cinque Ports, a borough, sea-port, and market-town, and the seat of a Poor-Law Union, is situated in 51° 0' N. lat., 1° 18' E. long.; distant 16 miles S.E. by S. from Canterbury, 71 miles E.S.E. from London by road, and 88 miles by the South-Eastern railway. The population of the borough in 1851 was 22,244. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The livings are in the archdeaconry and diocese of Canterbury. Dover Poor-Law Union contains 23 parishes and townships, with an area of 27,068 acres, and a population in 1851 of 27,044.

Dover is situated on the coast, at the opening of a deep valley formed by a depression in the chalk hills, which here present a transverse section to the sea. This depression, which runs into the interior for several miles, forms the basin of a small stream called the Dour. The site of Dover being the nearest point of communication with the continent, it was at an early period of British history an important place. At or near this point Julius Cæsar made his first attempt to land on the British shores, when the height of the cliffs, and the warlike appearance of the natives collected upon them, warned him to seek a more accessible landing-place. In the time of Edward the Confessor Dover was made one of the five ports appointed to be maintained for the special defence of the coast, and called from their number 'The Cinque Ports.' William the Conqueror met with opposition at Dover, which he remembered and revenged; but he did not on that account overlook the importance of the station, or neglect to strengthen the defences and restore the town. Subsequent sovereigns and governments have paid due attention to the fortifications at Dover, which from its position was at an early date regarded as 'the key of the kingdom.' In Dover King John submitted to the pope, and surrendered his kingdom to the papal nuncio. In 1295 a French fleet attacked and plundered the town; the inhabitants however

procuring aid from the surrounding country returned with a large force and drove the Frenchmen to their ships with considerable loss. A few years subsequently to this affair the French again attacked and burnt the town. The castle has been frequently besieged: on one occasion Hubert de Burgh, appointed constable of Dover Castle by King John, gallantly maintained his position here against the determined attacks of Louis, the dauphin of France, who after returning a third time to the siege was compelled to abandon the attempt, on which he had spent several months. De Burgh then collecting the navy of the Cinque Ports, of which he was warden, attacked with 40 vessels a French fleet of more than double his force, and took or destroyed all but about 15 vessels. This event put an end to the hopes of the dauphin, who soon after retired from Britain.

In the war between the crown and the Parliament Dover Castle, which was in the hands of the Royalists, was suddenly seized for the opposite party by a few determined men of Dover, headed by a merchant of the town, who in the silence and darkness of midnight scaled the walls, and overcoming the surprised sentinels opened the gates to a party of their adherents, before whom the garrison, unaware of the smallness of the assailing force, precipitately fled. In 1743, when a visit from the Pretender was looked for, the military works were considerably extended. Half a century later, when Buonaparte threatened an invasion of England, the military works of Dover Castle were after careful survey remodelled and enlarged, and considerable additions made to the fortifications. The solid rock was excavated for the construction of barracks, and accommodation was provided for a garrison of from 3000 to 4000 men. On the other side of the town the Heights were also fortified; and on the hill above the town barracks were erected. A passage to these barracks was constructed in a perpendicular shaft with three flights of stairs, each of 140 steps. From the hill at the top of this Grand Shaft, as it is called, an excellent view of the town and the channel is obtained. Extensive batteries of great strength are erected here, which are not however mounted with cannon. Indeed as they have happily not been required the works have never been fully completed.

The town of Dover is not in itself very attractive. The principal street is about a mile in length, running in the direction of the valley. Many showy houses for sea-bathing and other visitors have been built of late years; there are also some handsome shops and substantial public offices. The station of the South-Eastern railway is a building of some importance; and there is an hotel on a very large scale. Of seven churches once possessed by the town only two remain. St. Mary's church has a Norman tower. The edifice was restored some years back. St. James's church has also some Norman features. Two churches have been erected within the last few years. Christchurch, in the parish of Hougham, is within the town of Dover. The Baptists, Independents, Quakers, Methodists, and Roman Catholics have places of worship here. There are National and Free schools, a dispensary and an hospital in conjunction with it, a proprietary library, and a savings bank. A county court is held in the town. Wednesday and Saturday are the market-days: fairs are held in November. Some paper-mills and corn-mills are in the neighbourhood.

Dover is the principal station and the seat of government of the Cinque Ports; the other cinque port towns being Hastings, Sandwich, Hythe, and Romney. Various changes have taken place in the circumstances, and even, from the continued contest between sea and shore, in the physical features of some of these ports. Other towns and ports have been added to the original confederation under the title of members. The chief object for which the Cinque Ports were constituted into a distinct jurisdiction and endowed with peculiar privileges has been for two centuries superseded by the establishment of the naval force of this country; and most of the ancient privileges of the ports have been abrogated by the operation of the Municipal Corporations Reform Act. Still Dover from its position in relation to the Continent must always be regarded as an important point on the British shores. The warden of the Cinque Ports is constable of the castle of Dover.

The shipping trade of Dover is not very extensive, the harbour being constantly liable to be filled up by the influx of sand and shingle. Ship-building, sail-making, rope-making, and other trades dependent on the shipping are carried on to some extent. The vessels registered as belonging to the port on 31st December 1852 were:—Under 50 tons 51, tonnage 1421; above 50 tons 22, tonnage 2498; and 2 steam vessels, tonnage 106.

The vessels entered and cleared at the port of Dover during 1852 were as follows:—Coasting trade, inwards 407, tonnage 33,088; outwards 129, tonnage 6704; colonial trade, inwards 10, tonnage 1141; foreign trade, inwards 78, tonnage 6898; outwards 59, tonnage 3410; steam vessels, inwards 16, tonnage 2082. As Dover is the principal pilot station of the Cinque Ports, there are 56 pilots stationed here for the Channel service.

Many endeavours have been made at various periods and at enormous cost to improve Dover Harbour; but these efforts have been to a great extent rendered ineffective in consequence of the continual accumulation of sand and shingle. The authorities however continue to use means to keep the harbour as clear as possible, and to maintain the depth of water requisite for the packet service.

Dover Harbour has peculiar importance also from the operations

carried on with the view of making it a harbour of refuge. The Report of the Government Commissioners appointed in 1844 to investigate the subject recommended the construction of works so extensive as to involve an outlay of two and a half millions of money. The commissioners recommended that in the first place a pier should be run out from Cheesman's Head into 7 fathoms water. This portion of the work is being carried forward; its progress however depends much upon the state of the wind and weather.

(Hasted, *Kent*; Batchelor, *Guide to Dover*; *Land We Live In*, vol. ii.; *Parliamentary Papers*; *Communication from Dover*.)

DOVREFIELD. [NORWAY.]

DOWLETABA'D, a strongly fortified town in the province of Aurungabad, 7 miles W.N.W. from the city of Aurungabad, in 19° 57' N. lat., and 75° 15' E. long. The fort consists of an enormous insulated mass of granite, standing a mile and a half from any hill, and rising to the height of 500 feet. The rock is surrounded by a deep ditch, across which there is but one passage, which will allow no more than two persons to go abreast. The passage into the fort is cut out of the solid rock, and can be entered by only one person at a time in a stooping posture. The place is altogether so strong, that a very small number of persons within the fort might bid defiance to a numerous army. On the other hand, the fort might be invested by a very inconsiderable force, so as to prevent supplies being received by the garrison, who, owing to the intricacy of the outlet, could never make an effective sally. The lower part of the rock, to the height of 180 feet from the ditch, is nearly perpendicular, and impracticable to ascend. The rock is well provided with water.

Dowletabad is now included in the territory of the Nizam of Hyderabad. Since the seat of government has been transferred to AURUNGABAD the town of Dowletabad has greatly decayed; only a small portion of it is now inhabited.

DOWN, a maritime county of the province of Ulster in Ireland; lies between 54° 1' and 54° 41' N. lat., 5° 30' and 6° 24' W. long.; is bounded N. by an angle of Lough Neagh, the county of Antrim, and the Bay of Belfast; E. and S. by the Irish Channel; and W. by the counties of Louth and Armagh, from which it is partly separated by the Bay of Carlingford and the River Newry. The greatest length from Cranfield Point on the south-west to Orlock Point on the north-east is 51 English miles; the greatest breadth from Moyallan on the west to the coast near Ballywater on the east is 33 miles. The coast line (including Lough Strangford) from Belfast to Newry, exclusive of small irregularities, is about 125 English miles. The area according to the Ordnance Survey of Ireland, consists of 608,415 acres land, and 3502 acres water, being 611,917 acres in all, statute measure, or 956 square statute miles nearly. The population in 1851 was 328,883.

Surface, Hydrography, Communications.—Down forms the south-eastern extremity of Ulster. The surface of nearly all the county is undulating; but the only uncultivated district is that occupied by the Mourne Mountains and the detached group of Slieve Croob. The mountainous district of Mourne is bounded E. by the Bay of Dundrum and W. by the Bay of Carlingford, and covers an area of nearly 90 square miles. In this range are numerous mountain elevations, reaching in the case of Slieve Donard to 2796 feet. This mountain group contains much picturesque scenery, and is adorned with several fine mansions and extensive plantations. The Slieve Croob range covers an area of about 10 square miles to the north-east of the Mourne Group. Slieve Croob, the highest elevation of the range, has an altitude of 1755 feet; on its north-eastern declivity the river Lagan rises at an elevation of about 1250 feet above the level of the sea.

The remainder of the county, about 850 square miles, is productive, being either under cultivation or serving the purposes of turbary. A low chain of cultivated eminences, well timbered, and on the northern and western side covered with the demesnes and improvements of a resident gentry, commences east of Dromore, and extends under various names along the valley of the Lagan and the eastern shore of Belfast Lough, as far as Bangor. This range separates the basin of the Lagan from that of Lough Strangford.

The eastern shore of Belfast Lough has no anchorage for vessels above the third class. There is a small quay for fishing and pleasure-boats at Cultra, a mile below the bathing village of Holywood, where regattas are held. Out of Belfast Lough the first harbour on the coast of Ards is at Bangor. East of Bangor is the little harbour of Groomsport or Gregory's Port, where Duke Schomberg landed in 1690. South-east of Groomsport is Donaghadee, the only place of security for a large vessel from Belfast Lough south to the harbour of Strangford. [DONAGHADEE.] North of Donaghadee lie three islands, called the Copelands, from a family of that name which formerly held the opposite coast. On one of these, called the Cross or Lighthouse Island, there is a lighthouse, which marks the entrance to Belfast Lough from the south. This building which was erected about 1715, is a square tower, 70 feet high to the lantern; the walls are 7 feet thick. The sound between Big Island, which lies nearest the land, and the shore of Down, is about a mile and a quarter in breadth.

From Donaghadee south the coast is low, rocky, and dangerous. The rock of Sculmartin, covered at half-flood, and the North and South Rocks, the former never covered, the latter at every half tide, lie farthest off shore, and are most in the way of vessels coming up

channel. The lighthouse erected on South Rock in 1797, has proved highly serviceable to all traders in the channel. At Ballywalter, Ballyhalbert, Cloghy, and Newcastle, in Quintin Bay, all situated on the eastern shore of Ards, are fishing stations; but there is no shelter in any of them for vessels of more than 30 tons.

South from Newcastle is Tara Bay, much frequented by fishing-vessels, and capable of great improvement. The peninsula of Ards runs out at Ballyquintin to a low rocky point south of Tara Bay. A dangerous rock called the Bar Pladdy, having 11 feet water at spring ebbs, lies immediately off Quintin Point. The entrance to Strangford Lough lies west of the Bar Pladdy, between it and Killard Point, on the opposite side. Within the entrance the Lough expands into a very extensive sheet of water, extending northwards to Newtownards, and nearly insulating the district between it and the sea. The tide of so large a sheet of water making its way to and from the sea, causes a great current in the narrow connecting strait at every ebb and flow, and renders the navigation at such times very difficult. Across this strait is a ferry, which gives name to the town of Portaferry at the eastern or Ards side of the entrance. The town of Strangford, which lies opposite, is supposed to derive its name from the strength of the tide-race between. The true channel, at the narrowest part of the strait, is little more than a quarter of a mile across, being contracted by rocks, one of which, called the Rauting Wheel, causes a whirlpool dangerous to small craft. There is another but less dangerous eddy of the same kind at the opposite side. Within the entrance there are several good anchorages, and landing-quays at Strangford, Portaferry, Killileagh, the quay of Downpatrick, and Kirkcubbin. Strangford Lough contains a great number of islands, many of which are pasturable, and great numbers of rabbits are bred on them. From Killard Point the coast bears south-west, and is rocky and foul as far as Ardglass, where there is a pretty good harbour for small vessels. Immediately west of Ardglass lies the harbour of Killough, between Ringford Point on the east and St. John's Point on the west. A natural breakwater extends between these points, and gives a pretty secure anchorage for large vessels within. There is an inner harbour for small craft, dry at ebb, with a quay, built about the beginning of the last century.

West of St. John's Point opens the great Bay of Dundrum, which extends from this point on the east to the coast of Mourne on the west, a distance of about four leagues by a league in depth, running north by west. The pier and harbour of Newcastle on the south-western side of the bay are highly serviceable to the fishing-boats of the coast, and have been the means of saving several vessels within the last few years.

From Newcastle south to Cranfield Point the coast of Mourne possesses only three small boat harbours, the principal of which is at Derryogue, where there is a fishing station. On this part of the coast, near Kilkeel, is a lighthouse 120 feet high. Between Cranfield Point on the east, and the extremity of the barony of Dundalk, in the county of Louth, on the west, is the entrance to the extensive harbour of Carlingford. This Lough is about 8 miles long by a mile and a half broad, and has steep mountains to the east and west along each side. From Narrow Water, where it contracts to the width of a river, the tide flows up to Newry, whence there is a canal communication with the Upper Bann River, which flows into Lough Neagh. There are numerous rocks and shoals at the entrance, and a bar all across, on which there are but 8 feet of water at ebb tides. The middle part of the lough is deep, but exposed to heavy squalls from the mountains. There are two great beds of oysters in this lough, one off Rostrevor Quay, 2½ miles long by half a mile broad; the other off Killowen Point, one mile long by half a mile broad. Warren's Point has a good quay, from which steamers sail regularly for Liverpool; most of the exports of Newry are shipped here from the small craft that bring them down the canal. The scenery on both sides of Carlingford Lough is of striking beauty.

Hydrography, Communications, &c.—With the exception of the Upper Bann, all the rivers of Down discharge their water into the Irish Channel. The navigable river Lagan, which, for about half of its course, has a direction nearly parallel to the Bann, turns eastward at Magheralin, 4 miles north-east of which it becomes the county boundary, and passing by Lisburn falls into the Bay of Belfast after a course of about 30 miles. The Ballynahinch or Annacloy river brings down the waters of several small lakes south-east of Hillsborough, and widens into the Quoile river, which is navigable for vessels of 200 tons one mile below Downpatrick, where it forms an extensive arm of Strangford Lough. The Quoile is covered with numerous islands, and its windings present much beautiful scenery. The Newry river rises near Rathfriland, and flowing westward by the northern declivities of the Mourne range, turns south a little above Newry, and after a short course falls into the head of Carlingford Lough. Numerous streams descend from the district of Mourne immediately to the sea, and there is no part of the county deficient in a good supply of running water.

The Lagan navigation, which was commenced in 1755, and connects Lough Neagh with Belfast Lough, gives a line of water communication to the entire northern boundary of the county; and the Newry Canal, connecting the navigable river Banu with the Bay of Carlingford, affords a like facility to the western district, so that, with the

exception of about 10 miles between the Banu and the termination of the Lagan navigation, the entire county boundary is formed either by the coast line or by lines of water carriage. The summit level of the Lagan navigation towards Lough Neagh is 112 feet above the level of the sea.

The Newry Canal admits vessels of 50 tons through the heart of Ulster. This canal, which was commenced in 1730, and opened in 1741, lies partly in the county of Down and partly in Armagh; it extends, from its junction with the Bann River near Gilford, to Fathom, on the Bay of Carlingford, about 14 Irish or 17½ English miles, having its summit level 77 feet above the sea. The average breadth of the canal at top is 40 feet: the locks are 15 in number, and 22 feet in the clear. Its management is now under the control of the Board of Works.

Down is well supplied with roads. The great northern road from Belfast to Dublin passes through the county from north to south, by Hillsborough, Dromore, Banbridge, Loughbrickland, and Newry: this is the only turnpike-road in Down. The other chief lines are from Belfast to Donaghadee by Newtownards; from Belfast to Downpatrick by Ballynahinch; and from Downpatrick to Newry by Castlewellan and Rathfriland. The Ulster railway, from Belfast to Armagh, passes through parts of the parishes of Moira and Shankill in this county. A railway has been constructed from Belfast to Holywood, a bathing-place much resorted to by the citizens of Belfast in summer. Another line, which is to extend to Donaghadee, has been completed as far as Newtownards; another branch is projected to Downpatrick: these lines form part of the Belfast and County Down railway.

Geology, Mineralogy, &c.—The chief geological features of the county are strongly marked. The Mourne and Slieve Croob groups consist of granite. The boundary of this primitive district begins from the east at Dundrum, whence passing northward to Slieve Croob, it runs nearly due west, including the lordship of Newry, and passes into the adjoining counties of Armagh and Louth. Northward and eastward of the granite district the whole of the remainder of the county is occupied by an extension of the transition series which forms the southern basin of Lough Neagh. Clay-slate in greater or less degrees of induration is the prevalent rock. Towards the sea on the north-east and east, slate quarries are common. On the Antrim boundary near Moira, an extension of the tertiary limestone or chalk formation, which occurs throughout the basaltic district, occupies a small portion of this county, and affords a valuable supply of lime manure. Limestone boulders are found along the eastern shore of the Bay of Belfast; and at Carthage, near Comber, on the western side of Strangford Lough, there is a quarry of reddish granular limestone. Great quantities of marl are raised in the neighbourhood of Downpatrick.

Copper ore has been found in the mountains about 5 miles north-east of Rosstrevor; also near Portaferry, and at Clonliff, between Newtownards and Bangor, and in 1853 in the neighbourhood of Dundrum. At Bangor is a lead-mine which has been worked with moderate success at various times. Lead ore occurs on the estate of Ballylead, in the same neighbourhood, and on that of Bryansford, near Newcastle; also at Killough, and near Portaferry.

Chalybeate spas occur at Newry, Dromore, Magheralin, near Donaghadee, and Rathfriland, and at various places in the barony of Ards. A chalybeate spring strongly impregnated with sulphur and nitre rises about 2 miles north-west of Ballynahinch, on the declivity of Slieve Croob mountain, which has been found very efficacious in scorbutic cases: the village of Ballynahinch has in consequence become a rather fashionable resort during the summer months.

Climate, Soil, Agriculture.—The vicinity of the sea prevents the continuance of frosts on the east and south; and the insulated position of the mountainous tract confines the heavier mists and rains to that part of the county where their effects are least felt. The general inequality of the ground carries off surface waters and prevents damps, so that the climate, although somewhat cold, is considered healthy. The prevailing winds in spring are from the east: westerly winds, although more frequent than from any other point, have not so great a prevalence as in the neighbouring counties. Larch timber thrives on very exposed situations on the Mourne mountains.

The prevalent soil in the low district is a stony loam formed by the decomposition of the schistose rock. Clayey soils are confined to the north-east of the county and the barony of Ards, and are of a strong and productive quality, but they are wet and require a large quantity of manure. The richest soil in the county is in the district of Lecale, and a small tract of loam incumbent on limestone gravel in the neighbourhood of Moira and Magheralin: the timber here is of larger growth than elsewhere in Down. Alluvial tracts are frequent, and yield luxuriant crops of grass without manure. Considerable quantities of wheat are raised throughout the county, but chiefly along the shores of Strangford Lough; oats and barley are the chief produce of the south and centre of the county. Fences on the Antrim boundary and along the line of the Dublin road are of quickthorn; clay banks and dry stone walls are most frequent in the other parts of the county.

Large quantities of sea-wood are used as manure along the north-east and eastern coast. The distance of limestone quarries renders lime manure very expensive throughout the central baronies; but in

the south and south-east there is an abundant supply of marl in the barony of Lecale. This valuable substance is found in morasses and alluvial tracts at the bottoms of hills, and consists entirely of marine exuvium: the bed of marl is sometimes 5 feet in thickness.

Down is not a grazing county, nor are there sheep farms; but great numbers of pigs are reared for the provision markets of Newry and Belfast. The general condition of the people is much superior to that of the peasantry of the southern counties. The resident nobility and gentry are more numerous in proportion to the extent of the county than in any other part of Ulster. The yeomanry of the county are an intelligent class.

Down contains nine baronies, and part of the lordship of Newry; the remainder of this division lying in Armagh. The baronies are—Ards, on the east and north-east, between Lough Strangford and the sea; Castlereagh, Lower and Upper, on the north-east and north, between Lough Strangford and the county of Antrim; Dufferin, on the western shore of Lough Strangford; Iveagh, Lower, on the north and north-west towards Antrim and Lough Neagh; Iveagh, Upper, on the west and midland; Kinsalearty, midland, between Upper Iveagh and Dufferin; Lecale, on the south-east, between Strangford Lough and Dundrum Bay; Mourne, lying between Dundrum Bay and Carlingford Lough; and part of the lordship of Newry. BANBRIDGE; DONAGHADEE; DOWNPATRICK, the county town; DROMORE, the seat of a bishop; KILKEEL; NEWTOWNARDS, and the Downshire part of the town of NEWRY, are noticed in separate articles. Ballymacarrott is noticed under BELFAST, of which it is a suburb. Other places which require to be mentioned we notice here.

Ardglass, a decayed town, and small sea-port, at the head of the Bay of Ardglass, is distant 7 miles S.E. by S. from Downpatrick; population 974 in 1851. In the time of Henry VI. Ardglass was a royal borough, governed by a portreeve; it was also at that time represented in the Irish Parliament, and had a considerable trade. After the rebellion of 1641, and the subsequent rise of Belfast as an important sea-port, Ardglass sunk into insignificance. Latterly it has somewhat improved; the harbour is frequented by numerous fishing boats, and small coasting vessels; and visitors resort here in considerable numbers during the season for bathing. The harbour and bay afford good shelter.

Ballynahinch, a small town near the centre of the county, 7 miles N.W. by W. from Downpatrick; population 1006 in 1851, is situated in a vale between ranges of rocky hills. Of late years more easy communication has been obtained with neighbouring towns by means of new roads. Fairs are held in Ballynahinch on the third Thursday in each month. Near the town is Montalto House, once the principal residence of the Hastings family.

Bangor, a sea-port, market-town, and borough, is situated on the shore of Bangor bay, on the south side of the entrance to Belfast Lough; distant 18 miles N. from Downpatrick; population 2850 in 1851. Bangor is rather irregularly built, but has on the whole an agreeable appearance. Besides the parish church, there are two Presbyterian meeting houses and a Methodist chapel. Efforts have been made during several years past to improve the harbour. A dock has been constructed; a small harbour suitable for boats has also been made, and a pier run out from the south-east shore obliquely across the bay. There is a good deal of intercourse by vessels between Bangor and Portpatrick on the west coast of Scotland. The linen and cotton manufactures employ many of the inhabitants of the town and neighbourhood. Cattle and provisions are exported. An abbey existed here at a very early period; a portion of the ruins is still in existence. Fairs are held at Bangor on January 12th, May 1st, August 1st, and November 22nd.

Castlewellan is a market-town situated on the road from Newry to Downpatrick, between the Mourne mountains and the Slieve Croob range, 7 miles S.W. from Downpatrick; population 849 in 1851. Castlewellan is a neat town, pleasantly situated; it possesses some good buildings, including the market-house, sessions-house, and chapels for Roman Catholics and Presbyterians. The market is held weekly, the business transacted being chiefly in linen yarn and farm produce. Two bleaching establishments are in the neighbourhood. Ten fairs are held in the course of the year. In the neighbourhood is Castlewellan, the seat of the Earl of Annesley, the grounds of which are finely wooded and picturesque.

Comber, or Cumber, is a small market-town at the north-western extremity of Lough Strangford, 7 miles S.E. from Belfast; population 1790 in 1851. The inhabitants are chiefly employed in the linen manufacture. The ruins of a castle, called Mount Alexander, exist on a site which was formerly occupied by a Cistercian abbey. Besides the parish church, there are chapels for Presbyterians and Wesleyan Methodists. At low water the beach presents a spacious expanse of sand some thousands of acres in extent. Fairs are held at Comber on the first Thursday of January, O.S., on April 5th, June 28th, and October 19th. There is here a station of the Belfast and Newtownards railway.

Gilford, population 2814, a small market-town pleasantly situated on the right bank of the river Banu, about 4 miles N.W. from Banbridge. Flax spinning, linen weaving, and bleaching are carried on. Fairs are held on June 21st and November 21st. Gilford Castle, the seat of Sir William Johnstone, Bart., stands near the town.

Grey-Abbey, population 858 in 1851, is situated on the east shore of

Lough Strangford, about 6 miles S. by W. from Donaghadee. Besides the church, there are chapels for Presbyterians and Roman Catholics. The abbey from which the place received its name was founded here in 1192 by the lady of John de Courcy: some interesting and well preserved remains of the buildings still exist. Four fairs are held in the course of the year.

Hillsborough, population 1300 in 1851, a market-town and formerly a parliamentary borough, 64 miles N.N.E. from Dublin, is pleasantly situated on the side of a hill commanding an extensive view. The parish church is a handsome edifice with three towers. There are chapels belonging to the Roman Catholics, Presbyterians, Quakers, and Moravians. The mansion of the Marquis of Downshire is situated on the west side of the town, and on the east are the ruins of a castle erected by Sir A. Hill in the reign of Charles I.; it is now a royal fort. The linen trade is carried on to some extent. There are a market-house, a district bridewell, and two hospitals.

Holywood, a small sea-port town, in the parish of the same name, 73 miles N.E. by N. from Dublin; the population in 1851 was 1403. The church, which is ancient, is believed to have been the chapel of a Franciscan priory once established here. The Presbyterians have a large modern gothic chapel. A few of the inhabitants are engaged in fishing, but the greater number are agriculturists or weavers. Fairs are held four times a year. During the summer months Holywood is resorted to for sea-bathing. The town is connected by railway with Belfast.

Killaleagh, 72 miles N.N.E. from Dublin; population 1086, a small market- and sea-port town, was formerly a parliamentary borough. A castle was built here by De Courcy about the year 1180, which was demolished in 1648 by General Monk. It was shortly afterwards rebuilt. The church is cruciform and is a handsome building; the other principal buildings are a Presbyterian meeting-house, a market, and a barrack. The cotton manufacture is carried on, and the imports and exports of iron, timber, corn, and provisions form a considerable trade. A market is held on Monday; fairs are held four times in the year.

Killough, a small sea-port town 75 miles N.E. from Dublin; population 951. Fishing is very extensively carried on: there is some export trade in corn: also a large salt work. In the neighbourhood are several curious caves.

Moina, a small town on the road from Belfast to Armagh, 66 miles N. by E. from Dublin; population, 669. The town consists principally of one long well-built street, and contains a church and several meeting-houses. The linen manufacture is carried on.

Rathfriland, a market-town about half way between Newry and Castlewellan, 27 miles S.S.W. from Belfast, population 2053 in 1851, is pleasantly situated on a rocky elevation above the point where several roads meet. The remains of a castle, formerly of considerable strength, occupy the summit of the rock on which the town is built. The town possesses a market-house, two Presbyterian meeting-houses, and a Roman Catholic chapel; also a dispensary for the Newry Poor-Law Union. The linen manufacture is the chief occupation of the inhabitants. Seven fairs are held in the course of the year.

Rosstrevor, population 764, a sea-port town and watering-place, is finely situated on a gentle slope at the base of the Mourne Mountains, about 7 miles S.E. by S. from Newry. The vicinity is adorned with numerous good mansions, and the surrounding scenery is very beautiful. The town has been much improved of late years. Near the town is a handsome obelisk, erected to the memory of the late General Ross. There are seven fairs held in the course of the year.

Strangford, population 620, a market-town and sea-port on the west shore of the entrance of Lough Strangford, about 6 miles N.E. by E. from Downpatrick. In the neighbourhood are four of the castles built by John de Courcy on the shores of Lough Strangford. There are here a chapel of ease, a chapel for Wesleyan Methodists, and a custom-house. There is a small quay. A considerable trade is carried on. Fairs are held on August 12th and November 8th.

Warrenspoint, a small market-town and sea-port on the left bank of Newry River, at its junction with Carlingford Lough, 5 miles S.E. by S. from Newry; population, 1769 in 1851. The town is agreeably situated, and consists chiefly of a square and several streets which diverge from the square. Besides the parish church there are chapels for Wesleyan Methodists, Presbyterians, and Roman Catholics. There are here a dispensary and a savings bank. Considerable quantities of agricultural produce are exported. Flax is imported. The fishery employs some of the seafaring population. Warrenspoint is the port of Newry for large vessels; and the place is in repute for sea-bathing. Fairs are held on the last Friday of every month.

Down returns four members to the Imperial Parliament, namely, two for the county, one for the borough of Newry, and one for the borough of Downpatrick. Besides these boroughs, Newtownards, Bangor, Killisleigh, and Hillsborough returned members to the Irish Parliament, and are still corporate towns. The lordship of Newry, the greater part of which lies within this county, is an exempt jurisdiction both ecclesiastical and civil.

The linen manufacture is the staple trade of Down, and gives employment to a greater number of operatives, in proportion to the population, than in any other part of Ireland. The linen manufacture has been long carried on in Ireland, but its first great impulse was in

consequence of the settlement of French refugees on the revocation of the edict of Nantes, who, by introducing the improved machinery of the continent, and setting an example of more business-like habits, raised the manufacture to a high degree of perfection and importance. In the 4th of Queen Anne the export duty on Irish linens was taken off, and from that time the trade has continued to flourish.

The importation of flax-seed employs a considerable capital in Belfast and Newry. The dressing of the grown crop gives employment to numerous scutchers and backlers throughout the county; but the introduction of linen-spinning machinery has materially lessened the demand for hand-labour in converting the dressed flax into thread. Weaving is mostly carried on in the houses of small farmers, and there are few weavers who do not give part of their time to agriculture; hence they are generally a healthy and long-lived class of men. When the webs are ready for the bleacher, they are carried to market.

The next process, and that which employs nearly an equal number of hands, is the bleaching and preparing for market the green web as purchased from the weaver. The chief manufacturing district of this county, as of Ireland at large, is along the valley of the Upper Bann. The waters of this river are peculiarly efficacious in bleaching; and its rapid descent affords numerous sites for the machinery employed. From Tanderagie in Armagh to five miles above Bauhridge in Down, the banks of this river present an almost continuous succession of bleaching-greens. On that part of the river which flows through Down there are 18 of these establishments, each covering a large tract of ground, and giving employment to a numerous rural population. Besides these establishments, there are upon the Bann extensive flour-mills, and two or three factories. The neighbourhood of Gilford and Moyallan, about half way between Banbridge and Tanderagie, is celebrated for its rural beauty. Orchards are attached to all the better class of cottages, and the vicinity of so many bleaching-greens gives the effect of a continuous tract of rich park scenery to each bank of the river. The proprietors of the majority of these establishments are Dissenters and members of the Society of Friends, and the population generally is Protestant. The cotton and muslin manufacture employs many persons. The exports and imports of Down are made almost entirely through the ports of Belfast and Newry. About 80,000 firkins of butter are exported yearly from Down, and this as well as all other exports is increasing.

The fishery on the coast from Bangor to Carlingford Bay is pursued with a good deal of industry, but without sufficient capital or skill. The herring-fishery commences in July, and is pursued throughout the autumn and beginning of winter. The principal fishing-ground lies off Lecale, at a distance of a quarter of a mile to two leagues from shore, in 3 to 17 fathoms water, and extends with little interruption from Newcastle on the south to the entrance to Strangford Lough upon the north. The fish taken are herrings, mackerel, baddock, cod, ling, gurnet, plaice, and turbot. Besides this there are several other fishing-grounds off the coasts of Mourne and Ards.

The county assizes are held twice a year at Downpatrick. Quarter sessions are held by the assistant-barrister twice a year at Downpatrick, Hillsborough, Newry, and Newtownards. The constabulary force stationed in Down in the year 1852 consisted of 255 men, including officers.

Before and for some time after the coming of the English, Down was known as Ulladh or Ulidia, the original of the name of Ulster. The ancient inhabitants are supposed to have been the Voluntii of Ptolemæus. The north-eastern portion of Down was at an early period occupied by the Picts, of whom there was a considerable colony so late as the 6th and 7th centuries, extending from Strangford Lough to the Lower Bann in Antrim. The territory occupied by the Picts was called Dalaradia, and extended from the Ravi river in Antrim over the southern part of that county and the north and north-east of Down.

The presence of St. Patrick in this county in the 6th century is attested by authentic records, and can be traced with topographical exactness at the present day. Downpatrick, Saul, Dromore, Moville, and Bangor are the chief ecclesiastical foundations of Patrick and his immediate successors. Of these the last was the most famous, having a college which for many years rivalled the schools of Armagh and Lismore.

Down was overrun by the English under John de Courcy in 1177. The county was originally divided into two shires, Down and Newton, or the Ards, to which sheriffs were regularly appointed until 1333, when the revolt of the Irish on the murder of William de Burgh overthrew the English authority throughout Ulster. The attainder of Shane O'Neill, who was slain in rebellion in 1567, threw all Iveagh, Kinelcarty, Castlereagh, and Lower Ards into the hands of the Crown. In 1602 O'Neill of Castlereagh being seized on some slight pretext, and imprisoned in Carrickfergus Castle, contrived to make his escape by the assistance of one Montgomery, the brother of a Scotch knight of some fortune, who afforded the fugitive protection on his arrival in Scotland, and afterwards negotiated his pardon on the terms of having the greater part of O'Neill's estate made over to himself and Mr. Hamilton, his associate in the proceeding. The colony led over by Sir Hugh Montgomery settled chiefly about Newtownards and Grey Abbey, along the north-eastern coast between

Strangford Lough and the sea, and by their enterprise and industry, soon raised that part of the county to a very flourishing condition. The general plantation of Ulster soon after gave security to their improvements. The family of Hamilton settled at Bangor and Killileagh. That of Hill, which about the same time acquired large estates in the north of the county, settled in the neighbourhood of Belfast, and soon after their arrival laid the commencement of a town at Hillsborough, the residence of their present representative, the Marquis of Downshire. At present the fee of the county is almost entirely in the hands of Protestant proprietors of English and Scotch descent.

Of the Pagan antiquities of Down, the most remarkable is a stone cromlech, inclosed by a circular ditch of extraordinary dimensions, called the Giant's Ring, near Shaw's Bridge, half way between Lieburn and Belfast. The inclosure is nearly half an English mile in circumference; and the rampart is still from 12 to 14 feet in height. There are stone monuments of the same character at Sliderry Ford, near Dundrum, and Legarany in the parish of Drumgoolan. There is a remarkable cairn, or sepulchral pile of stones on the top of Slieve Croob. The main pile is 77 yards in circumference at bottom, 45 yards at top, and 54 feet high at its greatest elevation: there are 22 smaller cairns raised on the top. A great earthen rampart which runs along the Armagh boundary of Down, is called by the people of the county the Dane's Cast, and sometimes Tyrone's ditches. There are numerous raths, or earthen entrenched mounds throughout Down, of which the most remarkable are at Downpatrick, Donaghadee, and Dromore. Of the Anglo-Norman military antiquities of Down, the castle of Dundrum is the most important. Green Castle in Mourne was a place of great importance in the early history of Ulster. The castle of Newcastle was built by Felix Magennis in 1588, and is still inhabited. The Magennis had castles also at Castlewellan and Rathfriland. There are extensive military remains at Ardglass, and the castles of Killileagh, Ardquin, Portaferry, Bangor, and Hillsborough are the most important of those still standing. There are also some remains of the fortifications erected by General Monk for the defence of Scarvagh, Poyutz, and Tuscan passes into Armagh.

The chief ecclesiastical remains in Down are at Downpatrick, where are the ruins of the cathedral, and of three other religious houses. The cathedral was 100 feet in length; the roof of the centre aisle was supported by five arches of fine proportions. There is a round tower at Drumbo, near Belfast. A few remains still exist of the abbey of Bangor; and at Grey Abbey there is standing in good preservation a part of the abbey founded here in 1192 by Africa, daughter of the King of Man, and wife of De Courcy. A mile and a half to the east of Downpatrick is a hill about 150 feet high, called Strual Mountain, celebrated all over Ireland for the resort of the lower orders of Roman Catholics, who come here every Midsummer for the performance of penance.

In 1851 there were three savings banks in the county at Hillsborough, Newry, and Warrenpoint. The total amount owing to depositors on the 20th November, 1851, was 49,303*l.* 2*s.*

DOWN, a bishop's see in the ecclesiastical province of Armagh in Ireland. The chapter, which is regulated by patent of James I., consists of dean, precentor, chancellor, archdeacon, and two prebendaries. With the exception of part of one parish lying in Antrim this diocese is situated entirely in the county of Down, of which it occupies the eastern portion. The see of Down was founded about the end of the 5th century by St. Patrick, who appointed Cailin, abbot of Antrim, to the bishopric. The cathedral of the diocese is at DOWNPATRICK. The most distinguished bishop of Down prior to the English invasion was Malachy O'Morgair, who succeeded in 1137, and assisted the Primate Gelasius in the introduction of the Roman discipline. In 1442 the union of Down with the see of Connor took place in the person of John, first bishop of the united diocese. By act 3rd and 4th William IV., c. 37, the united diocese of Down and Connor is further augmented by the diocese of Dromore. [CONNOR; DROMORE.] The income of the united diocese is 4204*l.* (Beaufort, *Memoir of a Map of Ireland*; Ware, *Bishops*; Thom, *Irish Almanac*; *Parliamentary Papers*.)

DOWNHAM MARKET, Norfolk, a market-town and the seat of a Poor-Law Union, in the parish of Downham Market, is situated near the right bank of the river Ouse, in 52° 36' N. lat., 0° 24' E. long., distant 40 miles W. by S. from Norwich, 84 miles N. by E. from London by road, and 87½ miles by the Eastern Counties and East Anglian railway. The population of the town in 1851 was 2867. The living is a rectory in the archdeaconry of Norfolk and diocese of Norwich. Downham Poor-Law Union contains 34 parishes and townships, with an area of 80,702 acres, and a population in 1851 of 20,976.

Downham Market is a town of considerable antiquity. Spelman states that it had a market confirmed to it in the time of Edward the Confessor. The town has been much improved of late years. There is a spacious market square. The parish church, dedicated to St. Edmund, is an ancient structure occupying an elevated site; it has a low embattled square tower surmounted with a spire. The Baptists, Wesleyan and Primitive Methodists, and Quakers have places of worship; there are a National school and a savings bank. A county

court is held in the town. The market is held on Saturday. Fairs are held on March 3rd, May 8th, and November 13th. By the river Ouse and the Cam, which flows into it not far from the town, vessels can proceed from Lynn, on the coast, 12 miles below, to Cambridge, about 30 miles above, Downham.

(Blomfield, *Norfolk*; *General History of Norfolk*; *Communication from Downham*.)

DOWNPATRICK, county of Down, Ireland, a municipal and parliamentary borough, a market and assize town, and the seat of a Poor-Law Union, in the parish of Downpatrick and barony of Lecale, is situated in 54° 20' N. lat., 5° 45' W. long., distant 93 miles N.E. by N. from Dublin. The population of the town in 1851 was 3237, besides 803 in the workhouse and other institutions. Downpatrick returns one member to the Imperial Parliament. Downpatrick Poor-Law Union comprises 24 electoral divisions, with an area of 147,361 acres, and a population in 1851 of 63,659.

Downpatrick takes its name from St. Patrick, who is stated in many ancient records to have been buried here. Before his time the place was called Rath Keltair and Dun-da-leth-glass, from an earthen fortification, the ruins of which still cover a considerable space, and present an imposing appearance on the north-west of the town. On the conquest of Ulster by the English in 1177, De Courcy made Downpatrick his head-quarters. The town is pleasantly situated near the right bank of the river Quoile; it is partly surrounded by hills and partly by flat and marshy grounds. The town is divided into the English, Irish, and Scotch quarters. The streets are irregularly built, but the public buildings are numerous. The original cathedral church was erected in 1412, but was devastated by Lord de Grey in 1533: the cathedral has lately been rebuilt, and is now a very handsome edifice in the pointed style of architecture. Besides the parish church there are chapels for Presbyterians, Wesleyan Methodists, and Roman Catholics. Downpatrick has a Diocesan school chiefly supported by the bishop and clergy, and a jail school supported by the county. The county jail is situated at Downpatrick; there are also a court-house, a market-house, barracks, an infirmary, and a fever hospital. Downpatrick claims to be a borough by prescription, and until the Union was represented by two members in the Irish Parliament. The town is well lighted and paved. The linen manufacture is carried on to a small extent, as well as brewing, tanning, and soap making. Vessels of 100 tons can come up to Quoile Quay, one mile from the town. Markets are held on Saturday, and regular monthly markets are held in place of the old fairs, which are abolished. The assizes for the county are held twice a year, and petty sessions every alternate week. Close to the town are the ruins of Inch Abbey.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DOWNTON, Wiltshire, a disfranchised borough in the parish of Downton, is situated on the river Avon, in 50° 59' N. lat., 1° 44' W. long., distant 23 miles S.E. by S. from Devizes, and 87 miles S.W. by W. from London by road. Salisbury, which is 6 miles from Downton, is 96 miles from London by the Salisbury branch of the South-Western railway. The population of the town of Downton in 1851 was 2727. The living is a vicarage, with the vicarage of Nunton annexed, in the archdeaconry and diocese of Salisbury.

Downton was a place of some importance in the middle ages, and had a castle, of which extensive earthworks known as 'the Moot' remain. The borough sent members to Parliament with some interruptions from the time of Edward I. till the period of the Reform Act, when it was disfranchised. The town consists chiefly of one long street, in which the houses are irregularly placed. Over the three branches of the Avon at this place are three bridges. The parish church is a large cruciform structure, with nave, side aisles, chancel, and transepts. The Baptists and Wesleyan and Primitive Methodists have places of worship. There are National, British, and Infant schools, and a branch of the Salisbury savings bank. A paper manufactory gives employment to some of the inhabitants. A market formerly held at Downton has been long discontinued. There is an ancient cross called 'The Borough Cross.' At a short distance from Downton is the estate purchased for the heirs of Lord Nelson, for which the sum of 100,000*l.* was voted by Parliament.

(Hoare, *Wiltshire*; *Communication from Downton*.)

DRAGUIGNAN, a town in France, capital of the department of Var, is situated on the Artubie, a feeder of the Argens, 490 miles S.E. from Paris, in 43° 32' 18" N. lat., 6° 28' 46" E. long., and has 5000 inhabitants, including the commune.

Draguignan is a place of considerable antiquity, having been mentioned in the titles of the earliest counts of Provence. In the early part of the middle ages the town was strongly fortified with a bastioned wall and three citadels. The ramparts were destroyed in the civil wars, but were rebuilt in 1615 and strengthened with towers, and a wide ditch was drawn round the town. The town suffered much in the religious wars of France. It is situated in a fertile plain surrounded by an amphitheatre of hills covered with vines and olive-trees. It is tolerably well built, ornamented with numerous fountains and many rows of trees, and traversed by a canal from the Artubie, which drives the machinery of several factories. The chief buildings are the court-house, the prison, the clock-tower, which is built on the summit of a high perpendicular rock, and the hospital. The inhabitants manufacture coarse woollens, soap, leather, stockings, braudy, silks,

wax candles, and earthenware; there are many oil-mills in the town. The environs (which are peculiarly delightful in winter) produce excellent fruit and wines. Draguignan has a public library of 15,000 volumes, a cabinet of medals, a museum of natural history, containing chiefly the minerals of the department, a botanic garden (which is beautifully laid out and open as a promenade), a high school, and an agricultural society.

DRAMMEN, a sea-port town of Norway, in the province of Aggerhuus, is situated on both sides of the broad and impetuous river of the same name, which here discharges its waters into the Drammenfjord, in the Gulf of Christiania. The town stands in 59° 44' N. lat., 10° 12' E. long., 24 miles S.W. from the city of Christiania, and has about 12,000 inhabitants. It is divided into three quarters, of which Bragnaes is situated on the northern, and Stroemsoe and Tangen on the southern bank of the river: they are united by a bridge. Bragnaes consists of a row of houses about a mile in length. The main streets are chiefly composed of storehouses. Tangen is in fact the roadstead and landing-place, and is consequently the resort of mariners, fishermen, and small dealers. Drammen has a parish church, two other churches, several schools, and manufactures of spirits, leather, tobacco, sail-cloth, oil, ropes, &c. It is extensively engaged in trade and navigation, in building ships, and in the export of timber, deals, pitch, iron, &c. The water in the harbour is of depth sufficient to allow all vessels to lie alongside the quays and other landing-places. There are marble quarries in the vicinity.

DRAVE. [AUSTRIA, vol. I, col. 719.]

DRAYTON-IN-HALES, or **MARKET-DRAYTON**, Shropshire, a market-town and the seat of a Poor-Law Union, in the parish of Drayton-in-Hales, is situated in 52° 54' N. lat., 2° 23' W. long.; distant 19 miles N.E. by N. from Shrewsbury, and 153 miles N.W. from London by road. The population of the parish, a portion of which is in Staffordshire, was 4947 in 1851. The borough is governed by a mayor and corporation. The living is a vicarage in the arch-deaconry of Salop and diocese of Lichfield. Drayton Poor-Law Union contains 14 parishes and townships, with an area of 61,637 acres, and a population in 1851 of 14,160.

The town of Market-Drayton is watered by the river Tern. The market held in Drayton was formerly one of the largest in the district, but after the formation of canals the facilities afforded for conveying produce to various parts of the country diminished considerably the importance of this market. The town is lighted with gas. The parish church, built in the reign of Stephen, had its architectural character quite altered by repairs in 1787. Christ church, Little Drayton, is a district church recently erected. Its style is early English; the seats, which are free, will accommodate 600 persons. The Independents and Wesleyan and Primitive Methodists have places of worship. There are here a Free Grammar school with an endowment of about 35*l.* per annum, at which the number of scholars in 1853 was 40; a National school, for which a handsome and commodious Elizabethan structure was erected in 1836; a savings bank; and a young men's society, which has a library and reading-room.

Drayton has some manufactures; it has a paper-mill, and hair-seats for chairs are made; but the population of the locality is chiefly agricultural. The market-days are Wednesday and Saturday: several fairs are held in the course of the year. A county court is held in the town.

(Communication from Market-Drayton.)

DRENTHE, a province in the kingdom of Holland, is bounded N. by Groningen, E. by Hanover, S. by Overijssel, and W. by Friesland. It lies between 52° 35' and 53° 12' N. lat., 6° 5' and 7° 5' E. long. The area is 1029 square miles, and the population in 1852 was 86,735. The general character of the soil is bad. In fact out of the 658,643 acres which the province contains only 333,221 acres are capable of cultivation; 317,580 acres consist of heaths, bogs, and marshes, and the remainder is covered with canals, brooks, roads, and buildings. Agriculture, pasturage, and digging and exporting peat form the chief employment of the population. The province lies on each slope of the watershed between the Zuider-Zee and Dollart's Bay. Several small streams rise in it; the most important of them is the Haventer-Aa, along part of which the canal from Meppel to Assen runs. There are no towns in the province. Assen, the capital, is a village of 1800 inhabitants, 16 miles S. from the city of Groningen. *Hocvorden*, a strong fortress in the south of the province, stands on a feeder of the Vecht, and has a population of 2200. The pauper colonies of Fredericksoord and Willemsoord were established in 1818 on the western border of the province: in these establishments a great number of paupers are employed by the state in reclaiming and cultivating the waste lands, in brick-making, spinning, weaving, and various handicrafts.

DRESDEN, the capital of the kingdom of Saxony, is situated in the circle of Meissen, on both banks of the Elbe, in 51° 6' N. lat., 13° 44' E. long., at an elevation of about 410 feet above the level of the sea, 116 miles by railway S. by E. from Berlin, 72 miles E. by S. from Leipzig, 303 miles N.N.W. from Vienna by railway through Brünn and Prague, and has a population according to the census of 1852 of 104,500, including the military who number about 12,000. The fine plain in which it stands is bounded on the east by eminences which are offsets from the Saxon Switzerland, and are mostly

crowned with vineyards and gardeus; on the south and south-west there are similar elevations, which spring from the Erzgebirge. Westward lies the beautifully romantic 'Vale of Rocks,' or 'Plausische Grund,' through which the Weiseritz flows before it traverses part of Dresden and falls into the Elbe. On the north-western side of the city the Elbe winds round an enclosure planted with avenues of trees, and on the north the distance is bounded by a succession of hills, in general covered with firs and pines. Dresden is one of the most agreeable and interesting capitals in Europe, and well deserves the appellation of the 'German Florence.' It is divided into three parts; on the left bank of the Elbe is the Altstadt, or Old Town, with its three suburbs, and the Friedrichs-stadt, which is separated from the Altstadt by the Weiseritz: these two quarters form by far the larger portion of the city, and are disjoined from the third, or the Neustadt (New Town) by the Elbe, which is here 480 feet in breadth, and crossed by an elegant stone bridge of 16 arches. In continuation of the New Town, there are some later erections, called the 'Neue Anbau,' or New Buildings, which form a kind of suburb. The space gained by levelling the fortifications in the years 1810 and 1817 has been appropriated to gardeus, promenades, and building.

Dresden has altogether 11 barriers or gate-entrances, 27 public squares, 20 churches (of which 13 are for Lutherans, 1 for Reformed Lutherans, and 6 for Roman Catholics) and 5 synagogues. The houses are principally built of Pirna freestone, and in general are from five to six stories in height. The Altstadt, sometimes called Old Dresden, has 4 squares and 41 streets. The most interesting structure in this quarter is the Royal Palace, an irregular gothic building 1300 paces in circuit, which faces the west side of the bridge. The chief parts of this edifice are the royal audience chamber; the Roman Catholic church of the royal family, which is surmounted by a tower and steeple 378 feet in height, and is adorned with paintings by Rubens and Mengs; the chamber of ceremony on the second floor, the porcelain-cabinet, the walls of which are ornamented with porcelain; the Proposition-Saal, in which the sessions of the Saxon legislature are opened; the royal library; the hall of audience, with a splendid ceiling painted by Sylvester; and the parade-chamber, with paintings by the same master. The celebrated Grüne-Gewölbe (Green Vault) opens upon the palace-yard, and contains a costly collection of precious stones, pearls, and works of art in gold, silver, amber, and ivory, arranged in eight rooms, the painting of which is green, and the walls are decorated with mirrors laid into compartments of marble and serpentine stone. This collection, which was begun by king Augustus, and has been gradually increased by his successors, is estimated at above one million sterling in value. Close to the palace are the chancery buildings, the depository for the national archives, and the Stallegebäude, which contains the cabinet of casts and models and the picture gallery. This building formerly also contained a gallery of arms with upwards of 20,000 specimens of armour, weapons, &c., principally from all ages in Saxon and German history, ancient and modern; but these are now deposited in the Zwinger, which is noticed below. The picture gallery, in the upper story of the building, is composed of the outer gallery, which runs round the four sides of the Stallegebäude, the inner gallery towards the yard, and the Pastell-cabinet. The outer gallery contains above 500 paintings of the Flemish school, 90 paintings of the Italian, and many of the French and German schools: the inner gallery is occupied by 356 specimens of the Italian school; and the Pastell-cabinet comprises 150 paintings of various masters. A new building was in course of erection for the reception of these pictures three or four years ago. Near the Stallegebäude stands the Palace of Princes, in which are a handsome chapel, a gallery of portraits of princes of the Saxon and Bavarian lines, a porcelain cabinet, a library of 10,000 volumes, and a cabinet of engravings. A covered way leads from this palace to the opera-house, where there is space on the stage for 500 performers, and in the house itself for 8000 spectators. The adjoining square is called the Zwinger, three sides of which are occupied by six pavilions connected by a gallery one story high; the quadrangle contains four fountains and 300 orange-trees. The six pavilions, which are profusely ornamented, contain a museum of natural history, consisting of four galleries and six saloons; a cabinet of engravings, comprising above 250,000 plates, arranged in classes; and a historical museum, or armoury, one of the finest collections of the kind in Europe, consisting of arms, weapons, warlike instruments, accoutrements, and trappings of all kinds, arranged in nine apartments.

The other buildings of note in the Old Town are the Brühl Palace, which is the principal depository for the Meissen china; and behind it are spacious gardens and grounds commanding delightful views of the banks of the Elbe and the surrounding scenery. Immediately adjacent are the hall, in which there is an annual exhibition of the productions of Saxon artists; the Academy of Arts and School of Design; and the Gallery of Duplicates, in which there are 250 paintings for which there was not sufficient room in the Great Gallery, and the celebrated tapestries worked after Raphael's designs. On one side of the square of the Frauenkirche is the Mint; and adjoining it the Arsenal, which contains a valuable collection of every kind of arms, and in one of the apartments the portraits of all the Saxon sovereigns

from Maurice to the present times. Facing the Arsenal stands the Academical Building, now used for a medical and surgical school; below it there is a subterranean hall decorated with paintings by Franciscano Casanova. In the Pirna-street is the House of Assembly, a building of two stories, where the States hold their sittings and committees. The only handsome square in the Old Town is the Old Market Place, of which the town-hall is the great ornament. In this direction lie also the Botanical Garden, New Post-Office, the Trades' Hall with its colonnade, the Treasury, German theatre, two royal villas with fine gardens and chapels, the Observatory and grounds attached, the Mews and Riding School, Military Hospital and gardens, and the Orphan Asylum and church. The most remarkable churches in the Old Town are—the Frauenkirche (Church of Our Lady), built in 1726, after the model of St. Peter's at Rome; the Kreuzkirche, or the Church of the Cross, a parallelogram, surmounted by a steeple 305 feet in height; the Protestant church of St. Sophia, an irregular structure, erected in 1351; and the Roman Catholic or court church before mentioned, which contains the vaults for the royal family, besides a multitude of paintings, statues, monuments, carvings, altars, &c.

Three suburbs are connected with the Old Town by means of as many avenues—the Pirna, See or Dohua, and Wildsruh suburbs. The first of these, which extends from the banks of the Elbe to the Kaidiz Brook, has a long street in which is a royal palace with delightful grounds attached to it. The Botanical Garden, belonging to the Medical School, is close adjoining; and likewise Maurice's Avenue, on part of the site of the former fortifications, and named from a piece of sculpture representing Maurice, the elector, delivering his sword to Augustus. In front of the external entrance into the Pirna suburb is the Great Garden, which is nearly five miles in circuit; and to the right lies the Nursery of Fruit Trees, which contains upwards of 65,000 plants, and a building in the centre where concerts are held every week. The See suburb covers the south-west and the Wildsruh the western side of the Old Town. From the last-mentioned suburb is an avenue called the Ostra-Allee, on one side of which are Prince Maximilian's palace, gardens, and observatory: this avenue opens upon a massive bridge across the Weiseritz which leads to the Friedrichs-stadt, the second grand quarter of Dresden, between which and the Elbe are the wooded grounds called the Ostra-Gehege. Here are the Roman Catholic cemetery and infirmary, in which is Balthazar Permoser's monument to his own memory, chiselled by himself, and representing the Descent from the Cross.

The access from the Old Town to the New Town, the third grand quarter of the city, which lies to the north-east on the right bank of the Elbe, is across the palace square and stone bridge before mentioned, called the Bridge of the Elbe, from its being the largest and handsomest structure of the kind which traverses that river. It is also denominated Augustus's Bridge, in honour of Augustus II., its founder. It rests on 16 arches, is 1420 feet long and 36 feet broad, and was completed in the year 1731. The fourth pier, which was blown up by Marshal Davoust in 1813, was restored by the Russians in the following year. A bronze-gilt crucifix, resting on a gilt-copper globe placed on a mass of rustic stone about 28 feet in height, stands upon the fifth pier. The bridge opens on the New Town side upon an inclosed space planted with lime-trees, and embellished with an equestrian statue of Augustus II. A broad street lined with lime-trees runs from the bridge to the northern extremity of the New Town; and on the western side of it is the Japanese Palace, or Augusteum, and parade in front; and on the eastern side a range of barracks for the cavalry and infantry. The Augusteum is used as a depository for collections of antiquities, coins, and porcelain manufactures, and for the royal library. The Cabinet of Antiquities, arranged in 12 spacious and well-lighted rooms; the Cabinet of Coins, rich in the coins of Saxony as well as remarkable for a fine series of medals struck in honour of illustrious individuals of all countries; and the Cabinet of Porcelain, displayed in 18 rooms, are all on the ground-floor. The Royal Public Library is deposited in 3 saloons and 21 apartments in the first and second stories, and contains 300,000 printed volumes, 3000 manuscripts, above 150,000 pamphlets, and 20,000 maps. Among these are upwards of 1600 printed books of the 15th century. The terminus of the railway to Leipzig is near the Augusteum. The New Town also contains a church dedicated to the Most Holy Trinity; a town-hall; the cadet academy; several military schools; and the commandant's residence. It has 22 streets in all. To the north-east of the New Town lies the Neue Anbau (New Buildings), which is occupied by some handsome residences; a playhouse and baths; a house of industry; schools for the indigent and for the garrison of Dresden; and a spacious cemetery. The house for the reception of bodies of unknown persons is decorated with the Dances of Death, a rude sculpture in stone containing 24 figures.

Among public establishments not hitherto noticed are a high school, conducted by 12 masters and attended by about 400 pupils. Dresden contains altogether 71 establishments for Protestant education. The Catholics have a high school and several other educational establishments. The number of institutions for the sick and maimed and orphans is 8, including 3 hospitals. There is a variety of learned and other societies.

Dresden has no external trade of much importance. It is a place

of transit for colonial and other foreign produce from Magdeburg, Hamburg, &c., and has five general fairs, besides a yearly fair in June, at which a considerable quantity of wool is sold. The manufactures comprise scientific and musical instruments, gloves, carpets, turnery-ware, jewellery, silk and woollen stuffs, straw-hats, painters' colours, artificial flowers, chemical products, &c. Morocco and other leather, refined sugar, tobacco, white-lead, tin-ware, glass, stockings, cotton goods, &c., are also manufactured on a small scale. There is a foundry for bomb-shells and cannon, and a yearly exhibition of Saxon manufactures.

The immediate vicinity of Dresden abounds in places of public resort, and its environs are full of attractions for strangers. The French defeated the allies under the walls of Dresden, August 26th and 27th, 1813. Near the village of Räcknitz, about a mile to the south-east of the city, is a block of granite surmounted by a helmet erected on the spot where Moreau fell by the side of the emperor Alexander. Dresden shared largely in the excitement that prevailed in Europe after the French revolution of 1848. The second Chamber early in 1849 voted for the adoption of a republican form of government for Germany. A republican insurrection followed; Dresden was bombarded by Prussian and Saxon troops on the 7th of May; and it was not till after three days' fighting that the last of the insurgents were driven out of the town. Small steamers ply on the Elbe upwards to Pillnitz, and downwards to Meissen and Magdeburg. The city has railway and electro-telegraphic communication with Vienna, Paris, Berlin, and all the principal towns of Germany. Dresden sustained some damage in the spring of 1845 in consequence of the inundation of the Elbe.

DREUX, an ancient town in France, the capital of the third arrondissement in the department of Eure-et-Loir, stands on the Blaise, a tributary of the Eure, 41 miles W. from Paris, in 48° 44' 27" N. lat., 1° 22' 8" E. long., and has 6451 inhabitants, including the commune. It is partly surrounded by the Blaise, which here divides into several branches, and enters the Eure a short distance north of the town. Dreux is on the great western road to Alençon, Laval, Rennes, St.-Brieux, and Brest.

Dreux was known under the Romans by the name Durocasses, and appears to have been included in the territories of the Carnutes. Frou Durocasses the name was contracted into Droca, from which the modern form Dreux is derived. The town with the surrounding district, forming the county of Dreux, was included in the acquisitions made by the Northmen in France, but was early taken from them, and became part of the domain of the French crown. The Normans burnt the town in A.D. 1183. In December 1562 a severe action was fought in the plain of Dreux, between the rivers Eure and Blaise, between the royal Catholic army, under the constable Montmorency, and the army of the Calvinists, commanded by the Prince of Condé and Admiral Coligny. The Calvinists were defeated and the Prince of Condé taken prisoner. In 1593 Dreux, which was in the possession of the party of the League, was taken by Henri IV. after a vigorous resistance of eighteen days. The walls were not repaired after this event, and the town soon lost its political importance.

Dreux stands in a pleasant country, and is pretty well built. On a high hill which commands the town are the remains of the ancient castle of the counts of Dreux. On the site of these ruins stands the magnificent chapel built by Louis Philippe whilst duke of Orléans, and greatly enlarged and beautified by him during his reign. It was intended to be the final resting-place of the members of his family, and at the accession of the duke to the throne of France it already contained the remains of the Duke and Duchess of Penthièvre, the Count of Toulouse, and the Princess de Lamballe, which were brought hither by the care of the Duchess dowager of Orléans, the king's mother, whose body is also deposited here. The chapel contains also the tombs of the Princess Mary and the Duke of Orléans, children of Louis Philippe; the Princess Adelaide, the king's sister, who died December 30, 1847, was the last of the Orléans family buried here. An enormous brick tower, said to be the keep of the old castle above mentioned, was long used as a telegraph establishment under the old signal system. The town-hall and the parish church are handsome gothic structures; in the former is the tomb of Philidor, the musical composer and celebrated chess-player, who was a native of Dreux. The inhabitants manufacture cergees and woollen hosiery; they also trade in sheep and cattle. There are tan-yards, iron-foundries, and dyehouses in the town, which has tribunals of first instance and of commerce, a college, and a good hospital.

DRIFFIELD, GREAT, East Riding of Yorkshire, a market-town and the seat of a Poor-Law Union, in the parish of Driffield, is situated in 54° 0' N. lat., 0° 26' W. long., distant 28 miles E. by N. from York, 196 miles N. by W. from London by road, and 202 miles by the Great Northern and connected railways. The population of the town of Great Driffield in 1851 was 3792. The living is a vicarage, with the perpetual curacy of Little Driffield attached, in the archdeaconry of the East Riding and diocese of York. Driffield Poor-Law Union contains 43 parishes and townships, with an area of 104,910 acres, and a population in 1851 of 18,265.

The parish church of Great Driffield, dedicated to All Saints, is an ancient edifice; but the steeple is of later date than the body of the church. The Independents, Baptists, and Primitive and Wesleyan

Methodists have places of worship in Great Driffield, and there are National and Infant schools.

The town of Great Driffield occupies an agreeable situation at the foot of the Wolds, near one of the sources of the river Hull. It consists chiefly of one long street. A small stream which runs parallel with the street is enlarged below the town into a navigable canal, by which a communication is maintained with the port of Hull by the river Hull. Since this communication was opened Driffield has considerably improved; the town contains many good shops, and is lighted with gas. Among the public buildings and institutions are the new corn-exchange and public rooms, a dispensary, a mechanics institution, a branch of the Hull savings bank, and a station of the Hull and Scarborough railway. A county court is held in the town.

The district around Driffield is fertile. The market is held on Thursday, and extensive transactions take place in corn and cattle. Flour-mills and mills for hone-crushing are in the vicinity. A manufactory for chemical manure is in Great Driffield. The Malton and Driffield Junction railway is continued to the York, Newcastle, and Berwick line, and joins it near Thirsk. At the hamlet of Danes Hill are several tumuli.

(Communication from Great Driffield.)

DROGHEDA, in the counties of Louth and Meath, Ireland, a municipal and parliamentary borough, a market and sea-port town, and the seat of a Poor-Law Union, is situated on the river Boyne, in 53° 43' N. lat., 6° 20' W. long.; distant 28 miles N. by W. from Dublin by road, and 32 miles by the Dublin and Drogheda railway. In 1851 the population was 16,845. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. Drogheda Poor-Law Union comprises 12 electoral divisions, with an area of 98,706 acres, and a population in 1851 of 48,203.

The name Drogheda, of which Tredagh (as it is generally written in old books) is a corruption, signifies 'the bridge of the ford.' A synod was held here by Cardinal Paparo, the Pope's legate, in 1152, which was very numerously attended by the Irish ecclesiastics, and had the effect of greatly strengthening the authority and discipline of the Church of Rome in Ireland. Henry III., in the year 1228, divided the town into two parts, namely, Drogheda versus Uriel, on the Louth side of the river, and Drogheda versus Midiam, on the Meath side. In 1412 the two corporations were united by Henry IV., since which time Drogheda on both sides of the Boyne has continued to be one body corporate. Being a frontier town of the pale Drogheda was a principal rendezvous for the forces which were so frequently required in Ulster between the 14th and 17th centuries; and many of the Irish parliaments were held here, particularly during the 15th century.

On the breaking out of the rebellion in 1641 Drogheda was besieged by Sir Phelim O'Neill and a large force of Irish who invested the town on both sides on the 1st of December. The siege was raised on the 28th of February. Cromwell besieged the town in September 1649. He was twice repulsed, but succeeded in the third attempt, which he led himself. Most of the garrison were put to the sword. Drogheda was last held for the Roman Catholic party by the Lord Iveagh, with a garrison of 1000 men, in 1690, but it surrendered to a detachment of King William's army the day after the battle of the Boyne.

The old walls and four gates were standing within the last fifty years. A few buttresses and St. Lawrence's Gate are all that now remain. The last is a striking object, and is in good preservation. Drogheda is rich in ecclesiastical antiquities. The Dominican Friary on the north part of the town was founded by Lucas de Netterville, archbishop of Armagh, in 1224, and is celebrated as the scene of the submission of four Irish princes to Richard II. in 1394. A lofty tower of this friary, called the Magdalen Tower, is still standing, together with some of the cloisters. The Franciscan Friary on the north-east of the town is standing, although much ruined, and forms a striking feature in the view of Drogheda from the approaches on the Dublin side. A gable and bell-tower, with part of the aisle, of the priory of Canons Regular also remain on the west of the town near the river; and there are some traces of the priory of St. Lawrence near the gate, and of the hospital of St. Mary, beyond the priory of the Canons Regular.

Drogheda is a compact and well-huilt town; but the miserable suburbs extending north and south greatly disfigure the approaches. The chief part of the town lies on the left side of the river, which is the higher ground. The principal street runs nearly north and south, and forms a portion of the great northern road. About the centre of the town, on the western side of the main street, stands the town-house, a handsome building with a clock and cupola. Drogheda contains three churches: St. Mary's, a small plain edifice built on the ancient site of the chapel of a Carmelite convent; St. Peter's, a handsome Grecian building, erected about the middle of the last century; and St. Mark's, a chapel of ease to St. Peter's. The Roman Catholic chapel of St. Peter, which is considered the cathedral church of the archdiocese of Armagh, is a spacious gothic edifice: there are also a handsome Presbyterian meeting-house, and a Wesleyan Methodist chapel. Besides these there are four other Roman Catholic chapels, three friaries, and two nunneries, one of which, called the Sienna

Nunnery, near the site of the Franciscan Priory, is a large establishment. There are two barracks, an almshouse, the mansion-house, an infirmary, a savings bank, a jail, a corn-market, and a theatre. The town and harbour have been much improved of late years. A viaduct 95 feet in height, constructed across the river Boyne, forms part of the Dublin and Belfast Junction railway. An iron lattice bridge across the Royal Canal is for the passage of the trains of the Dublin and Drogheda railway. Richmond Fort, erected during the government of the Duke of Richmond, contains an hospital and a military store-house, and commands a very fine view of the town. Formerly the linen manufacture was the staple trade of Drogheda, but it has very much decreased: there are three extensive flax-mills, six corn-mills, and two hreweries; the other manufactures are cotton, leather, tobacco, soap, and candles: there are also an iron-foundry, which employs 300 persons, five salt-works, and some brick-kilns. There is considerable trade between Drogheda and Liverpool by six regular steam-vessels, and the importations and exportations are large. The harbour is convenient; vessels of 300 tons can come up to the quay. At the entrance of the harbour are three lighthouses. The market is on Saturday. Eight fairs are held in the course of the year. The assizes, quarter sessions, and petty sessions are held here. On the 31st of December 1852 the number and tonnage of the vessels registered as belonging to the port of Drogheda were as follows:—Vessels under 50 tons 7, tonnage 193; above 50 tons 39, tonnage 4459; and 5 steam-vessels of 1787 tons. In the cross-channel and coasting trade there entered and cleared at the port during 1852 as follows:—Inwards 648, tonnage 47,976; outwards 281, tonnage 21,378; steam-vessels, inwards 213, tonnage 83,034; outwards 254, tonnage 97,359. In the colonial and foreign trade there entered 52 vessels, tonnage 8069; and cleared 8 vessels, tonnage 935.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DROHOBYCZ, a town in the circle of Sambor, in the Austrian crownland of Galicia, is situated on the Tyszmanika, a tributary of the Dniester, in 49° 22' N. lat., 23° 35' E. long., and has a population of about 7000, seven-eighths of whom are Jews. A great portion of the houses are filthy cabins, constructed of boards. The town however has several buildings of consequence, among which are the high-church, a fine structure of the gothic order, a Basilian monastery, with a grammar-school conducted by the brotherhood, a chapter-house, several churches, a synagogue, castle, and seminary for teachers. The town, with its eight suburbs, contains about 1200 houses. The royal salt-works, including the adjacent works at Mobrzye, Solec, and Stebnik produce about 3700 tons annually, which are extracted from salt rocks and saline clay. In the neighbourhood of the town are iron-mines and pitch-wells. There is a brisk trade in native and foreign produce, particularly wine, linens, cottons, leather, and grocery, which is mainly carried on by the Jews; and the corn and cattle markets bring much profit to the place.

DROITWICH, Worcestershire, a municipal and parliamentary borough and the seat of a Poor-Law Union, is situated in a narrow valley through which flows the small river Salwarpe, in 52° 16' N. lat., 2° 8' W. long., distant 7 miles N.N.E. from Worcester, 116 miles N.W. by W. from London by road, and 132½ miles by railway via Birmingham. The population of the borough of Droitwich was 3125 in 1851; that of the extended parliamentary borough was 7096. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. The livings are in the archdeaconry and diocese of Worcester. Droitwich Poor-Law Union contains 26 parishes and townships, with an area of 51,984 acres, and a population in 1851 of 18,020.

The Romans had a station called Salinæ at the spot now occupied by Droitwich. Remains of a Roman villa were discovered in forming that portion of the Oxford and Wolverhampton railway which passes through Droitwich. So much of the tessellated pavement as could be removed was deposited in the Worcester Natural History Museum: several coins, medals, and fibulæ were found at the same place. Droitwich is mentioned in Domesday Book on account of the tax then derived from its salt springs. A charter was granted to the borough by King John. The Court Chamber, situated in the centre of the town, is a handsome and commodious structure. The upper portion of the building is appropriated for the meetings of petty sessions, which are held weekly; the under portion is used as a market-house. Near the Court Chamber is St. Andrew's church; St. Peter's is situated a short distance from the town. The Methodists and Plymouth Brethren have places of worship, and there are National and Infant schools. Droitwich possesses an excellent hospital, founded by Lord Keeper Coventry, the income of which is 1200*l.* a year. It is governed by trustees, and supplies 36 men and women with a room, clothing, and 5*s.* per week each. The foundation also provides 80*l.* a year and a house for a schoolmaster, and 50*l.* a year and a house for a schoolmistress, for the education of 50 boys and 50 girls. The boys have 10*l.* given them in aid of their apprentice fee; the girls receive 3*l.* on leaving the institution. Droitwich possesses a savings bank; and a penny bank has been recently established. A county court is held in the town.

The chief trade of Droitwich is that in salt, manufactured from the salt springs, which are very productive. About 60,000 tons of salt are annually produced. The Worcester and Birmingham Canal

passes near Droitwich, and communicates with the river Severn at Worcester; and a canal for vessels of 60 tons burden, constructed by Brindley, forms also a direct communication from the salt-works to the river Severn. The line of the Oxford and Wolverhampton railway passes through Droitwich. A station of the Birmingham and Bristol railway is about a mile and a quarter from the town. The market is held on Friday; there are two annual fairs. About a mile from Droitwich is Westwood Park, the seat of Sir J. Pakington, M.P. for the borough.

(Nash, *Worcestershire; Communication from Droitwich.*)

DRÔME, a department in the south-east of France, bounded N. and N.E. by the department of Isère, E. by the department of Hautes-Alpes, S. by the departments of Basses-Alpes and Vaucluse, and W. by the Rhône, which separates it from the department of Ardèche. The form of the department is irregular: its greatest length from north to south is about 80 miles; from east to west 50 miles. It is comprehended between 44° 9' and 45° 20' N. lat., 4° 33' and 5° 45' E. long. The area according to the cadastral returns of 1851 is 2519 square miles: the population in the same year amounted to 326,846, which gives 129.75 to the square mile, being 44.96 below the average per square mile for the whole of France.

Surface, &c.—The department forms an inclined plane which slopes from east to west. About one-third of the surface consists of a sandy and in part stony plain running north and south along the Rhône, with a breadth of 5 to 8 miles. The rest of the department is mountainous. From a secondary chain of the Alps, which runs along the eastern boundary, numerous offshoots all of calcareous formation extend westward, gradually diminishing in height as they advance in that direction, and finally subsiding into the valley of the Rhône. The highest of these masses is more than 5000 feet above the sea; but the general elevation of the ridges is not much above 3000 feet. Their summits, which are everywhere accessible, yield good pasturage in the summer and autumn, and at these seasons they are frequented by the migratory flocks of the neighbouring departments; their sides are covered with dense forests of pine, oak, beech, &c. The valleys between the ridges, which are the chief haunts of the population, communicate with each other by narrow dangerous by-roads, and are furrowed by rivers or mountain torrents that frequently cause great damage by their overflow. The facilities for irrigation are very great, and this mode of culture is extensively adopted, especially in the valley of the Rhône, the fertility of which is in a great measure owing to the skilful employment of the system of irrigation. The air is pure and healthy. The high mountains are covered with snow during several months of the year; but in the valleys, and along the Rhône, the heat in summer is intense. North and south winds alternately prevail, the former bringing dry weather, the latter rain.

Hydrography.—The Rhône, which divides this department from that of Ardèche, is navigated by steamers, and receives all the rivers of the department, which are all short, and are here briefly described proceeding from north to south. [RHÔNE.] The *Galaure*, which rises in the department of Isère, crosses the north of the department, and enters the Rhône at St-Vallier. The *Isère*, remarkable for its deep, black waters, and the magnificent views which its valley presents, receives in this department the *Herbasse*, and joins the Rhône a few miles north of Valence: it is navigable. [ISÈRE.] The *Veoure* has its whole length in the department, and flows south-west into the Rhône past Chabeuil. The *Drôme*, which gives name to the department, rises on the confines of Hautes-Alpes, and flows in a rapid stream north-west as far as Die, receiving the *Bes* on the right bank; from Die to Poutaix its course is nearly due west, and from the last-mentioned town it runs south to its junction with the *Rohanne* on the left bank, whence it flows west to the Rhône, which it enters below Livron after a course of 66 miles. A good deal of loose timber is floated down this river as far as Poutaix, above which its bed is very rocky; here the timber is made into rafts and floated on to the Rhône. No part of the Drôme is navigable. Strong embankments have been formed at dangerous points along the stream to prevent it from inundating the cultivated land along its banks. The next river to the south is the *Roubion*, which is joined by the *Jabron* at Montélimart, just before its entrance into the Rhône. The *Lez* forms part of the southern boundary, and flowing south-west enters the Rhône in the department of Vaucluse. The *Eygues* or *Aigues* rises in the south-east of the department, and passes Nyons, below which it enters the department of Vaucluse, and joins the Rhône a little west of Orange. The *Ouvèze* rises in the extreme south of the department, and passing Le-Buis enters the department of Vaucluse on its way to join the *Sorgues*.

Produce, &c.—The department contains 1,612,312 acres. Of this area, 408,667 acres are covered with woods and forests; 354,269 acres are heath and moor-land; 640,265 acres are capable of cultivation; 44,364 acres are natural pasture-land, and 69,272 acres are under vines. Corn sufficient for the consumption is not produced; maize, buckwheat, and haricot beans are the chief crops. The olive, the walnut, the almond, the chestnut, and other fruit-trees are cultivated with success. The mulberry-tree is extensively grown for the production of silk; the first crop of leaves serves to rear the silk-worms, and the second is given to cattle. The number of mulberry-

trees in the department is about 3,000,000, and above 500,000 lbs. of raw silk are annually produced. The culture of the vine is an object of great attention in the valley of the Rhône, and in the arrondissements of Die and Nyons. The annual produce of wine is 8,580,000 gallons, a large portion of which is exported; the best kinds are the famous red and white wines called *Hermitage*, which for their mellifluous goût, colour, and perfume rank among the best wines in the world. Black truffles of excellent quality are abundant. Horses and horned cattle are not numerous; mules are the common beasts of burden. Sheep and black pigs are reared in considerable numbers. Among the wild animals are foxes, wolves, deer, chamois, beavers in the islands of the Rhône, otters, hares, rabbits, eagles, vultures, pheasants, partridges, &c. There is a good deal of meadow land, chiefly in the valley of the Rhône, which by means of irrigating rills is made to yield two and three crops a year.

Several iron-mines are worked; copper and lead are found; coal is met with in various districts, but only one mine is worked. Sand used in glass manufacture, chalk, gypsum, rock crystal, alabaster, granite, potters' clay, &c., are found. There are also several mineral and salt springs. The manufacturing industry of the department is important and active. Woollen cloth, silk, hosiery, serge, cotton-yarn, leather, paper, nut and olive oil, brandy, ropes, lime, tiles, bricks, &c., are manufactured; there are various dyeing and bleaching establishments; 552 wind and water-mills, 5 iron smelting furnaces and foundries, 711 workshops and factories of various kinds, and most families have a *magnanière* for rearing silk-worms. There is roadway accommodation by 5 state and 5 departmental roads; the railway now in course of construction from Lyon to Avignon runs for about half its length in this department, passing through Tain, Valence, and Montélimart. The electro-telegraphic communication by this line between Paris and Marseille has been completed some time. Electro-telegraphic wires connect Valence with Grenoble, whence they are laid down to Chambéry in Savoy, and thence across the Alps to Turin and Genoa. There are 450 fairs and markets held in the year. The great markets for raw silk are held in Valence and Montélimart.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Valence	10	101	155,017
2. Montélimart . . .	5	69	68,926
3. Die	9	117	66,498
4. Nyons	4	74	36,405
Total	28	361	326,846

1. In the first arrondissement the chief town is *Valence*, the Roman *Valentia*, which is also the capital of the department, and is described under its proper head. [VALENCE.] Among the other towns we give the following: the population is that of the commune throughout:—*Bourg-du-Péage*, or *Péage*, on the left bank of the Isère, which separates it from Romans, owes its origin to the bridge built here in the 9th century by the monks, who had the right of toll (*péage*); it has 3858 inhabitants, who manufacture coarse silk, silk hats, leather, and ropes. *Bourg-lès-Valence*, 2 or 3 miles from Valence, has several pretty residences, and a population of 3059. *Chabeuil*, on the left bank of the *Veoure*, is an ill-built place, with 4461 inhabitants, who manufacture woollens, glove and shoe leather, and paper; there are also silk-throwing and bleaching establishments, and a college here. The town, which formerly gave title to a principality, has no object of interest except the remains of its ancient castle. *Grand-Serre*, on the *Galaure*, has iron and steel-works, and 1583 inhabitants. *Loriol* stands at the foot of a hill on the left bank of the Drôme, opposite Livron, with which it is joined by a handsome bridge; it has 3460 inhabitants, several silk-throwing establishments, and nurseries, and some trade in hides and skins. *Romans*, on the right bank of the Isère, owes its origin to the abbey founded here by St. Bernard, bishop of Vienne, in A.D. 837; it is well built in a pretty situation, and joined to *Péage* by the bridge before mentioned, from which there is a magnificent view of the valley of Isère, terminating eastwards in Mont Blanc, while in the opposite direction the mountains of Vivarais are visible. The town is girt by a fosse and walls which are flanked with square towers, and entered by five gates. The church of St. Bernard, and the theatre which stands in the middle of a handsome promenade, called *Champs-de-Mars*, are the most remarkable buildings. Silk, hosiery, woollen cloth, serge, and leather are manufactured; there are also establishments for reeling and throwing silk, lime and gypsum kilns; and the town has a good trade in wool, hemp, linen, wine, oil, black truffles, skins, &c. *Romans* has a tribunal and chamber of commerce, a college, ecclesiastical school, and 9471 inhabitants. There are vast mulberry plantations about this town. *St-Donat*, on the left bank of the *Herbasse*, has 2223 inhabitants, who manufacture silk and tiles. *St-Jean-en-Royans* stands in a beautiful valley, closed in by high mountains, on the right bank of the *Lionne*, which falls into the *Bourne*, a feeder of the Isère; it is a favourite place of resort with French landscape painters, on account of the romantic scenery about it; population, 2516. *St-Vallier*, at the junction of the *Galaure* with the Rhône, has 2696

inhabitants, who manufacture silk crape and twist, chemical products, pottery, beer, and leather. A little east of this town, in a narrow savage gorge of the Galaure, are the ruins of a fine old castle, near which the road runs in a deep cutting through rocks. *Tain*, a pretty little town 10 miles N. from Valence, on the left bank of the Rhône, stands opposite Tournon, with which it is connected by a fine suspension-bridge, and has 2459 inhabitants, who are engaged in the culture of the vine, cotton-spinning, and quarrying granite. This little town stands at the southern foot of the steep hill called Hermitage, on the craggy terraced slopes of which are the vineyards that produce the famous Hermitage wines.

2. In the second arrondissement the chief town, *Montélimart*, beautifully situated among vineyards, meadows, and mulberry plantations, is an ancient place surrounded by ramparts which are flanked with watch-towers, and entered by four gates facing the cardinal points. It stands near the left bank of the Rhône, at the confluence of the Roubion and the Jabron, which unite their waters at the southern gate, where they are spanned by a fine stone-bridge. The town is well built; the Grande Rue, which is paved with basalt, and through which the road from Lyon to Avignon runs, is the most commercial part. The left bank of the Rhône, a little above the town, is formed by basaltic cliffs. [ARDÈCHE.] Around the ramparts, both within and without, there is a fine drive lined with double rows of trees. The most imposing structure is the old castle or citadel, which overlooks the whole town. *Montélimart* has 8245 inhabitants, a tribunal of first instance, and a college; it is a busy manufacturing town, and has several silk and cotton factories, tanneries, tile-works, and lime-kilns; serge and hosiery also are made. It is famous for the manufacture of morocco leather and the almond cakes called 'nougat.' Besides the articles already named, corn, flour, raw silk, walnut and olive oil, cattle, and provisions enter into the commerce of the town. From the two rivers abundant water-power is derived to drive the machinery of the several factories; and from the same sources the system of canals for irrigating the grounds in the neighbourhood is filled. *Dieu-le-Fit*, situated among mountains, 15 miles E. from *Montélimart*, is the seat of a busy manufacturing population of 4163. The most remarkable building is the new Calvinist church. The manufactures are woollen cloths, serge, swanskin, flannel, glass, pottery, &c.; there are also dye-houses, and establishments for spinning silk, cotton, and worsted. In the neighbourhood there are mineral springs and a large cavern which bears the name of Tom-Jones. *Grignan*, a small place of 2000 inhabitants, stands on a hill above the Lez, and was formerly famous for a magnificent château, celebrated in the letters of Madame de Sevigné, who died in it (April 18, 1696), and was buried in the parish church of Grignan. This château is now in ruins, having been burnt during the first revolution. *Pierrelatte*, an ill-built town, 13 miles S. from *Montélimart*, stands at the foot of a rock crowned with the ruins of an old castle, which capitulated in 1562 to the ferocious Adrets, who hurled the garrison over the battlements and massacred all the inhabitants of the town. The environs yield much corn, wine, and silk; there are silk-mills and tan-yards in the town, which has 3430 inhabitants.

3. In the third arrondissement, the chief town *Die* (the *Dea Augusta* and *Dea Vocantiorum* of the Romans), stands in the middle of a fertile valley, on the right bank of the Drôme, and has 3920 inhabitants. The town, which is defended by walls flanked with numerous towers, was formerly the seat of a bishop; the old palace and former cathedral are the principal buildings. It has a tribunal of first instance, a Calvinist church, manufactures of woollen cloth, silk, and cotton yarn, besides several dye-houses, fulling-mills, and magnaneries. The neighbourhood produces excellent fruits, and the delicious white wine called 'Clairette de Die.' *Crest*, 20 miles W. from *Die*, on the right bank of the Drôme, stands at the foot of a rock which has the form of a cock's crest, whence the name of the town. It was formerly defended by a castle, which commanded the passage of the river and rendered this one of the strongest towns in Dauphiné; only one tower of the castle now remains, which is used as a house of correction. In the church there are some fine old bas-reliefs, and an inscription which recounts the chartered privileges of the town, with the date 1188. The town has 4948 inhabitants, who manufacture woollen and cotton cloths, serge, blankets, silk handkerchiefs, cotton yarn, paper, leather, tiles, and lime; it has also sugar refineries, fulling-mills, and dye-houses, and trades largely in truffles. *Saillans*, also on the right bank of the Drôme, is a busy manufacturing little town of 2000 inhabitants.

4. In the fourth arrondissement, the chief town, *Nyons*, or *Nions*, stands on the Eygues, at the opening of a valley which is cultivated like a garden by means of irrigating rills. The town is defended by walls and towers, and entered by four gates; the interior is ill-built. The most remarkable object is the stone bridge over the Eygues. Soap, woollen stuffs, earthenware, spun silk, and leather are the chief industrial products of the inhabitants, who number 3251. *Le-Buis*, an ill-built place in the valley of the Ouvèze, takes its name from the boxwood (*buis*) which abounds in its neighbourhood. Silk-throwing and the manufacture of oil and leather are the chief occupations of its 2456 inhabitants.

The department forms the see of the Bishop of Valence, is included in the jurisdiction of the High Court of Grenoble, and belongs to the

8th Military Division, of which Lyon is head-quarters. Education is more extensively diffused than in most of the French departments. There is a university academy and an ecclesiastical college in Valence, a diocesan seminary in Romans, communal colleges in *Montélimart* and Valence, and a Protestant training school in *Dieu-le-Fit*. The Calvinists have Consistorial churches in *Crest*, *Dieu-le-Fit*, *Die*, and *Bourg-lès-Valence*. (*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France.*)

DROMORE, county of Down, a market-town in the parish of Dromore, is distant 17 miles E.S.E. from Downpatrick; and 84 miles N. by E. from Dublin on the great northern road to Belfast. The population in 1851 was 1872. The town is situated on the river Lagan, and contains besides the cathedral or parish church, which is a mean structure on the bank of the river, one Roman Catholic and two Presbyterian chapels. Large quantities of linen cloth are manufactured here; and many of the inhabitants are engaged in weaving. Near the town is a mineral spring of celebrity. East of Dromore stands a remarkable mound, 60 feet high, with three concentric entrenchments, and an extensive outwork towards the Lagan. Fairs are held in February, May, July, and October.

The see of Dromore is in the ecclesiastical province of Armagh. The chapter consists of a dean, precentor, chancellor, treasurer, arch-deacon, and one prebendary. This diocese occupies the western portion of the county of Down, and extends partially into Armagh and Antrim. It contains 28 benefices. The foundation of the see is attributed to St. Colman in the 6th century. By Act 3rd and 4th Wm. IV. c. 37, this bishopric has become incorporated with the united diocese of Down and Connor.

(Fraser, *Ireland*; Ware, *Bishops*; Thom, *Irish Almanac*; *Parliamentary Papers*.)

DRONERO [CONI.]

DRONFIELD. [DERBYSHIRE.]

DRONTHEIM. [TRONDHEIM.]

DROXFORD, a division of Hampshire which has been constituted a Poor-Law Union. Droxford Poor-Law Union, which is nearly coextensive with the division, contains 11 parishes, with an area of 47,476 acres, and a population in 1851 of 10,676. The population of the parish of Droxford, in which the Union Workhouse is situated was 2005 in 1851. Droxford village is situated in 50° 58' N. lat., 1° 8' W. long.; distant 12 miles S.E. from Winchester, and 62 miles S.W. from London. The living is a rectory in the archdeaconry and diocese of Winchester.

DRUMSNA. [LEITRIM.]

DRUSES. [SYRIA.]

DRYPOOL. [YORKSHIRE.]

DUBLIN, a maritime county in the province of Leinster in Ireland, lies between 53° 11' and 53° 37' N. lat., 6° 3' and 6° 32' W. long.; and is bounded N.W. and N. by the county of Meath, E. by the Irish Channel, S. by the county of Wicklow, and S.W. by the county of Kildare. Its greatest length from north to south, between Gormans-town and Bray, is 32 miles; and its greatest breadth, between Howth Head and Leixlip, is 18 miles. The area, not including the city of Dublin, comprises 222,709 acres, of which 196,063 are arable, 19,312 uncultivated, 5519 under plantations, 170 covered with rivers, canals, &c., and 1820 in towns. Exclusive of the city of Dublin the population in 1851 was 146,631.

Surface and Coast-line.—The county of Dublin, excepting a small tract on the south, is fertile and well cultivated. The only portions of the county not under cultivation are the promontory of Howth, and the range of mountains which separates Dublin from Wicklow on the south. The Dublin mountains, of which the central group has an average height of 1000 or 1200 feet, are partially separated from the loftier elevations of the county of Wicklow by the valley of Glencullen on the east, and by that of Ballynascorney or Glenismaulo on the west; a neck of elevated land, intervening between these valleys, connects the range with the Kippure group on the south, the highest point of which rises to the height of 2473 feet above the sea-level. The whole range forms a fine mountain back-ground to the rich scenery of the plain of Dublin.

The northern part of Dublin county is more undulating than the immediate vicinity of the capital. A low range of cultivated eminences, called the Man-of-War Hills, extends across the line of communication with Meath and Louth, and the ground on the north-western border next Meath and Kildare is pretty much broken by picturesque valleys. The only marked eminences however north of the mountainous tract, are the islands of Lambay and Ireland's Eye, and the hill of Howth. The isthmus which connects Howth with the mainland is a low narrow neck, which gives Howth very much the appearance of an island. The highest point of the promontory of Howth is 567 feet above the level of the sea. The cliffs towards the bay and channel are lofty, and the whole promontory contributes much to the picturesque effect of Dublin Bay.

The coast which, reckoning all its windings, has a length of 70 miles, is indented by the Bay of Dublin and by several creeks forming tide harbours; the principal of which are those of Killiney, Malahide, Rogerstown, and Lough Shinny. Artificial harbours have been formed at Balbriggan, Howth, and Kingstown.

South of Skerries the sandy shore gives place to a limestone cliff as far as the creek of Lough Shiny near the town of Rush. Off the creek of Malahide is the rocky island of Lambay. The peninsula of Howth contains about 1500 acres, and, except towards the low isthmus which connects it with the mainland, stands in deep water. The sound between Howth and Ireland's Eye (a rocky picturesque island of thirty acres, which lies about three quarters of a mile off the northern side of the promontory) being a sheltered situation with considerable depth of water, was, till the erection of Kingstown Harbour, the chief government packet station. The harbour consists of two piers—the eastern one 2493 feet in length, and the western 2020 feet. On the extremity of the eastern pier is a lighthouse. The whole work is faced with cut granite, except the sloping glacis under water, which is of red grit from Inncorn in Cheshire. This harbour, the formation of which cost nearly half a million sterling, is now almost entirely neglected. From Howth round to the sands of the North Bull the whole of the promontory is rocky and precipitous towards the sea. On a detached rock at the south-eastern extremity, called the Bailey, stands a lighthouse, which marks the northern entrance to the Bay of Dublin. From the Bailey of Howth to Dalkey Island at the opposite extremity of the Bay of Dublin, is a distance of 6½ English miles. Between these points the bay recedes in a semi-elliptical sweep to a depth of about six miles inland. The shore surrounding the head of the bay, where the Liffey, Tolka, and Dodder rivers empty themselves, is low: it rises however towards Blackrock and Kingstown, and beyond Kingstown is of a bold and picturesque character. The river of Bray, which discharges itself about half a mile north of the promontory of Brayhead, is the county boundary.

As a harbour, the Bay of Dublin is materially encumbered by a great tract of sand, which is bisected by the Liffey in a direction from west to east. The portion on the north of the Liffey is called the North Bull, and that on the south the South Bull. In order to protect the navigation of the Liffey from the sands of the South Bull, a pier consisting of a mound of gravel contained between double stone walls was undertaken by the Irish government in 1748. It runs from the suburb of Ringsend along the northern margin of the South Bull, to a distance of 7938 feet. In 1761 a lighthouse was commenced at the extremity of the Bull, and from it a wall was carried inwards towards the Pigeon-house. This sea-wall, completed in 1796, is composed of two parallel walls of hewn granite, laid without cement; the space between is filled to a certain height with gravel and shingle; over this there is a course of stone-work imbedded in cement; and the whole is finished on the top with a course of granite blocks laid in trass. The wall is 32 feet broad at bottom, and 28 feet at top. The Pigeon-house has been converted into a dépôt for artillery and military stores. Another wall, called the North Wall, running nearly south-east from the opposite shore of Clontarf, is intended in like manner to confine the sands of the North Bull. By means of these works the navigation of the Liffey has been greatly improved, but the channel requires constant dredging. The bar, on which there are eleven feet of water at spring-ebs, runs across the channel immediately outside the lighthouse. An extensive basin in continuation of the North Wall basin, and a graving dock 384 feet long by 80 feet wide, are now in course of construction.

The insecurity of the bay, joined to the failure of the works at Howth, led to the formation of a harbour at Kingstown, on the site of the old harbour of Dunleary, on the south side of the bay, in 1817. The small pier and tide harbour at Dunleary have been inclosed within the new works, and are now crossed by the Dublin and Kingstown railroad. The new harbour is formed by two piers inclosing an area of 250 acres, with a depth of from 15 to 27 feet, and approaching each other within a distance of 850 feet. The eastern pier, on the extremity of which there is a bright revolving light, is 3500 feet long; the western one has a length of 4900 feet; and along both piers there are quays, 40 feet wide, which are protected from the sea by parapets 9 feet high. Along the breast of the harbour is a wharf 500 feet long.

Hydrography and Communications.—The Liffey has a course of little more than eight miles from the point where it enters Dublin county to the Bay of Dublin at Ringsend. It is navigable for sea-borne vessels to the custom-house, and for barges and row-boats to Chapelizod, about three miles farther up. The Dodder, the course of which lies almost wholly within this county, takes its rise from numerous small streams descending from Kippuro Mountain, and forming a rapid stream which descends in a course of about ten miles into the Bay of Dublin at Ringsend. The Tolka is a small river rising near Dunboyne in the county of Meath: it flows east by south through Blanchardstown and Glasnevin to the north-western extremity of Dublin Bay, which it enters below Ballybough bridge.

The county is traversed in a westward direction by the Royal Canal and the Grand Canal, which unite the Liffey with the Shannon. The Royal Canal leaves the Broadstone terminus (which opens into the Liffey a little east of Dublin custom-house) and passes through Maynooth, Mullingar, Ballymahon, and Killashee to Tarmonbarry on the Upper Shannon, the whole length being 92 miles. The width of the canal throughout is 42 feet at top and 24 feet at bottom; the depth of water is sufficient to float barges of 100 tons. The summit-level is

near Mullingar, 53 miles W. from Dublin, and at a height of 322 feet above the sea; here the canal is fed by the waters of Lough Owel. The articles borne on this canal into the interior are coals, manure, and merchandise of various kinds; those conveyed to the capital comprise stone, sand, bricks, turf, oorn, meal, potatoes, pigs, butter, &c. A branch canal connects the town of Longford with the main trunk at Killashee.

The Grand Canal, the most important line of internal navigation in Ireland, runs west by south from James's-street Harbour, on the south-west of the city of Dublin, across the counties of Dublin, Kildare, and King's County to the Shannon at Shaunon Harbour, whence a branch, 15 miles in length, runs to Ballinasloe along the right bank of the Suck, completing the navigation westward for a distance of 95 miles from the capital. At its highest level, which is 279 feet above the sea, near Robertstown in the county of Kildare, the canal is fed by two tributaries of the Barrow; the slope between Dublin and Robertstown is 26 miles in length, and the ascent is effected by means of four double and fourteen single locks. The dimensions of the canal throughout are 45 feet at the top and 25 feet at bottom; the depth of water is six feet in the body of the canal and five feet on the sills of the lock-gates. From the main trunk at Robertstown a very important branch runs south-west through Rathangan to Monasterevan, whence along the right bank of the Barrow two cuts have been made, one to Mountmellick and the other to Athy, below which the Barrow is navigable to its mouth in Waterford Harbour. The Grand Canal has an extensive range of docks, covering an area of 25 acres on the right bank of the Liffey near Ringsend. The communication with the river is by three sea-locks, and the basins within are capable of containing 600 sail in 16 feet of water. Attached are three graving-docks for vessels of different dimensions, with several extensive stores; the whole being surrounded by spacious wharfs. The communication between the Grand Canal docks and the line from James's-street Harbour is by a branch canal of about three miles, running from the docks round the south-east and south of the city.

The main roads, subject to turnpikes, which issue from Dublin, are those to Howth, Malahide, Drogheda by Swords and the Naul, Drogheda by Ashbourn, Ratoath, Navan, and Mullingar, Carlow by Rathcoole and Tallaght. The chief lines free from toll are the military road and the roads to Enniskerry, Bray, and Kingstown. The railroads that radiate from the capital and traverse the county of Dublin are—the Dublin and Drogheda line, which runs northward along the coast through Malahide and Balbriggan, and sends off a branch to Howth; the Great Southern and Western, which connects Dublin with Limerick and Cork, passing through Clondalkin and Lucan in this county; the Midland Great Western, connecting Dublin with Galway; and the Dublin and Kingstown line, which is continued from Kingstown to Dalkey on the atmospheric principle.

Geology and Mineralogy.—The greater part of the county of Dublin is occupied by a tract of mountain limestone, extending northward into Meath, and bounded in this county on the south by primitive rocks. Along the northern coast also there are patches of primitive rock, as the greenstone and argillaceous schists, which form the Man-of-War Hills and the island of Lambay, and the stratified quartz and schist of Howth. The primitive formation on the south of the limestone plain consists of a ridge of granite supporting flanks of micaceous and argillaceous schists. At Dalkey, and generally along the eastern and north-eastern limits of the granite district, the stone quarried is of the closest grain, and excellently adapted for building purposes. Between Blackrock and Dundrum the edges of the limestone field are in several places within a few yards of the granite, the intervening rocks of the series not being observable. The limestone is extremely compact along the margin of the field towards the primitive series, and forms a good building material. Magnesian limestone occurs at Sinton-on-Howth, and on the Dodder, near Milltown. It dresses with peculiar sharpness under the hammer or chisel.

The only mines worked are the lead and copper mines at Ballycorus, within half a mile of the Scalp. Galena, potters'-clay, and manganese have been found on Howth, and fuller's-earth of a middling quality at Castleknock, on the left bank of the Liffey.

Climate, Soil, Agriculture, &c.—The climate of Dublin is temperate; frosts rarely continue more than a few days, and snow seldom lies. The prevailing winds are from the west; easterly and north-easterly winds prevail in the spring. The quantity of rain that falls at Dublin is less than falls at Cork or Belfast: the average annual depth of rain is only about 23 inches 7 lines.

The soil of Dublin abounds in mineral springs: of those within the city ten are saline purgative springs. There is at Lucan, on the right bank of the Liffey, a spa strongly impregnated with sulphuretted hydrogen gas. These waters have been found very efficacious in cutaneous diseases. There are tepid springs of 75° Fahrenheit near Finglas and Leixlip. The water, which rises from the Calp district around Dublin, is so impregnated with sulphate or nitrate of lime as to render it unfit for most domestic purposes.

The vegetable soil of the county of Dublin is generally shallow. On the granite bottom it is a light gravel, which requires strong manuring. The subsoil of the Calp district is a tenacious clay, which retains the water and renders the loamy soil wet and cold; but drainage and an unlimited supply of scavengers' manure from the city have brought

that part of this district, which lies immediately round the capital, into a good state of productiveness. The quality of the land improves towards the west and north, and the district bordering on Meath is not inferior to the generality of wheat lands in the midland counties. Villas, gardens, dairy-farms, kitchen-gardens, and nurseries occupy the immediate neighbourhood of the capital, and grazing-farms and meadow-lands extend over the country which is not occupied by demesnes, to a distance of 10 and 12 miles beyond those on the west and north. Cattle, sheep, and pigs are numerous and of improved breed: in 1851 on 18,512 holdings their numbers were respectively 41,845; 30,775; 21,067. The horses on the same holdings in the same year were 19,921: poultry numbered 155,286. In the rural districts tillage-farms vary from 10 to 300 acres; by far the greatest number consists of from 10 to 30 acres. Grazing-farms are larger, varying from 200 to 700 acres. The fields are mostly inclosed by quickset hedges.

Divisions and Towns.—The county is in the archdiocese of Dublin, and in the diocese of Glendalough. It is divided into four Poor-Law Unions, North Dublin, South Dublin, Balrothery, and Rathdown; and into nine baronies:—1 and 2. Balrothery (East and West) on the north. 3. Nethercross, scattered through the other baronies in seven separate divisions, of which six lie north of the city of Dublin. 4. Coolock, on the north-east of the city of Dublin. 5. Castleknock, on the north-west of the city of Dublin. 6. Newcastle, on the west and south-west of the city of Dublin. 7. Uppercross, on the south-west of the city of Dublin. 8. Rathdown, on the south-east of the city of Dublin. 9. Dublin.

DUBLIN, the capital of the county and of Ireland; BALROTHERY and RATHDOWN, which are seats of Poor-Law Unions, with the sea-port of KINGSTOWN, are noticed in separate articles. The towns and villages which further require to be noticed we give here.

Balbriggan, population 2310 in 1851, a small sea-port town 22 miles N. by E. from Dublin on the Drogheda railway, is a place of some trading and manufacturing importance. It was a mere fishing village previous to 1780, when Baron Hamilton laid the foundation of its permanent improvement by the erection of two cotton factories, and the construction of a pier to improve the harbour. The public buildings are a church with a square embattled tower, a Roman Catholic chapel, a Methodist meeting-house, a sessions court-house, and a market-house. Quarter and petty sessions are held. The town is the head-quarters of the district police; and there is a coast-guard station at the martello tower on the strand. An important corn-market is held on Mondays. Cattle fairs are held April 29th and September 29th. Fustians, checks, jeans, and calicoes, are extensively manufactured. The embroidering of muslin employs a good many hands; and about 40 stocking frames are employed in the manufacture of the famous 'Balbriggan hosiery.' There are here dye-houses attached to the factories, a tan-yard, and salt-works. A viaduct of 11 arches, 35 feet high, by which the Drogheda railway crosses the harbour, is a great ornament to the town. The new and inner harbour, completed in 1829, formed of a curved pier 420 feet long, and terminating in a lighthouse, has 14 feet water at high tide. The chief exports are corn, meal, and flour; the imports are coal, bark, and salt. *Baldoyle*, population 817, situated on a small creek, about 7 miles N.E. from Dublin. There is here a station of the Dublin and Drogheda railway. The Roman Catholic chapel is a handsome edifice, with a portico of four Tuscan pillars, over which is a turret supporting a dome and cross. In the village are a dispensary, National schools, and stations of the constabulary and the coast-guard. In summer the visitors to the place for sea-bathing are numerous. A small fishery is carried on. *Blackrock*, population 2342, a well but irregularly built town, consisting of a main street, and several smaller streets, is situated on the Kingstown railway, 5 miles S.E. from Dublin. The town stands on the south shore of Dublin Bay, in a very pretty neighbourhood, studded with marine villas. It is much resorted to for sea-bathing. The chief buildings are a chapel of ease, a Roman Catholic chapel, and a Carmelite nunnery, attached to which there is a large Free school for girls. *Boosterstown*, population 535, on the shore of Dublin Bay, about 3 miles S.E. from the General Post-Office, contains a neat church, adorned with a square tower and pinnacles and a lofty spire; a commodious chapel for Roman Catholics, and a convent of Sisters of Mercy, in which about 200 poor children receive instruction. There are here National schools. The Kingstown railway runs close past the village and has a station here. *Bray*, situated on the sea-shore, 12 miles S.E. from Dublin at the mouth of the Bray River, is partly in Dublin county, but chiefly in Wicklow. The portion of the town situated in the county of Dublin is called *Little Bray*, and contained in 1851 a population of 1096; it is united to the Wicklow portion by an old bridge of four arches. The entire population of the town is 3156. The most important buildings, which are all on the Wicklow side, are a church, a Roman Catholic chapel, a Presbyterian chapel, and a Methodist meeting-house; there are also a fever hospital, a savings bank, National schools, a petty sessions-house, and police and coast-guard stations. The chief trade of Bray is in coal, slate, and Sutton limestone, which are imported in small craft; corn is exported. There are many handsome villas in the neighbourhood. Markets for provisions are held on Tuesday and Saturday. Ten fairs are held in the course of the year. *Chapelizod*, population

1683, situated on the Liffey, 3 miles W. from the Dublin General Post-Office, has a church, a Roman Catholic chapel, a National school, and a police station. The beautiful scenery of the Liffey in this neighbourhood, and the proximity of the Phoenix-park render it a favourite place of resort in summer. Opposite to one of the entrances to the park near the village is the Roman Catholic church of the Nativity, a handsome building in the early English style, with a tower 120 feet high. *Clondalkin*, population 474, about 4½ miles S.W. from Dublin, is situated close to the Grand Canal, and to the line of the Great Southern and Western railway, of which there is a station here. The village contains several neat houses. There are here the parish church, a chapel for Roman Catholics, almshouses for widows, and several charitable institutions. Near the village is the monastery of Mount Joseph, established in 1813. There is here an ancient round tower 100 feet high, 15 feet in diameter, with a conical roof of stone. Numerous handsome residences are in the vicinity. *Clontarf*, population of the village and sheds 875, memorable in Irish history for the great defeat of the Danes by the Irish under Brian Boru on Good Friday, 1014, is a pretty but scattered village, 3 miles E.N.E. from Dublin. The old castle of Clontarf was taken down in 1835 and a modern mansion with a Norman tower erected on its site. Marino, the seat of the Earl of Charlemont, is close to the village. A small church and a large and handsome Roman Catholic chapel are the most notable buildings. There are extensive oyster beds off the sheds of Clontarf. *Dalkey*, population 252, distant 8 miles S.E. from Dublin, at the eastern extremity of Dublin Bay, was formerly a town of some importance, and had in 1358 a charter of incorporation. The chief relics of its ancient consequence are the remains of three old forts, and a church. The only public building is the Roman Catholic chapel. A large church has been recently erected near the coast; and not far from it is the Loretto convent, a handsome cruciform structure. In the village there are a National school and coast-guard and police-stations. On Dalkey Island, which is about 3 miles from the shore and has an area of 22 acres, are a martello tower and battery. The atmospheric railway connects Dalkey with Kingstown and Dublin. *Donnybrook*, population 1970, a suburb of Dublin, on the road to Bray, is situated on the Dodder, which is crossed by Anglesea bridge. The public buildings include the parish church, chapels for Roman Catholics and Wesleyan Methodists, a Magdalen asylum, a dispensary, a lunatic asylum, and an hospital for incurables. It was formerly famous for its fair, originally granted by King John, and lasting 15 days from the 26th of August. The fair, which is now one of pleasure, is still held; but it does not continue longer than a week, and of late years it has been greatly shorn of its traditional glories. *Drumcondra*, population 434, a suburb of Dublin, about 2 miles N. from the General Post-Office, contains many elegant mansions. The Roman Catholic Missionary college of All Hallows, a commodious building, situated in the midst of extensive grounds, provides accommodation for 200 students, who are educated for foreign missionary service. There are here a Roman Catholic chapel, a dispensary, and an asylum for female penitents. *Dundrum*, population 594, about 4 miles S. from the General Post-Office, consists of one main street, chiefly cottages. It contains a chapel for Roman Catholics, a petty sessions court-house, a dispensary, and a National school. The parish church of Taney, a handsome cruciform edifice, stands on Taney hill. The village is finely situated and is much resorted to in summer by invalids. *Glasmovin*, population 398, a suburb of Dublin, 2 miles from the General Post-Office, is situated on the bank of the river Tolka. There are here a small church, the Model Training school of the National Board of Education, the Claremont Institution for the deaf and dumb, a Roman Catholic institution for the deaf and dumb, almshouses for widows, the Botanic Gardens of the Dublin Society, and Prospect cemetery, which contains several beautiful monuments, including one to the memory of Curran. *Harold's Cross*, population 2934, situated on the Grand Canal and on the road to Rathfarnham, 3 miles S. by W. from Dublin, is a large village built round a spacious central green, and surrounded by handsome villas and grounds. The principal buildings in and near the village are—the church, at the entrance of Mount Jerome cemetery; the convent of St. Clare, attached to which is a neat chapel; a Free school for female orphans; the Carmelite friary; and Pim's cotton factory, in which 6000 spindles are driven by steam and water power. The cemetery, the great attraction of the place, has an area of 25 acres beautifully laid out and surrounded by a shrubbery and lofty trees. It contains many handsome tombs and monuments, including one to the late Mr. Drummond, under-secretary for Ireland. *Howth*, population 829, a small fishing town, about 8 miles N.E. by N. from Dublin, consists chiefly of one main street. It contains the parish church, a Roman Catholic chapel, a dispensary, a National school, and stations of the constabulary and the coast-guard. The harbour cost a large amount of public money, but did not answer the purpose of its construction, and the mail packet station was in consequence transferred to Kingstown. Howth castle is an extensive embattled structure with a tower at each end. George IV. landed at Howth in August 1821. A branch of the Dublin and Drogheda railway was opened to Howth in August 1846. *Kilmainham*, population 473, besides 255 inmates of the jail, a suburban village on the road to Naas and near the terminus of the Great Southern and Western

railway, is interesting for its Royal hospital, county court, and jail. The hospital is a quadrangular building two stories high, inclosing an area 210 feet square, neatly intersected with walks; the north entrance is surmounted by a square tower, clock turret, and octagonal spire. The hospital is the official residence of the Commander of the Forces in Ireland. Like Chelsea hospital in London, which it resembles also in its architectural features, Kilmainham hospital forms a home for maimed officers and soldiers. It was built in 1680, after a design by Sir C. Wren. The county court-house is a large and handsome building, connected with which is the county jail. Elections of members for the county are held here, and also quarter sessions. In the village is a chapel for Independents. There are some woollen cloth mills at Kilmainham. Not far from the hospital is the terminus of the Great Southern and Western railway, the platform of which is 612 feet long, covered in by a roof supported on 72 cast-iron columns. *Lucan*, population 578, a village on the Great Southern and Western railway, is situated 7 miles W. from Dublin, on the high road to Galway, and consists of a wide street of small but neat houses. It occupies a pretty site, in a fertile valley on the left bank of the Liffey, which is here spanned by a bridge of one arch with a granite parapet. The village contains a parish church, which is surmounted by a tower and spire, a large Roman Catholic chapel, a Methodist meeting-house, the spa-house, and National schools. *Lucan* is noted for its chalybeate spring. The scenery round the village is varied and beautiful. In *Weston Park* the Liffey falls over a series of rocky ledges and forms a cascade called the 'Salmon Leap,' over which the fish dart at a single bound. *Lusk*, population 710, situated near the Rush station on the Drogheda railway, 17 miles N. by E. from Dublin, has a handsome church with a massive square tower, erected on the site of *Lusk abbey*, a large Roman Catholic chapel, and two National schools. *Lusk* church contains several ancient ecclesiastical remains. *Malahide*, population 596, a small village on the Malahide inlet, 9 miles N. from Dublin on the Drogheda railway, consists chiefly of neat cottages, let in the summer to sea bathers, and has a parish church, a Roman Catholic chapel, and police and coast-guard stations. Across the inlet, which is dry at low water, the Drogheda railway is carried by a wooden viaduct and embankments. Grain, meal, and flour are exported, and large quantities of coal are imported. Off the coast there are extensive oyster beds. The castle, or 'Court of Malahide,' a large square building flanked by lofty circular towers, stands on a high limestone rock, commanding a fine view of the bay. It has been the residence of the Talbots, lords of Malahide, since 1174, with a short interval during the Commonwealth; and contains several splendid apartments roofed and decorated with richly carved ancient Irish oak. *Ranelagh*, population 3209, a suburb of Dublin, situated on the road to Dundrum, 2 miles S.E. from the General Post-Office, consists of a main street, a square, and several avenues and terraces. The Carmelite convent, attached to which is a handsome chapel, and the Methodist meeting-house, are the principal buildings. There are many pretty villas and ranges of houses in the neighbourhood of *Ranelagh*. *Rathmines*, population 3216, a suburb, about 2 miles S. from the General Post-Office, separated from Dublin city by the Grand Canal, which is here crossed by *Latouche's* bridge, presents a street of well-built houses a mile and a half in length, intersected by avenues and terraces. The church of the Holy Trinity and the Roman Catholic chapel are handsome structures. There are Free and National schools. On the right of the road to Dublin are the *Portobello* artillery and cavalry barracks. Considerable improvement has taken place in the neighbourhood within the last few years. *Rush*, population 1496, a fishing village, situated on the coast 17 miles N. by E. from Dublin, has a commodious harbour for small craft. The harbour has been recently repaired, and will accommodate vessels of about 50 tons burden. The banks frequented by the *Rush* fishermen are about 20 miles from the shore, and abound in ling, hake, and haddock. The Roman Catholic chapel and the martello tower on the beach are the principal buildings. *Kenure Park*, near the town, is a spacious and handsome mansion, once the residence of the great Duke of Ormond. *Skerries*, population 2327, a small town situated on the coast and on the line of the Drogheda railway, 18 miles N. by E. from Dublin. The inhabitants are chiefly engaged in the fishery off the coast. The chief buildings are the parish church, which has a square tower surmounted with pinnacles, and a large Roman Catholic chapel. There are here malting-kilns, corn-mills, and a yeast brewery. A coasting trade is carried on in potatoes, limestone, and coal. A great number of females in the town and neighbourhood are employed in muslin embroidery. The harbour is formed by a pier, and affords good holding ground and shelter for vessels of about 90 tons. The town is frequented in summer for bathing. Off the port are the four *Skerry Islands*. There is a martello tower on *Shenicks Island*, the largest of the four, which has an area of 15 acres; and another on *Red Island*, which is nearest the shore. *Swords*, population 1294, is a market town situated on the road to Drogheda, 8 miles N. from Dublin, and on a small river that enters Malahide Bay. From 1678 to the Union, *Swords* was a parliamentary borough and returned two members to the Irish Parliament. At the Union 15,000*l.* were granted as an indemnification for the loss of its privileges; with the money was founded a school, which still exists, and is attended by above 300 children. The town consists

of a wide street about a mile in length. The parish church, a handsome modern structure, and a Roman Catholic chapel, which is surmounted with a small tower and spire, are the chief buildings. Quarter sessions are held here twice a year, and petty sessions every fortnight. There is a National school in *Swords*. The parish of *Swords* is studded with numerous country seats and villa residences. There are here a round tower and some remains of ancient ecclesiastical buildings.

Before the Union, *Swords* and *Newcastle* returned two members each to the Irish Parliament. The county of Dublin, the city of Dublin, and the university of Dublin are each at present represented by two members in the Imperial Parliament.

The commerce of the county of Dublin, exclusive of the capital and its immediate vicinity, is limited to the coasting trade carried on at *Balbriggan*, *Bray*, and the other towns along the coast. The cotton and stocking manufactures carried on at *Balbriggan* have been already mentioned. Many females are employed in embroidering muslin for Belfast and Scotch houses. There are extensive corn-mills on the Liffey, the *Balbriggan* river, and the *Kimmage* brook, on the south-west of *Harold's Cross*. The fishing-grounds lie in from 15 to 60 fathoms' water between the Dublin coast and the *Isle of Man*. The fish consist chiefly of turbot, hrit, sole, and plaice, which are sent to market daily throughout the year. There is a well-known fishing-ground between *Rush* and *Lambay Island* on which cod, ling, haddock, whiting, &c. are taken. The fishery districts of Dublin and *Swords* comprise together 85 miles of sea-coast.

The Pagan antiquities of the county of Dublin are not numerous. There is a cromlech on the hill of *Carrickmoor* in *Howth*. Another cromlech stands to the south of *Killiney*, on the descent into the vale of *Shanganagh*; and at *Brennanstown*, on the *Bray* road, 6½ miles from Dublin, there is a third of large dimensions. Dublin is however rich in ecclesiastical and military antiquities. The round tower of *Clondalkin*, 4½ miles from Dublin, on the southern road by *Rathcoole*, is in better preservation than most similar edifices in Ireland. The antiquities at *Swords*, on the great northern road, 7 miles from Dublin, consist of a palace of the archbishops of Dublin in ruins, a square steeple of the old church, and a round tower 73 feet in height. This tower is also in good preservation, and retains its conical stone capping. Between *Swords* and *Baldoye*, 5 miles from the capital, is the hamlet of *St. Doulagh's*, containing one of the most singular stoue-roofed churches in Ireland. The entire edifice measures but 48 feet by 18 feet. It is divided into a rude nave and choir, which communicate by a narrow square-headed doorway not sufficiently high to admit a full-grown person upright. The castles of *Clontarf*, *Baldangan*, *Naul*, and *Castleknock* are among the principal detached military edifices.

The county assizes are held at *Kilmainham*, and the quarter-sessions at *Kilmainham*, *Balbriggan*, and *Swords*. In December 1851 there were in the county 148 National schools, attended by 12,758 male and 14,514 female children. The constabulary force of the county numbers 243 men including officers; the head-quarters of the force are at *Ballybough*. There are 11 coast-guard stations in the county. The county of Dublin, together with the cities of Dublin and *Drogheda*, and the counties of *Meath*, *Louth*, and *Wicklow*, contribute in proportion to their populations to the support of the *Richmond Lunatic Asylum*, built in Dublin in 1815. Five fever hospitals and 47 dispensaries are supported by voluntary contributions and grand-jury presentments. In 1851 there were 3 savings banks in the county, at Dublin, *Balbriggan*, and *Castleknock*. The total amount owing to depositors on November 20th, 1851, was 219,046*l.* 1*s.* 4*d.*

DUBLIN, the metropolis of Ireland, a municipal and parliamentary borough, sea-port town, and the head of two Poor-Law Unions, is situated on the banks of the Liffey at its entrance into the Bay of Dublin, in 53° 20' 38" N. lat., 6° 17' 29" W. long., and 60 miles W. from *Holyhead*. The population, which in 1841 was 232,726, amounted to 258,361 in 1851. The borough is governed by 15 aldermen and 45 councillors, one of whom is annually elected lord mayor; and returns two members to the Imperial Parliament: two members are also returned by the University of Trinity College. For purposes of police the city and its dependencies are divided into 7 districts, placed in charge of 2 commissioners, 7 superintendents, and 24 inspectors, with 100 sergeants, 1000 constables, and 20 supernumeraries. The North Dublin Union comprises 9 electoral divisions, with an area of 41,187 acres, and a population in 1851 of 135,182. The South Dublin Union comprises 8 electoral divisions, with an area of 48,523 acres, and a population of 183,594.

The early history of Dublin is involved in great obscurity. It is generally agreed that the city named *Eblaua* in the geography of Ptolemæus occupied the site of Dublin; and the name *Eblaua*, as well as the names *Dublin*, *Dyflin*, and *Dyvelin*, which are met with in historical documents, all seem to be corruptions of the Irish *Dubb-linn*, which signifies *Black-pool*. The city was held in early times by the *Viking-Ostmen*, who built a citadel here and carried on constant predatory warfare with the native Irish. In 845 the Danes arrived in Dublin, demolished the citadel, and slaughtered or subjected its Norwegian inhabitants. For more than two centuries the Danes of Dublin continued to wage war with the native Irish, causing much devastation and bloodshed.

The history of Dublin since the Anglo-Norman invasion in 1170

belongs rather to the general history of the kingdom than to that of the city. [IRELAND.] Under the Norman sway the city increased in importance and extent. In 1205 the castle was ordered to be built and the city to be fortified, and in 1215 a stone bridge was built over the Liffey. The Reformation was established in Dublin in 1535; in 1550, on Easter Sunday, the liturgy was read in English for the first time in Christ church. The university of Trinity College was founded by Queen Elizabeth in 1593. Since the Union with Great Britain, although Dublin has greatly declined as a centre of commercial and manufacturing industry, it has increased in size and population, and continues to advance in architectural improvement.

The ground on which Dublin stands rises gently from the river towards the north and south-west: the highest ground in the city is at the Broadstone harbour of the Royal Canal, which is 62 feet above the level of high-water in the Liffey. The Circular Road, which has a length of about 9 miles, incloses a much larger space than is occupied by the city, especially to the south-west and north-west. The city is lighted with gas, and it is supplied with water chiefly from the Royal and Grand canals.

The eastern division of the city on the right bank of the river lies almost wholly without the limits of the ancient city, and stands on level ground, the northern part of which has in a great measure been reclaimed from the former bed of the Liffey. Six extensive spots of open ground ornament and ventilate this portion of the city; namely, Wellington-square, Fitzwilliam-square, Merrion-square, the park of Trinity College, the Castle gardens, and Stephen's-green. Dame-street, which leads from the castle to the university, expands towards its eastern extremity into College-green, from which all the leading lines of communication radiate. The whole area of College-green on the east is occupied by the front of Trinity College, a large and dignified pile of building of the Corinthian order erected in 1759, and extending north and south 300 feet, a little in advance of the provost's house.

Near the college stands the Bank of Ireland, formerly the Irish house of parliament, founded in 1729, which presents a portico of six Corinthian columns towards College-street, and a semicircular façade with a receding centre of unusual magnificence towards College-green. In the roadway opposite the bank is an equestrian statue of William III., in former days the object of many party demonstrations.

Of the squares which lie east and south of College-green, Stephen's-green is the first in point of extent. The area within the railing measures more than 20 statute acres, and is handsomely laid out. In the centre of the inclosure there is an equestrian statue of George II. In Dawson-street, which leads out of the north side of Stephen's-green, is the Mausion House, a large plain building with a statue of George I. on the lawn on the south side of it. A little east of the Mansion House is the Dublin Society's House, between Kildare-street and Merriou-square. Here is the site of the building for the Great Exhibition held in Dublin in 1853. Merrion-square, the finest in Dublin, is formed by handsome buildings inclosing an area of 12½ acres, which is tastefully laid out, forming a favourite promenade. Other remarkable objects in this division of the city are—Sir Patrick Dun's Hospital, a large granite structure; the Grand Canal docks; Queen's-square, off Great Brunswick-street; St. Andrew's, a large and costly Roman Catholic chapel; the terminus of the Kingstown railway in Westland-row; and on Burgh Quay, south-east of Carlisle bridge, the building formerly known as Conciliation Hall, and the Corn Exchange, a handsome structure of mountain granite.

The eastern division of the city on the left bank of the Liffey occupies higher ground, and is airy and cheerful. Monntjoy-square and Rutland-square occupy the crest of the hill, and from these respectively the chief lines of communication are Gardiner-street and Sackville-street. The façade of the Lying-in Hospital and the Rotundo forms a striking termination to Sackville-street on the north. In Sackville-street, about midway between Carlisle bridge and the Rotundo, stands a fluted Doric column, on a pedestal of large proportions, bearing a colossal statue of Lord Nelson, erected in 1808. A little farther south on the west side of the street is the General Post-Office, which has a cut-granite front of 223 feet. In the centre is a portico of Portland stone, with colossal statues on the apex and extremities of the pediment. The Custom House occupies a detached plot of ground on the quay leading from Carlisle bridge to the north wall. This splendid building, founded in 1781, is 375 feet in length by 205 feet in depth, and exhibits four decorated fronts of the Doric order; the columns, &c., being of Portland stone, and the body of the building of cut granite. To the east of the Custom House are docks and stores on a very extensive scale, surrounded by a lofty wall. Near the Custom House is the terminus of the Drogheda railway.

The Roman Catholic metropolitan church, situated in Marlborough-street, is a magnificent structure, erected in 1816 at a cost of 40,000*l.* Opposite to this church is the central establishment of the National Board of Education, occupying a space of above five acres, and comprising a board-room, library, commissioner's residence, male and female Training and Model schools, and an Infant school. St. George's church, adorned with a beautiful spire, and occupying the highest ground in the district, is the most sumptuous of the modern churches of Dublin; it was erected from a design by Johnstone, and cost 70,000*l.* In Upper Gardiner-street is the Roman Catholic chapel of St. Francis Xavier, which has a handsome Ionic portico.

This western division of the city, on the left side of the river, is almost exclusively occupied by dealers, tradesmen, and labourers. The portion of it which lies along the quays and towards the Blue-Coat Hospital is however well built. The building called 'The Four Courts,' situated on King's Inn Quay in this district, was commenced in 1786, and is of great extent and splendour. In this district are St. Paul's chapel, a graceful granite structure, with an Ionic tetra-style portico facing Arran Quay; the Blue-Coat Hospital; the Royal Barracks; the terminus of the Midland Great Western railway; the North Dublin Union Workhouse; the Richmond Lunatic Asylum; the Richmond Penitentiary; the House of Industry and hospitals attached; Newgate, the Sheriffs' prison, and the City Sessions House; the Linen Hall, opened in 1728; and the King's Inns.

West of the Royal Barracks is the entrance into the Phoenix Park, a finely-wooded demesne of 1759 acres, containing the vice-regal lodge, and the lodges of the chief and under-secretary; the Zoological Society's gardens and establishment; the Royal Military Infirmary; a powder-magazine and artillery station; and an obelisk, erected in commemoration of the victories of the Dukes of Wellington.

The division of Dublin which lies west from the castle, on the right bank of the Liffey, is the oldest part of the city, and is now almost exclusively occupied by persons in trade, small dealers, and the labouring classes. The castle of Dublin, at the north-eastern extremity of this district, consists of two handsome quadrangles, surrounded, except on one side, by the apartments of state and the offices of government. West of the castle stands Christ church cathedral, a venerable cruciform structure, part of which is of a date anterior to the coming of the English. South from Christ church, at a distance of rather more than a quarter of a mile, is the cathedral of St. Patrick, situated at the foot of the declivity, the ridge of which is occupied by the castle and older cathedral. St. Patrick's is an imposing pile, consisting of nave, transepts, and choir, with a chapter-house at the east end. Attached to the cathedral are the ancient archiepiscopal palace (now used as a police-barrack), and the deanery-house, a commodious residence built in the last century. At the back of the old palace is the library founded by Archbishop Marsh in 1694. South of this division are a penitentiary, the Portobello gardens and barracks, and several hospitals; and on the west of it are the South Dublin Union Workhouse; the Royal Hospital of Kilmaham, built at the cost of the army in 1684; the Foundling Hospital; Swift's Hospital for Lunatics; Steevens's Hospital; the terminus of the Great Southern and Western railway, a remarkably handsome granite structure situated between Steevens's Hospital and King's bridge; Kilmaham jail and court-house; and the artillery barracks at Island bridge. The Liffey is crossed by nine bridges, seven of which are executed in stone, and two in metal. It is lined for a space of nearly three miles with quays formed of stone embankments faced with granite.

The condition of the poorer classes in Dublin is wretched in the extreme; yet there are few cities in which charitable institutions are more numerous or better supported. The total number of charitable schools in the city of Dublin is above 200. The Lying-in Hospital in Great Britain-street, founded in 1757, is the earliest institution of the kind in the United Kingdom. Among other institutions are—the Meath Hospital and Infirmary, attached to which are an anatomical theatre and lecture-rooms; the City of Dublin Hospital; the Fever Hospital; and Mercer's Hospital, founded in 1734. The religious and charitable societies are very numerous.

The places of amusement include the Theatre Royal, the Queen's Theatre, the Hall of the Society of Ancient Concerts, the Music Hall for concerts, and the Abbey-street Theatre. The University Choral Society holds its meetings in the refectory of the college. The Portobello and the Rotundo gardens are neatly laid out, and in summer are well attended, on account of the firework displays exhibited.

The trade of Dublin consists chiefly in the supply of the midland districts with articles of import, comprising tea, coffee, sugar, tobacco, timber, deals, wine, &c. The harbour of Dublin has been greatly improved within the last 30 years. Two steam dredges are now employed cleansing and deepening the channel, so that large vessels can unload at the quays, there being a depth of 24 feet on the bar at high water, and about 12 feet at low water of spring tides. Extensive docks, with a depth of 16 feet water, and surrounded by quays and capacious storehouses, communicate with the Liffey to the east of the Custom House; and on the right side of the river the docks that communicate with the Grand Canal afford commodious wharves for merchantmen and colliers besides that supplied by the river quays. The channel of the Liffey, in Dublin Bay, is now deep enough for vessels of 1400 tons. The number and tonnage of vessels registered as belonging to the port of Dublin on December 31st, 1852, were:—Sailing-vessels, under 50 tons, 279, tonnage 8222; above 50 tons, 131, tonnage 20,239; steam-vessels, under 50 tons, 2, tonnage 84; above 50 tons, 42, tonnage 11,269. During the year 1852 there entered the port, in the coasting and cross-channel trade:—Sailing-vessels, inwards 4746, tonnage 360,316; outwards 2267, tonnage 140,470; steam-vessels, inwards 1444, tonnage 429,659; outwards 1528, tonnage 467,122. In the colonial and foreign trade there entered 403 sailing-vessels of 78,600 tons burden, and one steam-vessel of 606 tons; and there cleared 239 sailing-vessels of 53,386 tons aggregate burden. The gross amount of customs collected at Dublin during the year ending January 5th,

1852, was 893,383*l.*; the excise-duties were 350,540*l.* Large quantities of wine are imported into Dublin. The wines are imported direct, and consist chiefly of port, sherry, champagne, French, and Italian wines.

Mercantile business was formerly carried on at the Exchange, but is now transacted at the Commercial Buildings in Dame-street. There are a chamber of commerce, and an arbitration court for cases connected with shipping business. Several foreign consuls reside in Dublin. Much of the inland trade of Dublin is carried on by the Royal and Grand canals, which are noticed under DUBLIN COUNTY. The woollen, cotton, linen, and silk manufactures, notwithstanding many efforts to revive them, are nearly all extinct. The manufacture of poplin still flourishes to some extent. Brewing, iron-casting, and cabinet-making seem to be the most prosperous branches of manufacture.

Among the learned institutions of Dublin the principal is the University, incorporated as the College of the Holy and Undivided Trinity, which was founded by Queen Elizabeth. The collegiate body consists of a provost, 7 senior fellows, one of whom is vice-provost, 13 junior fellows, 70 scholars, and 30 sizars. The number of students, usually about 2000, is said to have been considerably diminished in consequence of the establishment of the new Queen's colleges in Galway, Belfast, and Cork. The permanent income of the University arises out of landed estates, which produce a rent of 13,846*l.* 2*s.* per annum, exclusive of the provost's separate estate, which produces a rent of 2400*l.* per annum. The income accruing from the class-fees of pupils amounts to about 30,000*l.* per annum, and a large sum is annually drawn in rents of chambers and fees for commons, &c. The college possesses a fine library of above 130,000 volumes, and the number of books is steadily increasing, in consequence of the right which the college has to copyright copies of books published in the United Kingdom. Connected with the University are a museum, rich in minerals and Irish antiquities; a magnetic observatory, in the Fellows' Garden; a school of anatomy near the south-east corner of the college park; a printing-house on the north side of the park; a botanic garden near Ball's bridge; and the astronomical observatory at Duusink, four miles north-west from Dublin.

By letters patent, dated August 15, 1850, Queen Victoria founded the 'Queen's University in Ireland,' with powers to grant degrees in arts, medicine, and law, to students who have completed their studies in any one of the Queen's colleges of Belfast, Galway, or Cork. The University consists of a chancellor and senate, named by the Crown; the meetings of the senate for holding examinations and granting degrees must be held in Dublin. The Royal Dublin Society, incorporated by George II., 1749, occupies the late residence of the Duke of Leinster, in Kildare-street. The museum of the society is open to the public twice a week; and the professors deliver public and gratuitous lectures. A considerable number of youths are instructed gratis in the fine arts in the Society's schools. The Royal Irish Academy, for promoting the study of sciences, polite literature, and antiquities, was incorporated in 1786. The academy-house is in Grafton-street: the library is rich in ancient Irish manuscripts, and the museum contains a remarkably fine collection of Celtic antiquities. The Royal Hibernian Academy of painting, sculpture, and architecture, incorporated in 1803, has its academy-house in Abbey-street; this building was bestowed on the body by Mr. Johnstone, the distinguished architect. There is here an annual exhibition of painting and sculpture.

The other chief societies for the promotion of science and general knowledge in Dublin are the Zoological, Geological, Agricultural, Horticultural, and Dublin-library societies. Among the institutions lately established is the Museum of Irish Industry, for forming complete collections of the materials for agricultural, mining, and manufacturing industry which Ireland contains. There is a valuable law library belonging to the King's Inns in Henrietta-street.

Dublin is well supplied with provisions of all kinds and of excellent quality. Smithfield, the wholesale market for cattle and hay, is deficient in accommodation; it covers a very small space, and is approached only by narrow lanes. The other markets are in general not sufficiently commodious: they are—Spitalfields for bacon, butter, and potatoes; Kevin-street for the same, and for hay; Boot-lane for fish; and Green-street for potatoes, fowls, eggs, and fruit.

Dublin gives title to an archbishop, who is styled primate of Ireland, and whose province includes the following united dioceses:—Dublin, Glendalough, and Kildare, which form the see of the archbishop; Ossory, Ferns, and Leighlin; Cashel, Emly, Waterford, and Lismore; Cork, Cloyne, and Ross; Kilsloe and Kilfenora; and Limerick, Arifort, and Aghadoe. The bishopric of Dublin, founded by St. Patrick or his immediate successors, was erected into an archbishopric in 1152. In 1214 the see of Glendalough, which is now merely nominal, was annexed to that of Dublin; and by the Church Temporalities Act, passed in 1833, the bishopric of KILDARE was consolidated with the sees of Dublin and Glendalough. The archiepiscopal see of Dublin comprises 183 benefices, of which 139 are in the diocese of Dublin, and 44 in that of Kildare; it includes the counties of Dublin, Kildare, Wicklow, a small part of Wexford, and King's and Queen's counties. The chapter of Christ church cathedral consists of a dean, pro-rector, chancellor, treasurer, 3 prebendaries, and 6 vicars choral. The chapter of the collegiate and cathedral church of St. Patrick consists of a dean, sub-dean, precentor, chancellor, treasurer,

20 prebendaries, 4 minor canons, and 13 vicars choral. The income of the archbishop of Dublin is 7786*l.* a year.

(Whitelaw and Walsh, *History of the City of Dublin*; *Picture of Dublin*; MacGlashan, *Dublin and its Environs*; *Land We Live In*, vol. iii.; Thom, *Irish Almanac*; *Parliamentary Papers*.)

DUBNO, the capital of the circle of Dubno, which is the richest and most productive of the subdivisions of the Russian government of Volhynia, is situated on the Ikwa, a feeder of the Stry, in 50° 25' N. lat., 25° 40' E. long., and belongs to the prince of Lubomirsky, who takes from it a ducal title as its owner. The Polish nobility of these parts held their annual sessions at Dubno from 1774 till Western Poland was seized by Russia. Dubno is an extremely irregular town in its construction; the streets are narrow, crooked, and unpaved; the houses are built almost wholly of wood. The inhabitants, among whom are a great many Jews, number about 8000. Dubno has a ducal residence, a Greek abbey of the order of St. Basil, several Greek and Roman Catholic churches, and a grammar-school. The people carry on much traffic in corn, flax, tobacco, fish, and cattle, the produce of the adjacent country, and hold a large fair at Whitsuntide.

DUDLEY, originally written DUDELEI, Worcestershire, a parliamentary borough, market-town, and the seat of a Poor-Law Union, in the parish of Dudley, is situated in 52° 30' N. lat., 2° 4' W. long.; distant 23 miles N. by E. from Worcester, 120 miles N.W. from London by road, and 125 miles by the North-Western and South Staffordshire railways. The population of the parliamentary borough, which consists of the parish of Dudley, in 1851 was 37,962. The town is under the jurisdiction of the county magistrates, and has a mayor and bailiff appointed by the lord of the manor. For sanitary purposes it is under the management of a Local Board of Health. The borough returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Worcester. Dudley Poor-Law Union contains 4 parishes, with an area of 16,655 acres, and a population in 1851 of 106,480.

About the commencement of the 8th century a strong castle was built on an elevated site at this place by Dodo, a Saxon prince. In 1664 Colonel Beaumont held the castle for the king for a period of three weeks against the Parliamentary forces; a party of the Royal army arriving from Worcester relieved the besieged force. The remains, consisting of a gateway, the keep, part of the tower, the offices, &c., are of a highly interesting character. A priory for Benedictine monks formerly existed here; the ruins of the building are about half a mile from the town.

The houses in the town are generally well-built and neat in appearance, the streets are clean and well paved, and the town is lighted with gas. The parish church, dedicated to St. Thomas, is a handsome building with a lofty spire. The other churches are St. Edmund's, St. Andrew's or Netherton, St. James's, and St. John's. The Wesleyan and New Connexion Methodists, Baptists, Independents, Presbyterians, and Unitarians have places of worship. The Free Grammar school, endowed by Queen Elizabeth with land which now yields above 300*l.* per annum, educates about 40 scholars. There are National and British schools, a Blue-Coat school well endowed, a Charity school for 40 girls, and a school for 50 boys, at which others besides those on the foundation receive instruction. There are in Dudley a subscription library, a mechanics institute, a savings bank, a dispensary, and various charities for benevolent purposes.

Dudley is a place of considerable importance in connection with the iron trade. The neighbourhood abounds with iron-ore and with coal. Among the articles manufactured are fire-irons, grates, nails, vices, chain-cables, &c. There are extensive glass-works and limestone quarries. A tunnel a mile and three-quarters in length and 13 feet high, for conveying the limestone under the Castle-hill to the kilns, passes through the hill on which the castle stands. Fairs are held on May 8th and October 2nd for cattle, cheese, and wool; and on August 5th for lambs. Saturday is the market-day, and a considerable amount of market business is also transacted on Monday. A county court is held in the town.

A fossil called the Dudley Locust is found in great quantities and of various sizes in the limestone quarries in the neighbourhood; it is supposed to be an extinct species of *Mouoculus*. In the vicinity of Dudley there are several chalybeate springs, as well as a spa well, held in high estimation for its efficacy in cutaneous disorders.

(Nash, *Worcestershire*; *Communication from Dudley*.)

DUISBURG, a town in Rhenish Prussia, in the government of Düsseldorf, is situated between the Ruhr and the Rhine, which meet about 3 miles below the town, in 51° 26' N. lat., 6° 46' E. long., 16 miles by railway N. from the town of Düsseldorf, and has about 7000 inhabitants. The site, which is ancient, was in the time of the Romans denominated *Castrum Deusionis*. The town is surrounded by walls and decayed towers on one side, and by a rampart and ditches on the other, and is situated in a fertile and agreeable country. Duisburg was in the 13th century an important member of the Hanseatic League. It afterwards was made a free town of the German empire, but lost its privileges in the last war, at the close of which it was handed over to Prussia. A canal unites the town with the Rhine on one side, and the Ruhr touches it on the other. Sailing and steam vessels are built: several of the Cologne company's steamers were constructed in Duisburg. There is a large vitriol factory in the

town, and a cloth-mill worked by steam. Duisburg contains a gymnasium founded in 1599, an orphan asylum and hospital, endowed almshouses, a monastery of Minorites, and five churches, of which St. John the Baptist's dates from A.D. 1187, and St. Salvator's, on the tower of which once stood an observatory, dates from 1415. It was the seat of a Protestant university founded in 1655 and abolished in 1802. There are considerable manufactures in the town, particularly of woollen-cloth, cottons, stockings, glue, soap, starch, and leather; and an extensive traffic in wine and colonial produce, grain, and cattle. In the neighbourhood there are several iron-works. The valley of the Ruhr is distinguished for its industrial and agricultural activity and for its coal-mines. The remains of the Duisburg Forest, mentioned by Tacitus ('Annal.' i. 60) under the name of the *Salutis Teutoburgensis*, are in the vicinity.

DUKINFIELD, Cheshire, a village in the parish of Stockport, is situated on the left bank of the river Tame, in 53° 29' N. lat., 2° 4' W. long.; distant 42 miles N.E. from Chester, 136 miles N.W. by N. from London by road, and 195 miles by the London and North-Western railway. The population of the township in 1851 was 12,132. Dukinfield is properly a suburb of the town of Ashton-under-Line, which is on the opposite or Lancashire side of the Tame. Some statistics on the cotton manufacture in this neighbourhood are given under **ASHTON-UNDER-LINE**. Extensive iron-foundries, collieries, and brick and tile works afford employment. There are in Dukinfield two churches of the Establishment; chapels for Independents, Wesleyan, Primitive, and New Connexion Methodists, Moravians, Unitarians, Roman Catholics, and Mormons; and National, British, Infant, and local day-schools.

DULEEK. [MEATH.]

DULVERTON, Somersetshire, a market-town and the seat of a Poor-Law Union, in the parish of Dulverton, is situated in 51° 2' N. lat., 3° 33' W. long., distant 44 miles S.W. by W. from Bath, and 165 miles W.S.W. from London by road. The population of the parish in 1851 was 1497. The living is a vicarage in the archdeaconry of Taunton and diocese of Bath and Wells. Dulverton Poor-Law Union contains 11 parishes and townships, with an area of 54,758 acres, and a population in 1851 of 5748.

Dulverton is situated near the border of Devonshire, in a deep valley watered by the Barle, a feeder of the Ex. The town consists chiefly of two streets, in which are some well-built houses. The parish church, an ancient edifice, comprises a nave, chancel, and two side aisles, with an embattled tower 60 feet high at the west end. The Independents have a place of worship, and there is an Endowed school. The silk manufacture is carried on. Saturday is the market-day. Two yearly fairs are held.

(Collinson, *Somersetshire*.)

DULWICH. [SURREY.]

DUMBARTON, or **DUNBARTON**, the chief town of Dumbartonshire, Scotland, a royal burgh, market-town and port, in the parish of Dumbarton, is situated at the confluence of the Leven with the Clyde, about 15 miles W.N.W. from Glasgow, in 55° 57' N. lat., 4° 37' W. long. The population of the royal burgh in 1851 was 4590; that of the parliamentary burgh was 5445. It is governed by a provost and 14 councillors, and jointly with Renfrew, Rutherglen, Kilmarnock, and Port Glasgow, returns one member to the Imperial Parliament.

The town consists of one principal street running parallel to the river Leven and of several smaller streets. The houses are generally well built, and the burgh is neat and clean, well paved, and lighted with gas. The public buildings include the parish church, the Free church, chapels for United Presbyterians and Roman Catholics, and the county-hall and prison. An elegant bridge of five arches spans the Leven. The harbour is small, and owing to a bar at the mouth of the river only vessels of light burden can enter the harbour except at high water. Steamers sail regularly to Glasgow, Greenock, and Loch Long.

The Dumbartonshire railway, which extends from Bowling (a village on the river Clyde), 3 miles W. from the town, to Balloch, has a station at Dumbarton. Steamers ply on Loch Lomond in connection with the railway. There are two ship-building yards, a graving-dock, and a crown-glass and bottle work. Rope-spinning is carried on. A weekly corn-market and an annual fair are held in the town, and sheriff, burgh, and justice-of-peace courts are held. There are public libraries and reading-rooms. A large portion of the salmon fisheries of the Clyde belongs to Dumbarton.

It is supposed by some antiquaries that Dumbarton occupies the site of the Roman station called *Theodosia*. A mile from the town, and at the mouth of the river Leven, forming at high water nearly an island of itself, stands the steep rock so often mentioned in Scottish history, *Dumbarton Castle*. This rock, which rises up in two points, is inaccessible on every side, except by a very narrow passage, fortified with a strong wall or rampart. The rock is divided into nearly equal parts, the western peak, which is rather the higher, being about 206 feet above the level of the river. Within the wall at the base is the guard-house, with lodgings for the officers, and hence a long flight of stone steps leads to the upper part of the castle, where are several batteries mounted with cannon, the wall being continued almost round the rock. There are remains of a high gateway and wall, the top of which has a bridge of communication from one summit of the rock

to the other. An excellent well is constantly supplied with water. The rock on which the castle stands forms a picturesque object from the Clyde, whose waters wash its base. This castle was formerly a great object of contention, and has sustained several sieges. In the upper part where the rock divides, and in the passage between the peaks, convenient barracks have been erected, as well as a small arsenal, which contains Wallace's gigantic sword and many other curiosities. Besides the castle the only remnant of ancient times is a gothic arch, said to be all that remains of a collegiate church founded in 1456 by a countess of Lennox. This arch formerly stood in the outskirts of the town, but to make way for the railway was removed to the front of the Burgh school.

(*New Statistical Account of Scotland; Communication from Dumbarton.*)

DUMBARTONSHIRE, a maritime county in the west of Scotland, lies between 55° 53' and 56° 20' N. lat., 3° 54' and 4° 53' W. long. The county consists of two parts, which are separated by an intervening space of 6 miles between their nearest approaching points. The larger and western part is bounded W. partly by Argyshire, but principally by Loch Long (which separates Dumbartonshire from Argyshire), S. by the river and Frith of Clyde (which separates this county from Renfrewshire) and by a small part of Lanarkshire, E. by Stirlingshire, and N.E. partly by Stirlingshire, and for a short distance by Perthshire, the boundary line being in the centre of Loch Lomond. This portion of the county is about 35 miles in length from north-west to south-east, in a straight line, and in the middle about 15 miles in breadth from east to west. The small detached eastern part of the county is inclosed by Stirlingshire on the north, and by Lanarkshire on the south, and measures 12 miles in length from east to west, and 2½ to 4 miles in breadth from north to south. The area of the county is in all 297 square miles, or 189,844 statute acres. The population in 1841 was 44,296; in 1851 it was 45,103. The county returns one member to the Imperial Parliament.

Coast-line.—On the southern coast of the county, at the village of Bowling Bay, 3 miles above the town of Dumbarton, the Forth and Clyde Canal falls into the Clyde. Half a mile nearer Dumbarton, and on a rock projecting into the river, stand the ruins of *Dunglass Castle*. A monument has been erected on this spot to the memory of Henry Bell, the originator of steam navigation. The Leven falls into the Clyde at Dumbarton Castle. [DUMBARTON.] The remainder of the southern coast, from Dumbarton to the Gareloch, is low and sandy, and the river near it is shallow. At the small village of Cardross, there is a ferry to Port Glasgow, anciently the ferry betwixt the western highlands and lowlands of Scotland. A few miles north-west of Cardross is Helensburgh, a fashionable resort of the citizens of Glasgow for sea-bathing. Immediately to the north-west of Helensburgh, and formed by the peninsula of *Rosenearth*, is the *Gareloch*, a small sea-water lake running north-west and south-east, the shores of which are embellished by numerous villas, principally the property of inhabitants of Glasgow. It is about 6 miles long, and averages a mile in breadth; and affords excellent anchorage for vessels of all sizes, and shelter from all the more prevalent winds. The western coast of the county is the eastern shore of Loch Long, an arm of the sea running north-west and south-east, and stretching northward from the Frith of Clyde. It is upwards of 20 miles long, and varies from 1 mile to 2 miles in breadth. The other coast of the county is that bounded by Loch Lomond, the principal part of which extends about 24 miles from *Gleu Falloch*, at the extreme north of Dumhartonshire, to the bridge of *Balloch*, where the overflow of the lake forms the river Leven. The shore of this coast is low, and the hills rising almost immediately from the lake, make it narrow. It is in general richly and beautifully wooded. The remaining part of this coast, from *Balloch* to the boundary of Stirlingshire, runs then north-east; the banks are generally steep. This line of coast is about 5 miles in length.

Surface, Hydrography, and Communications.—The south-easterly part of the county which is detached from the rest is generally of a lowland character. Between this outlying portion and the main part of the county extends a flat district through which the Kelvin Water runs. Proceeding in a north-westerly direction, the county is but slightly undulated until we approach the parishes of Row and Luss, with the exception of the rock of Dumbarton and the Kilpatrick Braes; which last, though cultivated or platted to the tops, attain an elevation of 1200 feet above the sea level, intersect a fertile country, and afford extensive and delightful views from their summits. North of Bonhill and Cardross the country rises into mountains, of which the loftiest, *Ben Voirlich*, at the northerly end of the county, attains a height of 3300 feet. Along the side of Loch Lomond lies romantic scenery, of which a part is that known as *Rob Roy's country*. The most northern of the parishes, *Arrochar*, containing about 30,000 acres, is so entirely mountainous as to afford only about 400 acres for arable cultivation. In the parish of Luss, south of Arrochar, several of the hills attain a height of 3000 feet. West of Luss are two nearly parallel ridges of hills. Of these the main range on the west is cultivated in some places, and the rest is covered with heath; it unites with the eastern range at the head of the intervening glen, which is about five miles long, and from a quarter to three-quarters of a mile broad. After uniting, they run north-west. *Fumart Hill*, the loftiest

of the range, attains a height of 2500 feet. The parish of Rosencath is a peninsula, having on the east the comparatively narrow inlet of the Gareloch, and on the west the wider expanse of Loch Long. Few counties possess more picturesque scenery than Dumbartonshire. Through this county lies one of the routes to the wilder and sterner landscapes of the Western Highlands in Argyleshire and Perthshire.

The numerous streams and lakes of Dumbartonshire contribute in no small degree to the comfort and prosperity of the inhabitants, the fertility of the soil, and the charms of the scenery. The chief rivers are the Clyde and the Leven, both of them in their upper courses mountain streams, and both subsiding into calm and useful rivers. The Clyde however is only a boundary stream, touching the county a little above West Kilpatrick and separating it from Renfrewshire. The Leven flows from the lower end of Loch Lomond, and passes by the foot of Dumbarton Rock into the Clyde. It is largely used for manufacturing purposes, for which the softness and purity of its waters peculiarly adapt it, in the bleaching and dyeing processes carried on at Bonhill and other places on its banks.

The other streams are of small importance, but those of Falloch, Inverglass, and Douglas, which contribute their waters to Loch Lomond near its head, are diversified by cascades as they descend from their mountain sources. Kelvin Water rises on the south-west of the Campsie fells, flows through Kirkintilloch parish, and falls into the Clyde at Partick, a little below Glasgow; in its lower course its banks become bold and elevated, and the stream rapid, which character it maintains till it joins the Clyde. The Forth and Clyde Canal skirts the northern borders of the parishes of Cumbernauld and Kirkintilloch, then crossing a part of Lanarkshire, it enters Dumbartonshire again by the Kelvin aqueduct, runs along the southern part of East Kilpatrick, and joins the Clyde at Dalmuir in West Kilpatrick. The islands in Loch Lomond form parts of the parish of Luss. There are eight other fresh-water lakes in the county, of which Loch Hog, about a mile long and a quarter of a mile broad, is the largest.

The highway and cross-roads are in general well made and kept in good order. The chief high road follows the north bank of the Clyde from Glasgow to Dumbarton, through which town one branch still following the Clyde estuary, leads to Cardross, Helensburgh, the Gareloch, and crossing a narrow isthmus between the lakes, to the banks of Loch Long, and the village of Arrochar, at its northern extremity: a second branch traverses the west side of the vale of Leven and the west side of Loch Lomond to the extreme north of the county. Another high road leads from the road between Glasgow and Dumbarton, through Bonhill along the south-eastern bank of Loch Lomond to Stirlingshire. On Loch Lomond are steamers which touch at the several villages on the banks of the lake, at all of which there are ferries. Several steamers start daily from Dumbarton, and several also from the Gareloch, to the towns on the Clyde and to Glasgow. By the Dumbartonshire railway there is communication between Glasgow and Balloch, at the south-east end of Loch Lomond via Dumbarton. The detached portion of the county is traversed in part by the Edinburgh and Glasgow railway, which has a station at Cumbernauld and a branch to Kirkintilloch and Campsie in Stirlingshire. The Monkland and Kirkintilloch railway is entirely a mineral line. The Forth and Clyde Canal also traverses this portion of the county, passing through the town of Kirkintilloch.

Geology.—The northern part of the county, including the whole of Arrochar and the larger part of Luss and Row, consists of mica-slate, which overlies the gneiss, and is traversed by dykes of whin and greenstone. Quartzose mica-slate forms the loftiest of the hills, and also the basin of Loch Lomond, except its southern extremity, which belongs to the old red-sandstone. Talose slate also abounds, the mica running into and blending with it. Clay-slate is wrought at Camstraddan and Luss. South of Camstraddan grauwacke and grauwacke slate occur: the whole partaking decidedly of the character of the lower Silurian series. The southern portion of the singular peninsula of Rosencath is occupied by the old red-sandstone, which extends across the county in an easterly direction by Ardmore and Bonhill into Stirlingshire. The basin of the Frith of Clyde is formed by the old red-sandstone; a curious example of this formation is the rock or promontory of Ardmore, 40 feet high, and nearly insulated, which is composed entirely of old red-sandstone conglomerate, with imbedded fragments of water-worn quartz. Carboniferous limestone occurs in several places in the main portions of Dumbartonshire and forms the bulk of the detached parishes of Cumbernauld and Kirkintilloch. At Duntocher, in Old Kilpatrick, limestone is extensively worked, and coal is wrought in connection with it. The beds of coal are between 4 feet and 5 feet in depth. At Cumbernauld the limestone occupies both sides of a remarkably picturesque ravine, and is worked to a great extent; the coal of Cumbernauld and Kirkintilloch is used for making coke, as well as for burning the limestone of the neighbouring quarries. Ironstone is found in small beds in connection with the limestone. Greenstone, trap, amygdaloid, serpentine, porphyry, and basalt occur in several places. At Knochderry on the shore of Loch Long is a large dyke of greenstone about 20 feet thick, which has converted the rock through which it has protruded into a chlorite slate. Remarkable examples of columnar basalt are met with at Auchentorlie and Cumbernauld in Old Kilpatrick, where they form lofty precipices and give a very bold and romantic character to the

scenery. Columnar basalt occurs also at Darglass and Bowling. Columar greenstone is found at Smithson and elsewhere.

Climate, Soil, Agriculture.—The climate is in general healthy; it is mild but humid, the quantity of rain falling in the course of a year being much above the average of many other parts of Scotland. Frost is seldom severe, or long continued, and snow does not fall heavily or remain long on the ground. Westerly winds prevail during the greater part of the year.

Along the Leven and Clyde and generally in the south and south-eastern parts of the county the soil consists of a fertile black loam. In other parts the soil is chiefly light and sandy, or a light gravelly loam. The hills have for the most part a light slaty soil; those near Loch Long are entirely devoted to pasture, but elsewhere cultivation has in many parts been carried far up the hill sides. The farms vary very much in size; many do not exceed 30 acres, others include an area of 700 or 800 acres. In the larger farms the land is well cultivated; the most approved methods are practised and improvements are readily introduced. The highland cattle are commonly kept on the hills, but in the plains preference is given to the Ayrshire breed, or a cross between them and the highland cattle. The sheep on the hills are the hardy black-faced race; on the plains the Cheviots are generally found. The native horses are small but hardy.

Divisions, Towns, &c.—Dumbartonshire (except the detached portion) is within the ecclesiastical jurisdiction of the Synod of Glasgow and Ayr. It contains 12 parishes and 16 ministers of the Established Church, four of whom officiate in chapels of ease. There are 12 Free churches in the county, and several others belonging to United Presbyterians and other Dissenters. The only royal burgh is DUMBARTON. Next in importance to it is *Helensburgh*; which is a burgh of barony, with an elective council, and possesses a handsome chapel of ease in connection with the Establishment, besides the Free church, and chapels for United Presbyterians, Independents, and Episcopals. The population in 1851 was 2841. Helensburgh is much frequented in summer for sea-bathing. *Kirkintilloch*, in the parish of the same name, is a burgh of barony, with two magistrates and a council, and a parish population in 1851 of 6342. The inhabitants are chiefly engaged in handloom weaving. There are calico bleaching and printing works, collieries, limeworks, and stone quarries.

The following villages may be mentioned, with their population in 1851, and a few other particulars:—

Alexandria, a suburb of Bonhill. [BONHILL.] *Arrochar*, or *Arrochar*, a fishing village at the northern extremity of Loch Long, population of the parish 562, is frequented during summer for sea-bathing: it contains many good houses. *Bowling*, a small village on the Clyde, about 11 miles N.W. from Glasgow, has a commodious winter harbour for vessels: there is a yard for ship-building. *Cumbernauld* is a large village in the detached portion of the county, population of the parish 3778: in the neighbourhood are some remains of the wall of Antoninus and the old castle of Cumbernauld, the ancient residence of the earls of Wigton. Handloom weaving is the chief occupation. *Duntocher*, population 3809, about 6 miles N.W. from Glasgow, has several large cotton factories, and in the vicinity are collieries and lime-works. A bridge over a stream near the town is pointed out as all that remains there of the labours of the Roman soldiers on Antoninus's wall. *Old or West Kilpatrick*, a burgh of barony, and formerly it is said a regality, now a mere village on the banks of the Clyde about 10 miles N.W. from Glasgow: population of the parish 5921. In the centre of the town stands the old baronial prison. West of the village is a mound called the Chapel Hill, where various Roman sepulchral stones containing the names of Roman legions have been found: vases and coins have also been taken out, and foundations of walls have been explored. The spot is now considered to have been the termination of the wall of Antoninus. *Luss*, a village on the banks of Loch Lomond, population of the parish 907: the inhabitants are chiefly employed in the neighbouring slate-quarries. *Renton*, population 2398, is situated between Dumbarton and Bonhill. Near the town on the river Leven are extensive bleach-fields, which afford employment to many of the inhabitants.

History and Antiquities.—There is very little in the early history of the county apart from that of Dumbarton Castle. [DUMBARTON.] Its modern history is that of the establishment within it of cotton-factories and bleaching-grounds, calico-printing works, and ship-building yards, and of extensive agricultural improvements. In this district occurred the dispersion of the followers of the Earl of Argyle in 1685, and the battle of Glenfruin, which led to the extirpation of the clan MacGregor.

The most interesting antiquities of the county are those connected with the Roman possession of the southern part of Scotland. Besides the remains of the Roman wall in West Kilpatrick parish already mentioned, there are traces of the wall and remains of forts in several other parts of the county. There are remains of ancient ecclesiastical edifices whose history is now little known. In Cardross parish are the ruins of the chapel of Kilmahew, a visit to whose shrine, it is said, conferred on the pilgrim considerable spiritual advantage. On Loch Long side, at Knochderry, is the site of a Danish fort. Stone coffins have been found at Luss, the church of which was dedicated

to St. Mackessog, a bishop and confessor, who is said to have suffered martyrdom A.D. 520, and whose tomb is still pointed out.

Cumbernauld House, Killermout, Garscube, and Gleuarhuck, in the detached part of the county; Tillichewan Castle, Balloch Castle, and Strath-Leven House, on the Leven; and Baturich Castle, Ross Priory, and Rossdhu, on the shores of Loch Lomond, are the more noticeable residences of landed proprietors in the county. The Garloch is studded from Helensburgh to the head of the lake with numerous large and handsome villas, and on the promontory opposite is Rose-neath Castle, a residence of the Duke of Argyll.

Industry.—The most important branches of industry in Dumbar-tonshire are those pursued on the banks of the Leven, and described under **BOXHILL** and **DUMBARTON**. On Loch Long and the Gareloch a small portion of the population is employed in fishing, though their income is chiefly derived from letting out a part of their cottages during the season of sea-bathing. In 1851 there was one savings bank in the county at Dumbarton. The amount owing to depositors on November 20th 1851 was 1883*l.* 16*s.* 7*d.*

DUMFRIES, Dumfriesshire, Scotland, the chief town of the county, a royal burgh and market-town, in the parish of Dumfries, is beautifully situated upon a rising ground on the left bank of the river Nith, in 55° 4' N. lat., 3° 36' W. long., 73 miles S. by W. from Edinburgh. The burgh is governed by a provost, 3 bailies, a dean of guild and treasurer, 12 councillors, and 7 deacons of trades. It unites with Annan, Sanquhar, Lochmahon, and Kirkcudbright, in returning one member to the Imperial Parliament. The population in 1851 was 11,107; that of the parliamentary burgh was 13,166.

Dumfries is a clean and well-built town. The principal street is about three-quarters of a mile long, and about 60 feet broad. The streets and shops are well lighted with gas. There are two parish churches, a chapel of ease, and chapels for Free Church and United Presbyterians, Independents, Episcopalians, Roman Catholics, and other bodies. St. Michael's churchyard has been called the 'West-minster of Scotland,' from the character of its monuments. It is here that the remains of the poet Burns lie interred under a handsome mausoleum erected by subscription. In the middle of the High-street is Mid Steeple, erected by Inigo Jones, where the meetings of the town-council are held; opposite to it is the Trades Hall. The other public buildings are a county jail, a hridewell, an academy, several endowed schools, a theatre, assembly-rooms, an infirmary, an hospital for aged persons and orphans, and a dispensary. The Crichton Lunatic Asylum is a large and handsome building surrounded by shrubberies and gardens. It is capable of accommodating 100 patients. A second building is intended chiefly, if not exclusively, for pauper patients. There are two libraries, a mechanics institution, several public reading-rooms, and a savings bank.

Dumfries is celebrated for its weekly markets, which are held on Wednesday on the 'Sands,' an open space on the bank of the river. Besides the quarter-sessions and the usual sheriff's courts, the circuit courts for the southern districts of Scotland are held here twice a year. Maxwell Town, on the opposite side of the river, a small burgh of barony chiefly inhabited by an Irish population, is a suburb of Dumfries. The Nith is crossed at Dumfries by two bridges—one a very ancient structure supposed to have been begun by Devorgilla Douglas, mother of John Baliol, king of Scotland; the other was built in 1795.

The river is navigable up to the town, and the harbour can receive vessels of upwards of 120 tons burden. The registered vessels belonging to the port on the 31st of December 1852 were 127, of 10,221 aggregate tonnage. During 1852 there entered the port in the coasting trade 870 sailing-vessels of 26,086 tons, and 125 steam-vessels of 32,408 tons; and there cleared 399 sailing-vessels of 13,277 tons, and 116 steam-vessels of 29,747 tons. In the colonial and foreign trade the entries were 13 vessels of 2603 tons, and the clearances were 11 vessels of 2423 tons. A steam-vessel plies weekly between this port and Liverpool. The principal exports are wool, freestone, grain, potatoes, and live stock, particularly sheep. The imports are wood, wine, slate, lime, coals, and iron. Pork forms an extensive article of trade.

The prosperity of Dumfries depends in a great measure on the country trade. Hosiery and tanning have long been carried on. A large spinning and weaving woollen-mill gives employment to upwards of 100 people. Dumfries is a principal station on the Scottish South-Western railway.

Dumfries as a burgh dates from the reign of David I. Its possession was always eagerly sought by the respective monarchs in the wars betwixt the Scottish and English kings: it was in the chapel of the Minorite convent at Dumfries that Bruce slew his rival Comyn; and it was at Dumfries that Bruce's brother-in-law Seton was hanged by order of Edward I. The town was frequently plundered and burned. Dumfries participated in the religious disasters of the reigns of Charles I. and II.; in 1715 it was threatened with siege; and in 1745 its adherence to the government involved it in the penalties of highland occupation and plunder.

(*New Statistical Account of Scotland*; M'Diarmid, *Picture of Dumfries*; Tytler, *History of Scotland*; *Communication from Dumfries*.)

DUMFRIESSHIRE, a southern county of Scotland lying between 55° 2' and 55° 31' N. lat., 2° 39' and 3° 53' W. long., is bounded

S. by the Solway Frith and Cumberland, N. by the counties of Lanark, Peebles, Selkirk, and Roxburgh, E. by Roxburghshire, and W. by the counties of Kirkcudbright and Ayr. Its form is an irregular ellipse: the greater diameter being about 50 miles; the lesser about 30 miles. The area is 1129 square miles, or 722,813 acres. Of the whole county little more than a fourth is under tillage. The population in 1851 was 78,123. The county returns one member to the Imperial Parliament.

Surface, Hydrography, and Communications.—The surface of the county is very irregular. About half of it is mountainous, a small part is flat sea-coast, and one-third midland, consisting of low hills, ridges, and vales. It has a general slope to the Solway Frith, and the mountain ranges are principally in the north and east. These serve to shelter the county from cold, while its comparatively inland situation protects it from the Atlantic rains, Ayrshire and Kirk-cudbright intervening between it and the western coast. The extensive ranges of mountains in the northern part of the district produce also the almost innumerable streams, great and small, by which the county is watered. All these streams find their way either directly or by confluence with the rivers Nith, Annan, or Esk, to the Solway Frith. Hartfell, the highest mountain in the county, in Moffat parish, is 3304 feet above the level of the sea; Lowther Hill, near the village of Leadhills in Lanarkshire is 3130 feet; Black Larg, on the borders of Ayrshire, is 2890 feet; Ettrick Pen, in Eskdale Moor, 2220 feet; and Cairnkinn, not far from Drumlanrig, is 2180 feet above the level of the sea: these heights however must be taken as of uncertain authority.

Dumfriesshire was, until a comparatively recent period, almost destitute of timber. Year after year the slopes of mountains and other naked tracts are being gradually planted, alike for the purposes of shelter and ornament. Much good has been effected in almost every parish by draining the land.

From the Sark to the Nith, this county extends about 21 miles along the Solway Frith. The shore is generally sandy and gravelly, the sand being occasionally mixed with clay, and sometimes covered for a space with large stones called 'cobbles.' On many parts of the coast considerable portions of land have been reclaimed from the sea. The principal harbours on the coast are those of **DUMFRIES** and **ANNAN**. There is a small quay at Glencaple, a village at the mouth of the Nith, where vessels for Dumfries occasionally unload. There is also a creek at the mouth of the Lochar farther east, to which small vessels find access, these being generally traders bringing coal from the opposite coast of Cumberland. At Queuesberry Bay in Cummertrees parish, still farther eastward, vessels of small burden find ready shelter from north and north-west winds; and at various spots along the coast of Dorcock and Gretna parishes (the most eastern part of the shore of the county), vessels of 100 tons burden discharge coals and slate: grain and potatoes being exported in return, to a large amount, to Liverpool and other places on the English coast.

The Solway Frith is narrowed by two promontories, Tordoff point on the south coast of Dumfriesshire, and Bowness on the opposite shore of Cumberland, to a breadth of two miles. Passing these points the channel inland expands rapidly, and is ultimately divided into the smaller channels of the rivers Esk and Edeu; the extensive Rockcliff sands being outspread between the Scottish and English rivers. The tide of the Solway flows directly east with great rapidity, over an immense expanse of sand, and the navigation of the Frith is consequently at once difficult and dangerous. "During spring tides, and particularly when impelled by a strong south-wester, the Solway rises with prodigious rapidity. A loud booming noise indicates its approach, and is distinguishable at the distance of several miles. . . . The tide-head, as it is called, is often from 4 to 6 feet high, chafed into spray, with a mighty trough of bluer water behind, swelling in some places into little hills, and in others scooped into tiny valleys, which, when sun-lit, form a brilliant picture of themselves." (M'Diarmid's 'Picture of Dumfriesshire.')

The principal rivers in the county are the Nith, Annan, and Esk. The *Nith* enters the county from Ayrshire, and runs in a south-east direction in a very winding course above 40 miles, passing Sanquhar, Thornhill, and Dumfries. About 9 miles below Dumfries it falls into the Solway Frith. The surrounding mountains and ridges approach near each other above Drumlanrig castle, in the south of Durisdcer parish, and also near Blackwood, not far above Dumfries, and divide the vale of the river into three portions, which have been named the Vale of Sanquhar, the Vale of Closeburn, and the Vale of Dumfries. The tributary streams which join the Nith are the Cluden, Scaur, Shinnel, Cample, Carron, Meuck, Euchan, Crawick, and Killoe. Its banks are almost everywhere adorned with gentlemen's seats and pleasure-grounds. The *Annan* rises near the sources of the Clyde and Tweed, among the mountains near Moffat surrounding Erickstone and the singular deep and caverned glen called 'the Devil's Beef-Tub,' and runs a course nearly south of about 30 miles. It enters the Solway a little below the burgh of Annan. The tributary streams that flow into the Annan are the Mein, Wamphray, Evan, Milk, Dryfe, Kinnel, Ae, and Moffat. A beautiful ridge crosses the vale of this river from Kirkwood by Murraythwaito to Mount Annan. In the head of the Kinnel is a rock called Wallace's

Leap, near which place Wallace is said to have concealed himself after the battle of Falkirk. The *Esk* rises in the mountains on the borders of Selkirkshire, runs in a southern direction above 30 miles in the county, passes Langholm and Canonbie, and forms for one mile the boundary with England; after which it enters Cumberland, and turns westward through an open country by Longtown into the Solway Frith. This river receives in its course the Riddel, Tarras, Wauchope, Ewes, Meggot, and Black Esk. The Kirtle is a small river that enters the Solway Frith a little distance from the river Sark, a border stream, forming the boundary between England and Scotland for some distance before it enters the Solway. Both these rivers rise from the hills in the neighbourhood of Langholm, and pursue a southern course of about 20 miles. The Lochar is a rivulet which rises in Tinwald parish, a few miles north of Dumfries, runs about 13 miles in a very serpentine course, and discharges itself into the Solway, a few miles east of the mouth of the Nith, and near the ruins of Caerlaverock Castle. The larger rivers contain salmon, herlings, parr or samlet, and sea-trout. These, and also founders and cod, and occasionally turbot, soles, and herrings are taken in the Solway Frith. Along the shore considerable quantities of cockles and mussels are gathered by the poorer people. The smaller rivers contain pike, perch, trout, and eels. In the vicinity of Lochmaben are nine lakes, five of which are of considerable size. The ancient royal castle of Lochmaben stands upon a very narrow peninsula on the south-east side of the castle-loch, which is three miles in circumference. The mountain lake called Loch Skeen, situated near the head of Moffat Water, is 1300 feet above the level of the sea, and about two miles in circumference. This lake feeds the well-known cascade called the Gray Mare's Tail, and is well stocked with delicate trout of a large size. There are several other lochs or lakes of less extent throughout the county.

Dumfriesshire is intersected in almost every direction by turnpike and other roads. The Carlisle and Glasgow road enters the county at Sark bridge, and passes through Gretna, Annan, Dumfries, and Sanquhar. Another main road to Glasgow passes through Gretna, Lockerby, and Beattock bridge. A line of road leads from Carlisle towards Portpatrick, by Annan and Castle Douglas. A turnpike road extends from the town of Dumfries to Edinburgh by Moffat. The roads in general are kept in excellent order, and safe and easy communications have been opened through several parts of the mountainous districts. The Glasgow and South-Western, the Carlisle and Nithsdale, and the Caledonian railways afford to the inhabitants of Dumfriesshire communication to every part of England and Scotland, and immediate access to the steamers which sail for Ireland from the west coast of Ayrshire.

Geology, Mineralogy, &c.—The largest portion of Dumfriesshire consists of the granwacke rock, trap occurring here and there, but along the valleys of the Nith, Annan, and Esk there exists a great variety of other formations, while along the shore or southern part of the county a bed of sandstone extends with but little interruption. In the upper part of Nithsdale there are two coal-fields, one at New Cumnock, a continuation of the Ayrshire strata; and one around Sanquhar of an independent formation. Below this there is an extensive bed of old red-sandstone, in which are the valuable limebeds worked at Clochurn and Barjarg: the lowest hasin is that around Dumfries, which consists of the new red-sandstone alone, and which is now generally regarded as the continuation of the sandstone of Cumberland. On the borders of the lower portion of Nithsdale and Annandale, a stratum of limestone is found which runs east through Eskdale until it is merged in the great limestone formation of Northumberland; this stone is worked at Kilhead in Annandale. In the middle of the valley of the Annan there is also an extensive bed of sandstone similar to that around Dumfries, well known to geologists from the impressions of the footsteps of an animal of the tortoise kind found at Corncockle Quarry, near Lochmaben. A little lower down the vale of Annan some interesting igneous formations exist. ('New Statistical Account of Scotland,' St. Mungo, by Rev. Mr. Jamieson.) The lower portion of Eskdale contains besides the limestone already mentioned, a bed of coal which is advantageously worked at Canonbie.

At Wanlockhead, on the northern border of the county, and near Leadhills, in Lanarkshire, are extensive lead-mines. From this lead silver is extracted in the proportion of six to twelve ounces in the ton. There are three veins of mineral here varying in thickness from a few inches to 9 feet. Gold is occasionally found in the mountains in this neighbourhood in veins of quartz, or washed down into the sand of the rivulets. In the reign of Elizabeth, 300 men were employed for several summers, and are said to have collected gold to the value of 100,000*l*. The largest piece found in the neighbourhood is now in the British Museum, and weighs four or five ounces. An antimony mine, discovered at Glendinning in 1760, was wrought for five years from 1793. The ore was a sulphuret which yielded about 50 per cent., and 100 tons of metal were obtained. The vein seldom exceeded 20 inches in thickness, and contained blende, calcareous spar, and quartz. Copper-ore and manganese have been met with in small quantities; the former in the parish of Middlebie. Ironstone exists in some places in spheroidal masses, and in beds and bogs, but no iron is worked from ores in the county.

Gypsum occurs in thin veins. Floetz-trap is found on the summit of some of the mountains, and generally in the shape of mountain caps. Boulders of granite and sienite are found in various places, the latter most frequently in the low part of the county. The variety of the granwacke in the vicinity of Moffat is peculiar, and was long regarded as of igneous origin. It forms an excellent building stone. Sir R. Murchison discovered in it some interesting organic remains. About a mile from Moffat is a celebrated mineral water similar to the sulphureous water of Harrowgate, and about 5 miles distant, in a deep ravine on the side of Hartfell, is a chalybeate spring. There are also mineral waters in the neighbourhood of Langholm, Annan, and Lochmaben, and in other localities.

Climate, Soil, and Agriculture.—That part of the county which adjoins the Solway Frith is low and warm. The mountainous district is cold and bleak, but seldom remains long covered with snow. The whole appears to be moist and in general mild and salubrious. The spring is generally late. The soil in the lower districts is light and gravelly, or sandy. Along the margins of the great rivers are considerable tracts of rich alluvial soil. Peat-moss prevails on many of the hills, and in some of the vales: the most extensive moss being that of Lochar, near Dumfries, which is 11 or 12 miles long, and between 2 and 3 miles broad. Clay is found extensively as a subsoil, and in a few places as a soil mixed with other substances. In Annandale and Nithsdale dry soil prevails. Farms of arable land are generally let on leases of 15, 19, or 21 years. On sheep-farms the ordinary leases are from 9 to 13 years. Oats and potatoes are cultivated more extensively than any other crop, both for home consumption and for exportation. Potatoes are much used in fattening cattle and pigs. A great quantity of hams and bacon of the best quality is cured in this county, and sent to Liverpool, London, and Newcastle.

The farm implements in use are similar to those in Cumberland, with the exception of the sickle, the use of which is in some places much laid aside, and the scythe substituted for it. The horses in general are of a middle size, and are the result of many crossings of different breeds. The quality of the cattle and sheep stocks has been much improved. The Galloway breed of cattle mostly prevails, except for the dairy, for which cows of the Ayrshire breed are preferred. The sheep are of the Cheviot and black-faced breeds: these have been crossed by the Leicesters, and the offspring answers exceedingly well, and makes profitable returns to the farmer. Pigs are kept by the farmers and cottars in great numbers. Sheep-farms vary in size from 300 to 3000 acres, and two sheep for three acres may be considered an average number of stock. Arable farms extend from 50 to 600 acres; many are about 100 or 150 acres. Some farms contain both sheep-walk and arable lands, and these are considered the most convenient and productive. Arable farms, and those of small size, prevail on the low grounds and near the market-towns and villages. Those of larger extent, where pasture greatly preponderates are more distant, and situated on higher ground.

Most of the modern farm buildings are commodious and well arranged; they are constructed of stone and lime, and generally covered with slate. Great improvements have been also made in the churches, schools, roads, and fences. There are three district farming societies, to the premiums awarded by which the Highland Society of Scotland usually contributes.

Divisions, &c.—Dumfriesshire is within the ecclesiastical jurisdiction of the synod of Dumfries, which extends also over parts of some other counties, and comprehends 55 parishes, forming five presbyteries: Dumfries, Lochmaben, Annan, Penpont, and Langholm. The number of clergymen within its limits is 55, and of these 43 are in this county, in the 43 parishes into which it is divided; and seven clergymen, in connection with the Establishment, officiate in chapels of ease. There are besides about 40 chapels for Free Church and United Presbyterians, Independents, and other Dissenters. Prior to the year 1756, there were three jurisdictions in the county, namely, the sheriffship of Nithsdale, the stewardry of Annandale, and the regality of Eskdale, each comprehending the portion of territory which forms the basin of the three rivers after which they are respectively named; Esk on the east, Nith on the west, and Annan in the centre of the county. There is now one sheriff for the county, though the districts still preserve their ancient names.

Within this county are four royal burghs, ANNAN, DUMFRIES, LOCHMABEN, and SANQUHAR, which are described under their respective names. The other more important towns of the shire are Langholm, Lockerbie, and Moffat.

Langholm, population 1406, is a burgh of barony and market-town, 29 miles E.N.E. from Dumfries, well built and situated in the midst of picturesque woodland and mountain scenery on the left bank of the Esk. It consists chiefly of one street, in which is a town-hall and jail in the market-place. On the opposite side of the river is the modern village of New Langholm. Weaving and stocking-making are the principal occupations. Besides the parish church there are a Free church, two chapels for United Presbyterians, two Endowed schools, and a savings bank. A market is held weekly on Wednesday. There are two woollen manufactories. Mr. Telford, the civil engineer, who was a native of Eskdale, and was apprenticed at the age of 14 to a stonemason in Langholm, left 1000*l*. to the Langholm library. On

an eminence near the town is a monument to the late Sir John Malcolm, who was also a native of Eskdale. In the vicinity are Laugholm Lodge, a seat of the Duke of Buccleuch, and Broomholm, the property of Mr. Maxwell.

Lockerbie, population 1569, is a neat and well-built market-town in the parish of Dryfesdale, situated between the rivers Annan and Milk, 12 miles E. from Dumfries. The parish church, the Free church, a chapel for United Presbyterians, two libraries, a public reading-room, the parochial school, and some other schools are in the town. Thursday is the market-day. The town has been long celebrated for its lamb and wool markets. The winter weekly markets are principally for pork. In the parish are the remains of eight Roman and British encampments. Armour and weapons have been found in the parish; and of the great Roman road from England which traversed this county and Ayrshire, there are distinct traces.

Moffat, population 1491, in the parish of Moffat, is situated near the river Annan, 20 miles N. by E. from Dumfries. It is protected on the north-east by a noble screen of lofty mountains. Moffat is much resorted to for its mineral springs. Here are baths, assembly-rooms, a Parish church, a Free church, a chapel for United Presbyterians, and subscription and circulating libraries. A weekly market is held on Friday. In the vicinity are the old caves at Newton, Earl Randolph's tower, Craigie Wood, Bellcraig Rock and Linn, and the well-known fall called the Gray Mare's Tail. Since the opening of the Caledonian railway, visitors to Moffat have increased, and the town is being proportionately enlarged.

The following villages may also be mentioned:—

Dunscore, about 9 miles N.W. from Dumfries: population of the parish 1578. In the parish are the remains of a circular encampment, and the ruins of the old towers of Lag, of Bogrie, and Sundaywell. *Durisddeer*, population of the parish 1795, only claims notice as containing the magnificent residence of the Duke of Buccleuch, Drumlanrig Castle, surrounded by a very beautiful demesne. *Ecclefechan*, population of the parish of Hoddam 1797, a neat village on the Glasgow and London road, at which a market is held every month on a Friday, and a pork market weekly during winter. There is here a large and beautiful bridge over the Annan. The Caledonian railway has a station here. The manufacture of gingham is the principal employment of the inhabitants. The parish church is a mile from the village, where there are a Free church and a chapel for United Presbyterians. *Graintrye*, or *Gretna Green*, population of the parish 1880, formerly a burgh of barony, now a small village, long celebrated for the clandestine marriages of fugitive lovers, is situated about 9 miles N. from Carlisle, within a mile of the English border; on which border also is Solway Moss, remarkable for a battle in the time of Henry VIII. *Minnihive*, a village in Gleucainr parish, about 15 miles N.W. from Dumfries. The houses are neat and substantial; but there is neither trade nor manufacture. The parish, which in 1851 contained 1980 inhabitants, has a Free church, a chapel for United Presbyterians, three parochial schools, and three subscription libraries. In the village is a stone cross, dated 1638.

History, Antiquities, &c.—The Selgovæ were the most ancient inhabitants of this county. In the time of the Romans, Dumfriesshire formed a part of the province of Valentia. [BRITANNIA.] In the 8th century it was under the dominion of the Picts, who dismembered Galloway and Dumfriesshire from the Northumbrian monarchy. Until the reign of James IV. this county was much harassed by the feuds of rival chieftains, and from its proximity to the borders it was also liable to the incursions of the English and to frequent predatory warfare. At a later period the contraband trade with the Isle of Man prevailed to a great extent, and the borders were for a considerable time infested with daring bands of smugglers. In the rebellions of 1715 and 1745, but particularly in the latter, the country districts endured various outrages, and the county town sustained great damage.

The remains of what are called Druidical temples exist in the parishes of Holywood, Gretna, Eskdalemuir, and Wamphray. Near Moffat are vestiges of a British encampment; and in Eskdalemuir parish of two stone circles. Two Roman roads passed through the county. Several fortifications, both circular and square, and some large Roman encampments, can be distinctly traced in various parts. There are ruins of many old towers, vestiges of forts, and a great number of cairns in different places. At Dryfesdale is a very entire British fort, and at Burnswark-hill, near Ecclefechan, are very distinct remains of Roman encampments. There are also many moats or artificial mounts: of these Rockhall moat, near Lochmaben, is one of the largest and finest. Among the antiquities, the cross of Markland, which is an octagon of solid stone, and a very curious ancient obelisk, supposed to be of Anglo-Saxon origin, found in the churchyard of Ruthwell, are deserving of notice. The obelisk is ornamented with figures in relief descriptive of sacred history, and inscribed partly with Runic and partly with Roman characters. The ancient buildings most worthy of notice are Caerlaverock Castle, on the coast of the Solway Frith: Torthorwald Castle, said to have been erected 800 years ago, and of which the walls are still standing: Closeburn Castle, also of great antiquity, but still occupied as a residence: Morton Castle, one of the finest ruins in this part of the country and

most romantically situated; and Sanquhar Castle. The ruins of Langholm Castle, formerly a square tower belonging to the Armstrongs, are situated near the town of Laugholm. In the same locality are traces of the fosse and outworks of Wauchop Castle. Other remains exist in different parts of the county.

Industry, &c.—Agriculture and the rearing of cattle and sheep are almost the only occupations of the rural inhabitants of Dumfriesshire. Trade in coals, timber, &c., is confined to the towns and a few of the villages on the coast, from which also are exported the staple productions of the county. [ANNAN; DUMFRIES.] In 1851 there was one savings bank in the county, at Thoruhill; and the amount owing to depositors on November 20th 1851 was 8653*l.* 3*s.* 6*d.*

DUN-LE-ROI. [CHER.]

DÜNA (DA-UGAVA; ZAPADULA), a considerable river in Western Russia, rises from several springs not far from the source of the Volga, which flow out of marshy ground in the neighbourhood of the Volkonsky forest, near the south-western confines of the government of Tver. It winds in a west-south-westerly direction, nearly parallel with the Dnieper, until it has passed Vitebsk, having become navigable for flat-bottomed craft at Valisch or Velige, above Vitebsk. Thence it turns to the north-west, and near Düna flows almost due north for several miles, and then resumes its west-north-west course to Dünamünde, where it falls into the Gulf of Riga, or Gulf of Livonia, in 57° N. lat. From the town of Disna in 55° 27' N. lat., 28° 3' E. long., where the river a little below its junction with the river Disna begins to take a north-westerly course, it separates the governments of Vitebsk and Livonia, which lie on its right bank, from those of Minsk and Kourland, which lie on the left bank. The entire course of the Düna, inclusive of its windings, is about 655 miles; its length, in a straight line from the source to the mouth, is about 325 miles. The fall of its waters is in the upper part of its course 1 foot in every 2000 fathoms; and in its passage through the lower part, where the land is more level, 6 inches in every 2000 fathoms, its average fall being 6 inches in every 4 versts (about 2½ miles). The navigable portion of the Düna, namely, from Velige to Dünamünde, is about 405 miles in length; but the navigation, owing to the variableness of its depth (which ranges from 2 to 4 fathoms), to its shallows, and to a stratum of rock which runs across its bed just above Riga, and the sandbanks at its mouth (on which there is a depth varying from 12 to 15 feet), is extremely difficult and even dangerous for vessels of any size, except during the floods of spring and autumn. Its course above Riga indeed is not ordinarily practicable for any but the flat-bottomed craft called Struseu. At Riga its breadth is about 2400 feet. In the spring the surface is covered with rafts, logs, and planks, which are floated down from the forests of the provinces which it passes through. It contains several islands and abounds in fish. The tributaries of the Düna greatly augment its waters, though they are not of any great length: the chief of these are the Toroptsa, which is navigable from Toropez to its mouth, a distance of about 60 miles; the Ulla, which flows out of lake Belyoe, and is unavigable for about 56 miles; the Kasplia, which is navigable from Poritsch, about 110 miles from its mouth; the Ewst, Meshna, and Disna, the last of which rises in the government of Vilna; and the Bolder-Aa, which flows past Mittau, then skirts the southern shore of the Gulf of Riga, and ultimately falls into the Düna just above its mouth. The Narofna, which joins the Düna on its right bank, can be regarded only as an outlet for lake Peipus, and is from 37 to 42 miles in length. The river is connected by canals with Lake Ilmen, the Beresina, and the Niemen. The basin of the Düna comprehends an area of about 28,350 square miles. By the Beresinski Canal, which unites the Ulla with the Sergatcha, the Düna is connected with the Dnieper, and the Baltic with the Black Sea.

DÜNABURG, the chief town of a circle in the north-western part of the government of Vitebsk in Western Russia, was formerly the capital of Polish Livonia. It stands on the right bank of the Düna, and on both sides of the Shunitzee which flows into it, in 55° 53' N. lat., 26° 24' E. long., and has 6300 inhabitants. It was founded in 1277 by the Knights of the Sword, and while attached to the Polish crown was the residence of a bishop, voyvode, and castellan. At the present day it has become of great military importance from the strength which has been given to its fortifications. Düna contains a Greek and two Roman Catholic churches, a synagogue, and a college which formerly belonged to the Jesuits. It has three fairs in the course of the year, and carries on considerable trade.

DUNBAR, Haddingtonshire, Scotland, a royal burgh, market-town, and sea-port, is situated at the mouth of the Frith of Forth, on the north-eastern coast of the county, in 56° 0' N. lat., 2° 30' W. long.; distant 29 miles E. from Edinburgh. The population of the parliamentary burgh in 1851 was 3033. It is governed by a provost, 3 bailies, a treasurer, and 15 councilors; and unites with Haddington, North Berwick, Jedburgh, and Lauder in returning one member to the Imperial Parliament.

Dunbar is a very fine old town; the principal street and the smaller streets leading from it are broad and well paved. The town is lighted with gas; it is well drained naturally, and is clean and healthy. The parish church is a handsome gothic building with a stately tower. It contains a fine marble monument to the Earl of Dunbar, High

Treasurer of Scotland to James VI. There are two chapels for United Presbyterians, one for the Free Church, and one for Methodists. There are two commodious Burgh schools and two Parochial schools, a mechanics institution and library, and a subscription library. The curing of herrings is carried on to a large extent, many fishermen from the neighbourhood resorting to Dunbar with the produce of their industry. The North British railway has a station at Dunbar. The harbour has been much enlarged. A weekly corn-market and several annual fairs are held.

The principal object of antiquarian interest is the ruined castle of Dunbar, which stands upon high rocks at the entrance of the harbour. The town-house is also an old building. Dunbar was made a royal burgh by David II., and the place has been the scene of many interesting events in Scottish history. The siege and heroic defence of the castle by Black Agnes, countess of Dunbar, is one of the most remarkable incidents of the Scottish wars.

(*New Statistical Account of Scotland*; Miller, *History of Dunbar*, 1830; Wynton, *Chronicle*; Tytler, *History of Scotland*; *Communication from Dunbar*.)

DUNBLANE. [PERTHSHIRE.]

DUNDALK, the capital of the county of Louth, Ireland, a municipal and parliamentary borough, an assize, market, and sea-port town, and the seat of a Poor-Law Union, in the parish of Dundalk, is beautifully situated at the mouth of the river Castletou, in 54° 1' N. lat., 6° 24' W. long., distant 50 miles N. by W. from Dublin. The population of the borough in 1851 was 9995. The borough is governed by a bailiff and 16 burgesses, and returns one member to the Imperial Parliament. The lighting and watching of the town are managed by commissioners. Dundalk Poor-Law Union comprises 19 electoral divisions, with an area of 104,359 acres, and a population in 1851 of 53,750.

Dundalk was the scene of many battles before the final subjection of Ireland. For a short time it was the residence of Edward Bruce, who, after his conquest of this town, was crowned here, and held his court until the fatal battle in which he lost his life. The streets of Dundalk are long and spacious, and contain some good shops and houses; but a large part of the town is exceedingly poor and wretched. The parish church is a large and ancient edifice. There are places of worship for Roman Catholics, Presbyterians, and Wesleyan Methodists; three Endowed schools, an infirmary, a court-house, a jail, a market-house, a new county prison, and a savings bank. The town is paved and lighted. Tobacco, soap, leather, and pins are manufactured. Timber, coal, iron, and slate, with cattle, grain, butter, and eggs, which form the chief trade, are exported by steam-vessels, which ply regularly between this port and Liverpool. The port and harbour have been recently improved at a considerable expense. A light-house, on the screw-pile principle, was erected in 1849. There were on the 31st of December, 1852, registered as belonging to Dundalk 23 vessels with an aggregate tonnage of 1871, and 2 steamers with an aggregate tonnage of 844. The number and tonnage of vessels entered and cleared at the port during 1852 were:—Inwards, sailing-vessels 519, tonnage 35,928; steam-vessels 109, tonnage 47,782; outwards, sailing-vessels 224, tonnage 17,074; steam-vessels 105, tonnage 46,235. Fishing is carried on to a small extent. The assizes are held here, also quarter and petty sessions. The market is on Monday; fairs are held on the 17th of May and the third Wednesday of every other month in the year.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNDAS. [CANADA.]

DUNDEE, Forfarshire, Scotland, a royal and parliamentary burgh, market-town, and sea-port, is situated on the left bank of the estuary of the river Tay, in 56° 27' N. lat., 2° 58' W. long., distant 42 miles N.N.E. from Edinburgh by road, and 47 miles by the Edinburgh, Perth, and Dundee railway. The population of the burgh in 1851 was 78,931. The town is governed by a provost, 4 bailies, and 16 councillors, and returns one member to the Imperial Parliament.

Dundee is a place of considerable antiquity. From a fishing-village it became a fortress with walls, gates, and castle, and was the residence of several kings of Scotland. It was made a royal burgh by William I. in 1164. The Cowgate port or gate is the only trace of the ancient fortifications. In the various civil wars which desolated Scotland, Dundee suffered severely. In 1651, when it was sacked and burned, it was one of the richest towns in Scotland. It is built on ground which rises gradually from the edge of the river or estuary, the summit behind the town reaching a height of 500 feet. The town is also protected on the east side, and from the proximity of the great North Sea the temperature is considerably modified, and preserves a nearly uniform range throughout the different seasons. The town is rather irregularly built. Like the generality of old towns in Scotland, it originally consisted of one long street, and was the residence for part of the year of people of rank. The older streets are narrow, and the houses in them are packed together. From the market-place, or High-street, the other leading streets run nearly parallel with the river. In the High-street are the town-hall, a plain edifice with a steeple, and piazzas below, and the exchange and reading-room, a Grecian structure. In the Netbergate stand the old gothic tower or steeple of Dundee (156 feet high) and the three contiguous churches of the Establishment. The old cathedral of Dundee, erected, it is said, by

David, earl of Huntingdon, in 1185, stood on the site of the new churches, and contained four places of worship. The public seminaries occupy an elegant building in the Grecian style, recently erected. In Dock-street are the custom-house and a triumphal arch erected to commemorate the first landing of Queen Victoria at Dundee. Several handsome streets have been opened within the last few years, and great improvements have been otherwise effected in the appearance of the town. Including the churches already noticed, there are 8 churches of the Establishment in Dundee, 11 of the Free Church, 6 belonging to United Presbyterians, 3 to Independents, an Episcopal chapel, in which the bishop of Brechin officiates, a Roman Catholic chapel, and chapels belonging to some of the smaller bodies of Dissenters. The Infirmary, established in 1795, the Lunatic Asylum, the Ragged and Industrial school, the Orphan Institution, a savings bank, and an association for providing lodgings for the working classes, are among the benevolent institutions of the town. An extensive new building for the Infirmary, occupying three sides of a square, is in the Tudor style. Dundee is lighted with gas; a plentiful supply of water is brought from Monikie, about 15 miles distant.

The commerce of Dundee has varied considerably in its characteristic features. About 60 years ago 7000*l.* worth of shoes were annually exported. This trade is now extinct. At one time the cotton manufacture was carried on, and was succeeded by the woollen; but the permanently prosperous trade of the town has been that arising from the linen manufacture, of which it is now the chief seat. In 1745 there were imported into Dundee 74 tons of flax; in 1815 the quantity of flax and hemp imported was about 3000 tons: the annual imports amount at present to upwards of 35,000 tons of flax and hemp, and 13,000 tons of jute. In 1745 the exports of manufactured linen amounted to 10,000 pieces; in 1822 there were exported 263,403 pieces; it is calculated that the exports are now upwards of a million pieces, each piece containing on an average about 120 yards. The manufacture comprises Osnaburgs, sheetings, canvass, and other coarse descriptions of linen cloth. The annual value of the linen manufacture is estimated at between three and four millions sterling. About 40 flax-spinning steam-power mills are in the town and vicinity.

A short distance above the town the river Tay widens into a large estuary or frith, which has much the appearance of an inland lake. Dundee has consequently been for a long period an important maritime port. On December 31st, 1852, there were registered as belonging to the port, 36 sailing-vessels under 50 tons, tonnage 1179, and 297 above 50 tons, tonnage 56,418; with one steam-vessel of 36 tons, and 8 steam-vessels of 1660 tons. During 1852 there entered the port in the coasting trade:—Sailing-vessels 1479, tonnage 123,584; steam-vessels 148, tonnage 28,704; and there cleared:—Sailing-vessels 401, tonnage 37,977; and steam-vessels 150, tonnage 23,191. In the colonial and foreign trade there entered 411 vessels, tonnage 63,249, and cleared 278 vessels, tonnage 44,806. Earl Grey's Dock, King William's Dock, and Victoria Dock afford ample accommodation for the shipping of the port. Facilities alike for building and repairing ships exist. There are several large establishments for the manufacture of machinery. Since 1815 the harbour trustees have effected great improvements in the harbour. The Frith of Tay is two miles in width opposite the town; there are many dangerous sandbanks in the estuary, but they are avoided by means of excellent charts of the soundings, two lighthouses, and several beacons.

(*New Statistical Account of Scotland*; *Communication from Dundee*.)

DUNFANAGHY, county of Donegal, Ireland, a market-town and the seat of a Poor-Law Union, in the parish of Clondeherky and barony of Kilmascreegan, is situated in 55° 13' N. lat., 7° 58' W. long., distant 150 miles N.W. by N. from Dublin. The population in 1851 was 751, inclusive of 162 in the Union workhouse. Dunfanaghy Poor-Law Union comprises 10 electoral divisions, with an area of 125,666 acres, and a population in 1851 of 17,392.

The town is situated at the mouth of Dunfanaghy Harbour, which forms part of the Sheephaven, close to the peninsula of Horn Head, and is surrounded by bold and rocky scenery of great beauty and grandeur. There is here a small fishery. The entrance to the harbour is very dangerous at low water from a bar across its mouth, but the harbour itself is perfectly secure. Large quantities of corn are exported from the quay. A market is held weekly, and fairs are held in June, August, October, and November.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNFERMLINE, Fifeshire, Scotland, a royal burgh and market-town, is situated in 56° 5' N. lat., 3° 27' W. long., about 2½ miles N. by E. from the estuary at Charlestown and at Limekilns, two small ports in the parish, and 16 miles N.W. from Edinburgh. The population of the royal burgh in 1851 was 8577; that of the parliamentary burgh was 13,836. The affairs of the town are managed by a provost, 4 bailies, and 17 councillors. Conjointly with Culross, Inverkeithing, South Queensferry, and Stirling, the burgh returns one member to the Imperial Parliament.

Dunfermline is a neat and well-built town. The streets are paved, and the town is lighted with gas. The finest building is the New Abbey church, finished in 1821, and built in consequence of the decay of the old abbey or parish church, which now forms a porch to the new structure. The Burgh Commercial and the M'Lean schools, a poor-house, and a prison, are buildings of recent erection. An enormous

meeting-house, built for the celebrated minister Ralph Erskine, is a conspicuous object in approaching the town. In addition to the parish church and two chapels of ease there are three Free Church places of worship, three chapels for United Presbyterians, an Episcopal chapel, and several other places of worship. Several schools in the burgh are partially endowed. There are in the town a public library, a mechanics library, a savings bank, and some charitable foundations. A weekly corn-market is held on Tuesday.

The staple manufacture of Dunfermline is that of table linens. This trade originated upwards of a century ago in the making of ticks and checks. Dye-works and tanning and currying works employ some inhabitants of the burgh. Several spinning factories, chiefly for making linen-yarn; rope-works, tile-works, and breweries, also afford employment. The Stirling and Dunfermline railway unites this town with Stirling, and by junction with the Scottish Central railway it connects it with the west and south of Scotland. The same line communicates with the Edinburgh Perth and Dundee railway. *Charlestown* and *Limekilns* are two small ports in the parish principally for shipping its mineral productions.

Dunfermline is a place of great antiquity. It was the residence of King Malcolm Canmore, the vestiges of whose comparatively rude castle still exist on a small hill in a ravine near the burgh. In a romantic situation in the neighbourhood are the few remains of the once royal palace, a building of great extent and grandeur, and a favourite residence of the kings of Scotland. Charles I. was born here, and Charles II. inhabited it temporarily in 1640. It is said that besides Malcolm III. and his queen St. Margaret, their descendants till the days of Bruce, and some noble collateral connections, are buried in Dunfermline Abbey. The tombstone of St. Margaret is still pointed out. By far the most interesting tomb is that of Robert the Bruce, discovered in clearing away the ruins of the choir for the new church. The skeleton of the king was disinterred in 1818 and a cast taken of the cranium. The abbey of Dunfermline was the most eminent in Scotland; it was very richly endowed, having the patronages of no less than 37 livings, with their tithes, and many properties throughout the kingdom, and was also possessed of peculiar and extensive feudal privileges. The frater, or refectory, with its fine gothic windows, still indicates the grandeur of the original buildings.

Dunfermline was burned by both Edward I. and Richard II. David II. was born at Dunfermline. The Confession of Faith of 1581 was subscribed here by James VI. The town was made a royal burgh by this monarch, who frequently resided in the palace. In 1638, 1643, and 1650 the various solemn leagues and covenants were subscribed at Dunfermline; and in 1651 Cromwell's soldiers plundered the place, after defeating the king's troops in the battle of Fife.

(*New Statistical Account of Scotland*; Grose, *Antiquities of Scotland*; Tytler, *History of Scotland*.)

DUNGANNON, county of Tyrone, Ireland, a parliamentary borough and market-town, and the seat of a Poor-Law Union, is situated in 54° 32' N. lat., 6° 47' W. long.; distant 85 miles N.N.W. from Dublin, and 20 miles N.W. by W. from Omagh. The population in 1851 was 3335. Dungannon returns one member to the Imperial Parliament. Dungannon Poor-Law Union comprises 19 electoral divisions, with an area of 102,440 acres, and a population in 1851 of 54,220.

The town is beautifully situated on the slope of a hill, in the midst of a fertile district, and is sheltered on the west by a lofty and extensive range of hills. The streets are well built, and the town is lighted with gas and paved. Dungannon was formerly the site of a very ancient castle, which was destroyed by the Parliamentary forces in 1641. A small Franciscan monastery was erected here in the reign of Henry VII. Besides the parish church there are a Roman Catholic, a Presbyterian, and two Wesleyan Methodist chapels, an Endowed school, a school supported by the Earl and Countess of Ranfurley, a savings bank, and a fever hospital. Among the public buildings are a court-house, a district hridewell, and a market-house. The principal manufactures are of linen and coarse earthenware; there is some trade in grain, flour, flax, and coal. The market is held on Thursday, a corn-market on Monday and Thursday, and a fair is held on the first Thursday of every month.

(*Fraser, Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNGARVAN, county of Waterford, Ireland, a parliamentary borough, a market and sea-port town, and the seat of a Poor-Law Union, is situated in 52° 5' N. lat., 7° 37' W. long.; distant 24 miles S.W. by W. from Waterford, and 128 miles S.S.W. from Dublin. The population in 1851 was 6349. The borough returns one member to the Imperial Parliament. Dungarvan Poor-Law Union comprises 18 electoral divisions, with an area of 94,046 acres, and a population in 1851 of 31,207.

The castle of Dungarvan, which stands in the centre of the town, was built by King John: it is now used for military purposes. The town is situated on the Bay of Dungarvan, on the point of land formed by the union of the rivers Brisky and Calligan, which here fall into the sea. A new street and a handsome square were a few years back built by the Duke of Devonshire, who also erected a bridge across the river Calligan, consisting of a single arch 75 feet in span. The church, which is modern, is situated on the shore. A Roman Catholic chapel has been erected on the site of an old monastery,

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some remains of which still exist. There are also a second Roman Catholic chapel, a convent, a sessions-house, a school-house, a district hridewell, a market-house, a fever hospital, a union workhouse, and the old castle, which is used as a barracks. The town is mainly supported by the summer visitors, and by the herring and hake fisheries. There is some trade in exporting corn and butter and other farm produce. A market is held on Saturday: fairs are held in February, June, August, and November, as well as on the second Wednesday in every month.

(*Fraser, Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNGIVEN. [LONDONDERRY.]

DUNKELD. [PERTSHIRE.]

DUNKERQUE (*Duyn Kerche*, *Dunkirk*), a sea-port and fortified town in France, capital of the third arrondissement in the department of Nord, stands on the eastern shore of the Strait of Dover, at the junction of the canals of Bergues, Bourbourg, and Furnes, in 51° 2' 11" N. lat., 2° 22' 46" E. long., 174 miles in a straight line N. by E. from Paris, 50 miles by railway through Hazebrouck N.N.W. from Lille, and has 26,886 inhabitants in the commune. It is said to owe its origin to a chapel founded here by St. Eloi, which from its situation among the sandy downs of the coast got the name of Duyn Kerche, which in Flemish means 'the church of the downs.' In the 10th century it was raised by Baudouin III., count of Flanders, from a mere village to the rank of a town. Charles V., to whom the town had come by inheritance along with the rest of Flanders, built a castle to defend the port, which has since been demolished. In 1558 the English, who had rendered themselves masters of the town, were driven from it by the French; and in the following year it was given up to the Spaniards. In 1646 it was taken from the Spaniards by the French under the Duke of Enghien (afterwards the Great Condé); but it fell again shortly afterwards into the hands of the Spaniards. In 1658 Turenne, having defeated the Spaniards, took Dunkerque, which, according to a treaty previously concluded with Cromwell, was put into the hands of the English: four years afterwards Charles II. restored it to France on condition of receiving for it a considerable sum of money. Louis XIV. by the fortifications he erected enabled the town to repel an attempt made by the English to bombard it in 1695. By the peace of Utrecht the fortifications were razed and the port filled up. At the peace of Aix-la-Chapelle the port and fortifications, which had been partially restored in the previous war, were again demolished; but by the peace of 1783 they were allowed to be restored. In 1793 the town was besieged by the allies under the Duke of York; but the French obliged the besiegers to retire with great loss.

Dunkerque is nearly three miles in circuit. The streets are broad and well paved; the houses are well built of brick. The public squares are spacious, handsome, and regular. The principal of these are the Champ-de-Mars and the Place Jean Bart, which is planted with trees and ornamented with a statue of Jean Bart, a distinguished French naval hero and a native of Dunkerque. The fortifications consist of the ramparts, which are surrounded by ditches, of Fort Louis, and the citadel. The principal buildings are—the church of St. Eloi, which though a gothic structure has a handsome Corinthian portico; the detached belfry in front of this church; the town-hall; the barracks and naval storshouses; the tower of the port, on which there is a lighthouse; the college, theatre, and concert rooms. The only supply of water is from cisterns. The market is abundantly supplied with poultry, vegetables, and other kinds of provisions. The immediate neighbourhood is dreary and uninteresting.

The inhabitants are engaged in the manufacture of soap, starch, beer, beet-root sugar, cordage, and leather: there are metal foundries, gin distilleries, salt-works, and ship-building yards. As this port serves as the outlet for the great manufacturing department of Nord the trade by sea is very considerable. The harbour, which is chiefly artificial, is rather shallow and of difficult entrance; but the roadstead is large and safe. The cod and herring fisheries are prosecuted with great activity; and the town has a considerable trade in Bordeaux wines and brandies, which has greatly increased since Dunkerque was made a free port in 1826.

Dunkerque has tribunals of first instance and of commerce, a chamber of commerce, a custom-house, a public library of 18,000 volumes, an exchange, a college, a school of navigation, and two hospitals. Foreign consuls reside at Dunkerque. The town is connected by railways with all the great commercial centres of France and Belgium.

DUNLAVIN. [WICKLOW.]

DUNLEER. [LOUTH.]

DUNMANWAY, Cork, Ireland, a market-town and the seat of a Poor-Law Union, is beautifully situated on the river Bandou near its head, in 51° 43' N. lat., 9° 5' W. long., distant 33 miles W.S.W. from Cork, 190 miles S.W. from Dublin. The population in 1851 was 2222. Dunmanway Poor-Law Union comprises 15 electoral divisions, with an area of 103,917 acres, and a population in 1851 of 20,517.

The town is situated on level ground almost entirely surrounded by lofty and rugged hills. The greater part of the town was built by Sir Richard Fox, who also obtained for it a charter as a market-town. There are two churches for Episcopalians, a Roman Catholic and a Wesleyan Methodist chapel, and a district hridewell. A Charter

school was endowed by Sir Richard Fox. The market is held weekly; fairs are held in May, July, September, and October.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNMORE. [GALWAY.]

DUNMORE, EAST. [WATERFORD.]

DUNMOW, frequently called GHEAT DUNMOW, Essex, a market-town and the seat of a Poor-Law Union, is situated on an eminence on the right bank of the river Chelmer, in 51° 42' N. lat., 0° 21' E. long., distant 12 miles N.N.W. from Chelmsford, and 38 miles N.N.E. from London. The population of the parish of Great Dunmow in 1851 was 3235, including 435 inmates of the Union workhouse. The living is a vicarage in the archdeaconry of Essex and diocese of Rochester. Dunmow Poor-Law Union contains 25 parishes, with an area of 72,291 acres, and a population in 1851 of 20,048.

The town consists chiefly of two streets, which contain some good houses. The streets are well lighted with gas and paved, and there is a good supply of water. Many Roman antiquities have been found in the vicinity. The parish church, dedicated to the Virgin Mary, is a large ancient structure, and has a lofty embattled tower. There are Independents, Baptists, and Quakers have places of worship. There are National and British schools, a savings bank, almshouses, and several parochial charities. The market is held on Tuesday for corn and cattle; fairs are held on May 6th and November 8th. A county court is held.

(Morant, *Essex*; Wright, *Essex*.)

DUNNING. [PERTHSHIRE.]

DUNOIS, a district of the former province of Orléanais in France, of which Châteaudun was the capital. It is now comprehended in the departments of Eure-et-Loir, Loir-et-Cher, and Loiret. In the middle ages this district was a county united with that of Blois, without giving to its owner any separate title; but about the commencement of the 14th century Hugues, count of Blois, added to his title that of count of Dunois. Guy, count of Blois and Dunois, sold his counties to Louis, duke of Orléans (brother of Charles VI. of France), whose son Charles bestowed the county of Dunois upon his natural brother Jean, who took so eminent a part in the expulsion of the English from France under the designation of the Bastard of Orléans, and through whom alone any historical interest attaches to the district.

DUNOON, Argyleshire, Scotland, a watering-place situated on the Frith of Clyde and east coast of the county, about 9 miles W. from Greenock, in 55° 57' N. lat., 4° 56' W. long. The population in 1851 was 2229. The old village, which dated from the reign of Robert Bruce, has been supplanted by a new and well-built little town, supplied with shops of every description, and surrounded by handsome houses and villas. There is an excellent pier for the accommodation of the numerous steamers which sail between Glasgow, Dunoon, Rothsay, and other watering-places on the Clyde. In addition to the parish church there are a Free church, a chapel for United Presbyterians, and a handsome Episcopal chapel.

Dunoon was formerly, and after the restoration of Episcopacy, continued for some time to be, the seat of the bishops of Lismore, now called of Argyle and the Isles. The foundations of the old castle are still traceable.

(New *Statistical Account of Scotland*.)

DUNSE. [BERWICKSHIRE.]

DUNSHAUGHLIN, county of Meath, Ireland, a market-town and the seat of a Poor-Law Union, is situated in 53° 32' N. lat., 6° 33' W. long., distant 18 miles N.W. from Dublin. The population in 1851 was 422, besides 653 inmates of the Union workhouse. Dunshaughlin Poor-Law Union comprises 12 electoral divisions, with an area of 103,344 acres, and a population in 1851 of 17,168.

Dunshaughlin was formerly a place of considerable trade, but is now of little importance. The church is said to have been founded by St. Seachlan, nephew of St. Patrick, in the year 439. The Roman Catholics have a chapel; and there are a court-house, the Union workhouse, and a dispensary. A market is held weekly, and fairs are held in May, July, October, and November.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

DUNSTABLE, Bedfordshire, a market-town in the parish of Dunstable and hundred of Manshead, is situated at the intersection of the ancient Ikeneld and Watling streets, in 51° 53' N. lat., 0° 31' W. long., distant 21 miles S. by W. from Bedford, 33 miles N.W. from London by road, and 47½ miles by the London and North-Western railway. The population of the town in 1851 was 3539. The living is a rectory in the archdeaconry of Bedford and diocese of Ely.

Dunstable is situated at the southern extremity of the county, near the centre of the Dunstable chalk downs. Henry I. founded here a priory of Black Canons, on whom in 1131 he bestowed the town and all its privileges, the exercising of which gave rise to many quarrels between the priors and the inhabitants. In 1200 the corpse of Queen Eleanor rested at the market-place, and a handsome cross was erected to commemorate the event, but it was pulled down during the Commonwealth time as a relic of popery. The town of Dunstable consists chiefly of one main street and another which crosses it. The houses are in general built of brick; some of them are very old. The

parish church formed part of the priory buildings; the front of the edifice is chiefly Norman, and of unusual richness. The interior is richly ornamented: over the altar is a large painting by Sir James Thornhill. There are chapels for Baptists and Wesleyan Methodists, National and British schools, a Free school, a Charity school, and several almshouses. The making of a straw-plait employs many females. Whiting is manufactured. During the winter months many larks of large size are caught on the neighbouring downs, and sent to London for sale. The market-day is Wednesday. Fairs are held on Ash-Wednesday, May 22nd, August 12th, and November 12th.

DUNSTER. [SOMERSETSHIRE.]

DUNWICH. [SUFFOLK.]

DURANCE (the ancient *Druentia*), a river in the south of France, rises in Mont Genèvre. At Briançon it is joined by the Guisane and the Claret, which flow from the ridge of the Alps that separates the department of Hautes-Alpes from Savoy; and just after their junction it receives the Servières, another small stream. From Briançon the Durance flows south-south-west above 25 miles to Embrun, receiving by the way the Gyronde and the Guil, and several small mountain-streams. The Ubaye, which passes Barcelonette and receives the Ubayote, joins the Durance 10 miles below Embrun. From the junction of the Ubaye the Durance flows first south-west, then south, and then west by north 135 miles, into the Rhône below Avignon, receiving a great number of tributaries, of which the principal are the Buech (which joins it at Sisteron), the united streams of the Bes and the Bleone from Digne, the Asse, the Verdou from Castellane, and the Calavon from Apt. The whole length of the river is about 180 miles. No part of its course is navigable. Owing to the rapidity of its slope it resembles a torrent more than a river, and sweeps down such an enormous quantity of sand and pebbles that its bed, except at a few points where it is contracted by projecting rocks and mountains, presents a valley deeply covered with beach, through the middle of which the restless stream hurries down to the Rhône. The Durance fills its bed only in time of floods, which are frequent and often disastrous, especially on the melting of the snows on the Alps in spring, and on the fall of heavy rains in the mountains. In the lower part of its course the bed of the Durance is full of islands. Large quantities of larch, pine, and fir-timber are floated down the river either in rafts or in single trees from the Alpine forests to Arles, whence they are forwarded to different ports along the Mediterranean. The Craponne Canal is fed from the Durance, and a portion of its waters is conducted by a magnificent aqueduct recently constructed to supply the city of Marseille. [BOUCHES-DU-RHÔNE.]

DURANGO. [BASQUE PROVINCES.]

DURANGO, a town in Mexico, capital of the state of Durango, is situated near 24° 28' N. lat., 105° W. long., in a wide plain, 6843 feet above the sea, and at no great distance from the Sierra Madre, which rises to the west of the town. Its population amounts to upwards of 22,000, and it carries on a considerable commerce in the agricultural produce of the country lying about it, and in that of the numerous and rich mines partly situated in the Sierra Madre and partly east of the town. The town is regularly built, and presents a very handsome appearance. Among the principal buildings are the cathedral, several churches and couvents, a theatre, and a mint, in which a large number of gold and silver dollars are coined. Iron-mines are worked within a quarter of a league from the town. Woollen stuffs and leather are the chief manufactures. Not far from Durango is the Breña, a tract more than 30 miles in length and about 15 miles in width, which is occupied by hills composed of basalt and covered with scoria; among them is a crater of considerable dimensions. The department of Durango is noticed under MEXICAN STATES.

DURAZZO (the ancient *Epidamnus* and *Dyrrachium*) is a town on the coast of Albania, in 41° 22' N. lat., 19° 27' E. long., situated on the south coast of a peninsula which projects into the Adriatic, and forms the south boundary of the Gulf of Drin. Epidamnus was a colony of Corcyra, but it afterwards changed its name to Dyrrachium. It fell under the Romans at the time of the conquest of Macedonia, and its harbour became the principal means of communication between Italy and the north parts of Greece, Macedonia, and Thrace. The Romans embarking at Brundisium, which is nearly opposite, landed at Dyrrachium, and thence by the Via Egnatia they reached Thessalonica, on the Ægean Sea. Pompey defended Dyrrachium with success against Cæsar before the battle of Pharsalia. After the fall of the Roman empire Dyrrachium came successively into the hands of the Goths, Bulgarians, and the Normans from Sicily, who made it their stronghold in their wars with the Byzantine emperors. It afterwards fell into the hands of the Venetians, from whom it was taken by Sultan Bayazid II. Durazzo has a safe harbour, which however admits only vessels of moderate draught; larger vessels must cast anchor more than a mile from the shore. Its population is variously estimated at from 5000 to 10,000. They carry on an active import trade in British manufactures by way of Trieste, and export the surplus corn which grows abundantly in the neighbouring plains, and tobacco to Italy.

John, the eighth son of Charles II. of Anjou, king of Naples, assumed, with the consent of the Byzantine emperor, the title of duke of Durazzo and lord of Albania; and from him sprung the Durazzo branch of the Angevine family, who reigned over Naples and Hungary.

Charles III., king of Naples, was a grandson of John; he died in Hungary, and left two children, Ladislaus and Joanna, who reigned in succession at Naples, but both died without issue.



Coin of Dyrachium.

British Museum. Actual size. Silver. Weight, 469 grains.

DÜREN, the Roman *Marcodurum* (whence its former name of *Mark-Düren*), chief town of the circle of Düren in the government of Aachen in the Prussian province of the Rhine, is situated on the Roër, 18 miles E. from Aix-la-Chapelle, in 50° 46' N. lat., 6° 32' E. long., and has above 8000 inhabitants. It is a walled town, the seat of a mining board, and possesses a Romau Catholic gymnasium or high school, three nunneries, five Catholic and two Protestant churches, and a synagogue. Düren has considerable manufactures of fine and ordinary woollen cloths, screws, nails, iron and steel ware, paper, coarse buttons, soap, leather, oil, triukets, &c. Several paper-mills, iron-foundries, and other factories in the vicinity of the town are worked by water-power derived from the Roër. It has an extensive trade in grain, a horse market, and three large fairs in the course of the year. On this spot several cohorts of the Uhl, who had assumed the Roman name of Agrippinenses, were surprised and cut to pieces by Civilis, the Batavian leader, in A.D. 70. (Tacit. 'Hist.,' iv. 23.)

Charlemagne held assemblies here on his way to attack the Saxons in A.D. 775 and 779. Charles V. took Düren by assault and burnt it in 1543. The French in 1794 made it the capital of the department of the Roër; it was ceded to Prussia in 1814.

DURHAM, one of the northern counties of England, lying between 54° 27' and 55° 1' N. lat., 1° 8' and 2° 20' W. long., is bounded N. and N.W. by Northumberland, W. by Cumberland and Westmoreland, S. by Yorkshire, and E. by the German Ocean. Its greatest length is from east to west, 48 miles; its greatest breadth, at right angles to the length, is 39 miles. Previous to 1844 there were three detached portions of the county, namely: 1. Northamshire and Islandshire (including Holy Island and the Farne Islands). 2. Bedlington parish, sometimes called Bedlingtonshire. 3. The parish of Craike. In October, 1844, by the Act 7 & 8 Vict. cap. 8, Northamshire, Islandshire, and Bedlingtonshire were incorporated with the county of Northumberland, and Craike parish with the North Riding of Yorkshire, in which it is locally situated. The area of Durham county is 973 square miles, or 622,476 statute acres: the population in 1851 was 390,997.

Coast, Surface, Hydrography, &c.—The coast of the county of Durham is generally low. There are however several ranges of cliffs, which are of magnesian limestone, except at Seaton Bents, where they are formed by rocks of the red marl or new red-sandstone formation.

Durham may be characterised as a hilly county. The western part is overspread by the branches of the great Penine chain, from the eastern slope of which the chief rivers of the county flow. The two principal branches of this chain, which belong to Durham, are separated from each other by Weardale (the valley of the Wear); from the Yorkshire Hills by Teesdale, or Teasdale (the valley of the Tees); and from those of Northumberland by the valley in which the Derwent, a feeder of the Tyne, flows. Large portions of the mountain district consist of moor-lands covered with heath, or, as it is here termed, 'ling.' The hills north of Weardale have the name of Weardale Forest, and those north of Teasdale are called Teasdale Forest; but they are bare of wood. The principal elevations in the county are Kilhope Law (2196 feet), Cross Ridge, Bolts Law, Baron Hope, Collier Law (1678 feet), and Fotherly Fell, in Weardale Forest; Pike Law, West Pike, Manner Gill Fells, and Eglestone Bank, in Teasdale Forest; Pontop Pike, on Lanchester Common, south-east of the valley of the Derwent (1018 feet); and Brandon Mount (875 feet), south-west of the city of Durham. The moors are chiefly occupied as pasturage for sheep of the black-faced kind, and for a few young cattle and horses. The best wooded part of the county is the vale of Derwent, which produces oak, ash, elm, birch, and alder, and a quantity of underwood, especially hazel.

The chief rivers are the Tyne, the Wear, and the Tees, with their tributaries. The Tyne drains the northern parts, the Wear the middle, and the Tees the southern.

The *Tyne* [**NORTHUMBERLAND**] forms the northern boundary of the county for about 18 miles, from the junction of the Stanley Burn at Wylam to the sea, and its navigation extends from above Newcastle to the sea, a distance of about 15 miles. Its Durham affluents are the Derwent and Team rivers and the Stanley and Hedworth burns. The *Derwent* rises in Northumberland, and flowing east, reaches, about 3 miles from its source, the border of the county of Durham, along which it flows with a winding

course north-eastward for about 30 miles, flowing into the Tyne about 3 miles above Newcastle. For about 21 miles of its course it forms the boundary between the counties of Northumberland and Durham. The Team rises on the side of Pontop Pike, and flows first east by north and then north by west about 13 miles into the Tyne, about a mile above Newcastle. The Stanley Burn and the Hedworth Burn are only 4 or 5 miles long.

The *Wear* rises near Kilhope Law, and flows east and south-east above 4 miles (in which part of its course it is known as the Kilhope Burn), to Bowertree or Burtree Ford. From Bowertree Ford the Wear flows east by south 18 miles through the wild and romantic district of Weardale, to the junction of the Bedburn River, passing the towns of Stanhope and Wolsingham, and receiving on the right bank the Irshope, Harthope, Dadree, Swinhope, Westenhope, Snowhope, and Bollihope burns; and on the left bank the Middlehope, Rookhope, Stanhope, Shittlehope, Weserow, Houslip, and Eals burns, all of which are small. From the junction of the Bedburn, the Wear flows still east by south 6 miles to Bishop Auckland, where it receives the Gaunless, then turns to the north-east, and flows in a very winding course about 36 or 37 miles past Durham and Chester-le-Street into the German Ocean at Sunderland. Below Durham the Wear receives the Stanley Burn, united with the Cock Burn on the left bank, and the Lumley Burn on the right bank, all at or near Chester-le-Street. The whole course of the Wear may be estimated at about 65 miles, for about 18 or 20 miles of which, namely, up to the city of Durham, it is navigable. It is crossed at Sunderland, near its mouth, by an iron bridge of one arch, of 236 feet span and 100 feet above high water-mark. The importance of its navigation arises from the export of coals from the neighbouring mines.

The *Tees* rises in Cumberland, on the slope of Cross Fell (2901 feet high), and for the first few miles of its course forms the boundary between Cumberland and Westmoreland. It is joined by the Trout and Crook becks, and upon its junction with the Crook forms the boundary of the county of Durham, separating it for a very few miles from Westmoreland, and throughout the remainder of its course from Yorkshire. The general direction of the Tees till it reaches Sockburn, nearly 55 miles from its source, is east-south-east; thence it flows nearly 30 miles north-east into the German Ocean, its total course being between 80 and 90 miles. The valleys watered by the affluents of the Tees above Barnard Castle open laterally into the valley of the Tees, and many of them are remarkable for picturesque scenery. A ridge of trap rocks across which the river flows at Caldron Snout, at the junction of the Maize or Marys beck, forms a series of falls in a distance of 596 yards which offer a fine contrast to the still water of The Wheel, a pool or lake into which the river expands just above. Some miles below these falls and three miles above the village of Middleton in Teasdale, basaltic rocks form the bank of the river. Below Barnard Castle the Tees receives on its right bank the Greta from Yorkshire, and on its left bank the Grand River, or Staindrop beck. From the neighbourhood of Darlington the channel winds very much. At Croft, near Darlington, it receives on the left the river Skerne, which, rising between Durham and Hartlepool, has a very winding course to the south-south-west, of more than 25 miles, receiving several streams by the way, and passing the town of Darlington just before its junction with the Tees. Below the town of Stockton the Tees is joined by the Hartlurn and Billingham hecks, and at Greatham Fleet, near its mouth, by the Elmeldon heck united with another from Greatham. The wide estuary of the Tees is navigable for colliers and other large vessels up to Stockton, and for small craft several miles higher up, above Yarm in Yorkshire: the navigation has been shortened by a cut, by which a considerable bend in the river is avoided.

There are several small streams which flow into the sea between the Wear and the Tees. They are called Deans, as Ryhope Dean, Seaham Dean, Dalton Dean, Hawthorn Dean, Castle Eden Dean, and Hasledon Dean.

The river navigation of Durham, comprehending only the lower waters of the Wear and of the border rivers Tyne and Tees, is confined to the eastern side of the county. There are no canals or artificial cuts, except the one already noticed, which was made to shorten the winding course of the Tees.

The old mail-road to Edinburgh, Aberdeen, Inverness, and the north of Scotland crosses this county from south to north. It enters it at Croft bridge over the Tees, and passes through Darlington, Durham, Chester-le-Street, and Gateshead, where it quits the county, crossing the Tyne to Northumberland. Two other roads from London to Durham city branch off from the Glasgow and Carlisle mail-road at Scotch Corner, in Yorkshire, and enter the county by Pierce bridge over the Tees. Here they divide, the right-hand road passing through the villages of Heighington and Eldon, and the left-hand road through Bishop Auckland. They reunite a few miles beyond Bishop Auckland and fall in with the Edinburgh mail-road near Sunderland bridge over the Wear, about 4 miles before reaching Durham. The road from London to Sunderland branches off from the Edinburgh mail-road at Thirsk in Yorkshire, and proceeds by Yarm, upon leaving which town it crosses the Tees into the county of Durham, and proceeds forward to Stockton, and thence to Sunderland. There are several other important roads in the county.

Durham has numerous railways constructed by the coal-owners for the conveyance of coals from the pits to the rivers Tyne and Wear, where they are shipped. The principal passenger lines are the York Newcastle and Berwick railway, and its branches. The main line enters the county at Croft bridge, and passes through it in a generally northern direction for about 45 miles, forming part of the great railway communication between Scotland and the Metropolis. Its principal branches in the county are the Hartlepool branch, which unites Hartlepool with the main line, the Brandling junction, which connects South Shields and Sunderland with the main line, and the Durham and Sunderland branch. The Stockton and Darlington, Wear Valley and Redcar line runs along the south and south-eastern portion of the county, from Cold Rowley to Hartlepool. The Stockton Hartlepool and Clarence railway passes from east to west through the centre of the county, and like the other trunk lines has several branches of greater or less length.

Geology, Mineralogy, &c.—The lower part of the valley of the Tees, from the junction of the Skerne, and the coast from the mouth of the Tees to Hartlepool are occupied by the red marl or new red-sandstone, the uppermost of the formations which are found in the county. Among the strata of the formation a fine-grained sandstone of a brick-red colour predominates. Some attempts have been made to find coal by boring through the red marl, but without success, though the pits were sunk to the depth of more than 700 feet. The newer magnesian or conglomerate limestone crops out from beneath the north-western limit of the red marl: it extends along the coast to the mouth of the Tyne, and along the valley of the Tees, to the junction of Staindrop beck with the Tees, between Darlington and Barnard Castle: its inland boundary is a line drawn southward from the mouth of the Tyne, gradually diverging from the coast-line to the village of Coxhoe, between Durham and Stockton; and thence south-west to the Tees. Along the coast the upper stratum of the limestone is a species of breccia, with which wide chasms or interruptions in the cliff are filled; the next strata are thin and slaty, of a white colour inclining to buff; but lower down the stratification becomes indistinct, the rock is of a crystalline and cellular texture, and of a light-brown colour. The thickness of the limestone formation varies. At Pallion, near Sunderland, it is only about 70 feet thick; near Hartlepool it has been bored to the depth of more than 300 feet without penetrating through it. Along the coast the strata dip to the south-east. Galena is the only ore that Mr. Winch observed in this limestone, and few organic remains are found in it. In this formation along the coast are caverns and perforated rocks, which appear to have been formed by the action of the sea.

Of the dykes of basalt or greenstone which intersect the coal-measures of the Northumberland and Durham coal-fields, one crosses the Tyne into Durham county, near the Walker colliery, and another crosses the bed of the Wear at Butterby, near Durham. In the south part of the county is a remarkable basaltic dyke, extending several miles from Cookfield to Bolam, where the coal-measures dip beneath the newer magnesian limestone: a dyke of similar kind and in just the same line intersects the new red-sandstone or red marl, and crosses the bed of the Tees near Yarm into Yorkshire. In Mr. Greenough's 'Geological Map of England and Wales' the Cookfield dyke and that which crosses the Tees are represented as parts of one vast dyke, extending from the upper valley of the Tees near Eglestone, through the millstone grit and limestone shale (or, as it is laid down in Mr. Winch's map, the mountain limestone), the coal-measures, the newer conglomerate or magnesian limestone, the red-sandstone, the lias, and the inferior oolite, in all 65 miles in an east-south-east direction, to the Yorkshire coast, between Scarborough and Whitby. The coal in contact with the dyke is charred and reduced to cinder; and the sulphur is sublimed from the pyrites near. Besides the fissures filled with basalt, others of a different nature intersect the coal field: these, if large, are also called dykes; but, if small, 'troughles,' 'slips,' or 'hitches,' and by geologists 'faults': by these 'faults' the strata are thrown, that is, raised on one side or depressed on the other, many feet. Other irregularities are observed in the coal-measures. Mineral springs and chalybeate springs are found in various parts of the coal-field.

The coal-field of Durham is bounded on the west by the district occupied by the millstone grit. This district extends westward up the valley of the Tees to Eglestone, and is bounded by a line drawn thence northward to Bollisope beck, along that stream to the Wear above Wolsingham, and thence north-west to the Derwent at Blanchland. The millstone grit extends northward into Northumberland, skirting the west side of the coal-field; and southward into Yorkshire where it extends between the districts occupied by the newer magnesian or conglomerate limestone and the carboniferous or mountain limestone. The beds of this formation may be estimated at 900 feet thick; and this is probably short of the truth. "The prevailing rock of this series is shale, known by the provincial name of 'plate,' with which various beds of sandstone, differing in hardness and texture, and, according to these differences, distinguished as free-stone, hazel, whetstone, grindstone, and millstone, occur: of the millstone only one bed is worked, the thickness of which is about 30 feet. This is one of the uppermost strata on the Derwent, where it crops out, and does not occur farther west." (Phillips and Conybeare,

'Outlines of the Geol. of England and Wales.') The millstone bed is quarried on Muggleswick Fell, and between Wolsingham and Stanhope in Weardale. Towards the lower part of this formation two thin beds of limestone occur, alternating with some occasional seams of coal.

The remainder of the county, west of the district occupied by the millstone grit, is occupied by the carboniferous or mountain limestone. The limestone beds in this formation repeatedly alternate with beds of siliceous grit and slate-clay. Mr. Winch, from whose account we have largely borrowed, classes both the millstone grit and the mountain limestone formations under the common designation of the lead-mine measures. He estimates their joint thickness at from about 2700 feet to 2750 feet, and the aggregate thickness of the limestone beds at 570 feet: deducting the thickness of the millstone grit as given above, that of the mountain limestone will be about 1800 feet or 1850 feet, of which the limestone beds amount to 570 feet: this includes about 250 feet of sandstone and slate-clay, lying immediately above the old red-sandstone, which is the formation subjacent to the mountain limestone. The limestone beds are the most characteristic of this formation, and the most important to the minor. The bed called 'the great limestone' is from 60 to nearly 70 feet thick, and consists of three strata, divided by indurated clay. It is the uppermost bed in this formation, and crops out at Frosterly, in Weardale, between Wolsingham and Stanhope, where it is quarried in large quantities for agricultural uses and building cement, or for ornamental purposes: it is a brownish-black or dark bluish-gray marble, in which hivalve shells are imbedded. 'The scar limestone,' a lower bed 30 feet thick, is divided into three strata like the great limestone, which it also resembles both in colour and organic remains. 'The Tyne-bottom limestone,' above 20 feet thick, is also divided into three strata. 'Robinson's great limestone' is above 80 feet thick. All the limestones of this formation appear to contain the encrinurus, and most of them also hivalve shells: one of them (the cockleshell limestone) contains oyster-shells of 4 or 5 inches diameter. They seem to agree in every essential character, as well as in their extraneous and native fossils. The beds of sandstone which occur in this formation are thicker than those in the millstone grit: they are thickest towards the bottom of the series. The beds of shale, or as it is called 'plate,' are very numerous: they are seldom so much as 40 feet in thickness, but one bed is 60 feet. Clay ironstone is found in Teasdale.

The carboniferous limestone is the great depository of the metallic veins of the district which comprehends the great Northumberland and Durham coal-field. Lead-mines abound in Weardale and in Teasdale Forest, and there are a few in the valley of the Derwent. Some of the fissures, especially those which range from north to south, are of great magnitude, but contain very little ore; those which run from south-east to north-west are most productive. The same vein is productive in different degrees, according to the bed which it traverses: the limestones are the chief depositories of ore, particularly 'the great limestone,' which is considered to contain as much as all the other beds put together. Galena is the only lead-ore procured in abundance from this formation; but white and steel-grained ore are occasionally found: silver is contained in the ore in different proportions, varying from 2 to 42 ounces in the fother of 21 cwts.: 12 ounces may be considered as the general average; and if 8 ounces can be obtained the lead is worth refining. Newcastle and Stockton are the ports at which lead is shipped. ('Geological Transactions,' vol. iv.; Phillips and Conybeare, 'Outlines of the Geol. of England and Wales.')

Climate, Soil, Agriculture.—The climate of the county of Durham is mild for its northern situation. The sea, which bounds it on the east, moderates the cold in winter; and the surface, being hilly without any considerable mountains, presents many sheltered valleys, the climate of which nearly resembles that of the more southern parts of the island. The soil varies in different parts; its general nature is that of a rather strong loam. In the centre of the county there is a moist clay loam of moderate quality, on an ochre subsoil, which gradually becomes peaty, and joins the western portion of the county towards Cumberland and Westmoreland, the whole of which last-mentioned part of the county is a poor peat or moor, chiefly covered with heath. From Barnard Castle to Darlington there is a strip bounded by the Tees on the south, which consists of a dry loam intermixed with clay. In this there are some good pastures and productive farms. In the valleys of the Tees, Skerne, Tyne, and their tributary streams, the soil consists of a good friable loam, which is cultivated at a small expense, and under good management is sufficiently profitable to the occupier. The extent of moor and heath land is rapidly diminishing as cultivation advances. The wastes are made profitable by rearing a hardy breed of sheep and cattle.

The general state of cultivation throughout the county is above mediocrity; and improvements have been readily adopted. The farms are not in general very large: the average size is from 150 to 200 acres of inclosed land. Cattle and horses are bred to great advantage, and oxen and sheep are fattened by grazing on some of the rich upland meadows. The soil and climate of this county are not favourable to fruit-trees, and except in the gardens of gentlemen of fortune they are not much attended to. There are some good oak woods, and many new plantations, where the tenure is freehold.

The cattle bred in the county of Durham are in great repute all over England and Scotland. The Teeswater or Holderness breed is the finest of the short-horns. The cows are remarkable for the quantity of milk which they give, as well as for their aptitude to fatten. The oxen are considered as the most profitable breed for stall-feeding, as they become fit for the butcher at an earlier age than most other breeds. The Durham cow came originally from Holland, but it has been much improved by careful breeding. The milk, although abundant, is not so rich in cream as that of some of the smaller breeds.

The horses bred in this county are of a superior description, both for draught and for the saddle. The Cleveland bays are preferred for their vigour and activity. Hunters of superior power are produced by crossing strong active mares with blood horses which have great bone as well as spirit; or better, by having a breed produced by selected half-bred stallions and mares. The young stock are kept in rich and extensive pasture, where they have plenty of food and good water. The dry pastures on the limestone rock are peculiarly adapted to rear horses, the sound soil being advantageous to the proper hardness of the hoof. The Leicester breed of sheep is generally preferred in this county. On the heaths and moors a small and hardy species of sheep is found in considerable numbers.

Divisions, Towns, &c.—The county of Durham is a county palatine—that is, a county within which some lord had a jurisdiction “as fully as the king had in his palace;” but the palatine jurisdiction having been transferred by Act of Parliament from the Bishop of Durham, by whom it was long held, to the crown, the distinction has been for most practical purposes abolished. The county of Durham is divided into four wards, as follows:—

I. Chester ward, in the northern part of the county. II. Darlington ward, which extends from the boundary of Chester ward to the boundary of the county on the west and south. III. Easington ward, which is bounded on the north by Chester ward, on the west by Darlington ward, on the east by the sea, and on the south by a line drawn from Croxdale beck eastward to the sea. IV. Stockton ward, which occupies the remaining portion of the county. Chester and Darlington wards are further subdivided into three divisions each—Easington and Stockton are subdivided into two divisions each.

The county includes one city, DURHAM on the Wear; seven borough towns, namely, BISHOP AUCKLAND, on the Wear, in Darlington ward; BARNARD CASTLE, on the Tees, in Darlington ward; DARLINGTON on the Skerne, in Darlington ward; GATESHEAD on the Tyne, in Chester ward; HARTLEPOOL on the Sea, in Stockton ward; STOCKTON on the Tees, in Stockton ward; and SUNDERLAND at the mouth of the Wear, in Easington ward. To these we may add the new parliamentary borough of SOUTH SHIELDS on the Tyne, in Chester ward. These with the market-town of SEDGEFIELD are described under their respective titles. Of the market-towns of Staindrop, Stanhope, and Wolsingham, an account is here subjoined.

Staindrop, population of the township 1429, situated in a beautiful vale about 19 miles S.W. by S. from Durham, is an ancient town, and was originally a royal demesne. The houses, many of which are well-built, form one wide street ranging east and west. Staindrop beck runs at the east end of the town. The church, which was formerly collegiate, is in the early English style, and consists of a nave, side aisles, and chancel, with an embattled tower. In the church are several interesting monuments. The market is held on Saturday for provisions. There are congregations of Wesleyan Methodists, Independents, and Quakers, an Endowed Charity school, and an Infant school. Close to Staindrop is Raby Castle, the seat of the Duke of Cleveland. The castle is on the east side of the park, which is very extensive. The principal part of the building was erected by John Nevill, earl of Westmoreland, in the 14th century; a portion is still more ancient. The general effect of the building, from its extent and grandeur, is very imposing. Its situation is fine: it occupies a rising ground, with a rocky foundation, and is inclosed with an embraured wall and parapet.

Stanhope is situated on the left bank of the Wear, 21 miles W. by S. from Durham. The parish, which comprehends 55,030 acres, is one of the largest in England: the population of Stanhope quarter or township in 1851 was 2545, chiefly engaged in the lead mines. The church is a plain old building. There are in the town a chapel for Wesleyan Methodists; the Hartwell Endowed school, founded in 1724; a National school, and a savings bank. About a mile from Stanhope are the extensive works of the Weardale Iron Company. There are also important lead mines and lime works. On the west side of the town is an eminence called the Castle Hill, rising to the height of 108 feet perpendicular from the bank of the Wear. On the summit are remains of some ancient fortifications. The market is on Friday: there are three annual fairs.

Wolsingham is pleasantly situated on a point of land formed by the confluence of the Wear and the Wescrow on the left bank of the Wear, about 15 miles W.S.W. from Durham. The parish had in 1851 a population of 4585. The church contains a finely executed font of Weardale marble. The Wesleyan and Primitive Methodists and Baptists have places of worship, and there are National schools. The Free Grammar school, founded in 1614, had 55 scholars in 1851, of whom 31 were on the foundation. The income is about 32L per annum. Woolen cloth, spades, and edge tools are manufactured here.

Several iron blast furnaces have been recently opened, and coal mines are worked on an extensive scale. The population has consequently been more than doubled in number since 1841. The market is on Tuesday. The views from the hill above Wolsingham are extensive and diversified. Two chalybeate springs rise near the town.

Monk Wearmouth and Bishop Wearmouth are included in the parliamentary borough of SUNDERLAND.

The following are some of the more important villages, with their population in 1851, and a few other particulars:—

West Auckland, 13 miles S.W. by S. from Durham: population of the township, 2303. The inhabitants are chiefly engaged in manufactures and mining works. Here are a Primitive Methodist chapel, an Endowed school, and a mechanics institute. *Great Aycliffe*, an ancient village on the Great North road, 14 miles S. from Durham: population of the township, 812. Besides the parish church there is a chapel for Wesleyan Methodists. There are several corn-mills, a flax-mill, a tannery, and a rope-work. The York and Newcastle railway has a station at Aycliffe. *Birtley*, 10 miles N. from Durham: population of the township 1833; chiefly occupied by persons employed in coal-mines and at the Birtley iron-works. Salt is made here from a salt spring. There are in Birtley chapels for Wesleyan Methodists and Roman Catholics, and a school. *Blaydon*, on the right bank of the Tyne, 18 miles N.N.W. from Durham, has grown into importance, chiefly from the formation of the Newcastle and Carlisle railway, which has a station here. The population is not given separately in the returns. Coal is extensively sent down to Shields by the river Tyne. A suspension-bridge crosses the Tyne at Blaydon. There are here a district church; chapels for Wesleyan, Primitive, and New Connexion Methodists, and National schools. Fire-bricks, glass, white-lead, coke, and lamp-black are manufactured; there are an extensive iron-foundry and a steam-engine factory. *Brancepeth*, about 5 miles S.W. from Durham: population of the township, 470. This village is interesting on account of its castle, formerly the seat of the Nevills, which has recently undergone a thorough restoration. The church, a cruciform structure in the perpendicular style, erected by the Nevills, is at the east end of the castle. The grounds of Brancepeth Castle are well wooded, and are stocked with deer. In the village is a National school. *Castle Eden*, population of the parish 491, about 10 miles E. by S. from Durham, is inhabited chiefly by persons employed in the neighbouring coal-mines. The colliery company have established schools for boys and girls. An extensive engine-foundry is in the neighbourhood. Several local mineral railways converge at Castle Eden and join the line to Hartlepool, which is the shipping port for this district. *Eaglescliffe*, population of the township 493, on the left bank of the Tees, about 10 miles E. by S. from Darlington. The village occupies an elevated site on the bank of the Tees, which is here crossed by a handsome cast-iron bridge of one arch 180 feet in span. Besides the parish church, which is ancient, there is a National school. *Ford and Hylton*, contiguous townships on the river Wear, about 4 miles W. from Sunderland, have gradually increased so as conjointly to form an important village: population of Ford township, 1922 in 1851; of Hylton township, 546. The principal occupation is ship-building; there are also earthenware, copperas, and paper manufactories, and an iron-foundry. At Ford is a chapel built and endowed in 1817 by Captain Malin, R.N. *Greatham*, on the road from Stockton to Hartlepool, 6 miles S. from Hartlepool: population of the township, 651. The principal object of interest is Greatham Hospital, founded in 1272 by Robert de Stichill, bishop of Durham; the present commodious building was erected by the late Earl of Bridgewater, who also laid out the grounds and plantations. The institution supports 13 brethren and a master. The parish church is modern. Parkhurst's Hospital is an institution for six poor widows or spinsters. There is an Infant school. *Heighington*, 6½ miles N.N.W. from Darlington, on the road to Bishop Auckland: population of the township, 685. The parish church, an ancient gothic structure, has a fine Norman tower. There is a Wesleyan Methodist chapel. The Grammar school, founded in 1601, has an endowment of about 70L a year, and had 72 scholars in 1851. The village is chiefly dependent on the trade arising from the residence of several wealthy families in the vicinity. *Hetton-le-Hole* is pleasantly situated in a vale about 6 miles N.E. from Durham: population of the township, 5664. The coal raised from the Hetton collieries is carried by railway to the river Wear, and thence by water to Sunderland for shipment. There is also railway communication with Sunderland. The Methodists have places of worship, and there is a National school. *Heworth* is a chapelry in the parochial chapelry of Jarrow: population, 8869. It is divided into Upper and Nether or Low Heworth. The chapel at Low Heworth is a modern building. Some very ancient coins of the Saxon kingdom of Northumbria were some years since dug up in the chapel-yard. One corner of this chapel-yard contains a monument, a neat plain obelisk nine feet high, fixed on a stone base, to the memory of 91 persons killed in the explosion of Felling colliery in 1812. There is a parish school-house, built by subscription in 1815. At Heworth Shore, on the Tyne, are manufactories of Prussian blue and other colours, one for coal tar, and works for preparing alkali for soap-boilers; also ship-building yards, a pottery, a glass-house, and wharfs for the shipment of grindstones. Freestone of a porous character, called from its excellence in

enduring a strong heat 'firestone,' is quarried at High Heworth. *Heworth*, on the left bank of the Tees, 3 miles S.S.E. from Darlington, population of the township 1154, is situated on elevated ground, and commands an extensive prospect along the valley of the Tees. Besides the parish church there are places of worship for Wesleyan and Primitive Methodists and Independents: there are also National schools and a school supported by the Primitive Methodists. *Jarrow*, or *Yarrow*, is between Newcastle and South Shields; the church is 8 miles from Newcastle, and 2½ miles from Shields; but when the tide is out a mile may be saved between Jarrow and Shields by crossing the 'Slake,' a recess in the right bank of the Tyne, which is dry at low water: the population of the joint township of Hedworth, Monkton, and Jarrow is 3335. Jarrow was the seat of a monastery established in 681 by Benedict, a noble Saxon, who had previously founded the monastery of Monk Wearmouth. Jarrow derives its chief interest from its connection with the venerable Bede, whose birth is fixed by an ancient and probable tradition at the hamlet of Monkton, which nearly adjoins Jarrow. In 870 the monastery was burned by the Danes, and after rising from its ruins was again destroyed by William the Conqueror, 1070. Some scattered vestiges of the monastery still remain. The church adjoins the centre of the monastic buildings immediately on the north. The church was in great part rebuilt in 1783. The tower, which rises from the centre of the church, retains some curious Norman features. Roman inscriptions and pavements have been dug up near Jarrow. There are large coal-works in the vicinity. Ship-building, the manufacture of canvases, and paper-making afford employment to many of the inhabitants. There are some alkali works. *St. John's Weardale*, although little better than a village has a market. It is about 27 miles W. by N. from Durham: population of Forest Quarter, in which the village is situated, 4358. Lead-mines in the neighbourhood give extensive employment. The market is held on Saturday; and there are fairs in April and September. *Great Lumley*, population of the township 1730, about 5 miles N.N.E. from Durham, is occupied chiefly by persons employed in the collieries. The Wesleyan and New Connexion Methodists have places of worship. An hospital for twelve poor women was founded in 1685 by Sir John Duck. Salmon-fishing is carried on in the river Wear. *Middleton-in-Teesdale*, a small market-town on the left bank of the Tees, about 25 miles S.W. by W. from Durham: population of the township, 1840. The church is a small ancient edifice. The Baptists and the Primitive and Wesleyan Methodists have places of worship, and there is a Free school. The market is held on Saturday, and there are two annual fairs. The proprietors of the lead-mines have established schools and a library. The village is situated among hills, and extends in a kind of oval form round a spacious green. *Middleton St. George*, a small village 5 miles S.E. from Darlington: population of the parish, 332. The village is situated on the left bank of the Tees, and is chiefly dependent on visitors to the neighbouring spa of Dinsdale, for whose accommodation some good dwelling-houses have been built in this village and Middleton-One-Row, a smaller village a little to the west, consisting of a row of respectable houses. *Norton*, about a mile N. from Stockton: population of the parish, 1725. This village contains many good residences. The parish church, anciently collegiate, is of mixed styles, and has a central tower. The Grammar school has an endowment of about 44l. a year, and had 41 scholars in 1853. Here is also a National school. *Painshaw*, population 2120, situated about 9 miles N. by E. from Durham. In this neighbourhood the Marquis of Londonderry's extensive collieries are situated, and give employment to a large proportion of the labouring population. There is also an iron-foundry. Numerous railways intersect each other here. There are here a chapel for Wesleyan Methodists, and an Endowed school for the children of the colliers. *Pelton*, population of the township 1207, about 8 miles N. by W. from Durham, possesses a neat gothic church, erected in 1842 by the neighbouring proprietors of land and the coal-owners. The Wesleyan and Primitive Methodists have places of worship, and there are schools for the children of the coal-miners. *Ryton*, on the right bank of the Tyne, about 8 miles W. from Gateshead: population of the township, 739. The parish church is an interesting old edifice; it has a tower surmounted with a lofty spire. The Wesleyan Methodists and Independents have places of worship, and there is a school with a small endowment. Salmon-fishing is carried on in the Tyne at Ryton. *Seaton Carew*, 3 miles S. from Hartlepool: population of the township, 728. The village consists chiefly of neat and commodious cottages for bathing visitors; the cottages are arranged on three sides of a quadrangle. There is here a National school. *Shildon*, 11 miles S. by W. from Durham: population of the township, 2144. In Old Shildon village are a chapel of ease, a Wesleyan Methodist chapel, and National and British schools; there is also a British school in New Shildon. In the vicinity are several iron-foundries, engineering factories, and collieries. *Shotley Bridge*, 14 miles W.N.W. from Durham, on the right bank of the Derwent, which here separates the counties of Durham and Northumberland: population returned with the parish of Lancaster. The Consett Iron Company's works about 2 miles from Shotley Bridge, iron-works at Black Hill, one mile distant, a paper manufactory at Shotley Grove, flour-mills, saw-mills, a brewery, and a tobacco-pipe manufactory give employment to a large proportion of the inhabitants

In Shotley Bridge is a mechanics institute; petty sessions and a county court are held here. At Black Hill are chapels for Primitive and Wesleyan Methodists, a National and a British school. *Swalwell*, a village about 16 miles N.N.W. from Durham: population of the township, 1429. Sir Ambrose Crowley established iron-works here in 1690. There are chapels for Wesleyan and Primitive Methodists and Scotch Presbyterians, a National school, and a public library. *Tow Law*, population of the village about 2000, pleasantly situated on high ground, about 10 miles W. by S. from Durham, has risen within the last ten years in consequence of the opening of iron-works in the neighbourhood. The abundance of coal, iron, and limestone in the vicinity, and the convenience of transit by railway, are elements of prosperity to this rapidly rising village. There are chapels for Wesleyan and Primitive Methodists. *Trimdon*, population of the parish 1598, about 3 miles S.E. from Durham, has much increased of late years from the opening of new collieries. The Wesleyan Methodists have a chapel at New Trimdon. The parish church is situated in Old Trimdon. *Washington*, 11 miles N. by E. from Durham, population of the township 1224, is chiefly dependent on the neighbouring collieries. Magnesia and coke are manufactured, and there are saw-mills. The parish church, a handsome edifice, was rebuilt in 1832; there is a National school. *Whickham*, about 16 miles N.N.W. from Durham, population of the township 910, is agreeably situated near the right bank of the Tyne and on the right bank of the Team. The parish church, which is ancient, has been recently repaired; it has a nave, aisles, and chancel, and a square tower with flying buttresses. There are here a Wesleyan chapel and a National school. Coke is manufactured in the vicinity. *Whitburn*, about 2 miles N. from Sunderland: population of the parish, 1203. Numerous visitors resort to this place in summer for sea-bathing. Limestone is quarried in the parish, and some coal is raised: fishing is the chief occupation of the inhabitants. Besides the parish church there are a Methodist chapel and a parochial school. *Wilton*, population of the township 5627, is a manufacturing village between the Tyne and the Derwent, about 13 miles N.W. by N. from Durham. Sir Ambrose Crowley, an alderman of Loudon, established here about 1690 the extensive iron-works which still bear his name. Sir Ambrose established various charities for the benefit of the workmen and their families. These charities however ceased in 1816. There is here a new church, erected in 1828, and chapels for Wesleyan, Primitive, and New Connexion Methodists and Presbyterians. *Witton-le-Wear*, 12 miles S.W. from Durham: population of the parochial chapelry, 918. The village is situated on rising ground on the left bank of the river Wear. Coal is extensively raised, and an iron-foundry employs a considerable number of workmen. Witton Castle was burnt down several years back, but has been rebuilt; there are some good mansions in the neighbourhood. *Wolsiston*, 4 miles N. from Stockton: population of the township, 750. In the neighbourhood of this village is Wynyard Hall, the seat of the Marquis of Londonderry. There are here almshouses for widows, erected in 1833 by the Marchioness of Londonderry.

Divisions for Civil and Ecclesiastical Purposes.—The county of Durham is in the diocese of Durham and in the ecclesiastical province of York. It constitutes an archdeaconry, which is subdivided into the deaneries of Chester-le-Street, Darlington, Easington, and Stockton. The richer benefices are among the wealthiest in England. Some of the parishes and parochial chapelries are of great extent. According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 621 places of worship, of which 351 belonged to five sections of Methodists, 169 to the Established Church, 25 to Independents, 21 to Baptists, 20 to Roman Catholics, 14 to Presbyterians, 9 to Quakers, and 12 to minor bodies. The total number of sittings provided was 171,903. By the Poor-Law Commissioners the county is divided into 14 Unions: Auckland, Chester-le-Street, Darlington, Durham, Easington, Gateshead, Houghton-le-Spring, Lancaster, Sedgfield, South Shields, Stockton, Sunderland, Teesdale, and Weardale. These Unions include 311 parishes and townships, with an area of 716,019 acres, and a population in 1851 of 406,201; but the boundaries of the Unions are not strictly co-extensive with those of the county. Durham is included in the northern circuit. The assizes and the quarter sessions are held at Durham, where stand the county jail and the house of correction.

Before the Reform Act there were four members returned to Parliament from this county, two for the county itself and two for the city of Durham. By the Reform and Boundary Acts the county was formed into two divisions, each returning two members. By the Reform Act two members were given to Sunderland, including part of the parishes of Monk Wearmouth and Bishop Wearmouth; and one member each to Gateshead (including part of the chapelry of Heworth in the parochial chapelry of Jarrow) and South Shields, including the townships of South Shields and Wostoe in the parochial chapelry of Jarrow.

History and Antiquities.—At the time of the Roman invasion the county of Durham was included in the territory of the Brigantes (*Brygantes*, Ptolemaeus), a powerful tribe who occupied the northern part of the island from the Mersey to the Tyne. The Brigantes were subdued by Cerialis and Agricola, but no incidents have been recorded of their subjugation which are peculiarly connected

with this county. The county remained in the possession of the Romans until they finally withdrew from the island, being defended by the wall of Hadrian or Severus, which extended from sea to sea across Northumberland and Cumberland. The notices of the district by the ancient geographers are scanty. We gather from the Itinerary of Richard of Cirencester that the Tees was known to the Romans as the Tisa, and the Tyne as the Tina; and from Ptolemy, that the Wear (Horsley will have the Tyne) was known as the Vedra. The Romans had several stations within the county. Vindomora and Vinovium, mentioned in the first Itinerary of Antoninus are fixed by antiquarians at Elchester on the Derwent, and Binchester near Bishop Auckland. Ad Tisam, mentioned by Richard, is fixed at Pierce Bridge on the Tees. Gateshead was considered by Camden to be the Gabrosentum of the Notitia, which others place at Drumburgh near Carlisle. Of some other stations the precise site has not been definitely ascertained. Roman antiquities have been found at Chester-le-Street, at Coniscliffe or Consliffe, near Pierce Bridge; at Old Durham, near Durham city, at Lanchester, at Pierce Bridge, at South Shields, at Stanhope, at Thornton, near Darlington, at Monk Wearmouth, and at Whitborn Lizard. (Reynold's 'Iter Britanniarum'.)

On the establishment of the Saxon Octarchy, Durham was probably included in the kingdom of Deira, the southernmost of the two which are frequently comprehended under the general name of Northumbria. About the year 634, after Oswald had united the two kingdoms under one sceptre, Lindisfarne, or Holy Island, was selected as the residence of the first bishop. The seat of the bishopric was about 30 years later removed to York. In 678, when Northumbria was divided into two dioceses, Lindisfarne again became an episcopal seat. Fear of the ravages of the Danes caused the bishop and clergy to leave Lindisfarne about 875, and to take up their residence at Chester-le-Street. From this place another removal took place in 995, first to Ripon in Yorkshire, afterwards to Dunholm or Dunholme, now Durham, where the see has since been fixed.

For about 20 years subsequent to the Conquest, Durham suffered all the calamities of civil war in consequence of the oppressive conduct of William and his Norman followers, the resistance of the ecclesiastics and the people, and the attacks of an invading Scots army. Rapine, famine, and pestilence spread misery on every hand, and almost entirely depopulated the district.

In the early part of the 14th century Durham was frequently invaded by the Scots. The last occasion of this kind was in 1346, when under the conduct of king David, they crossed the Tyne and the Derwent, and encamped about 3 miles from the city of Durham. Edward was in France; but the northern nobles and prelates collected a powerful army, and the battle of Nevill's Cross terminated in the defeat of the Scots and the captivity of David.

In the war of the Roses, the Yorkists, under the Marquis of Montacute, marched across Durham to attack the Lancastrians before the battle of Hexham. In the invasion of England by James IV. of Scotland, who favoured the cause of Perkin Warbeck, Northham Castle, which then belonged to Durham, was besieged by the king; but when reduced to the last extremity, it was relieved by the approach of the Earl of Surrey with an army. At the time of the Reformation the see of Durham was held by Cuthbert Tunstall, a man honourably distinguished in that persecuting age by his mildness and forbearance. He was imprisoned and deprived of his bishopric under Edward VI., was restored under Mary, but finally deprived after the accession of Elizabeth. The religious establishments were not richly endowed, with the exception of the priory at Durham. Kypen and Sherburn hospitals, which were among the wealthiest, had each less than 200*l.* a year gross revenue. In the rebellion of the earls of Northumberland and Westmoreland in support of the Roman Catholic faith, they found little difficulty in raising a tumultuous force, with which they entered Durham, tore and trampled under foot the English Bibles and prayer-books, and celebrated mass in the cathedral; they were however shortly afterwards dispersed by the royal army under the Earl of Sussex. In the latter part of Elizabeth's reign the northern counties were much afflicted by a pestilence.

When the Scots invaded England, in 1640, they crossed the Tyne into this county, Lord Conway, who commanded the King's troops, retreating first to Durham, and afterwards to Northallerton in Yorkshire. When the civil war broke out in 1642, the Earl of Newcastle formed the four northern counties into an association for the king's service. During the Commonwealth the see was dissolved; but upon the restoration of Charles II. it was re-established, and bestowed on Bishop Cosins, who distinguished himself by the munificent use he made of his large revenues. The local history of the county since the Restoration is not marked by any interesting features.

Durham is one of the principal counties in which coal is raised; it does not rank very high as an agricultural county.

In 1851 there were 12 savings banks in the county: at Barnard Castle, Bishop Auckland, Chester-le-Street, Darlington, Durham, Hartlepool, Lanchester, Middleton-in-Teesdale, Monkwearmouth, South Shields, Stanhope, and Stockton-upon-Tees. The total amount owing to depositors on the 20th of November 1851, was 262,449*l.* 7*s.* 5*d.*

DURHAM, the capital of the county of Durham, a city and borough,

and the seat of a Poor-Law Union, is situated on the river Wear, in 54° 47' N. lat., 1° 34' W. long., distant 258 miles N. by W. from London by road, and the same distance by the Great Northern and York and Newcastle railways. The population of the municipal and parliamentary borough of Durham in 1851 was 13,188. The city is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. For sanitary purposes the borough is governed by a Local Board of Health. The livings are in the archdeaconry and diocese of Durham. Durham Poor-Law Union contains 25 parishes and townships, with an area of 42,163 acres, and a population in 1851 of 35,793.

About the close of the 10th century, when the monks of Lindisfarne, or Holy Island, removed from Chester-le-Street with the remains of St. Cuthbert, the legend informs us that on the arrival of the body at Dunholme the car in which it was carried became immovable. The monks proceeded to build (on the site now occupied by the church of St. Mary-le-Bow, erected in 1635) a sort of tabernacle of boughs, wherein they deposited the relics; but soon after a stone church was built by Bishop Aldun, and dedicated to St. Cuthbert, whose remains were removed and enshrined in it. The town of Dunholme, or Durham, was besieged unsuccessfully by Duncan of Scotland in 1040. By Leland it is called Duresme (the Norman name, whence Durham).

William the Conqueror and his friends and followers committed dreadful ravages in Durham and its neighbourhood, in revenge of the murder of the garrison by the inhabitants, whose feelings of hatred had been roused into action by the excesses of the Norman soldiers. In 1072 a strong castle was built here, and Walcher, a Norman, was appointed to the bishopric. This prelate purchased the earldom of Northumberland, and assumed the title of Count Palatine. In 1093 the old church built by Aldun was pulled down, and the present magnificent edifice begun by King Malcolm, Carlepho the bishop, and Turgot the prior. Durham was often the head-quarters of Edward III. and of other monarchs and commanders on their excursions against Scotland. After the battle of Newburn the city of Durham became almost depopulated.

By an Act passed in the 27th of Henry VIII. the temporal jurisdiction of the bishops of Durham was considerably abridged. In more modern times, by the 6th and 7th William IV., cap. 19, the whole of the palatine jurisdiction of the bishops of Durham was taken away, and vested in the crown as a separate franchise and royalty. The city had its first charter from Bishop Hugh Pudsey, confirmed by Pope Alexander; the last charter was granted by Bishop Egerton in 1780. The assizes for the county are held here twice a year by the judges going the northern circuit. A county court is held in Durham.

The city is nearly surrounded by the river Wear, and forms a peninsula, the centre of which rises to a lofty eminence, partially inclosed by the ancient walls, and skirted with hauging gardens descending to the river, on each side of which are delightful public walks called the Banks. The cathedral and castle crown the summit. The prospect obtained from the summit of this eminence, comprehending a large extent of fertile and wooded country, is exceedingly interesting; as are also the views of Durham city, castle, and cathedral from numerous points in the approaches on either side. The cathedral occupies the north side and the castle the south side of Place or Palace Green, a spacious square in the centre of the town. On the west side of the square is the old exchequer, comprising the offices of the Palatine court of chancery, offices for the diocesan records, &c. Other buildings connected with the ecclesiastical establishment adjoin those just named.

Notwithstanding the marring effect of so-called restorations and alterations, enough of the outline of the cathedral remains to show the majestic character of the original Norman structure. The building is in the form of a Latin cross; the dimensions are as follows:—Length, 502 feet; length of nave, 205 feet; height of nave, 69 feet; width of nave and aisles, 81 feet; middle transept, 171 feet by 33 feet; choir, 127 feet by 32 feet; eastern transept or chapel of the nine altars, 129 feet by 34 feet. The height of the great central tower is 210 feet. The principal entrance was originally at the western end, a beautiful Norman arch forming the doorway; but after the erection of the Galilee Chapel by Bishop Pudsey the northern doorway became the principal entrance. A transept at the east end called the Chapel of the Nine Altars is a fine specimen of early English architecture, and has additional interest as containing the remains of St. Cuthbert. The remains were discovered under the site of the former shrine of the saint on the 7th of May, 1847, and were re-interred the same evening. Many interesting old monuments are in the cathedral.

The castle has received many alterations and repairs from the hands of successive bishops of Durham, who used it as a place of occasional residence. The original building is Norman. The great outer gateway, which had been for some time used as the county jail, stood till 1818, when it was removed. The archway of the present entrance-gate is Norman, but the tower of the gateway is a recent structure, built or restored by Bishop Barrington. The courtyard of the castle is an irregular square, the greater portion of the buildings being on the north and west sides. Bishop Hatfield's Hall, on the western side, was originally 132 feet long by 36 feet in width; but was considerably curtailed in its dimensions by succeeding bishops. In this hall

Henry III., the Princess Margaret of England, Charles I., and many distinguished personages have at various periods been entertained by the bishops of Durham. The Norman chapel, recently repaired and altered, is the most ancient part of the building. It consists of a nave and aisles. The whole of the castle buildings are now in possession of the University of Durham.

The church of St. Mary-le-Bow, in the North Bailey, in which the visitations of the bishop are held, occupies the site of the oldest church in Durham. The present building, which consists only of a nave and chancel, was erected in 1685; the tower in 1702. St. Mary's church, in the South Bailey, is a small ancient edifice. St. Oswald's was partly rebuilt some years back; it is of mixed styles; the tower is of the perpendicular style. St. Giles's church is of early date; its original character has however been considerably changed by reparations. The other churches are St. Nicholas's church in the market-place and St. Margaret's chapel on Crossgate Hill. The Independents, Quakers, Primitive, Wesleyan, and New Connexion Methodists and Roman Catholics have places of worship. A Grammar school connected with the cathedral has 4 exhibitions for the sons of clergymen of 25*l.* each at the school and 50*l.* each at either of the universities; and 18 King's scholarships, worth about 40*l.* per annum each; with some scholarships for Cambridge University. The school-house has been rebuilt outside the city, with residences for the head master and the second master. The number of scholars, including King's scholars, was 106 in 1853. A Diocesan training-school had 23 students in residence in 1853. There are besides a Blue-Coat school, National and Infant schools, a Catholic Free school, a Charity school, a mechanics institute, and an Athenaeum. The Infirmary was established in 1791; the present handsome building was erected in 1849. Durham possesses a savings bank. There are almshouses for 4 poor men and 4 poor women, and numerous other benefactions to the poor.

Durham is lighted with gas, and is well supplied with water; the streets are partially paved. A public fountain stands in the centre of the market-place. In the market-place is the guildhall erected by Bishop Tunstall in 1555. The town-hall, a spacious and handsome edifice in the Tudor baronial style, was erected a few years ago from the designs of Mr. Hardwick. The hall is 70 feet long, 35 feet broad, and 56 feet high, and is finished with very great richness and splendour. There are in Durham a subscription library, a news-room, assembly-rooms, and a theatre. A new jail, county courts, and house of correction were erected some years back at a cost of nearly 120,000*l.* Races are held in May. At the northern extremity of the city is Framwell-gate bridge, erected about the year 1120 by Bishop Flambard. Elvet bridge was originally built by Bishop Pudsey in 1170; it was considerably widened and improved some years back. A handsome bridge of three arches, erected at the end of the last century, crosses the river at the extremity of the South Bailey.

Durham possesses manufactories of carpets, worsted stuffs, paper, and hata; with tan-works, breweries, and iron and brass foundries. The mustard made at Durham has acquired a high character in the market. The coal-field is extensive, and there are numerous coal-mines near the city. A market for corn and provisions is held on Saturday. Five fairs are held in the year; that held in March is a celebrated fair for horses.

The principal station of the Durham branch of the York and Newcastle railway is in Gilesgate; it is spacious and well arranged. Among old buildings in Durham may be named the Magdalene Chapel in Gilesgate, and the dormitory which belonged to the great monastery of Durham. This dormitory is one of the largest and finest buildings of the kind in England. Beaufort, or Bear Park, the summer retreat of the priors of Durham, is about two miles north-west from Durham. About three-quarters of a mile from the city is the site of the Maiden Castle, a fortress ascribed to the Romans, as also some remains of the Ermine-street. Saline, chalybeate, and sulphureous springs are found in the neighbourhood.

Durham, University of.—A college was founded here by the prior and convent of Durham in 1290, which was afterwards enlarged by the liberality of Bishop Bury and Bishop Hatfield. At the dissolution of monastic houses the endowments of Durham College were given to the dean and chapter, in the preamble to whose foundation-charter, granted by Henry VIII. in 1541, the promotion of learning is particularly referred to. Oliver Crenwell instituted a college at Durham which he endowed from the sequestered revenues of the dean and chapter. At the restoration these arrangements were overturned, and the dean and chapter received again their alienated emoluments. The present university owes its existence mainly to the exertions of the venerable Charles Tborp, D.D., archdeacon of Durham, who on the institution of the university was appointed to the office of warden. The university was opened for students in October 1833, under the provisions of an Act of Parliament obtained by the bishop and dean and chapter in 1832. In 1837 a royal charter of incorporation granted to the institution the style and title of 'the warden, masters, and scholars of the University of Durham.' The charter gave the power of conferring degrees, and confirmed the rights and privileges assured to it by Act of Parliament, or usually enjoyed by chartered universities. The bishop is visitor; the dean of Durham is in future to be warden. There are professorships of divinity and ecclesiastical history, Greek and classical literature, and mathematics and astronomy,

with readers in law, Hebrew, history and polite literature, and natural philosophy, and a lecturer in chemistry and mineralogy. Of University College the warden of the university is master. Bishop Hatfield's Hall, instituted in 1846, is for divinity students. It has four tutors, one of whom is principal, a censor, and a chaplain. The academical year consists of three terms of not less than eight weeks each, which are called Michaelmas, Epiphany, and Easter terms. The age of admission to the academical course is from 16 to 21; and for the divinity course between 21 and 26; beyond this age students must be admitted by special leave. Care has been taken that the charges for the necessary expenses of students shall be as moderate as is consistent with comfort, and any approach to extravagance is sedulously guarded against.

The diocese of Durham is in the province of York; it extends over the counties of Durham and Northumberland, and comprises 242 benefices. It is divided into three archdeaconries, Durham, Northumberland, and Lindisfarne. The chapter consists of the dean, the archdeacons, 9 canons, 19 honorary canons, 6 minor canons, a chancellor, a sacrist, and a precentor. The income of the bishop is fixed at 8000*l.* a year.

(*Surtees, Durham; Hutchinson, History of Durham; Ormsby, Sketches of Durham; Communication from Durham.*)

DURLACH, a town in Baden, capital of the circle of Durlach in the province of Mittel-Rhein, is situated on the Pfalz, at the foot of the Thurberg, a richly-cultivated hill, about 3 miles E. from Carlsruhe, the road to which is formed by a straight avenue of Lombardy poplars; in 48° 59' N. lat., 8° 25' E. long.; and has a population of about 5000. Durlach is a station on the Duke of Baden's railway, which runs up the right bank of the Rhein from Mannheim to Bäle. It is an old town, and was long the residence of the margraves of Baden-Durlach, one of whom, Charles William, built Carlsruhe, and removed the seat of government to that spot. The palace, called the Carlsruhe, and its gardens are the chief attraction of the place. In these gardens are four stone columns once set up on the road through the land of the Decumates, in the reigns of Caracalla, Heliogabalus, and Alexander Severus, as well as an altar to Hercules, and several stone tablets with Roman inscriptions upon them. The town has a church, a training school, and a town-hall. Trade, agriculture, and horticulture, the manufacture of wine, and mechanical pursuits form the chief occupations of the people. The environs are covered with orchards. Tobacco and earthenware are manufactured, and the town has one of the most extensive markets for grain in the grand duchy.

DURROW. [KILKENNY.]

DURSLEY, Gloucestershire, a market-town and the seat of a Poor-Law Union, is situated at the base of a steep hill, in 51° 40' N. lat., 2° 20' W. long.; distant 15 miles S. by W. from Gloucester, and 106 miles from London by road. The population of the town of Dursley in 1851 was 2617. The living is a rectory in the archdeaconry of Gloucester and diocese of Gloucester and Bristol. Dursley Poor-Law Union contains 10 parishes and a chapelry, with an area of 26,270 acres, and a population in 1851 of 14,818.

Dursley consists principally of two streets, which cross each other. The houses are irregularly built. The church is handsome and commodious. The Independents have a place of worship. The market-house is a neat freestone building erected in 1738. The market-day is Thursday; there are two annual fairs. A county court is held in Dursley, and there is a savings bank. The cloth manufacture is carried on to a considerable extent. In the neighbourhood is a quarry of topices, or puff-stones, which being soft is easily worked, but exposure to the air hardens the stone and makes it durable. The walls of Berkeley Castle, which were built of this stone some seven centuries ago, are still in good preservation.

DÜSSELDORF, a government or administrative circle in the Prussian province of the Rhine, is bounded N. by Holland, E. by Westphalia, S. by the government of Cologne, and W. by Holland and the government of Aachen. It has an area of 2065 square miles, and had at the close of 1849 a population of 907,151, among whom about 7500 were Jews, 900 Mennonites, and the rest Catholics and Evangelicals in the ratio of about seven to four. It is the most densely peopled portion of the Prussian dominions. The Rhine which enters this government near Rheinfeld, divides it into two nearly equal portions, and after receiving many small rivers quits it near Schenkenschanz, where it is 2300 feet in width. During its passage through Düsseldorf it is joined on the left bank by the Erft or Erff, and on the right bank by the Wipper, Dühne, Düssel, Selwarzbach, Angerbach, Ruhr, Emsche, and Lippe. The northern part of the government is level, and though it contains large tracts of sand, it has also a considerable extent of good arable land and pastures. The soil of the other parts is highly productive in general, but there are many forests and barren tracts in the mountainous districts on the right bank of the Rhine, particularly in the circle of Lennepe. The quantity of arable land is computed at 680,000 acres, and of meadows and pastures at 155,000 acres. There are extensive manufactures of woollens, silks, cotton, thread, leather, steel, iron, ironware and cutlery, tobacco, soap, &c. Iron, coals, and potters' clay are among the native products. Grazing and the rearing of horses and cattle are actively pursued. The government is

traversed by railroads which communicate with the Belgian, Hanoverian, and Prussian lines. The government is divided into thirteen circles, and contains many considerable towns, the inhabitants of which are extensively engaged in manufacturing enterprise. DÜSSELDORF the capital, BARMEN, CLEVES, CRELFELD, DUISBURG, and ELBERFELD are noticed in separate articles.

Among the other towns are—*Essen*, which stands 23 miles by railway N.E. from Düsseldorf, between the Ruhr and the Emsche, in a rich iron and coal district, has four churches, a gymnasium, an hospital, iron blast-furnaces, factories for steam machinery, cast-steel works, small-factories, &c., and a population of about 7500. *Emmerich*, a frontier fortress of Prussia, which is on the right bank of the Rhine, and has 7000 inhabitants; it stands in the centre of a rich agricultural district, and has a custom-house, four churches, considerable manufactures of woollens, soap, leather, hats, &c. *Lennepe*, 20 miles E. by S. from Düsseldorf, and not far from the left bank of the Wipper, has important cloth factories, and dye-works, and trades in wines, hats, iron-ware, &c.: population, 4900. *Mühlheim*, a pretty town on the right bank of the Ruhr, 15 miles N.E. from Düsseldorf, has large silk and cotton-factories, zinc and iron-works, establishments for the manufacture of steam machinery, and 9000 inhabitants, who are also largely engaged in the export of coals. *Neuss*, a fortress and flourishing manufacturing town, 4 miles S.W. from Düsseldorf, has 8000 inhabitants; it is said to be the *Novesium* of the Romans; up to the 13th century the Rhine flowed close past the walls, from which it is now nearly 2 miles distant; the church of St. Quirinus is the most important building; the manufactures are woollen-cloth, flannel, cotton-cloth and yarn, ribands, hats, starch, vinegar, soap, oil, &c.; there is also a good trade in corn, slates, timber, coals, quills, and stone. *Novesium* was sacked by Attila in A.D. 451; in 1254 the town joined the Hanseatic league. *Rondorf*, midway between Elberfeld and Lennepe, has 4000 inhabitants, who manufacture cutlery, silk, cotton-cloth, woollen-cloth, and linen. *Ruhrort*, at the entrance of the Ruhr into the Rhine, has a large trade in coals, yards for building steam-tugs, cotton-factories, workshops for the construction of steam and other machinery, and about 3500 inhabitants. A railroad $5\frac{1}{2}$ miles in length connects Ruhrort with the Oberhausen station on the Cologne-Minden railway. [ARENSBERG.] *Solingen*, 15 miles S.E. from Düsseldorf, has 6000 inhabitants, and is famous for the manufacture of sword-blades, foils, cutlery, and iron-ware. *Steele*, or *Steyle*, situated a short distance E. from Essen on the right bank of the Ruhr, and in the centre of the Westphalian coal-field, has about 2000 inhabitants. A railway 21 miles in length runs from Steele to the Vohwinkel station on the Düsseldorf-Elberfeld railway. *Weesel*, which stands at the junction of the Lippe with the Rhine, and on the right bank of the latter; is a fortress of the first class, defended by a citadel on the south side of the town, and connected by a bridge of boats with Fort Blücher, on the left bank of the Rhine; the town including the garrison has 13,000 inhabitants, who manufacture woollen and cotton-cloths, soap, hats, cordage, leather, tobacco, beer, &c., and carry on a considerable trade with Holland by the Rhine, and with Westphalia by the Lippe, which has been made navigable; the chief articles of commerce are corn, timber, coals, salt, wine, brandy, and colonial produce; it has a gymnasium, seven churches, a synagogue, a town-house, an arsenal, house of correction, and a number of distilleries.

DÜSSELDORF, the capital formerly of the duchy of Berg, now of the government of Düsseldorf in Rhenish Prussia, is situated in the centre of a fertile country on the right bank of the Rhine, at the point where the Düssel joins that river, in $50^{\circ} 13' N. \text{ lat.}, 6^{\circ} 47' E. \text{ long.}$, at an elevation of about 100 feet above the level of the sea, 22 miles by railway N. from Cologne, and has, including the suburbs, a population of 31,000, who are chiefly Roman Catholics. It was raised from the rank of a village to that of a municipal town by Adolphus V., duke of Berg, in 1258; it was first united to the Prussian dominions with the duchy of Berg in 1815. The flying bridge across the Rhine dates from the year 1680. Düsseldorf having been carefully fortified, acquired the character of a fortress in the middle of the last century; but it was never tenable against a serious assault, and the defences were razed by virtue of the treaty of Lunéville in 1802. It is one of the best-built towns on the Rhine, and has more the appearance of a small German capital than any of the other Rhenish towns. The streets are broad and planted with avenues of trees, and contain many showy shops. Düsseldorf is surrounded by extensive garden-grounds, and consists of three quarters, namely: the Altstadt, on the right bank of the Düssel, which was the whole extent of the town until the beginning of the 17th century; the Neustadt, on the Rhine; and Carlstadt, the handsomest part of Düsseldorf, south of the Old Town, and on the left bank of the Düssel, which takes its name from Carl Theodore, the elector-palatine, who founded it in 1786. There are five squares or open spaces, on one of which, the old market-place, stands a colossal equestrian statue in bronze of Johann Wilhelm, elector-palatine. Among the buildings of note are the old electoral palace, which is now occupied by the Academy of Arts and the Royal Mint, and in the court-yard of which is another statue of Johann Wilhelm in marble. The town had formerly a famous picture-gallery, founded in 1710 by the elector Johann Wilhelm; but the paintings were removed to Munich in 1803, and those which it now contains are said to be of little

value. There is however a thriving school of painting in the town, and an exhibition of paintings is held annually in a building for the purpose adjacent to the old electoral palace. The other buildings of consequence are the present palace, where the governor of the province resides; the government-house, once a college of Jesuits; the observatory, town-hall (erected in 1567), courts of law, barracks, theatre, gymnasium, and a public library of above 30,000 volumes. Düsseldorf has seven churches, two of which belong to the Protestants; the most remarkable are St. Lambert's, and St. Andrew's (the oldest in the town, which contains some good pictures and the tombs of several of the dukes of Berg, &c.); and the church of the Jesuits, a handsome and richly-decorated structure with two steeples, beneath the main altar of which other sovereigns of Düsseldorf are interred. Besides these there are a synagogue, three nunneries, an orphan and a lunatic asylum, two hospitals, an infirmary, and various schools.

Düsseldorf is the seat of the provincial government and tribunals of justice. A court of assize is held in the town. It has manufactories of woollens, cottons, leather, hats, tobacco, jewellery, mirrors, stockings, &c., and carries on a considerable trade in cotton, wool, wines and spirits, colonial produce, coals, timber, slates, and other commodities. It has been a free port since 1829. Adjoining the town are the royal gardens and a botanic garden. The growing importance of Düsseldorf as a commercial port is shown by the increase of its imports and exports, which in 1836 were respectively 855,533 cwts. and 113,144 cwts.; in 1845, 1,535,926 cwts. and 206,370 cwts. A large portion of the imports were for the use of Elberfeld and other manufacturing towns in the neighbourhood. The establishment of railroads has increased the commercial advantages of the town. Steamers ply regularly up and down the Rhine.

DWINA, or DVINA, a river of Northern Russia, the largest that falls into the White Sea, originates in the confluence of two smaller rivers, the Sukhona and the Jug (Yug), near Veliki-Usstiu, in $60^{\circ} 46' N. \text{ lat.}, 46^{\circ} 30' E. \text{ long.}$ The Sukhona, a considerable stream, which flows out of Lake Kubinskoi, and runs with a very tortuous channel and in a north-easterly direction through the south-western parts of the government of Vologda, describes a course (along the whole of which it is navigable), of about 235 miles between that lake and its junction with the Jug. The Jug, flowing down from a morass on the northern range of the Volga Mountains, at the southernmost point of the same government, and in the early part of its course washing the walls of Nikolsk in its progress northward to its confluence with the Sukhona, has a length of about 248 miles. These two rivers unite below Veliki-Ustiu, and the river is thenceforward denominated the Dwina ('double river.') The Dwina flows in a north-westerly direction through the western districts of the government of Vologda, becomes navigable before it quits them, traverses the south-westerly part of the government of Archangel, and discharges its waters through five arms below the town of Archangel into the Bay of Dwinskaya, in the White Sea. Its length in a straight line from the confluence of the Sukhona and the Jug to its mouth is about 312 miles, but, including its windings, it is estimated at about 736 miles. The Dwina is navigable from the close of April to the first week in November for a distance of about 240 miles; but owing to shoals at its mouth vessels of more than 14 feet draught cannot enter it. [ARCHANGEL, vol. i., cols. 439, 442.] It generally flows between high banks, and is on an average from 500 to 600 feet in width; at Archangel this width is increased to four miles. Its chief tributaries are, on its right bank, the Vytchegda and the Pinega. The source of the *Vytchegda* is on the declivity of the Vertshoturi range of the Ural Mountains: this river has numerous bends, and falls into the Dwina in the centre of the government of Vologda, from which point the Dwina becomes navigable. The whole length of the *Vytchegda* is not less than 500 miles. The *Sysola*, which flows northward from the mountains of Viatka, joins the *Vytchegda* on the left bank at Ust-Sysolsk in the government of Vologda. The *Pinega* rises in the north of the government of Vologda, not far from the right bank of the Dwina, in about $60^{\circ} 20' N. \text{ lat.}$, and flows in a very tortuous course northward to Pineg, in the government of Archangel. From Pineg the river is navigable, and flows westward into the Dwina a little above the town of Kholmogory. The length of the *Pinega*, reckoning all its windings, is little short of 300 miles. Soon after it has received the *Pinega* on its right bank, the Dwina forms a number of islands, which extend to its mouth. On its left bank the Dwina receives the *Vaga*, which is navigable for about 75 miles, and joins the Dwina above Poinskoi, in the government of Archangel, and the *Emtsor Yamza*, a river navigable for about 90 miles, which has its confluence with the Dwina about 36 miles above Vilsk in the same government. The tide is perceptible in the Dwina nearly 30 miles above Archangel. The basin of the river occupies an area of about 123,900 square miles; the bed is generally of clay, covered with a thin layer of sand. The Dwina abounds in fish. [ARCHANGEL.]

DYLE. [SCHELDE.]

DYRRACHIUM. [DURAZZO.]

DYSART, Fifeshire, Scotland, a royal burgh and sea-port, is situated on the northern shore of the Frith of Forth, about 16 miles N. by E. from Edinburgh, and 14 miles E. from Dunfermline, in $56^{\circ} 7' N. \text{ lat.}, 3^{\circ} 6' W. \text{ long.}$ Dysart unites with Kirkcaldy, Burntisland, and Kinghorn in returning one member to the Imperial Parliament: the

population of the burgh in 1851 was 1610; that of the parliamentary burgh was 8041.

The tower of the old church of Dymart is still entire. The town consists chiefly of three streets and a small square. The square contains the public offices. The town is lighted and cleansed under police regulation. Dymart has a small harbour, attached to which is a large wet dock. Besides the parish church there are a Free church and a United Presbyterian meeting-house. A school-house has been erected by subscription, aided by a government grant. At Pathhead, a populous village in the neighbourhood of Dymart, a school has been

similarly erected, and 200 children are there also clothed and educated in an institution, the munificent endowment of Mr. Philp, a merchant in Kirkcaldy, who left 80,000*l.* to be devoted to establishing schools in Kirkcaldy, Pathhead, Abbotshall, and Kinghorn. At Pathhead are a chapel of ease, a Free church, and a Dissenting chapel. At Dymart is a station of the Edinburgh, Perth, and Dundee railway; and there are packet-vessels twice a week to Leith. The chief manufacture is the spinning of flax and weaving of cloth. Limestone, sandstone, and ironstone are quarried.

(*New Statistical Account of Scotland.*)

E

EALING. [MIDDLESEX.]

EARLSTON. [BERWICKSHIRE.]

EASINGTON, Durham, a village, and the seat of a Poor-Law Union in the parish of Easington, is situated in 54° 47' N. lat., 1° 21' W. long., distant 10 miles E. from Durham, and 263 miles N. by W. from London. The population of the township in 1851 was 916. The living is a rectory in the archdeaconry and diocese of Durham. Easington Poor-Law Union contains 19 parishes and townships, with an area of 34,780 acres, and a population in 1851 of 21,480. The village is situated on elevated ground, about 2 miles from the sea. The parish church, a lofty structure, chiefly in the early English style, with a Norman tower, erected upon high ground at the western end of the village, is a useful landmark for vessels at sea. There are places of worship for Wesleyan and Primitive Methodists, and a Free school. The inhabitants are chiefly employed in the collieries or in agriculture. (*Communication from Easington.*)

EASINGWOLD, North Riding of Yorkshire, a market-town and the seat of a Poor-Law Union, in the parish of Easingwold, is situated in 54° 7' N. lat., 1° 10' W. long.; distant 13 miles N. by W. from York, and 212 miles N. by W. from London. The population of the township in 1851 was 2240. The living is a vicarage in the archdeaconry of Cleveland and diocese of York. Easingwold Poor-Law Union contains 29 parishes and townships, with an area of 61,459 acres, and a population in 1851 of 10,211.

The situation of Easingwold, on the line of the great north road, made it formerly a place of importance. The market for agricultural produce is still large. The surrounding district is chiefly agricultural: much land is occupied for grazing purposes; and a good breed of horses is reared. The parish church overlooks the town, commanding an extensive prospect of the Vale of Mowbray and the ancient forest of Galtrea. The Primitive and Wesleyan Methodists, Independents, and Roman Catholics have places of worship. The Grammar school, founded in 1784, has an income from endowment, &c., of 85*l.* a year, and had 60 scholars in 1851. A county court is held in Easingwold. Friday is the market-day: fairs are held in July and September. There are an iron and brass foundry, a tan-work, and two rope-works. In the vicinity are some chalybeate springs.

(*Communication from Easingwold.*)

EAST GRINSTEAD, Sussex, a market-town, and the seat of a Poor-Law Union, in the parish of East Grinstead, is situated in 51° 7' N. lat., 0° 1' W. long.; distant 22 miles N. by W. from Lewes, and 28 miles S. by E. from London by road. The population of the parish of East Grinstead in 1851 was 3820. The living is a vicarage in the archdeaconry of Lewes and diocese of Chichester. East Grinstead Poor-Law Union contains 7 parishes, with an area of 57,615 acres, and a population in 1851 of 13,223.

The town of East Grinstead is pleasantly situated on an eminence; it consists chiefly of one street, which is irregularly built. The parish church is a neat stone edifice, with an embattled tower. There are places of worship for Baptists, Wesleyan Methodists, and the Countess of Huntingdon's Connexion. An Endowed school, founded as a Grammar school in 1780, is now an English school: the income from endowment is about 44*l.* a year; the number of scholars in 1852 was 30. There are a National school and a savings bank. Sackville College, a quadrangular stone building, erected in 1616, is an institution founded by Robert Earl of Dorset, for aged unmarried persons of both sexes, each of whom has a separate apartment, and 8*l.* a year. Many of the inhabitants are employed in shoemaking and in pen-making. The market day is Thursday, and there is a stock market on the last Thursday in each month. Fairs are held on April 21st, July 13th, and December 11th. A county court is held in the town. East Grinstead was disfranchised by the Reform Act.

(*Horsfield, Sussex; Communication from East Grinstead.*)

EAST INDIES. The portion of the globe to which the name of India, or the East Indies, is given, is usually understood to comprehend the peninsula of Hindustan lying to the east of the river Indus, and thence eastward as far as the boundary of the Chinese empire, by which empire and by Tartary, India is also bounded on the north. The East Indies include also the islands of the Indian Ocean, which lie between Hindustan and Australia as far north as the Philippine Islands, and as far east as Papua, but without including either the

Philippines or Papua. A general description of the East Indies will be found under the article HINDUSTAN.

EAST PRESTON, Sussex, a village and the seat of a Poor-Law Union, in the parish of East Preston, is situated in 50° 48' N. lat., 0° 28' W. long., on the south coast, 23 miles W.S.W. from Lewes, 60 miles S.S.W. from London by road, and 66 miles by the London, Brighton, and South Coast railway. The population of the parish in 1851 was 310. The living is a vicarage annexed to the vicarage of Ferring, in the archdeaconry and diocese of Chichester. East Preston Poor-Law Union contains 19 parishes and townships, with an area of 29,890 acres, and a population in 1851 of 14,847. The population is wholly agricultural. The parish church consists of a nave, erected in the 15th century, and has a handsome stone spire. In the village is a National school. (*Horsfield, Sussex; Communication from East Preston.*)

EAST RETFORD, Nottinghamshire, a municipal and parliamentary borough and market-town and the seat of a Poor-Law Union, is situated in 53° 19' N. lat., 0° 37' W. long.; distant 33 miles N.N.E. from Nottingham, 141 miles N.N.W. from London by road, and 133½ miles by the Great Northern railway. The population of the borough and parish of East Retford in 1851 was 2943; that of the parliamentary borough, which includes numerous adjacent parishes and districts, was 46,054. The living is a vicarage in the archdeaconry of Nottingham and diocese of Lincoln. East Retford Poor-Law Union contains 50 parishes and townships, with an area of 88,730 acres, and a population in 1851 of 22,756. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. For sanitary purposes the borough of East Retford and the parish of West Retford are each under the management of a Local Board of Health.

East Retford is seated on the right bank of the river Idle, a feeder of the Trent, on what was formerly the Great North Road. In Domesday Book it is called Redeford. On the west a handsome stone bridge of five arches connects East Retford with the smaller and more modern town of West Retford. The houses in general are well built: the streets are paved, and are well lighted with gas, at the expense of the corporation. An extension of the town has of late years taken place on the south side, and is called South Retford. The town-hall is a handsome building. The market-place is an irregular quadrangle, affording ample accommodation. In the centre of the market-place is a pillar, erected on the site of an ancient cross, called the broad stone. The parish church, a spacious and handsome edifice, of various styles, was founded about 1258. It consists of a nave, two aisles, chancel and transept, and has a square tower, 97 feet high. West Retford church is a small building, with a tower and an elegant crocketed spire. The Independents and Wesleyan and Primitive Methodists have places of worship. There are in East Retford a Free Grammar school founded by king Edward VI., which has an annual income of 450*l.*; the number of scholars in 1852 was 22. The affairs of this school are in chancery. In the town are National and Infant schools; a literary and scientific institution, with a library; and a savings bank. There are almshouses for 18 poor women; Slowick hospital is for 6 poor men. The hospital of the Holy Trinity in West Retford, founded in 1664 by Dr. John Darrell, is for a master and 16 brethren. Three coach-making establishments and two tanneries afford some employment. There are corn-mills and paper-mills. The canal from Chesterfield to the Trent at Stockwith passes through the borough: the traffic on the canal is chiefly in corn, coal, &c. The market, held on Saturday, is well supplied with dairy produce, and in autumn with hops, which are extensively raised in the neighbourhood: fairs are held on March 23rd, and October 2nd, and there is one great market yearly for horses, cattle, cheese, and hops. The low level of the town has exposed it to occasional inundations from the overflow of the Idle, which have sometimes done considerable damage.

(*Piercy, History of Retford; Communication from East Retford.*)

EAST STONEHOUSE. [PLYMOUTH.]

EAST WARD, Westmoreland, the eastern division of the county, gives name to a Poor-Law Union. The ward contains an area of 177,910 acres, and a population in 1851 of 13,660. It is bounded N. by Cumberland, N.E. by Durham, and S.E. by Yorkshire. East Ward

Poor-Law Union contains 30 parishes and townships, with an area of 175,400 acres, and a population in 1851 of 13,664.

EASTBOURNE, Sussex, a village (formerly a market-town) and the seat of a Poor-Law Union, in the parish of Eastbourne, is situated in 50° 46' N. lat., 0° 16' E. long., distant 16 miles S.E. by E. from Lewes, 63 miles S.S.E. from London by road, and 65 miles by the Brighton and South Coast railway. The population of the parish in 1851 was 3133. The living is a vicarage in the archdeaconry of Lewes and diocese of Chichester. Eastbourne Poor-Law Union contains 14 parishes and townships, with an area of 36,373 acres, and a population in 1851 of 8346.

Eastbourne is believed to be the site of the Roman station *Portus Anderida*. Many Roman remains have been found in the neighbourhood. The village consists of three portions: the oldest including the parish church and some old houses, is farthest inland; a hamlet, containing a new church, and some good shops, inns, and private residences, is nearer the shore; and close to the beach is a cluster of dwellings known as *Sea Houses*, to which have been recently added a beautiful esplanade, and many fine mansions. The parish church consists of a nave, with side-aisles, a large chancel, and a lofty antique tower. In the church are some interesting monuments. The new church, a handsome edifice recently enlarged, is near *Sea Houses*. There are three small places of worship for Dissenters, National schools, and an Infant school. Eastbourne is much resorted to for sea-bathing. Along the shore of the bay are situated some of the martello towers erected about the beginning of the present century. There is also a fort capable of accommodating 450 men, and provided with 18 guns—24- and 64-pounders—and some mortars. At Holywell, near Eastbourne, are chalybeate springs. Some remains exist of a small establishment of Black friars.

(Horsfield, *Sussex*; *Communication from Eastbourne*.)

EASTER ISLAND, an island in the eastern part of the Pacific Ocean, more than 2000 miles distant from the west coast of South America, is situated near the point 27° 20' S. lat., and 109° 30' W. long. It is about thirty or forty miles in circuit, with a stony and hilly surface, and an iron-bound shore. The hills rise to the height of about 1200 feet. At the southernmost extremity of the island is an extinct volcano. Lava seems to form the principal component of the hills, which rise gradually and are covered with grass. The island has no safe anchorage, no wood for fuel, no fresh water, and no domestic animals, except a few fowls. The inhabitants, who number about 2000, live on yams, potatoes, and sugar-cane. In physiognomy, language, and manners, they resemble the inhabitants of the other groups of islands lying farther west. On the island are a number of colossal statues, some of which are 15 or even 18 feet high; they stand on platforms, which have been made with a considerable degree of art.

EASTHAMPTSTEAD, Berkshire, a village and the seat of a Poor-Law Union, in the parish of Easthampstead, is situated in 51° 24' N. lat., 0° 45' W. long.; distant 11 miles E.S.E. from Reading, and 29 miles W.S.W. from London by road. The population of the parish in 1851 was 698. The living is a rectory in the archdeaconry of Berks and diocese of Oxford. Easthampstead Poor-Law Union contains 5 parishes, with an area of 27,600 acres, and a population in 1851 of 6343. Easthampstead is an agricultural parish.

EASTRY, Kent, a village and the seat of a Poor-Law Union, in the parish of Eastry, is situated in 51° 15' N. lat., 1° 18' E. long., distant 10 miles E. by S. from Canterbury, and 65 miles E.S.E. from London. The population of the parish of Eastry in 1851 was 1697, including 464 inmates of the Union workhouse. The living is a vicarage, with the curacy of Worth annexed, in the archdeaconry and diocese of Canterbury. Eastry Poor-Law Union contains 30 parishes, with an area of 45,659 acres, and a population in 1851 of 23,848. Eastry is quite a rural village, and has no trade of any consequence. The parish church is a large and handsome edifice in the early English style. The Wesleyan Methodists have a place of worship, and there are National schools.

EATON-BRAY. [BEDFORDSHIRE.]

EATON-SOCON. [BEDFORDSHIRE.]

EBERSBACH. [LAUSITZ.]

EBREUIL. [ALLIER.]

EBRO (the *Iberus* of the Romans), a river of Spain, rises in Castilla la Vieja, in 43° N. lat., 4° 3' W. long., and after a course, generally east-south-east, of about 350 miles, enters the Mediterranean Sea, in 40° 42' N. lat., 0° 50' E. long.

The source of the Ebro is in the modern province of Santander, at a great elevation, on the side of a ridge which extends from the summit-level of the Cantabrian mountain-chain southward towards the city of Burgos. The stream flows east about 10 miles past the small town of Reynosa, and then south about 10 miles more, after which its course is east past Frias, east-south-east and south-east past Miranda and Haro, and east-south-east past Logroño, Calahorra, Tudela, and Zaragoza, till it receives the Guadalupe, when it turns to the north. It then passes by Mequinzenza, where it receives the Segre, and making a semicircular bend to the south-east, passes by Mora, whence its course is south to Tortosa, and east to the Mediterranean. The main stream enters the sea opposite the island of Buda, but two branches have previously separated from it, one of which flows north

into the Gulf of Amposta, and the other south into the Gulf of Alfaques.

With the exception of the marshy land at the mouth of the river, and the level tract between Zaragoza and Mequinzenza, the course of the Ebro is generally through narrow and occasionally rocky valleys. Shoals and rapids interrupt the navigation, but a canal has been constructed which extends from near Tudela to about 40 miles below Zaragoza. It runs parallel to the south bank, and is to be extended to Tortosa when funds have been provided.

In passing through Castilla la Vieja the Ebro receives the Nebo on the northern bank, and the Oca, the Teron, and the Oja, on the southern bank. In crossing Navarra it receives the river Aragon. The principal affluents which enter it in the province of Aragon are described in the article ARAGON.

ESBAMBUL. [ABOUSAMBUL.]

ECBATA'NA, (*Ἐκβάτῃνα*), the ancient capital of Media, founded by Deioces, (Herod. i. 98.) The genuine orthography of the word appears to be Agbátana (*Ἀγβάτῃνα*; see Steph. Byzant. v. *Ἀγβάτῃνα*), as it is now written in the text of Herodotus, and as we are informed by Stephanus it was written by Ctesias. It appears in the 'Itinerary' of Isidore of Charax under the form of Apobátana. In the Book of Judith (c. i.) is a curious account of the building of Ecbatana, and of the enormous strength of its walls and fortifications.

Ecbatana was situated, according to the testimony of ancient writers, in a plain at the foot of a lofty mountain called Orontes. According to an ancient popular tradition Ecbatana was founded by Semiramis (Diod. ii. 13), but Herodotus ascribes to it a later origin. Herodotus, who had probably seen the place, describes it as built on a conical kind of hill, and consisting of seven circular inclosures or walls, one within another, each wall being higher than that which surrounded it, and the innermost wall, which surrounded the palace, of course the highest of all. Ecbatana being a high and mountainous country was a favourite residence of the Persian kings during summer, when the heat at Susa was almost insupportable. The city, according to Polybius, was not only of vast strength but of extraordinary splendour: the royal palace, in particular, was of the richest materials and workmanship; the only wood used in it was cedar and cypress, and it was wholly covered with plates of gold and silver; most of these plates were, he says, carried off by the soldiers of Alexander, Antigonus, and Seleucus. Ecbatana was the scene of the great events which marked the childhood of Cyrus; and it was at Ecbatana that Alexander's favourite, Hephestion, died; and Alexander is said to have destroyed the celebrated temple of Æsculapius there in grief for him.

The site of Ecbatana has been a matter of dispute; but the best recent geographers have generally agreed in placing it on the site of the modern Hamadan. The route of commerce between the low country in the neighbourhood of the ancient Seleucia and the modern Baghdad and the high table-land of Iran is determined by the physical character of the country, and has continued the same from the earliest recorded history of those countries to the present day. The places marked in the 'Itinerary' of Isidore as lying between Seleucia and Ecbatana are the places indicated by modern travellers as lying on the route between Baghdad and Hamadan. This question is fully discussed in No. 4 of the 'Journal of Education,' and in Thirlwall's 'History of Greece,' v. ii., App. 2.

Recently indeed a modification of the received view has been advanced by Colonel Rawlinson, and supported by him with such a well-digested array of evidence as to command respectful attention, apart from the authority of his high reputation. He believes that there were two independent Median capitals named Ecbatana; the one in the lower country (*Media Magna*), which occupied the site of Hamadan; the other in the mountainous country of Upper Media, or Atropatene, the site of which is now marked by the ruins of *Takht-i-Soleiman*, in the province of Azerbáijan (36° 25' N. lat., 47° 10' W. long.). This theory is shown to receive much corroboration from various passages in ancient and mediæval, as well as oriental writers, and a careful examination of the country itself. We can here only refer the reader to the evidence so ably adduced in the 'Journal of the Royal Geographical Society,' vol. x. p. 125, &c. The title merely signified a treasure city, and the above two Median capitals were not the only places which were called Ecbatana. ('Geographical Journal,' xi. 31.) It was in a city of the same name in Syria of uncertain position (Herod. iii. 64) that Cambyzes died.

Hamadan, which is on or near the site of the Ecbatana of *Media Magna*, is near the parallel of 35° N. lat. and in 48° E. long., in a low plain at the foot of Mount Elwud, a mountain which belongs to the chain which forms the last step in the ascent from the lowlands of Irak Arabi to the high table-land of Iran. [ASIA, vol. i., col. 582.] "During eight months in the year the climate of Hamadan is delightful; but in winter the cold is excessive, and fuel with difficulty procured. The plain is intersected by innumerable little streams, covered with gardens and villages, and the vegetation is the most luxurious I ever beheld." (Kinneir's 'Persia,' p. 126.) Kinneir says that the summit of Elwud is tipped with continual snow, and seldom obscured by clouds. Hamadan is said to contain about 10,000 inhabitants, a large manufacture of leather, and also a considerable trade, owing to its position on the high road from Baghdad to Tehran and Isphahan.

ECCLES. [LANCASHIRE.]

ECCLESALL BIERLOW, West Riding of Yorkshire, a village and the seat of a Poor-Law Union, in the parish of Sheffield, is situated close to the southern boundary of Yorkshire, in 53° 21' N. lat., 1° 31' W. long.; distant 54 miles W.S.W. from York, and 162 miles N.N.W. from London. The population of the township of Ecclesall Bierlow, which includes 26 hamlets, was 24,552 in 1851. Ecclesall Bierlow Poor-Law Union contains 7 parishes and townships, with an area of 26,850 acres, and a population in 1851 of 37,911. The inhabitants of the township are chiefly occupied in the same manufactures as are carried on in Sheffield, of which borough and parish the township forms an important constituent part. The Wesleyan Methodist institution called Wesley College, founded in 1838, which stands within the township, had 150 students in 1853.

ECCLESHALL. [STAFFORDSHIRE.]

ECIJA. [SEVILLA.]

ECKMÜHL, a small village in Bavaria, situated on the Laber, in 48° 47' N. lat., 12° 3' E. long., owes its celebrity to the signal victory which the French and Bavarians, under the emperor Napoleon I., gained over the Austrians, commanded by the archduke Charles, April 22, 1809. In testimony of the skill and intrepidity which Marshal Davoust displayed on this occasion Napoleon conferred the title of Prince of Eckmühl upon him.

ECUADOR, a republic of South America, extends from north to south between 1° 40' N. lat. and 5° 50' S. lat., and between 70° 20' and 80° W. long. It is bounded N. by the republic of New Granada; E. by the empire of Brazil, S. by the republic of Peru, and W. by the Pacific Ocean. The area may be vaguely estimated at about 300,000 square miles; the population at about 665,000.

Coast-line, Surface, &c.—The southern boundary of the coast of Ecuador is the Punta de Malpello, 3° 30' S. lat., the termination of the left bank of the river Tumbez, which from the Andes to the Pacific is regarded as the boundary between the republics of Ecuador and Peru. From this point to Point Mangles, 1° 35' N. lat., at the mouth of the Mira River, the boundary on the Pacific between the republics of Ecuador and New Granada, the coast has a broken convex line, with a general bearing towards the north-east. Punta de Malpello forms the southern extremity of the Gulf of Guayaquil; from it to Punta de Carnero the northern extremity of the gulf is about 70 miles. At the mouth of the Guayaquil River is the large island of Puna, and several smaller islands and sand-banks lie in the channel of the estuary, but the river is navigable for vessels of considerable burden up to Guayaquil, the principal port town of the republic. From Punta Carnero to Punta Santa Elena, about 14 miles, the coast bears north-west, it then curves round to the east and north, and forms the wide open bay of Santa Elena, in which there is good anchorage in three and a half fathoms water. As the coast bears round towards Cabo San Lorenzo there are several small islands and rocks off the shore, and one, La Plata Island, of somewhat larger size a few miles north from it. From San Matheo Point, a few miles north from Cabo San Lorenzo, the coast again makes a bold sweep round to Cape Passado and forms the large open Bahia Manta, near the centre of which is the smaller bay of Caracas, formed by the estuary of the river of the same name. From Cape Passado to Galera Point the general bearing of the coast is north-north-east, and like the entire coast from Punta Santa Elena it is bold and rocky, lofty hills and low mountains, the lower spurs of the Andes, rising to heights varying from 500 to 1500 feet. From Galera Point the coast bears away east-north-east to the mouth of the Matage River, whence it turns northward and forms Sardinias Bay; Point Mangles, the northern extremity of this bay, is the boundary on the Pacific of the territory of Ecuador. Along the coast there are no large towns; and the few small harbours which it affords are only visited by small coasting-vessels.

About one-third of the surface of the country is mountainous. Ecuador contains almost the whole of the Equatorial Andes and the hilly country between them and the Pacific. The Andes enter the country between the Bay of Guayaquil and San Jaen de Bracamoros, and thence run in a northern and north-eastern direction to the northern boundary. This chain forms in the southern and northern extremity two large mountain-knots, that of Loja, between 5° 30' and 3° 15' S. lat., and that of Los Pastos between 20' and 1° 13' N. lat. The first occupies, according to Humboldt, 11,650 square miles, and the second 8700 square miles. Between these two mountain-knots the Andes form an enormous mass of rocks, covering in width an extent of 70 or 80 miles. Both declivities are rather steep, but especially that towards the eastern plains. On both edges of this mass are lofty ranges running parallel to one another, and crowned by numerous summits, several of which rise above the line of perpetual snow. The highest ridges of these ranges may be about 50 miles distant from one another; and between them extends a longitudinal valley, which measures from 15 to 20 miles across, and extends nearly 300 miles in length. At two points transverse ridges unite the two ranges, and thus the great valley is divided into three smaller valleys. The most southern of these valleys, that of Cuenca, extends from 3° 15' to 2° 27' S. lat., with a mean elevation above the sea of about 7800 feet. Its waters join the Rio de San Jago, a tributary of the Amazonas. The summits of the ranges which surround it rise only to about 10,000 feet and nowhere attain the snow-line,

except the range of Assuay (2° 27' to 2° 30' S. lat.), which separates the valley of Cuenca from that of Alausi and Ambato, the great road over which rises near the Ladera de Cadlud to 15,520 feet. To the north of this transverse ridge extends the valley of Alausi and Ambato from 2° 27' to 0° 46' S. lat. Its surface is about 8000 feet above the sea. Its waters run off to the Marona and Pastaza, two tributaries of the Amazonas. On the range east of this valley are the volcanoes of Sangay 16,827 feet, Tunguragua 15,960 feet, Cotopaxi 18,875 feet, and Carguairazo 16,663 feet. A short distance south of Carguairazo is the lofty Chimborazo, the highest summit of the Equatorial Andes, being 21,242 feet above the sea. The transverse ridge which separates the valley of Alausi and Ambato from that of Quito is called the Alto de Chisinche. It is only about 500 feet above the plains contiguous to it on the northern side, and is of inconsiderable width. At its western extremity stands the Volcano of Cotopaxi, and at its eastern the Yliniza, which rises to 17,376 feet. This Alto de Chisinche forms the watershed between the Pacific and Atlantic seas. The valley of Quito extends from 40' S. lat. to 20' N. lat. to the mountain-knot of Los Pastos; and has a mean elevation above the sea of about 9600 feet. Its waters run off by the Rio Pita, which joins the Rio de las Esmeraldas, and thus flows into the Pacific. On the range standing east of this valley are the Volcano de Antisana 19,137 feet high, and the Cayambe Ureú on the equator 19,534 feet high. On the western range are the Volcano de Pichincha 15,936 feet high, and the Cotacache which rises to 16,448 feet. On the mountain-knot De los Pastos are several volcanoes, as those of Chumbal 16,824 feet, Chile and Pasto 13,740 feet; this last, which gives its name to the group, is however just beyond the northern limits of Ecuador. The elevated plains which are inhabited on that mountain region are 10,240 feet above the sea.

The country between the Andes and the Pacific is filled up with mountains of various elevations, which towards the shores mostly sink down to hills. The shores themselves are high, but not of great elevation, except in a few places, as at Cape San Lorenzo. The country along the Rio de Guayaquil forms an exception. Here a plain extends several miles in width, and is so low that part of it is covered by the inundations of the river in the rainy season, and part has been changed into a swamp. Along this valley are extensive plantations of cacao.

The great plain east of the Andes is partly wooded and partly a savannah; but in its present state it is of little importance, being only inhabited by the natives. The north-eastern portion of it is said to be occupied by a part of the low mountain range called by Humboldt the Sierra Tunuhy. Numerous lakes and stagnant pools occur in the great plain.

Hydrography, Communications, &c.—The principal river of Ecuador is the *Amazonas*, which is here called *Marañon*, and sometimes *Tunguragua*. Where it leaves Peru, and begins to form the boundary-line between the two republics, commence the series of cataracts and rapids with which it issues from the Andes. Near San Jaen de Bracamoros is the Pongo de Rentema, where the river, according to Humboldt, is only 1232 feet above the level of the sea. Lower down between Santiago de las Montañas and Borja, is the rapid or Pongo of Manseriche, where the river is narrowed to about 150 feet, and for about 7 miles rushes down with incredible velocity. Below this Pongo the Amazonas becomes navigable, and continues so to its mouth. [AMAZONAS.] Within the boundary of Ecuador, the Amazonas receives the Marona, Pastaza, Tigre, and Napo, which descend from the eastern declivities of the Andes. The Putumayo and the Yapura, which descend from the same range and in the same direction, fall into the Amazonas within Brazil. The rivers which descend from the western side of the Andes are numerous, have a comparatively short course, and are of little importance. The most remarkable are the Rio de las Patias, Rio de las Esmeraldas, the Rio Santiago, the Rio Mira, and the Rio de Guayaquil; all of these are navigable by boats, but the Guayaquil is the only one navigated by large vessels.

The *Guayaquil* is formed by the union of numerous streams which issue from the western slopes of the Andes. It becomes available for commercial purposes at Bahaboyo, or Caracol, about 70 or 80 miles from its mouth, river boats ascending to one or other of these places according to the season: ships of considerable burden can ascend at full tide up to the town of Guayaquil. Here the river has been swelled by the junction of its principal affluents, the Dañili and the Babo, and has increased to a great size. Opposite the city of Guayaquil it is 2 miles across, and it continues to expand largely to its mouth. Below Guayaquil the channel is impeded by numerous rocks and small islands. At its mouth is the larger island of Puna. Where the river falls into the Pacific it is known as the Gulf of Guayaquil, the extreme points of which, as already noticed, are 70 miles apart.

All the maritime commerce of Ecuador is concentrated in that of Guayaquil, from which town there is a road to Quito, running first along the banks of the Rio de Guayaquil to Caracol, and then for some miles through a low and level country. It then begins to ascend the western declivity of the Andes, and between Caluma and Guaranda the ascent is extremely steep. From Guaranda it runs over the plain to Ambato, and thence to Quito. The great road which connects New Granada and Peru runs through the high valleys of Ecuador.

It leads from Almaguer in New Granada over the Páramo de Puruguay (9408 feet above the sea) to Pasto (8578 feet), and hence over the Páramo de Boliche (11,504 feet), and the Alto de Pucara (10,400 feet) to Ibarra (7368 feet), and Quito (9536 feet). In the Alto de Chisinche it attains an elevation of about 10,000 feet. Hence it traverses Ambato (8864 feet), Riohamba Nueva (9472 feet), and Alausi (7984 feet), and attains on the Páramo de Assuay 15,536 feet. In passing this range many lives are annually lost. From Cuenca (8640 feet) it runs over the Alto de Pulla (10,000 feet) to Loja (6768 feet), and hence to Ayavaca (8992 feet) in Peru. From the latter place it proceeds to Truxillo and Lima. Formerly European commodities were imported into Ecuador by this road from New Granada, but nearly the whole country now receives them from Guayaquil.

Climate, Soil, Productions.—The temperature of course differs considerably in the elevated valleys which are surrounded by the high peaks of the Andes, and in the low countries on both sides of the range. In the valley of Quito the seasons are scarcely perceptible. The mean temperature of the day, all the year round, is between 60° and 67°, and that of the night between 48° and 52° of Fahrenheit. The winds, which are generally either from the north or the south, blow continually, but never with great violence. During the morning, till one or two o'clock, the sky is serene and clear; but after this hour vapours begin to rise, and the whole sky is gradually covered with black clouds, which often bring on dreadful tempests of thunder and lightning, followed by torrents of rain. At sunset the weather generally clears up, and the nights are as serene as the mornings. The rains sometimes continue all night, and occasionally, though rarely, three or four days in succession. At other times a few fine days occur without rain. The interval between September and May is called the winter, and the remainder of the year the summer. The winter is only distinguished by a somewhat greater quantity of rain, and the summer by a greater number of fine days. These valleys are subject to frequent earthquakes, some of which have been very destructive. At Guayaquil and on the other valleys along the coast the mean temperature of the year varies between 78° and 82°. From December to April the heat rises to 95°; during these months rain falls with but short interruptions, and violent tempests frequently occur. The great plain extending along the Rio Amazonas and its numerous tributaries has a hot climate. The mean temperature probably does not fall short of between 75° and 85°, and the heat sometimes rises to 95° and more. But every day at two o'clock a wind begins to blow from the east with great force and continues to sunset. Near the base of the Andes rain falls nearly every day, generally after noon, when the wind commences.

Agriculture varies with the elevation of the cultivated land above the level of the sea. Near the snow-line, which in this part of the Andes occurs at the height of 15,750 feet, the vegetation of the Páramos (flat tracts on the summit of the range, from 11,000 to 14,000 feet above the sea) is extremely scanty, consisting only of two or three species of plants. Districts like the plains in the mountain-knot of Pastos, situated at an elevation of 10,000 feet, are covered with grass, and afford good sheep-walks. The culture of European cereals and fruits prevails between 10,000 and 4000 feet, especially in the great valley of the Andes, where excellent wheat is raised, with barley and Indian corn. Lucern is also extensively grown as fodder for beasts of burden. In those parts of the country which do not exceed 4000 feet in elevation the vegetables cultivated for food are chiefly sweet potatoes, mandioc, yams, and bananas, with rice, Indian corn, and some leguminous plants. The most common fruit-trees are cherimoyers, pine-apples, papayas, and anous. In some of the valleys are extensive plantations of sugar-cane, cotton, tobacco, and cocoa. The wide valley of the Guayaquil is especially fertile: the soil consists of alluvium; and there are few spots even between the tropics which for richness and vigour of vegetation can vie with this wide valley. It is covered with groves of every kind of intertropical fruits; only a comparatively small quantity of sugar is produced, but an immense quantity of cocoa of very fine quality is grown, and is exported to all the countries bordering on the Pacific. Among the forest-trees is that which gives the cinchona bark. This tree is most frequent on the heights of the mountain-knot of Loja, where it grows on the eastern declivities at an elevation of 6000 or 8000 feet above the level of the sea.

Sheep and cattle are reared in great numbers, the former especially in the valleys of the Andes, and on the higher declivities of the mountains. Horses, asses, and mules are sufficiently numerous to be articles of export. In some districts, especially in the valleys along the coast, a considerable quantity of wax is collected; and still higher up are some spots where the cochineal insect is reared. Along the Amazonas turtles are numerous, and their fat, called 'manteca,' furnishes a considerable article of trade. Fishing is carried on to some extent on the coast, and a good deal of salt-fish is prepared. Along the coast a murex is found, which yields a juice used in dyeing purple.

Ecuador is less rich in the precious metals than the other countries of South America which comprehend a portion of the Andes. There are several mines of gold and silver, and a few are still worked; but the annual produce is not considerable. Lead and quicksilver occur

in some places, and in others sulphur is prepared in considerable quantity. Salt is obtained from sea-water along the coast.

Formerly the manufactures of Ecuador were more considerable than those of any other country in South America. They are chiefly of coarse woollen and cotton goods; but have diminished greatly in amount of late years in consequence of the preference given to articles of English manufacture. Lace of a good kind is made in Quito. Various articles of home consumption are made, but there is no other important branch of industry.

The commerce, as already mentioned, is almost wholly carried on at Guayaquil. The goods exported are the raw produce of the country, and vary very greatly in quantity in different years. Of cotton the average annual quantity exported may be about 150,000 lbs.; of cocoa about from 10,000,000 to 12,000,000 lbs.; sugar and tobacco are also exported to some extent. Of the imports we have no recent reliable accounts. The imports into Ecuador from Great Britain in 1851 were valued at 54,099*l*.

Inhabitants.—The population of Ecuador is composed of the descendants of Spaniards and of the aborigines. The aborigines are believed to constitute about three-fourths of the population. Those Indians who inhabit the elevated valleys belong to the race of the Peruvians, and speak the Quichua language. They are mostly agriculturists, and cultivate their lands with much care; they also make coarse stuffs of wool and cotton. The Indians who inhabit the eastern plain are much lower in civilisation. They cultivate only small pieces of ground, and apply themselves almost exclusively to fishing and hunting. The Jesuits and the monks who succeeded them had made some progress in bringing them over to a kind of Christianity and civilisation; but the political events which have taken place since 1812 have driven the monks out of the country, all the 'misiones' are in ruins, and the Indians have returned to their wild life in the forests. Three-fourths of the population dwell in the elevated valleys of the Andes.

Political Divisions, Towns, &c.—The republic of Ecuador is divided into three departments, Quito, Guayaquil, and Assuay. The population of the towns in the following notice of these departments is given according to the latest estimates, but these estimates are very vague, and the numbers are probably excessive, except when they are intended to include the surrounding district.

1. The department of Quito extends along the coast from the mouth of the Rio Mira [to Cape Pasado, and comprehends the two valleys of Quito and of Alausi and Ambato; to which is added a portion of the eastern plains along the upper courses of the rivers Putumayo, Napo, and Pastaza. In the elevated valleys in several places are the ruins of ancient palaces of the Incas, and in many districts there are traces of the great road which in the time of the Incas led from Quito to the southern extremity of the valley of Titicaca (from the equator to 20° S. lat.). Its principal wealth consists in its extensive corn-fields, and its numerous herds of sheep, cattle, asses, and mules; it has also a few mines of silver and gold. The capital of the republic and of the department, is QUITO. North of this place lies *San Miguel de Ibarra*, or briefly *Ibarra*, a well-built town, with about 10,000 inhabitants, situated at the foot of the Volcano of Imhabura. A good deal of grain is grown in the neighbourhood; and there are some manufactures of wool and cotton. Not far from it is *Oavalo*; it has more considerable manufactures of wool and cotton, and is said to contain 20,000 inhabitants. On the coast are the harbours of Esmeraldas, Atacames, and Caroudelet, but they are not visited by foreign vessels. South of Quito is *Tacunga*, or *Lactacunga*, which, between 1698 and 1797, was four times destroyed by earthquakes; it stands at the foot of the eastern ridge of Andes, 9254 feet above the sea, and contains 5000 inhabitants. *Riohamba* was entirely destroyed in 1797. The new town which was built 4 or 5 miles farther south, is said to contain 15,000 inhabitants, and is the capital of the province of Chimborazo. In its neighbourhood, at Tescan, great quantities of hrimstone are made. *Ambato*, or *Hambato*, north-east of Mount Chimborazo, with 10,000 inhabitants, and *Guaranda*, south of the same mountain, have some commerce, owing to their situation on the road between Guayaquil and Quito. The missions in the eastern plain have almost entirely disappeared.

2. The department of Guayaquil comprehends the coast between Cape Pasado and a short distance from the boundary-line of Peru, and extends inland to the upper declivity of the Andes. Its commercial wealth consists in its tropical productions, especially in cocoa, of which there are extensive plantations. *Guayaquil*, the capital of the department and the chief commercial town of the republic, population about 25,000, is situated in 2° 12' S. lat., 79° 39' W. long., on the right bank of the river Guayaquil, which is about 2 miles wide opposite the town. Vessels of considerable burden can sail up to the town, as the tide at full and change rises 24 feet. The town itself is divided into the old and new town—*La Ciudad Vieja* and *La Ciudad Nueva*. The old town, which is higher up the river, is entirely inhabited by the poorer classes. It is intersected by narrow creeks, which are full at high-water, but at half ebb the mud is uncovered and exhales the most noisome and pestilential effluvia, especially in hot weather. The new town though exempt from this nuisance, is scarcely more healthy. It occupies a low perfectly level site, which

has no drainage, and its streets during the rainy season (from December to April) are converted into quagmires. There is also a marsh at the back of the city: circumstances taken together amply sufficient to account for the malignant fevers which so often prevail in Guayaquil. The whole town extends about 2 miles along the river, but its width is inconsiderable. The houses except in the principal street, called the *Calla da Comercio*, have commonly only one story, and the framework is made of timber. None of the public buildings are distinguished by architectural beauty. As the tides rise so high, the water far above the town is brackish and unfit for drinking. Several large balsas are constantly employed to bring fresh water down the river from a distant place. Many families live entirely on board of balsas in the river Guayaquil. The commerce of the city is of considerable importance. European goods are imported into Guayaquil in considerable quantities, and sent up the river to Babayhoyo or Caracol, whence they are carried on the backs of mules to the valleys of Ambato and Quito. Almost the whole of the native products are exported from Guayaquil. From 130 to 200 ships enter and leave the port annually. Some ships are built here. Guayaquil is subject to frequent visitations of terrific earthquakes. Mount Chimborazo, as well as the Volcano of Cotopaxi, is visible from the town in clear weather. On the banks of the Rio de Guayaquil are *Babayhoyo* and *Caracol*, which are situated at the points where the river ceases to be navigable at different seasons, and consequently on that account are used as commercial depôts. *Puerto Veje*, a small place, is the capital of the province of Manabi; its harbour is at Manta. Another harbour is at *Punta de Santa Elena*, where much salt is made. The island of *Puna*, in the Bay of Guayaquil, has an area of more than 200 square miles. At the arrival of the Spaniards it is said to have had a population of 20,000, but it is now only inhabited by a few fishermen. To this department belong the Galapagos Islands. [GALAPAGOS.]

3. The department of Assuay derives its name from the mountain ridge which divides the valley of Alansi from that of Cuenca. It comprehends the last-named valley, the mountain knot of Loja, and a few miles of sea-coast along the Gulf of Guayaquil, contiguous to the boundary of Peru, with by far the greatest part of the eastern plains. In a few places ruins of ancient temples and palaces occur. Cinchona-bark forms its principal article of exportation. This department contains many herds of sheep and cattle, and the valley of Cuenca produces grain in abundance. Some silver mines occur, but few if any are now worked. The capital is Cuenca, 8640 feet above the sea, a large but meanly-built town, with 20,000 inhabitants, and some trade in cheese and rural produce. It has a university; and some institutions for education have been established. At *Asogues* are mines of quicksilver. *Loja*, population about 10,000, in a valley 6763 feet above the sea, has some fine churches, and trades extensively in cinchona-bark. *Zaruma*, on the western declivity of the Andes, population 6000, is the capital of the mining district; both gold and silver mines are in the neighbourhood. The port of *Tumbes*, in the Gulf of Guayaquil, is the place where Pizarro made his descent on the Peruvian coast; in its neighbourhood are some mines. *San Jaen de Bracamoros*, near the left bank of the Marañon, has 3000 inhabitants. *Borja*, is a small place, where the Pongo de Manseriche terminates.

History, Government.—Ecuador was discovered by Pizarro in 1526; and came into the hands of the Spaniards at the downfall of the empire of the Incas. It remained a Spanish possession until 1812, when the inhabitants rose in insurrection and made a determined effort to throw off the Spanish yoke. Quito was then a part of the vice-royalty of New Granada, and it participated fully in the frequent vicissitudes of the war, which ended in 1823 with the complete expulsion of the Spaniards. By the convention of Cucuta in 1821 New Granada and Venezuela united and formed one republic under the name of Colombia, but this union lasted only till 1831, when these countries again separated. Ecuador, or the ancient kingdom of Quito, was then also separated from New Granada, and since that time has existed as an independent state. Ecuador declared itself an independent republic, and established a constitution, according to which it is governed by a president elected for eight years, a vice-president, council of state, and a house of representatives consisting of one member for every 40,000 inhabitants. The Roman Catholic is the established religion: the church is presided over by the Archbishop of Quito and the Bishop of Guayaquil.

(La Condamine; Ulloa; Humboldt; Caldas, in *Mollien's Travels*; Captain B. Hall; *Geographical Journal*; *Admiralty Chart*; *Parliamentary Papers*.)

EDDYSTONE or EDYSTONE LIGHTHOUSE is constructed on the sloping side of a rock which bears from Plymouth south by west, and from the Ram Head south half a point east. It is distant from the anchoring in the Sound 4 leagues, and from Ram Head about 3½ leagues. The Isle of Maystone bears from the lighthouse about north-east by north, 4 leagues distant. All the rocks near the lighthouse are on the east side, stretching to the north and south, and they are all covered at high water; but on the west side any ship may sail close by the houra in 12 or 13 fathoms water, and there are no hidden rocks. About a quarter of a mile east by north from the house there is a rock which never appears but at low-spring tides.

The first lighthouse built on the Eddystone rock was constructed by Mr. Winstanley, a gentleman of Essex, who was a man of a mechanical turn. His work was begun in 1696, and completed in four years. The base was of stone, the remainder was of wood. While some repairs were making under his inspection the building was blown down in a terrible hurricane during the night of the 26th of November 1703, and he and his workmen perished. Not a vestige, except some iron stanchions and a chain, was left behind. In 1706 an act was passed for rebuilding the lighthouse, and Mr. Rudyerd, a silk-mercator, was employed by the lessee of the lighthouse to construct a new building, also of wood on a stone base. Mr. Smeaton was of opinion that Rudyerd directed the performance of his work in a masterly manner, and so as perfectly to answer the end for which it was intended, until it was destroyed by fire in 1755.

The present edifice is a circular tower of stone sweeping up with a gentle curve from the base, and gradually diminishing to the top, somewhat similar to the swelling of the trunk of a tree. The upper extremity is finished with a kind of cornice, and is surmounted with a lantern, having a gallery round it with an iron balustrade. The tower is furnished with a door and windows, and a staircase and ladders for ascending to the lantern through the apartments for those who keep watch. Mr. Smeaton undertook the task of constructing the lighthouse in 1756, and completed it in less than four years.

The materials employed in building the tower are moor-stone, a hard species of grauite, and Portland-stone. The stones for the several courses were rough-worked at the quarries. Six foundation courses dovetailed together were raised on the lower part of the rock, which brought the whole to a solid level mass. These courses, with eight others raised above them, form the solid bed of the work, and take the form of the swelling trunk of a tree at its base. The general weight of the stones employed is from a ton to two tons. In the solid work the centre stones were fixed first, and all the courses were fitted on a platform and accurately adjusted before they were removed to the rock.

The base of the tower is about 26 feet 9 inches in diameter, taken at the highest part of the rock. The diameter at the top of the solid masonry is about 19 feet 9 inches, and the height of the solid masonry is 13 feet from the foundation. The height of the tower from the centre is 61 feet 7 inches; the lantern, the base of which is stone, is 24 feet; and the diameter of the tower below the cornice is 15 feet. The whole height is therefore 85 feet 7 inches, according to the scale given by Smeaton to his drawings. The upper part of the building, constructed of wood, was burnt in 1770, and renewed in 1774. The building has stood every storm unshaken.

(Winstanley, *Lighthouse*; Smeaton, *Narrative*.)

EDEN, RIVER. [CUMBERLAND.]

EDENBRIDGE. [KENT.]

EDENDERRY, King's county, Leinster, Ireland, a market-town and the seat of a Poor-Law Union in the parish of Monasteroris, is situated in 53° 18' N. lat., 7° 2' W. long., distant 35 miles W. by S. from Dublin. The population in 1851 was 1804, besides 1023 in the Union workhouse. Edeuderry Poor-Law Union comprises 29 electoral divisions, with an area of 172,407 acres, and a population in 1851 of 29,791. The town is situated at the north-eastern extremity of the bog of Allen. It has been much improved by the Marquis of Downshire, on whose estate it stands; and is now a clean, neat, and rather prosperous town. The church stands on the summit of a hill 318 feet high which adjoins the town, and commands an extensive view of the surrounding country; on the same hill are also the ruins of an ancient castle. The other public buildings are a Roman Catholic chapel, a Quakers' meeting-house, the town-hall, a market-house, and the Union workhouse. The principal trade is in corn, of which large quantities are sold at the weekly markets. The Grand Canal passes within a mile of Edenderry, and a branch has been brought into the town. Fairs are held in March, June, and November.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

EDENSOR. [DERBYSHIRE.]

EDESSA. [ORFA.]

EDFU, a village of Upper Egypt, on the left bank of the Nile, in 25° N. lat., remarkable for its two temples, the larger of which is one of the finest and best preserved in Egypt, though much encumbered with sand and rubbish, and with the huts of the inhabitants, who have built their village around and on the top of it. The outward access to the larger temple, which was dedicated to Noun, or Kneph, is by a gateway 60 feet high, between two enormous pylons, or truncated pyramids, 104 feet long, 37 feet wide at the base, and 114 feet high. At the summit the horizontal section is 84 feet by 20. On the front of these moles immense figures are sculptured in a masterly style. A court is then entered 161 feet long, and 140 feet wide, surrounded with walls, on each side of which there is a row of pillars placed at some distance from the side wall, the space between the pillars and the wall being roofed over with stone, forming a covered portico. From the base of the pillars to the top of the stone covering is about 35½ feet. The court is now filled with rubbish and encumbered with wretched buildings, forming part of the modern village of Edfu, the remainder being built on the roof of the temple itself. From the entrance of the court there is a gradual ascent to the

pronaos, or portico, of the temple, which is supported by 18 pillars, six in a row, the whole height of it being about 56 feet above the lowest level of the court. The intercolumniations of the front pillars are built up to more than half the height. Passing through the pronaos we come to a doorway leading into a kind of hypostyle hall, 66 feet by 33, supported by 12 pillars, with a flat roof formed by large beams of stone crossing from each pillar to the next in the same row, the whole being covered with thick flat slabs. The pillars have the quadrilateral two-headed capital as at Denderah. From this chamber we pass into another long and narrow one, from which there are two small entrances to the side galleries, wherein we see flights of steps leading upwards to the roof of the sekos, or cell. Proceeding onwards through the middle chamber we pass into another small one, with an apartment on each side of it, probably for the use of the priests. From this last-mentioned chamber we enter the holy recess itself, an oblong room about 33 feet by 17, in which the figure of the deity was placed. Two galleries run down on each side of it, leading to a doorway at the back of it, by which the priests might walk into a large but perfectly retired space all round the sanctuary, or might ascend on the roof by a flight of steps to enjoy the air and light on the terraced roof, for below they had no light at all, except it might be from small apertures, through which the fellows who now live on the roof with their families and cattle discharge all their dirt into the temple. The chambers of the sekos serve them as repositories for grain and other commodities. The temple, as well as every part of the wall, is covered with hieroglyphics and figures representing the progress of the sun through the circle of the hours. The outer wall, which joins the two propylæa and completely incloses the court and the temple, is 414 feet on each of its longer sides, and 154 feet on its shorter side at the back of the temple. The smaller temple is also covered with hieroglyphics representing the birth and education of Horus, the son of Kneph and Athor, who were worshipped in the larger edifice.

The temple of Edfu may be compared with that of Denderah for preservation, and is superior to it in magnificence. The propylæon is the largest and most perfect of any in Egypt; it contains several apartments in the interior, which receive light by square apertures in the sides. The entrance court is the only one to be seen in Egypt in such perfection, though completely encumbered with Arab huts. The pronaos, or portico, is magnificent; but unfortunately above three-fourths of it are buried in rubbish. Upon the whole the temple of Edfu, although built much later than many of the others (the earliest part of it was erected by Ptolemæus Philometor, B.C. 181), is perhaps the most complete specimen remaining of an Egyptian temple, which can give a good idea of the respective proportion and distribution of the different parts of their exterior appearance when entire, and the strength of those formidable citadels, which while they served as a protection to the town commanded the respect of the inhabitants, and prevented or defeated any attempts to dispute the authority of their priestly rulers. Edfu marks the site of the ancient *Apollinopolis Magna*; the Coptic name is *Abo*, in which is preserved the ancient name—(Hat)—of the district round Apollinopolis.

(*Egyptian Antiquities*, vol. i.; Belzoni; Wilkinson, *General View of Egypt*.)

EDGEWORTHSTOWN. [LONGFORD.]

EDGWARE. [MIDDLESEX.]

EDINBURGH, the City of, a royal and parliamentary burgh, the chief town of Edinburghshire or Mid Lothian, and the capital of Scotland, is situated on the south side of the Frith of Forth, about 2 miles inland, in 55° 57' N. lat., 3° 12' W. long.; distant 392 miles N.N.W. from London by road; 398 miles by the North-Western, Lancaster and Carlisle, and Caledonian railways; and 402 miles by the Great Northern and North British railways. The population of the city of Edinburgh in 1851 was 66,734; of the city and suburbs, which together constitute the capital and parliamentary borough, 160,511. The city (which is divided for municipal purposes into five wards) is governed by 31 town councillors elected by the constituency, a dean of guild elected by the guildry, and a convener of trades elected by the representatives of the incorporated trades. The council of 33 thus constituted elects from its own members a lord provost, 4 bailies, and a treasurer, as the administrators of the municipal government. The city returns two members to the Imperial Parliament.

The boundaries of the capital include, besides various districts subject only to the jurisdiction of the county sheriff, the four following districts, namely:—1. Edinburgh; 2. Canongate; 3. Portsburgh; 4. Calton.

The existence of Edinburgh as a royal burgh may be traced to the middle of the 12th century. A general charter of confirmation was granted by James VI. in 1603, and another charter by Charles I. in 1636. These charters specify Leith and Newhaven as belonging to the burgh. Other grants and charters were afterwards obtained at different times from the crown prior to the Union in 1707. By a charter of George III. in 1794 the lord provost, who by previous charters was sheriff and coroner, was constituted lord lieutenant of the county of the city. By the Scotch Burgh Reform Act (3 and 4 William IV. c. 76) the right of election to corporate offices was declared to be in those persons who are entitled to vote for members

of Parliament. There are eight incorporated crafts within the burgh, all possessed of funds appropriated to the support of decayed members or the widows of such as are deceased. From an early period the property of the burgh has been administered very improvidently. In 1819 the debts of the city were stated to amount to 497,101*l.*, including 264,258*l.* incurred on account of the Leith Docks; in 1833 the amount of debts and obligations of the city were 425,194*l.*, exclusive of engagements on account of the Leith Docks. The revenue of the city amounted then to 27,524*l.*, and its annual current expenditure to upwards of 33,000*l.* Under these circumstances the city was declared insolvent, and an Act was passed in August 1833 conveying its properties and revenues to trustees for its creditors. *Canongate* is a parish and burgh of barony, of which the royal burgh of Edinburgh is the feudal superior. It is governed by a barou-baillie nominated by the town council, and two bailies elected by the inhabitants of the burgh of Canongate. Its revenue, which is of small amount, is derived from petty customs levied at the Watergate, or exit to Leith. *Portsburgh*, or more accurately the Easter and Wester Portsburghs, form a burgh of barony the jurisdiction of which is on each side of the grounds of Heriot's Hospital. A baron-baillie and two resident bailies are appointed by the corporation, the feudal superior. The burgh offices are merely nominal. *Calton* is a district lying in the hollow betwixt the Calton Hill, Canongate, and the New Town. It was annexed to the city in 1725. A baillie is appointed, but no duties are attached to the office.

Site, Aspect, &c.—Edinburgh is built upon a series of bills, which, with three intervening valleys, give to the streets a remarkably undulating character. Salisbury Crag and Arthur's Seat, two high bills beyond the precincts of the city on the east, greatly enhance the grandeur of its characteristic features. The central hill, on the summit of which the castle is built, slopes gradually down, forming the High-street and Canongate; Holyrood Palace, about a mile from the castle, being placed in the valley at the base of the hill. This ridge lies nearly east and west. The west or castle end is a rock, bare and inaccessible on the west, and with slopes of almost impracticable ascent on the north and south. Southward of this central hill is another but smaller elevation; northward the elevation on which a portion of the New Town is built, rises by a gentle slope from the north valley, and then declines towards the shores of the Forth at Leith and Granton. Westward of the Castle Hill the ground is generally level. Eastward of the northern ridge, and separated from it by a valley, is Calton Hill; eastward of the hill on the south side of the city, and separated from it by a portion of the King's Park, is Salisbury Crag. Arthur's Seat is still farther east.

Civil History.—In the 7th century the southern part of Scotland belonged to the Anglo-Saxou kingdom of Northumbria; and Edwin, king of Northumbria, is said to have built a fort on the site of the present castle, the name of which was Edwinsturgh. Some antiquaries assign an earlier date to the castle. In 1215 the first parliament held by Alexander II. met at Edinburgh; and 20 years afterwards the Pope's legate held here a provincial synod. Robert Bruce bestowed on the burgh the harbour and mills of Leith. By this time Edinburgh had become the chief town, though not nominally the capital, of Scotland; parliaments were frequently held in it, and a mint was established. In 1436 Edinburgh became in name what it had long been virtually—the capital of the country. About the middle of the 15th century, on the representations of the provost and community, James II. granted the citizens licence to inclose and fortify the city. His successor erected the city into a sheriffdom within itself, and presented to the incorporated trades a banner or standard, which has since been known by the name of the 'Blue Blanket,' and is still preserved. King James IV. patronised the erection of its first printing-press; and in the succeeding reign it became the seat of the royal palace, of the parliament, and of the superior courts of justice.

The wall built in 1450 included very little more than the present High-street, from the castle to the Canongate; but by the year 1513 the city walls inclosed the southern valley, called the Cowgate, and portions of the slopes extending upwards on each side of that valley. The Canongate had a separate origin. The abbey of Holyrood was founded by David I. in the 12th century, in the low ground lying east of the city. The abbot and monks, in order to connect themselves with Edinburgh, formed a line of street from their abbey up the slope of the hill, till it joined the High-street of Edinburgh; this street received the name of the Canongate, and the burgh of Canongate was constituted distinct from Edinburgh.

Up till the middle of last century the boundary of the city was not much enlarged; the additional accommodation required for the progressive increase of the population having been met by building houses of great height, and affording on each floor residences for one or more families. Some additional space was obtained by the draining of a morass on the southern side of the city, and on the drained land were formed the Cowgate and the Grassmarket, which had for their earlier occupants the wealthier classes of the city. After the Union of Scotland with England in 1707, and the transference of the parliament and the privy council to London, many of the nobility removed thither, and the Canongate became deserted. In 1753 an Act of Parliament was obtained, and the work of renovation and extension of the city was commenced. The Royal Exchange, in the High-street,

was first built; the morass or loch in the north valley was drained, and the North Bridge across that valley was constructed. George-square, Brown-square, and other streets and squares in the southern part of the town, built by private enterprise, were immediately occupied by the wealthier inhabitants. About 1770, improvements which had been some time projected, and for which an Act had been obtained in 1767, were commenced on the north side of the city, and the New Town gradually rose into existence. St. Andrew's-square was the nucleus of the building operations; and from that time till the present the work of extension has been steadily proceeding.

Castle.—The castle covers a space of about six acres. On the east side a spacious esplanade, used as a parade-ground and a promenade, intervenes between the castle entrance and the houses at the upper end of the High-street. On the north side of the esplanade is a statue of the Duke of York. At the entrance to the castle is a drawbridge, with a dry ditch underneath, and the outer gateway is protected by low batteries. The batteries extend along the ramparts on the north side. A second strong gateway gives entrance to the inner or higher fort, which contains the oldest portion of the castle. A large pile of buildings on the east side contains what were once the state apartments of Queen Mary, and the crown-room, in which are the regalia of Scotland. The regalia consist of the Scottish crown, the sceptre, the sword of state, the Lord Treasurer's rod of office, &c. On the ramparts is Mons Meg, a huge cannon, supposed to have been cast in the time of James IV., and which, after having been in the Tower of London for three-quarters of a century, was returned to Edinburgh Castle in 1829 by George IV. On the west side of the castle rock, and on its highest part, stands a huge pile of buildings used as barracks.

From the castle ramparts a magnificent prospect is obtained northward, comprehending the new National Gallery and other buildings on the Mound, the New Town and the valley beyond, the Frith of Forth, and the Fife Hills; eastward the Old Town, backed by Arthur's Seat; north-east the railway termini in the north valley, the Scott monument, the North Bridge, the Calton Hill and the fine buildings on its side and in its vicinity; and to the west Corstorphine Hill, backed by a dim outline of mountains in the distance.

The line of street eastward from the castle to Holywood Palace presents many objects of interest, the modern in numerous instances mingling with and superseding the ancient structures. From the Castle Hill flights of steps lead down to the valley of the Grassmarket. The new western approach to the Old Town is carried along the southern side of the Castle rock, and joins the High-street at the junction of the Castle Hill and Lawnmarket. At this point is the New Assembly Hall, which serves the double purpose of a parish church and the meeting-place of the General Assembly of the Established Church of Scotland. This building is a handsome gothic structure; at the eastern end is an elaborately-ornamented tower 240 feet high, which forms a prominent object from almost every part of Edinburgh. Near this building, in the new road, are the Normal school of the Established Church, the Episcopal church of St. Columba, and other buildings. On the northern side of the Castle Hill are the extensive buildings of the Free Church College and Free High church. The Lawnmarket, as its name imports, was once occupied as a market for linen cloth and other articles of merchandise. In the High-street, on the north side, is the Royal Exchange, and opposite to it in Parliament-square, is St. Giles's church, having under its roof the High church of Edinburgh and two other of the city churches; on the west side of the square is the County Hall. The fine range of buildings on the south side of Parliament-square comprises the Advocates Library, the Signet Library, the Parliament House (the Westminster Hall of Edinburgh), and halls in which sit the judges of the Court of Session, the High Court of Justiciary, and the Scottish Court of Exchequer. Between the Justiciary Court and St. Giles's church is an equestrian statue of Charles II., erected in 1685; it is formed of lead coated with bronze. The Parliament House just named, is one of the finest halls in Scotland. It was here that the Scottish Parliament sat until the Union with England. The hall is 122 feet long by 49 feet broad, and has a carved oak roof. Its floor is now used as a promenade for the advocates, solicitors, and litigants of the Court of Session. In the hall are statues of eminent judges. The Advocates Library is one of the privileged libraries entitled to demand a copy of every printed work published in Great Britain and Ireland; it contains a fine collection of upwards of 150,000 volumes. Among the manuscripts in this extensive collection are many valuable works on the civil and ecclesiastical history of Scotland. The Signet Library contains 50,000 volumes, and is particularly rich in works relating to British and Irish history.

The church, or as it is sometimes called, the cathedral of St. Giles, is one of the most ancient buildings in Edinburgh, although its exterior has been frequently renovated. It is mentioned in the year 1359 in a charter of David II. About a century later it was made collegiate, and 40 altars were supported in it. After the Reformation the building was partitioned into four distinct places of worship. The High church, of which John Knox was for a considerable period the minister, and which is regarded as the principal parish church of Edinburgh, occupies the eastern end of the building. Externally, the most noticeable feature of the edifice is the central tower: its top

is crowned with open carved stonework, with arches springing from the four corners, and meeting together in the centre, so as to form a sort of crown. The Old Tolbooth, popularly called the 'Heart of Mid-Lothian,' was removed in 1817, with numerous little booths or shops called the Luckenbooths, which stood close to St. Giles's church. A little farther down the High-street, a piece of radiated pavement marks the site of the ancient cross, which was removed in 1756. At the intersection of the High-street with South Bridge-street is the Tron church, an old building, with a neat spire. A few yards eastward of John Knox's house, at the foot of High-street, is the lane formed by Leith-wynd and St. Mary's-wynd (the Holywell-lane of Edinburgh). Eastward extends the Canongate, containing many houses which by their style and decorations show that they were when first inhabited the mansions of the nobility. One formerly belonged to Lord Balmerino; another was the mint of Scotland, afterwards occupied by the Duchess of Gordon; Queensberry House, now used as an hospital, was the residence of the Duke of Queensberry; Moray House, the residence of the earls of Moray, erected in 1618, and Milton House, another of these old edifices, are now devoted to educational and benevolent purposes, Moray House being the training school for masters and mistresses in connection with the Free Church. Canongate church is a large old building with no pretensions to architectural elegance.

The ancient palace of Holyrood House nearly fronts the eastern extremity of the Canongate. By the end of the 12th century the abbey founded by David I. had become a wealthy and powerful institution, the abbot holding regular courts like other barons. The first separate royal residence here is supposed to have been a small hunting seat, built by James V. in 1528, prior to which many of the Scottish kings had on great occasions lodged in the abbey. A large part of the palace was destroyed by Cromwell's soldiers in 1650; after which the present edifice was built. From the period of the Union of the two kingdoms the dukes of Hamilton have been hereditary keepers of the palace. Charles Edward Stuart lodged here during his short sojourn in Edinburgh in 1745; here Charles X. of France resided during the revolutionary troubles, and here he again found a refuge more than 30 years afterwards, when he was driven from his throne. George IV. visited Holyrood in 1822; and Queen Victoria held a levee in it in 1842. Her majesty has on several occasions since passed a day or two in the palace on her way to or from Balmoral Castle. Holyrood House is a quadrangular building, with an open court in the centre. The front is flanked with double castellated towers. The north-west corner, containing the apartments of Queen Mary, is the oldest portion. The gallery of the kings of Scotland exhibits 106 paintings, said to be portraits, but of no merit as works of art, and of no historical authority. In the hall which contains these paintings are held the meetings for choosing the representative peers of Scotland, and the levees of the Lord High Commissioner to the General Assembly of the Established Church. The ruins of Holyrood chapel lie behind the palace, at the north-east corner. The chapel was fitted up by Charles I., who was crowned in it in 1633. James II. had it adorned afterwards for the Roman Catholic worship. The chapel contains the remains of David II., James II. of Scotland, James V. and his queen, Lord Darnley, and other illustrious personages.

The back street called the south back of the Canongate leads westward to Cowgate and Grassmarket. Over the Cowgate pass the South Bridge and George the Fourth Bridge. Three or four flats or stories of the houses next the bridges are below the level of the upper street, while three or four flats are above, the fourth or fifth floor at the back of each house being the street floor in front.

The Grassmarket is historically famous as the spot where many Protestant martyrs suffered death in days of persecution, and also as the scene of the Porteous riot in 1736. The Grassmarket was for a long time the place of public execution. It is a wide, open, oblong space. The market is chiefly for cattle, sheep, and grain. The New Corn Exchange is a handsome and commodious building in the Italian style, 152 feet long by 93 feet 6 inches within the walls. The main front is 98 feet in length, and 59 feet in height to the top of the main cornice. At the west end is a campanile 98 feet in height. The main entrance to the building is through a handsome Doric portico. This building contains besides a spacious hall, lighted from the top, for the sale of grain, a bank for the accommodation of parties attending the market, a hall 66 feet long, in which buyers and sellers may settle accounts, and a granary. Westward of the Grassmarket is the West Port, a district notorious as the place where Burke and Hare perpetrated their murderous deeds. A church, schools, and sanitary and benevolent institutions were established here a few years ago, chiefly owing to the exertions of the late Dr. Chalmers.

A little way south from the Grassmarket stands Heriot's Hospital, founded by George Heriot, jeweller to James VI., for the maintenance and education of poor and fatherless boys, or boys whose parents are in indigent circumstances, "freemen's sons of the town of Edinburgh." The building, which was completed in 1660, is quadrangular, measuring 162 feet each way, and having an open court, 92 feet square, in its centre. Over the north gateway and at the four corners of the building are projecting towers or turrets. Inigo Jones is said to have furnished the design. About 180 boys are educated and boarded in the hospital, which is under the management of the town council

and city ministers of Edinburgh. In 1836 an Act of Parliament was obtained enabling the governors of the hospital to apply a portion of its funds to the establishment of Free schools for children of both sexes in various parts of the city. Accordingly 10 schools of this description have been established, in which about 3000 children are under instruction. Near Heriot's Hospital stands George Watson's Hospital, for the benefit of the children and grand-children of decayed Edinburgh merchants. In this institution about 80 boys are fed, clothed, and educated. The Merchant Maiden's Hospital, founded in 1695, is for the maintenance and education of the daughters of merchant burghesses of Edinburgh. Eastward of Heriot's Hospital is the Grayfriars church with its churchyard, both of historical interest. Here lie the remains of many eminent Scotsmen, among whom may be named George Buchanan, Allan Ramsay, and Principal Robertson. The churches of Old and New Grayfriars were under one roof till January 1845, when the building was destroyed by fire; one of the churches was afterwards restored. Among public edifices near this spot are a new and commodious Free church; a neat Roman Catholic chapel; a Baptist chapel; and the City Charity workhouse, a large and very plain edifice, accommodating about 750 inmates. To the south-west is a large open space, with walks planted with avenues of trees, named the Meadows, the walks of which are useful as promenades; the inclosed space are used for drying clothes. Beyond the Meadows stretch Bruntsfield Links, much frequented by golf players, and occasionally used for military reviews; many handsome villas are in this direction. Here is Gillespie's Hospital for the maintenance of indigent old men and women, of whom there are about 30 in the house, and for the elementary education of 100 poor boys. The Roman Catholics have a nunnery at Bruntsfield Links. To the south-east of the Meadows is the suburb called Newington, occupied chiefly by wealthy merchants and professional gentlemen. Many fine residences are here, and the district is considered one of the healthiest about Edinburgh.

University.—The University is situated on the west side of South Bridge-street. The buildings form a parallelogram 356 feet by 225 feet, having an open court in the centre. The quadrangle is entered by a portico on the east side, and the doors to the several departments of the college lie around the quadrangle. The University corporation consists of a College founded by James VI. of Scotland, by a charter dated April 24th 1582. By this charter, which forms the constitution of the University, the provost, bailies, and town councillors of Edinburgh, and their successors in office, are invested with the power both of electing the professors and of dismissing them. In the non-recognition of any authority, or at least of any supreme authority, as belonging to either the entire body of the professors and students, or even to the *Senatus Academicus*, the University of Edinburgh differs from all other Scottish colleges. The first appointment of a professor was made in 1583. In 1620 a second Professor of Theology was appointed, and the office of Principal has since been made a mere sinecure. The property of the college is of inconsiderable amount. The deficiency is made up by the town council. A bequest was left by the late General Reid for founding a professorship of music and for other purposes. A professorship of music has accordingly been established, and in terms of the founder's will concerts have been held on several occasions. The professorships are considered as divided into the four faculties, or classes, of arts, law, medicine, and theology. The Principal is considered as the *ex-officio* convener of the faculty of theology. The others have each a dean or convener chosen by the faculty. The law school dates from the commencement of the last century, and the medical school from the close of the century preceding. It was not however till a considerably later period that the medical school began to acquire celebrity.

For 50 years preceding 1826 the total number of graduates in arts was only 168. During the same period 100 degrees of D.D. were conferred, and 56 of LL.D. The average number of graduates in arts of late years has been from 8 to 10 annually. The number of medical degrees was 119 in 1839, since which year the number has gradually diminished. The number of medical degrees granted in the five years 1849-1853 was as follows:—51, 67, 45, 51, and 85; being 299 degrees in the five years. The regular, or winter university session or term, begins on the first Monday in November and ends on the last day of April. Of late years a few of the classes have also been taught during a summer session, beginning on the first Monday of May, and terminating with the end of July. No academical dress is worn by the students; no theological test or attendance upon divine service is enforced; and scarcely any discipline is exercised beyond the class-room. The students are examined in several of the classes, but there is no public examination in the University. The medical students attend the hospital of the Royal Infirmary, and clinical lectures are delivered to them by the medical professors. By an Act of Parliament recently passed the subscription of the professors to the Westminster Confession of Faith is dispensed with in this as in all the Scottish universities. A collection of pictures and marbles was bequeathed for the use of the University by the late Sir James Erskine of Torry, Bart. The foundations for bursaries or exhibitions in the University are 34 in number, in the benefits of which 80 students participate. The whole amount is under 1200*l.* per annum. The library of the University occupies the

south side of the building. The principal room is 187 feet long by 50 feet in breadth, and has an arched roof from 50 to 58 feet high: this is a very fine apartment, and admirably adapted for the purposes of a library. The library contains upwards of 90,000 volumes. It is exclusively a College Library. Its income arises chiefly from fees payable on matriculation and graduation. There is also a Theological library for the students of theology. The Museum occupies several galleries and apartments, and comprises an extensive collection of specimens in natural history, and upwards of 300 manuscripts. The present university buildings were commenced in 1789.

Nearly opposite the University is Surgeons Hall, a handsome building with a Grecian front. In this building is an extensive anatomical and surgical museum. In the Blind Asylum about 90 blind persons are maintained and instructed in the making of baskets, rugs, mattresses, and other useful articles, by the sale of which the institution is in part supported. The Royal Infirmary occupies an extensive range of buildings erected about a century ago. This institution, incorporated in 1736, is the means of great benefit to the inhabitants.

The New Town of Edinburgh abounds in spacious streets, squares, and terraces, containing many fine public buildings and elegant private mansions. The Calton Hill, at the eastern extremity of the New Town, 345 feet above the level of the sea, is a prominent object in itself, and from its summit beautiful views of the city, the surrounding country, and the Frith of Forth, are obtained. On the hill are 12 columns of the projected 'National Monument;' the Nelson Monument, a lofty shaft, on the top of which a time-ball is placed; an observatory, and monuments to Dugald Stewart and Professor Playfair. Around the eastern slope of the hill are a series of fine private mansions, named Royal-terrace, Carlton-place, and Regent-terrace. On the south side of the hill stands the new High school, a noble structure, built of fine white stone; it consists of a centre and two wings, in all 270 feet in length. The central portion of the front is a pediment supported by a range of Doric columns. This seminary is attended chiefly by the children of the middle classes: the number of scholars in 1853 was 420. On the side of the hill, nearly opposite to the High school, is a monument to Robert Burns. The jail and bride-well, which are now under the management of the Prison Board as one prison, occupy a large space on the side of the hill. Among other public buildings in Waterloo-place, leading to Princes-street, are the General Post-office, the office of Stamps and Taxes, the Calton Convening Rooms, the Waterloo Rooms, and the Theatre Royal. Facing the North Bridge is the Register House, a spacious edifice, in which are deposited the public records, registers of sasines, and other deeds. In front of this building is a statue of the Duke of Wellington. Princes-street, a fine open terrace, lined with handsome shops, and towards the west end with some good private residences, extends westward for about three-quarters of a mile. On the south side of Princes-street, in the North Valley, are the termini of the North British, Edinburgh and Glasgow, and Edinburgh, Leith, and Ganton railways. The monument to Sir Walter Scott, a kind of gothic tower or steeple, stands on the south side of Princes-street. It is 200 feet in height, and the gallery at the top is reached by a flight of 287 steps. On the basement floor of the monument is a fine marble statue of the great novelist by Mr. John Steel. In the centre of St. Andrew's-square, northward from Princes-street, is a tall column surmounted by a statue of Lord Melville. Farther west in Princes-street is the earthen Mound, connecting the Old and New Towns, on which stand the buildings of the Royal Institution, the new National Gallery, and other important structures. The other buildings in Princes-street which demand notice are—the New Club; St. John's Episcopal church, at the extreme west end of the street, a remarkably ornate and very beautiful gothic structure; and adjoining it on the south, St. Cuthbert's or the West Kirk, a large building of rather forbidding appearance, but commodious. St. Thomas's Episcopal church; St. George's Free church; the Gaelic Free church; the Unitarian chapel; Lothian-road United Presbyterian church; and the terminus of the Caledonian railway, are in this neighbourhood. Northward of Princes-street is Charlotte-square, containing residences of some of the Lords of Session and of wealthy families, with several educational institutions. On the west side of this square is St. George's church, a large and massive building surmounted with a dome. This church, the finest ecclesiastical structure in Edinburgh, was erected about 32 years ago, and cost about 33,000*l.* George-street, a straight and wide street running between Charlotte-square and St. Andrew's-square, contains among other buildings the spacious Assembly Rooms, and the Music Hall, a large and splendid hall; St. Andrew's church, the Commercial Bank, and statues of George IV. and William Pitt. The public buildings in Queen-street, to the north of George-street, are the Queen-street Hall, belonging to the United Presbyterian Synod, which has here its mission-house and offices; the United Service Club House, and the Hopton Rooms. In York-place are St. George's Episcopal chapel, a small, low-roofed gothic structure; St. Paul's Episcopal church, a richly-ornamented gothic building, in which the Bishop of Edinburgh officiates; and St. Mary's Roman Catholic chapel.

The northern slope of the hill on which the New Town is built, is occupied by regular and handsome streets, rows, places, and squares extending to Canonmills, and leading by Inverleith-row to Granton

and Newhaven. To the north-west of Queen-street is the Octagon, or Moray-place, which for the massive elegance of its princely mansions, may be regarded as the most striking feature of the New Town. Farther to the north-west is the Dean Bridge, a fine structure which spans the Water of Leith at a height of 106 feet above the bed of the river. Trinity Episcopal chapel, a fine gothic structure, is picturesquely situated close to the bridge. Along the banks of the Water of Leith, westward, is the curious old village of Dean, chiefly occupied by millers and their families, who in respect of manners and customs, and even of dialect, were till recently quite a peculiar class. To the westward a short way out of the city is Donaldson's Hospital, a magnificent structure, with accommodation for 150 boys and 150 girls; of those admitted a certain proportion is selected from applicants who are deaf and dumb. John Watson's Institution, for the maintenance and education of 120 destitute children, and the Orphan Hospital, for 100 orphan children of both sexes, are also in this neighbourhood.

At the north side of the town is the New Edinburgh Academy, founded in 1824, to provide for the families in the northeru districts a system of education somewhat similar to that of the High school. The number of scholars in 1853 was 350. The Asylum for the Deaf and Dumb, a large and commodious building, adjoins the academy. On the Water of Leith, near Canonmills Bridge, is Tanfield Hall, which is much occupied for public meetings: to this hall the members of the General Assembly who seceded from the Established Church in 1843 walked in procession, and formed the Free Church. In this hall also, in 1847, the United Associate Synod and the Relief Synod formed a junction under the title of the United Presbyterian Synod. In Inverleith-row are the Caledonian Horticultural Society's gardens, occupying 10 acres of ground, and the Royal Botanic gardens, occupying 15 acres, to both of which access is readily obtained. Inverleith Cemetery, opened about nine years back, has ranges of well-built vaults, and a neat Episcopal chapel. The Zoological gardens are situated in Bonnington-road, at the north-east end of the city. At Rosebank, near to the Zoological gardens, is another cemetery. On the southern skirts of Bruntsfield Links is the village of Morningside, a rather favourite resort as a summer residence. Morningside Lunatic Asylum is an extensive range of buildings, having about 300 inmates. The system of treatment is mild and soothing, and has been found successful. Near Morningside is Merchiston Castle (now occupied as an academy), the residence, from the 15th century, of the Napiers of Merchiston.

By the North British, the Caledonian, the Edinburgh and Glasgow, and the Edinburgh, Perth, and Dundee railways, Edinburgh has ready communication with all parts of the kingdom. From Granton New Pier (the property of the Duke of Buccleuch), the chain-pier at Newhaven, or from Leith, there are steamers to the various towns and important villages on the Forth, to the towns on the north-east coast, and to Orkney and Shetland; and in addition to the traffic by sailing vessels, and the swift sailing 'clippers,' there are steamers to London, Newcastle, Hull, and Hamburg.

Edinburgh possesses no manufacture of any importance. Shawl-making and coach-making are carried on successfully. The printing and publishing trades of Edinburgh rank in extent next to those of London. Several extensive paper manufactories are in the neighbourhood of Edinburgh. Hair-cloth, net and lace weaving, and the manufacture of small wares, are engaged in to some extent.

Churches, &c.—There are in Edinburgh 17 parish churches and 10 chapels of ease (one of which is for a Gaelic congregation) in connection with the Established Church; the Free Church has 26 places of worship (one being Gaelic); the United Presbyterians, 15; the Congregationalists, 4, the Original Seceders, 2; the Baptists, 6; the Methodists, 3; and the Roman Catholics, 2. The Jews, Quakers, Mormonites, Rowites (or Irvingites), Unitarians, and other minor sects have chapels or hired rooms for their services. There are 9 Episcopal chapels in Edinburgh, one of them being unconnected with the Scottish Episcopal Church.

Edinburgh possesses many religious and benevolent institutions, some of which have extensive operations. Among these may be named the City Mission, the Bible Society, the Strangers' Friend Society, the Gaelic School Society, the Society for the Propagation of the Gospel in the Highlands and Islands, the Sabbath School Society, societies for supporting Ragged and Industrial schools, the Medical Missionary Society, Society for establishing Evening Schools for Apprentices and Adults, Society for providing Improved Dwellings for the Working Classes, and numerous others with similar praiseworthy objects. Among the educational institutions of Edinburgh not already noticed are the Scottish Military and Naval Academy, founded in 1825; the Hill-street Institution, opened in 1832; the Scottish Polytechnic school; the Circus-place school, having a rector and five other masters; the Southern Academy, instituted in 1829; the Ladies' Institution for the Southern Districts, founded in 1833; the Scottish Institution for the Education of Ladies, founded in 1834; the School of Arts, or Mechanics Institute; Dr. Bell's schools; the Lancasterian schools; the Canongate Burgh schools; and the Normal schools of the Established and Free churches. The Philosophical Institution is a recently founded society similar in character to the Athenaeums of Manchester and some other towns. The Select Subscription Library and the

Mechanics Library have each large and valuable collections of books, and are well supported. Several medical and literary societies and legal clubs have libraries of their own. The Society of Antiquaries has a museum containing many objects of interest. Fourteen newspapers are published in Edinburgh—one three times a week, seven twice a week, and six weekly. Several quarterly, monthly, and weekly periodicals of influential character and extensive circulation are also published in Edinburgh.

Population.—The population of the city and suburbs of Edinburgh was 66,544 in 1801; 112,235 in 1821; 188,182 in 1841; and 160,511 in 1851. Of the inhabitants of Edinburgh an unusually large proportion are engaged in, or connected with, the courts of law. The number of females is also unusually large, the respective numbers in 1851 being 71,567 males and 88,994 females.

Edinburgh is lighted with gas supplied by two companies. The savings bank on 20th November 1851 had 25,751 depositors—the amount due to them being 327,208*l.* 7*s.* 5*d.*

EDINBURGHSHIRE, or MID-LOTHIAN, a county in the eastern part of Scotland, bounded N. by the Frith of Forth, N.E. and E. by Haddingtonshire, S. by Peeblesshire and Lanarkshire, and W. and N.W. by Linlithgowshire, lies between 55° 37' and 56° N. lat., 2° 50' and 3° 48' W. long. The county is in length from east to west about 36 miles, and in breadth from north to south about 18 miles. Its area is 397 square miles, or 254,300 acres. The population in 1851 was 259,435. The county returns one member to the Imperial Parliament.

Coast-line.—The northern boundary of the county extends for nearly 13 miles along the Frith of Forth. From Queensferry, where the Frith may be said to begin, the southern shore of the Frith proceeding eastward is studded with towns, havens, and piers. First, is the village of Cramond, at the mouth of the Almond Water; then the newly-formed landing-place, Granton, with its excellent stone pier and spacious hotel; this is succeeded by Trinity chain-pier, and the old village and pier of Newhaven, and farther to the east the town and harbour of Leith; while still farther along the coast are the towns or villages of Portobello, Fisherrow, and Musselburgh. At Granton, Newhaven, and Leith there is at high tide considerable depth of water, while eastward of Leith the shore is formed of an extensive breadth of sand, left dry at low water, and consequently shallow, even at high tide. Westward of Granton the shore is again composed of sand, covered only at high tide. The island of Cramond, in the Frith, about half a mile off the village, affords pasture for a few sheep which are driven to it over the sands at low water.

Surface, Hydrography, Communications.—The surface of Edinburghshire is in general uneven. The most hilly district comprises the parishes of Stow and Heriot in the south-eastern portion of the county, the Moorfoot Hills being the northern boundary of Stow parish. In this district is the Sairs Law, 1739 feet above the sea. The continuation westward of this high ground through the parishes of Temple and Pennicuik forms the boundary between this county and Peeblesshire. It has a general elevation of upwards of 800 feet, and is rather flat and covered with bogs and mosses; but in some parts there are hills of considerable elevation, as the Coat Law, 1680 feet, and the Blackhope Scars, 1850 feet, above the level of the sea. Farther westward are several high hills, as the Cairn Hill (1800 feet), and others which belong to the Pentlands. Farther west, in the district on the Lanarkshire boundary, only isolated bills occur, the highest of which, Leven's Seat, at the south-western extremity of the county, is about 1200 feet above the sea. Between this high ground and the Frith of Forth are the Pentland Hills, the highest summits of which are from 1800 to 1900 feet above the sea, but their mean elevation probably does not much exceed 1000 feet. They terminate at the distance of a few miles from Edinburgh. In Ratho parish, to the west of the Pentlands, the Plat Hills, a small range about a mile and a half long, attain an elevation of nearly 600 feet. Dalnaboy Crags, in the same parish, are three hills of trap, which are above 600 feet high. Towards the northern boundary the county presents an undulating surface, on which a few hills rise to a moderate elevation. Corstorphine Hills, lying westward from the city of Edinburgh, extend about two miles in length, and are about 470 feet above the sea level; Braid and Blackford Hills are immediately south of the city, and Arthur's Seat is close to the Old Town on the south-east.

This county is watered by several rivers. The *Gala Water*, which falls into the Tweed, traverses Stow parish, receiving in Heriot parish the Heriot Water, which has several small tributaries, and in Stow parish the Lugate, Ernit, and Cockhan Waters, besides numerous mountain streams. The *South Esk* issues from a small lake in Peeblesshire, on the borders of the county, and its tributary, the Gladhouse Water, takes its rise in the Moorfoot Hills, also on the borders. They unite after a winding and parallel northern course of about 9 miles. After passing Dalkeith the South Esk joins its waters with those of the North Esk, and the united streams form the river Esk, which falls into the Frith of Forth at Musselburgh, the South Esk and Esk having traversed about 18 miles of the county in a nearly direct line from south to north. The *North Esk* also takes its rise on the borders of Peeblesshire, and enters Mid-Lothian a few miles west of the South Esk. In its course it receives a great many tributaries from the eastern side of the Pentlands. The banks of both of these streams are generally picturesque, and occasionally romantic;

and the localities through which they pass offer many spots of great interest to the tourist. The *Water of Leith* takes its rise in the parish of Mid Calder, on the south-western border of the county. It receives several unimportant streams from the western sides of the Pentlands, and after a winding north-eastern course, in which it traverses the county for about 20 miles, passing by the north-west and north of Edinburgh, it falls into the Frith of Forth through the harbour of Leith. The *Almond Water* separates Mid-Lothian from Linlithgowshire, except as regards the parish of Mid Calder, the extreme south-western part of Edinburghshire, which is separated from the adjoining county by the Breich Water, a tributary of the Almond. The Almond receives in its comparatively straight north-eastern course the Harwood, Muirhouse, and Linhouse Waters from the hills on the south-west of the shire; and, near the Corstorphine Hills, the small stream called the Gogar Burn. It falls into the Frith of Forth at the village of Cramond after a course (including that of its tributary the Breich) of about 20 miles. The Union Canal enters Edinburghshire about 9 miles west of the capital. A small lake at the base of Arthur's Seat, called Duddingston Loch, is a favourite winter resort of the skaters of Edinburgh.

Mid-Lothian possesses many excellent roads and bridges, and ample canal and railway communications. The chief highways are the high-road to London by the eastern coast, through Berwick, and that through Dalkeith by Lauderdale, across the Tweed at Coldstream; the high-road to Queensferry and the north-east of Scotland; and the high-roads to Glasgow through Linlithgow, Bathgate, and Mid Calder. There are also excellent roads to Lanark, Dnmfries, Peebles, Selkirk; and other turnpike-roads to the whole south and south-west of Scotland. The parish roads are also kept in good order. The railways in the county are, the North British, extending along the east coast to Berwick; the Edinburgh and Hawick, a branch of the North British, to the south of Scotland; the Caledonian to the south-west and to Carlisle; the Glasgow and the Granton lines.

Geology, Mineralogy.—Mid-Lothian rests on a series of strata, connected with the coal formation, which in this district forms altogether a deposit, the depth of which is calculated to be in some places 3000 feet. The depth and character of the strata vary much however in different parts of the county. In the hilly south-eastern districts, the rocks are of grauwacke and clay-slate; quartz, spar, and steatite being found only in small quantities. The Moorfoot Hills are of grauwacke, no granite or other primitive rocks being found there. The rock of the Pentlands again is chiefly porphyry, of which the prevalent kinds are the clay-stone and felspar porphyries. Extending northward from the Moorfoot range and the Pentlands, in the wide valley of the Esk between these ranges, is the extensive mineral field of Mid-Lothian, which, when it arrives at the northern part of the county, rests on the old red-sandstone of the Craigmillar Hills, that again resting on the secondary rocks of Salisbury Crag. Coal, limestone, and sandstone, are extensively wrought throughout the whole of this district, the limestone chiefly in the neighbourhood of Dalkeith; though dislocations are of such frequent occurrence that the strata are thrown up or down sometimes from 5 to 40 fathoms. On the shore of the Frith, between Portobello and Musselburgh, the seams of shale, sandstone, and coal, can be easily traced. The stratum here exposed stretches along for a considerable distance, and lies almost vertically; yet it is said to shew but little of the depth of this extensive mineral field, in which not less than 25 seams of coal, varying in thickness from 2 to 25 feet, are found. The sandstone beds differ much in character. Freestone is wrought in the neighbourhood of Portobello, and both limestone and ironstone have been found in Duddingston parish, close to the shore of the Frith.

In the parish of West Calder, which with Mid Calder forms the south-western extremity of the county, coal, ironstone, and limestone have been wrought to some extent, though the coal is inferior, and the supply is not abundant. Ironstone is not largely produced, though both the Wilsontown and Shotts iron companies derive part of their supplies from this locality. Sandstone, whinstone, and limestone have all been wrought in Mid Calder parish.

Judging from this, and from the appearance of the strata in the different rivulets which intersect this part of the county, sandstone, shale, and limestone may be specified as the rocks which form the basis of the district. Near East Calder village, the limestone is 40 feet thick; it rests on sandstone, and is surmounted by beds of shale, and thin beds of clay-ironstone alternately. The limestone consists almost entirely of shells; the shale shews innumerable impressions of plants, and the freestone affords numerous specimens of ferns. In the strata exposed in the Almond Water, sandstone, limestone, shale, clay, ironstone, and coal are all found, the seams being occasionally traversed by trap. The clay-ironstone is found only in these beds, and parts of the shale are exclusively composed of vegetable remains. Around Edinburgh, shale, sandstone, and limestone are still the prevailing strata, the limestone having been seemingly the earliest deposit of all. Through this stratum which is about 30 feet thick, and is the lowest seam of the great mineral field of the county, the igneous trap rocks, on which Edinburgh is built, and those also which lie to the west and south of the city, seem to have been forced up. These rocks consist of greenstones, porphyries basalts, and some others. The Castle Rock is composed

of basalt and greenstone, and, on the south and east sides of it, the trap may be seen in curious contrast with the rent and shattered sandstone. At one portion of the Calton Hill, trap and greenstone are interposed with the limestone and shale, so as to induce the supposition that there have been two eruptions of igneous rocks, the second having had the effect of raising all the strata together. This supposition is borne out by the appearance of the hills in the neighbourhood. The Calton Hill is composed of claystone and porphyry, with greenstone occasionally intervening. The same greenstone forms the rock on which the New Town of Edinburgh is built, and resembles closely that of Salisbury Crag. The base of Salisbury Crag is sandstone and shale, above which is a thick seam of greenstone. The centre and upper part of Arthur's Seat is basalt, columns of which form what are called Samson's Ribs: the precipice on the southern side shewing the different strata (sandstone and limestone chiefly), through which the trap has been forced. In the trap of the Corstorphine Hills, the greenstone again appears, the same greenstone forming the Cramond Island. Along the shore, trap of different kinds appears, interposed with the sandstone, while immense masses of greenstone are found in the sand and gravel on the side of the Frith. Freestone is wrought in the extensive quarries of Craigeleith, and also at Granton.

Climate, Soil, and Agriculture.—The eastern coast of Scotland generally is visited during the months of March, April, and May, with a cold and dry easterly or north-easterly wind; and the climate of Mid-Lothian resembles that of the adjoining coast. During the rest of the year the prevailing winds are from the west and south-west. These blow principally in August and September, and bring with them a great deal of rain. About 24 inches of rain fall annually. The temperature varies much in the different parts of the county. In the hilly south-eastern district the climate is cold, but healthy. This district is chiefly devoted to grazing; the black-faced sheep and the cattle reared here being much esteemed. The climate westward of this, and nearer the Pentlands, is cold and damp, owing partly to the proximity of extensive moorlands. In the rich and fertile valley watered by the North and South Esks and their tributaries, the climate necessarily varies, being milder in the low grounds than in the more elevated and exposed districts. The soil in the valley is light, the subsoil porous, and the ground being very undulating, the land enjoys a natural drainage. In the higher districts the soil is a thin clay, with a retentive subsoil, but draining converts this rapidly into good arable land. Towards the Frith of Forth the lower district of the county is in general warmer than farther inland, reaping being usually commenced a fortnight earlier. Along the west side of the Pentlands the climate is, though cold, very salubrious. The soil throughout the western district is of good quality. It is in the highest state of cultivation, and grows all kinds of crops.

One-third nearly of the land in the county is devoted to pasturage. The county is generally well wooded, watered, and inclosed. The agricultural farms are of considerable size, the farm-houses are substantial and commodious, and the implements of husbandry of the best description. In the neighbourhood of Edinburgh are many nurseries and market gardens, the arable lands beyond these being principally devoted to the culture of potatoes, turnips, and other vegetables. The land where these vegetables are raised is divided into small holdings, and is amply supplied with the manure of the capital. In the more landward parts of the county, wheat, oats, and barley, beans or peas, potatoes, turnips, and clover, are the crops usually raised, the succession varying in different districts, according to the different rotations, which are sometimes a four, sometimes a five years' shift, according to the nature of the soil. The cattle throughout the county are of the best breeds. For all kinds of agricultural produce ready markets are found in the city of Edinburgh, in other places in the county, or in the immediate neighbourhood.

Divisions, Towns, &c.—Mid Lothian is divided into 33 parishes, and is within the Synod of Lothian and Tweeddale. According to the 'Census of Religious Worship and Education,' taken in 1851, there were 230 places of worship in the county, of which 66 belonged to the Established Church, 49 to the Free Church, 40 to the United Presbyterian Church, 16 to the Episcopal Church, 14 to the Independents, 9 to Baptists, and 36 to minor bodies. The number of sittings in 205 of the 230 places of worship is stated at 115,514. There were in the county 399 day schools, of which 232 were public schools, with 29,258 scholars; and 167 private schools, with 8016 scholars. The Sabbath schools in the county for which returns were received were 321, of which 80 were in connection with the Free Church, 69 with the Established Church, 60 with the United Presbyterian Church, and 112 with other bodies. The total number of scholars returned was 27,196.

The chief town of the county is EDINBURGH, and the towns next in importance to it are LEITH, the seaport of the capital, and DALKEITH, where is held an important market for grain. These will be found described under their respective titles: of the other towns we give a short notice here.

Musselburgh, about 5½ miles E. from Edinburgh, is a small sea-port, an ancient burgh of regality, and since the 1 & 2 Will. IV. c. 65 a parliamentary burgh, uniting with Leith and Portobello in the return of one member to Parliament: the population of the burgh in

1851 was 7092. The town is situated at the mouth and on the right bank of the river Esk, which flows between it and the village of Fisherrow. On the Links, or Common, between the town and the shore of the Frith of Forth, the Edinburgh races generally take place. Musselburgh is connected with Fisherrow by three bridges; the erection of the oldest of these bridges (now only used for foot passengers) has been attributed to a Roman colony that settled on Inveresk Hill immediately behind the town. Numerous Roman remains, traces of baths, &c., have from time to time been discovered at Inveresk. Musselburgh is generally well but irregularly built. It is clean, lighted with gas, and is well supplied with shops and markets. The parish church, built in 1806, will accommodate 3000 sitters. There are a Free church, an Episcopal chapel, and several chapels for United Presbyterians and Independents. The tolbooth, or jail, which is in the High-street, was built in 1590 of materials derived from a chapel dedicated to our Lady of Loretto, which had existed in the town from a very early period. The town-hall adjoins the jail. The chief bridge is an elegant and substantial structure. Tanning and leather-dressing, and the manufacture of sail-cloth are carried on; a salt-work is in the immediate neighbourhood; horse-hair cloth and fishing-nets are manufactured. The market-gardens supply vegetables for Edinburgh. There are a savings bank and two libraries in the town. The Grammar school of the burgh and two other schools are partly endowed. A few coasting vessels and small vessels from the north of Europe bringing timber, oil-cake, bone-dust, bark, hides, &c., visit the port. Slates, bone-manure, grain, and other commodities are imported from the adjoining coasts. Coals are the chief export. At the east end of the burgh is Pinkie House, not far from which was fought the battle of Pinkie. The Marquis of Hamilton, on behalf of Charles I., in 1638 met the Covenanters on the Links. In 1650 Cromwell's infantry encamped there. The inhabitants of the village of Fisherrow derive their subsistence from the sale of fish at Edinburgh.

Portobello, about 3 miles E. from Edinburgh, population 3497 in 1851, unites with Leith and Musselburgh in returning one member to the Imperial Parliament. It is much resorted to in summer by the inhabitants of Edinburgh for sea-bathing. There are hot and cold baths. The town has some good streets; a few of the older streets are narrow. There are several churches and chapels, and a good market-place. The town is lighted with gas. It is connected with the capital by the North British railway. Brick and tile-works, a flint-glass manufactory, and a paper-mill, give employment to many of the inhabitants; and there are salt-works near *Joppa*, a small village eastward of the town, but within the boundaries of the burgh of Portobello.

The following villages, with the parish population in 1851, and a few other particulars, may be mentioned:—

Borthwick, population 1614, about 12 miles S.E. from Edinburgh. The castle, built in 1430, is in the form of a double tower, of great height, and a magnificent hall, with a vaulted roof. It was here that Queen Mary retired with Bothwell after their marriage, and from this castle she fled in disguise to Dunbar. The castle was greatly injured by a cannonade from Cromwell. The houses of Borthwick village are clustered round the base of the castle. *Calder (Mid)*, population 1474, on the right bank of the Almond Water, 12 miles S.W. from Edinburgh, possesses an ancient gothic church and a chapel for United Presbyterians. In the vicinity is Calder House, the seat of Lord Torphichen. In Calder House is a portrait of John Knox, which is said to be the only authentic portrait of the Reformer. Knox preached at Calder House. *Cramond*, at the mouth of the Almond Water, contains between 40 and 50 houses; the parish is partly in Linlithgowshire. Cramond is said to have been a Roman station; many Roman antiquities have been found here. The mouth of the river affords at high tide a small natural harbour. There are iron-works a little way up the stream. *Duddingston*, at the south-eastern base of Arthur's Seat, about 2 miles S.E. from Edinburgh, population of the village, 636. The parish church in the village is of great antiquity. An iron collar hangs at the church gate, a remnant illustrative of ancient ecclesiastical discipline. *Gilmerton*, about 4 miles S.E. from Edinburgh. Coal has been wrought here, it is said, for 300 years; and the lime-quarries are supposed to be the oldest in Scotland. There are a chapel of ease, a Free church, and a partially endowed school. *Granton*, on the Frith of Forth, 2 miles W. from Leith, and 3 miles N.W. from Edinburgh, has a good pier, 1700 feet long and 180 feet broad, and an hotel, erected by the Duke of Buccleuch; also the terminus, on the south side of the Forth, of the Edinburgh, Dundee, Perth, and Cupar railway. The ferry-steamer carries the train on its deck from Granton to Buntisland, on the opposite shore of the Frith. Steamers ply regularly between London and Granton, which divides with Leith the duties connected with the port of Edinburgh. On the pier are several warehouses, with cranes, slips, jetties, &c. Several handsome houses have been built on the shore. *Inveresk*, 6½ miles E. from Edinburgh by the North British railway, is beautifully situated on a rising ground behind the town of Musselburgh, and watered by the Esk. It contains many handsome houses, and is well wooded. In this parish are extensive coal-works. *Lasswade*, about 6 miles S.E. from Edinburgh, population of the parish 5821, is much frequented as a summer residence by the inhabitants of Edinburgh. The parish church is handsome. Besides that of the parish, there are two endowed schools. On the Esk are two corn-mills; but the paper-

mills and carpet-manufactories are the chief sources of employment. A small fragment of the old castle of Hawthornden, the residence of the poet Drummond, still exists in the neighbourhood of the modern mansion. Under the house are extensive caves, said to have served as places of concealment in the wars with England. *Newhaven*, on the shore of the Forth, half a mile W. from the town of Leith, is inhabited by the fishermen who supply Edinburgh. There is an old pier for the fishing-boats and some of the steamers of the river. Here, and at Trinity chain-pier, already mentioned, numerous villas have been erected. *Pennycaick*, or *Pennicuik*, 10 miles S. from Edinburgh, population of the parish 3003, contains extensive paper-mills. *Roslin*, 8 miles S. from Edinburgh. Here is the most extensive manufactory of gunpowder in Scotland. There are also a paper-mill and a bleach-field. Roslin chapel and castle will be noticed presently.

History, Antiquities, &c.—Mid-Lothian was in early times inhabited by the Ottadini and Gadeni, British tribes. The names of various streams, hills, and villages in the county are of British extraction. The Romans, who held possession of the county for about 400 years, included this district in their province Valentia. Anglo-Saxons from the north of England appear to have succeeded the Romans, and in ancient charters many names, evidently of Saxon origin, are found. They followed an influx of Scots-Irish, it is said, from the west. From the time of Malcolm Canmore the history of Edinburgh, then becoming a place of importance, is closely connected with that of the district generally, though many portions of the county have been the scene of events of national as well as of local interest.

Besides the Roman remains already referred to, traces of Roman camps exist in the parishes of Crichton, Mid Calder, West Calder, and Stow. Roman coins and many implements of domestic use have been found in several parts of the county. Feudal and ecclesiastical antiquities are numerous in this county. The finest is Roslin chapel, built in 1446, by William St. Clair, earl of Orkney and lord of Roslin; which, after remaining perfect for nearly two centuries and a half, was much injured towards the close of the 17th century. The architecture is of a very florid and somewhat peculiar style. The pillars and arches of the nave are especially elaborate, one of them in particular, which is designated the 'Prentice's Pillar.' The castle of Roslin, not far from the chapel, is a mere ruin, almost inaccessible from the surrounding ground, except by a small bridge over a deep valley. Many fortalices are scattered over the face of the county, each possessing its own history of local, if not of general interest. Crichton Castle, a large quadrangular mass of ruins on the banks of the small river Tyne, a little way north-east from Borthwick Castle, is finely described in the notes to 'Marmion.' Craigmillar Castle, standing on an eminence, separated by a valley from Arthur's Seat, is a place of great antiquity, though a considerable portion of the present building was erected after the destruction of the old castle by the English after the battle of Pinkie.

Mid-Lothian, as the metropolitan county, has from the earliest times contained the residences of many powerful families; it now contains perhaps a much greater number of modern residences than it did places of strength in feudal times. The Earl of Stair has a seat, Oxenford Castle, in Cranston parish; Eldin House, near Lasswade, belonged to Lord Eldin; Arniston House, on the bank of the South Esk, in Borthwick parish, is the seat of the family of Dundas.

Industry, &c.—The more important branches of industry carried on in this county have been already referred to in connection with the different villages. Coal works and stone and lime quarries occupy the inhabitants residing in the great mineral field of the county; grazing employs the highland farmers, and agriculture those occupying the low and rich land of the districts on each side of the Pentlands, and on the shore of the Forth around Edinburgh. The ale of Edinburgh has long been celebrated. There are breweries near Musselburgh, and distilleries there, near Edinburgh, and at Ratho. Paper and gunpowder are manufactured to a considerable extent; and there are several bleach-fields and corn and other mills on the banks of the rivers Esk and the Water of Leith. In 1851 there were saving banks at Dalkeith, Edinburgh, and Leith; the total amount due to depositors on the 20th November 1851 was 257,161*l.* 17*s.* 8*d.*

EDMONTON, Middlesex, an extensive village, and the seat of a Poor-Law Union in the parish and hundred of Edmonton, is situated in 51° 37' N. lat., 0° 3' W. long., distant 7 miles N. by E. from London by road, and 10½ miles by the Eastern Counties railway. The population of the parish of Edmonton in 1851 was 9703. The living is a vicarage in the archdeaconry of Middlesex and diocese of London. Edmonton Poor-Law Union contains 6 parishes, with an area of 47,880 acres, and a population in 1851 of 45,352.

The name of the place is given in Domesday Book as Adelmeton; it appears to have been first called Edmonton about the beginning of the 16th century. The parish church, a commodious edifice, was in great part rebuilt in 1772: the embattled tower at the west end, and some other parts of the building, are ancient. In the churchyard Charles Lamh lies interred. The Quakers, Independents, and Wesleyan Methodists have places of worship. National and Infant schools, several endowed schools, and the Children's Establishment for the West London Poor-Law Union are in the parish. Edmonton contains many excellent villas, chiefly the residences of London merchants.

Wyer Hall, about a mile north-west from the village, is a fine old mansion, built in the early part of the 17th century.

(Lysons, *Environs of London*; *Communication from Edmonton*.)

EDOM. [IDUMEA.]

EDRENOS. [ANATOLIA.]

EDWARD ISLAND, PRINCE. [PRINCE EDWARD ISLAND.]

EECLOO. [FLANDERS, EAST.]

EGER, a town, river, and circle, in the north-west of Bohemia. The town is situated on a rocky eminence on the right bank of the river Eger, in 50° 5' N. lat., 12° 24' E. long., and has a population of about 10,000. In former days it was strongly fortified; but most of its defences have been levelled, and the ditches have been filled up. There are several handsome buildings in the town, among which are the deanery church, six other churches, the spacious town-hall which stands in the market-place, a Dominican and a Franciscan monastery, and the barracks. In the burgo-master's house at the east end of the market-place the room is still shown in which Wallenstein was murdered in 1634. Eger has likewise a gymnasium, a military college, two hospitals, an infirmary, and an orphan asylum. Among the ruins of the Burg (citadel, or castle), the former residence of the margraves of Vohburg, which is situated in an angle of the fortifications above the river, is an ancient square tower built of black volcanic tufa. The double chapel too is very interesting, the lower one existed in 1213 and is supported by granite pillars; the upper rests upon four slender marble columns with pointed arches, and has an octagonal opening in the floor by means of which persons without being seen could hear mass celebrated in the lower chapel. In the castle hall adjoining the chapel the friends of Wallenstein were murdered previous to his own assassination. After the perpetration of this crime the castle it is said was haunted, and was consequently suffered to fall into decay. Eger has manufactures of broadcloth and kerseymeres, cottons, chintz, leather, soap, alum, &c. An avenue nearly three miles long leads northward from Eger to *Franzenbrunn*, or *Franzenbad*, famous for its cold mineral and saline springs, and for its mud and gas baths. The avenue passes a remarkable conical hill called *Kammerbühl* which is an extinct volcano. The baths are much frequented in the summer season, and rendered attractive by the beauty of the surrounding scenery. About 15,000 dozen bottles of the waters are annually exported.

The river *Eger* rises in the north-east of the Upper Palatinate in Bavaria near the junction of the *Böhmerwalde* and the *Erzgebirge* with the *Fichtelberg* Mountains. A few miles below its source it quits Bavaria, and enters the west of Bohemia at *Hohenberg*, whence it flows eastward through a valley which abounds in picturesque scenery and forms the natural division between the regions of the *Erzgebirge* and the *Böhmerwalde* until it reaches *Theresienstadt*, where it joins the *Elbe*: from the point of their confluence the *Elbe* becomes navigable. The length of the *Eger* is about 90 miles; its banks are high, and its bed stony; no part of it is navigable. The chief towns on its banks besides Eger are *Elbogen*, *Budin*, and *Theresienstadt*. In its lower course the *Eger* flows through an extensive marshy plain.

The *Circle of Eger* comprises the basin of the *Eger*, and extends westward from the *Elbe* to Bavaria, from which it is separated by the *Böhmerwalde*. The *Erzgebirge* Mountains separate it from Saxony on the north. Numerous offsets from these two mountainous regions cover a great part of the circle, and inclose many small valleys and plains. Both these mountain ranges rise in their highest points to above 4000 feet above the level of the sea, but their average height is not more than 3000 feet. They are composed chiefly of primitive rocks—granite and gneiss being everywhere prevalent—with clay-slate, mica-slate, and near the *Elbe* sandstone. Both systems are extremely rich in metals; marble and coal are also found. [BOHEMIA.] One of the branches of the *Erzgebirge*, which crosses the east of the department to the south of *Töplitz*, is called *Mittelgebirge*, or *Middle Mountains*; the highest point is the *Milleschauerberg*, which has an elevation of 3000 feet above the sea-level. The mountains generally are covered with forests; the southern slope of the *Mittelgebirge* however is generally a desolate region bare of trees, but abounding in bitter salt-springs, the waters or the salts of which (obtained by evaporation) are largely exported. The circle contains numerous evidences of volcanic agency at some long-distant epoch. Of these the most remarkable are—the *Kammerbühl*, a vast conical heap of scoria and columnar basalt thrown up from beneath mica-slate, between the town of Eger and the baths of *Franzenbrunn*; the *Teufelsmauer*, a remarkable precipice of basaltic lava 1100 feet high, passed on the road from *Töplitz* to *Bilin*; and near the latter place a singular isolated basaltic rock of vast dimensions. [BILIN.] The circle is famous for the number and excellence of its cold and hot mineral springs; among the latter *Carlsbad* and *Töplitz* have a world-wide reputation, and are amongst the most aristocratic watering-places in Europe. The nature of the soil, except in a small proportion of the surface, is unfavourable for agricultural operations; in this the usual corn-products are raised, but not sufficient for the consumption. Hops of excellent quality and good wine are grown near the *Elbe*. The inhabitants live chiefly by mining, manufactures, and trade. The mineral products are silver, tin, lead, iron, sulphur, nitre, garnets, coal, &c. The manufactures are woollen and cotton stuffs, lace, hosiery, paper, china-ware, Bohemian

glass, tin- and pewter-wares, iron- and steel-wares, chemical products, papier-mâché, &c. The country is traversed by numerous good common roads leading from the valley of the *Eger* to Saxony, and by the gorges and passes of the *Erzgebirge*, and southward to Prague and Pilsen. The great railway from Vienna to Dresden through Prague skirts the eastern side of the circle passing through *Theresienstadt*, *Lobositz*, and *Aussig*; and a branch line runs from Prague to the *Eger* at *Laun*. Small steamers ply on the *Elbe* from Dresden to within 20 miles of Prague. The country is interesting to the tourist for its extensive and picturesque views, and its numerous old castles and convents are rich in historical and legendary lore. The climate is cold in winter, but except in the marshy country on the lower *Eger* it is healthy. In some of the mountain valleys of the *Erzgebirge* goitrous affections and cretinism are prevalent. Besides the *Eger* above noticed, the only streams worth notice are its feeders, the *Töpl* and the *Striela* from the right bank, the *Zwoda* and *Weistriz* from the left bank; and the *Bila* which is joined by the *Saubach* from *Töplitz* and enters the *Elbe* at *Aussig*. The *Töpl* flows northward through a long narrow valley hemmed in by wooded offshoots of the *Böhmerwalde*, and enters the *Eger* below *Carlsbad*. Near its source are the large convent of *Töpl*, the baths of *Marienbad*, and the fine château of *Königswart*, belonging to Prince *Metternich*. The circle has an area of 2861 square miles, and a population of 560,732. Near the borders of Saxony and Bavaria German is spoken, but in the interior the language is a dialect of the Slavonic, which is spoken by the Chechs, who form the great bulk of the population. [BOHEMIA.]

Towns.—*Eger*, the capital of the circle, is noticed above. Among the other towns we give the following:—*Asch*, 14 miles N.W. from Eger, and the most western town in Bohemia, has about 5000 inhabitants, who manufacture cotton hosiery, woollen stuffs, and wire. *Aussig*, at the confluence of the *Bila* with the *Elbe*, is a small manufacturing town with about 2000 inhabitants. It is the birth-place of the painter *Raphaël Mengs*, and is a station on the Prague-Dresden railway. *Bilin*, a small walled town on the *Bila*, to the south-west of *Aussig*, and famous for its alkaline mineral springs, has been already noticed. [BILIN.] *Carlsbad*, celebrated for its hot springs, is described under its proper head. [CARLSBAD.] *Ellenbogen*, *Elnbogen*, or *Elbogen*, a picturesque old town built on a rocky promontory, round which the *Eger* bends, 18 miles N.E. from Eger, has about 2000 inhabitants and a manufactory for china-ware. The town was formerly entered by one narrow gate flanked by a wicket for foot passengers, but the construction of a handsome chain suspension-bridge across the *Eger*, which flows round the north side of the town, has necessitated the opening of a new approach in that direction. The castle of *Elbogen*, one of the oldest in Bohemia, is now used as a prison. A large mass of meteoric iron is exhibited in the town-hall. *Franzenbrunn* is noticed above. *Graslitz*, high up the *Erzgebirge*, 19 miles N.N.E. from Eger, near the source of the *Zwoda*, has a population of about 5000, engaged in the manufacture of cotton-yarn, paper, musical instruments, looking-glasses, &c. *Joachimsthal*, situated in a gorge of the *Erzgebirge*, at a distance of 30 miles N.E. from Eger, is an old mining town with above 4000 inhabitants. It was formerly a place of much greater importance than at present, owing to its silver-mines. In the silver-mines, which are said to be the oldest in Europe, 400 men are employed instead of 800 as formerly. The first silver dollars, it is said, were coined here, the German name for dollar (thaler, 'valley-pieces') being a contraction of *Joachimsthaler*. Zinc and cobalt are also obtained from the mines; wire, smalt, and vermilion are manufactured. *Kaaden*, on the left bank of the *Eger*, at a distance of 45 miles N.E. from the town of Eger, has a large corn-market and 3500 inhabitants, who manufacture woollen stuffs and hosiery. *Kommotau*, a few miles N.E. from *Kaaden*, on the road from Prague to *Chemnitz*, is a walled and well-built town, with a population of 3725. Woollen stuffs, cotton prints, and beer are the chief industrial products. In the environs are alum-mies and alum-works. *Königsberg*, 9 miles below Eger, on the right bank of the river *Eger*, has an old castle, some trade in corn and hops, and a population of 3900. *Laun*, on the right bank of the *Eger*, on the high road from Prague to *Chemnitz*, is a busy little town with about 2000 inhabitants. The *Eger*, which frequently overflows its banks near the town, is here crossed by a long stone bridge. The neighbourhood has rich pastures and celebrated apple-orchards. The town is surrounded by old walls; there is a branch railway to Prague. *Lobositz*, a small town of 1200 inhabitants, situated at the foot of vine-clad hills, on the left bank of the *Elbe*, is a station on the railway from Vienna to Dresden. A bridge connects it with *Leitmeritz* on the right bank. *Saatz*, a walled town of 5000 inhabitants, on the right bank of the *Eger*, which is here crossed by a handsome chain suspension-bridge, is about 10 miles W. from *Laun*. It is an ill-built, miserable-looking place. The principal structures are a collegiate church, a capuchin monastery, and the gymnasium. The study of St. John Nepomuk is still shown in the town. There is some trade in wine and hops grown in the district round the town, and the best products of the kind in Bohemia. North-east of *Saatz*, on the road to *Töplitz*, is *Brux*, a small place of about 2900 inhabitants, engaged principally in the coal-mines of the neighbourhood, and in preparing salts for export from the mineral springs. The country between *Brux* and *Saatz* is for the most part desolate, bare of trees, and devoid of fresh water, but abounds with springs, most of which are impregnated with

bitter salts. Here are the springs of *Püllna*, *Saidchutz*, and *Seilitz*, miserable villages, not frequented as watering-places; but water from the springs to which they give name is evaporated, and the salts that remain are exported in large quantities. To the north of *Drux*, and at the foot of the *Erzgebirge*, is the large Cistercian convent of *Oseeg*. *Schlackenwald*, or *Schlaggenwald*, 20 miles E. from *Eger*, in a valley screened by forest-clad offshoots of the *Böhmerwalde*, and near the left bank of the *Töpl*, has about 3000 inhabitants, who manufacture woollen cloth, porcelain, and tin and pewter ware, and work in the neighbouring tin-mines. *Thericsenstadt*, a strongly-fortified town, built by the emperor *Joseph II.* in the midst of the morasses at the junction of the *Eger* with the *Elbe*, has a population of about 1500, exclusive of the military. The defences of the place are very strong; the country round it can be inundated by means of sluices. The situation however is unhealthy. *Töplitz*, the famous watering-place, is noticed in a separate article. [TÖPLITZ.]

EGHAM. [SURREY.]

EGHIN. [ARMENIA.]

EGREMONT. [CUMBERLAND.]

EGRIPOS. [EUBŒA.]

EGTAG-ALTAI MOUNTAINS. [ALTAI MOUNTAINS.]

EGYPT, AND EGYPTIANS. *Egypt* (*Miz* or *Mizraim* in Hebrew, *Masr* in Arabic, and *Chemt* or *Chem* in Coptic) is within the limits of Africa, though bordering on Asia. It is bounded N. by the Mediterranean; E. by the little river of *El-Arish*, on the borders of Palestine and the Syrian or Arabian Desert, which extends from the Mediterranean to the Gulf of Suez, and thence southward by the west coast of the Red Sea; and W. by the Libyan Desert. *Egypt* Proper is merely the long narrow valley of the Nile, below the rapids or cataracts of Assouan, the ancient Syene, which have been regarded as the southern boundary from the oldest time. But the political limits of *Egypt* have extended both in ancient and modern times further south along the Valley of the Nile into the country known by the general name of Nubia, and in modern times over the western desert as far as the Oases, and the eastern country to the Red Sea. The length of *Egypt* from the cataracts of Syene, 24° 3' N. lat., to the most northern point of the Delta on the Mediterranean, 31° 37' N. lat., measures on the map about 500 English miles; but the length of the cultivated parts of *Egypt*, or the Valley of the Nile, is, including the Delta, at least a hundred miles more. The Valley of the Nile and the Delta are the only parts, excepting the Oases, where there is a settled population. We may therefore consider *Egypt* under each of these four great divisions:—1. The Valley of the Nile; 2. The Delta; 3. The Western Desert and the Oases therein inclosed; 4. The Eastern country towards the Red Sea.

1. *Valley of the Nile*.—The Nile coming from Nubia runs through a deep and narrow valley sunk between two ridges of rocky hills, which rise in some places more than 1000 feet above the level of the river. The breadth of the valley varies considerably, but it is seldom more than 10 miles, and in many places, especially in Upper *Egypt*, it is not two miles, including the breadth of the river, which varies from 2000 to 4000 feet. In its course within *Egypt* the Nile contains numerous islands. From Assouan to Selseh a distance of about 40 miles, the river runs nearly in the middle of the valley, leaving little cultivable land on each side. As we advance northward the western ridge recedes from the river, so as to leave a space of several miles between the left bank and the foot of the hills, while the east chain keeps closer to the corresponding or right bank of the Nile. North of Keneh the river forms a great bend to the west and north-west as far as Minyeh (28° 8' N. lat.), near which it reaches its westernmost point, which is about 120 miles to the west of the longitude of Keneh; it then inclines again to the north-east a few miles beyond Benisouef, after which it assumes a course nearly due north to the apex of the Delta. From Farnhout, half way between Keneh and Girgeh, a canal runs parallel to and west of the course of the Nile under the different names of *Moye Souhadj*, *Bahr Jousouf*, &c., for about 250 miles to Benisouef, where an opening in the western ridge allows a branch of it to pass into the district of Faioum, which it irrigates and fertilises. Its surplus waters then flow into the *Birket-el-Keroun*, the ancient *Mœris Lake*. [BIRKET-EL-KEROUN; FAIOUM.] Another branch of the *Bahr Jousouf* continues to follow the course of the Nile northward as far as the Delta. The *Bahr Jousouf* from *Ashmoueln* to Benisouef runs at the distance of 3 to 6 miles from the river; the western ridge being here from 8 to 10 miles, and near Benisouef 15 miles, distant from the Nile. The banks of the *Bahr Jousouf*, like those of the Nile, are raised higher than the rest of the valley. Consequently between the canal and the Nile there is a kind of depression. On the other or west side of the canal is a strip of cultivated land as far as the inundation or artificial irrigation extends, beyond which and to the foot of the ridge is a strip of sand, light and drifting in the neighbourhood of the cultivated ground, and coarser and mixed with pebbles near the base of the hills. Consequently the cultivable land along the banks of the Nile, both to the east and to the west of the river, by no means occupies the whole breadth of the valley. The *Bahr Jousouf* appears to be the same as the *Oxyrhynchus Canal* of ancient times, which *Strabo*, while sailing along it, mistook for the Nile itself, on account of its magnitude. North of Benisouef the western range, the height

of which becomes less and less as it advances northward, again approaches the river near *Sakkarah*, and forms in the neighbourhood of *Jizeh* a kind of natural terrace, on which the great pyramids stand. The ridge then continues to skirt the western or Rosetta branch of the river as far as the neighbourhood of the Canal Bahreh, which once communicated with the Lake *Mareotis*. The ridge here inclines to the west, and joins the hills which skirt the valley of the *Natron lakes*. [BAHR-BELA-MA.]

The eastern range leaves the banks of the Nile at a higher or more southern point than the west ridge. From *Mouut Mokatteh*, near *Cairo*, it turns off abruptly to the east, and under the name of *Jebel Attaka* runs to the Red Sea, near *Suez*. North of it the sands of the desert of *Suez* spread close to the eastern skirts of the Delta.

The general character of the western ridge which borders the Valley of the Nile is a limestone formation which contains numerous fossil shells. The great pyramid is built of this kind of stone. In the neighbourhood of *Esneh*, in Upper *Egypt*, a sandstone formation commences, alternating with limestone, but the mountains contain also slate and quartz of various colours. The great slabs used in the construction of the temples of *Egypt*, with the exception of those of the Delta, were of sandstone, as well as many of the sculptures or statues. In the neighbourhood of *Selseh* are extensive quarries of sandstone.

The mountain range on the eastern side differs in some respects in its geological character from the western ridge, and it generally rises more abruptly, and often close to the edge of the river. From *Mouut Mokatteh*, near *Cairo*, the limestone extends southward, though with many interruptions, as far as on the western side of the Nile. But basalt, serpentine, and granite appear to commence earlier, and to characterise the eastern more strongly than the western side. Near Assouan the granite alternates with the decomposed sandstone, exhibiting an irregular and broken appearance, which has sometimes been compared to a ruin. On the east side of the Nile, near Assouan, scattered about the foot of the mountains, and occasionally close to the river, are those extensive granite quarries which furnished the ancient *Egyptians* with materials for their colossal statues and obelisks.

2. *The Delta*. The Nile issuing from the valley a few miles north of *Cairo*, enters the wide low plain which, from its triangular form and its resemblance to the letter Δ , received from the Greeks the name of the Delta. The river divides into two branches, that of *Rosetta*, or old *Canopic*, and that of *Damiat*, or *Phatuitic*. The figure of the Delta is now determined by these two branches, although the cultivated plain known by that name extends east and west, as far as the sandy desert on each side. In ancient times the triangle of the Delta was much more obtuse at its apex, as its right side was formed by the *Pelusiatic* branch, which, detaching itself from the Nile higher up than the *Damiat* branch, flowed to *Pelusium*, at the eastern extremity of *Lake Menzaleh*. This branch is now in great measure choked up, though it still serves partly for the purpose of irrigation. West of the *Pelusiatic* branch the *Moes Canal* corresponds with the *Tanitic* or *Saitic* branch of the ancients, and the *Menzaleh Canal* with the *Mendesian* branch; they both enter *Lake Meuzaleh*, a vast salt marsh, 40 miles long, which communicates with the sea by several outlets. Between the *Damiat* and the *Rosetta* branch are numerous canals, large and small, intersecting the country in every direction. Along the sea-coast is another salt lake or marsh, called *Burlos*, communicating with the sea by an outlet, which is probably the same as the *Sebennytic* mouth of the ancient geographers. Proceeding westward we meet with the *Rosetta*, or *Bolhitic*, mouth, which with that of *Damiat* are now the only two entrances from the sea into the Nile, and they are accessible only to small vessels. The Nile at *Rosetta* is 1800 feet wide, and at *Damiat* 800 feet. West of *Rosetta*, a salt marsh, called *Lake Etko*, has been formed, which communicates on one side with the Nile, and on the other with the sea or *Aboukir Bay*, by an outlet which corresponds to the old *Canopic* mouth. West of *Lake Etko* is the *Lake of Aboukir*, which likewise communicates with the sea, and is divided from *Lake Mareotis* to the south-west of it by an isthmus, along which passes the canal of *Alexandria*, which was restored by *Mehemet Ali* and is now known as the *Mahmudiye* Canal. [ALEXANDRIA; BIRKET-EL-MARIOUT.] This canal was used for the conveyance of passengers by the overland route to *India*. From the mouth of this canal at *Atfeh* the passengers proceed along the Nile to *Boulak*, the port of *Cairo*, in steamboats constructed for the service; and thence across the desert in caravans to *Suez*. A railway is now in course of construction mainly for the overland service, which is intended to connect *Alexandria* with *Suez*.

The greatest breadth of the Delta, or cultivated plain of Lower *Egypt*, is about 80 miles from east to west; its length from the bifurcation of the river to the sea is about 90 miles. The interior of the country, which is covered with fields, orchards, and plantations, exhibits different aspects according to the various seasons. The rise of the Nile occasioned by the periodical rains of Central Africa, begins in *June* about the summer solstice, and it continues to increase till *September*, overflowing the lowlands along its course. The Delta then looks like an immense marsh, interspersed with numerous islands, with villages, towns, and plantations of trees just above the water. Should the Nile rise a few feet above its customary elevation, the inundation

sweeps away the mud-built cottages of the Arabs, drowns their cattle, and involves the whole population in ruin. Again, should it fall short of the ordinary height, bad crops and dearth are the consequences. The inundations having remained stationary for a few days begin to subside, and about the end of November most of the fields are left dry and covered with a fresh layer of rich brown slime: this is the time when the lands are put under culture. During our winter months, which are the spring months of Egypt, the Delta, as well as the Valley of the Nile, looks like a delightful garden, smiling with verdure, and enamelled with the blossoms of trees and plants. Later in the year the soil becomes parched and dusty; and in May the suffocating khamseen begins to blow frequently from the south, sweeping along the fine sand, and causing various diseases, until the rising of the beneficent river comes again to refresh the land. Showers are very rare in Egypt, except on the sea-coast; it rains three or four times in the year at Cairo, and once or twice in Upper Egypt, but perhaps not every year. The nights however are cool, and the dews heavy. Strong winds blow from the north during the summer, at the period of the inundation, and are very useful in propelling vessels up the Nile against the current.

Whatever may have been once the case, it appears to be ascertained that the coast of the Delta does not now advance; the currents which sweep along the north coast of Africa preventing any permanent accession of alluvial soil to the Egyptian shore. The gradual elevation of the soil of the Delta and Valley of the Nile has also been much exaggerated. From the most careful calculations the land since the time of the Ptolemies at the first or lowest cataract only appears to have been raised about 9 feet, at Thebes about 7 feet, at Cairo about 5 feet 10 inches, and thence, as the inundation spreads over an increasingly wider space east and west along the Delta, the elevation continually diminishes, till at Rosetta and the mouths of the Nile it is hardly perceptible: but the effect of the accumulation of soil on the Delta appears to be also counterbalanced by the gradual subsidence of the land along the coast here. With this raising of the soil from the alluvial deposits the bed of the river has also risen in proportion. The height of the inundation requisite for the irrigation of the land, making allowance for the difference of measures, appears to be nearly the same as in the time of Herodotus. The vertical increase of the cultivated soil must not be confounded with the accumulation of sand in some particular places, as round the great sphinx, &c. which has been in many instances the work of the wind.

3. *The Western or Libyan Desert.*—The nominal limits of Egypt along the sea-coast west of Alexandria are the mountains at Akabah-el-Soloum, the Catabathmus Magnus of the ancients, about 25° E. long., where the nominal limits of the pashalic of Tripoli begin, but this extensive tract of country is occupied by independent tribes of nomadic Arabs. Inland to the south is the oasis of Siwah, or Ammon. [SIWAH.] Farther to the south-east, and nearer to the Valley of the Nile, is a succession of oases, beginning with the Little Oasis, now called Wah-el-Dahryeh, or Wah-el-Behnesa, having been colonised by people from Behnesa, or Oxyrhynchus. The chief town or village is El-Kasr, about 28° 16' N. lat., 28° 51' E. long. It is three caravan days' journey S.W. from Faioum, across the desert. This Wah is fertilised by irrigation from plentiful and never-failing springs; it produces wheat, rice, barley, clover, liquorice, and a variety of fruit-trees. A short day's journey to the south of it is the small wah of El-Hayz, and three days further south is that of Farafreh. Five or six days west of the road to Farafreh is another oasis, called Wadi Zerzoora, abounding in springs and palms. Gerbabo, another wah, lies six days still farther to the west, and twelve days from Augila: the inhabitants are said to be black, probably Tibbhos, and are far removed beyond the dominion of Egypt. Four days south of Farafreh is the Wah-el-Gharbee, or Wah-el-Dakheh, which although mentioned by Arab writers was unknown to recent Europeans till discovered by Sir A. Edmonstone in 1819. It has however a temple of Roman date, with the names of Nero and Titus upon it. The condition and population of this oasis is superior to those of the others already mentioned: it contains 11 villages or towns, and a population of 6000 male inhabitants. It abounds with fruit, particularly olives and apricots; but dates, as in all the oases, form the principal produce of the district. The principal village, El-Kasr Dakhel or Dakheh, is in about 25° 35' N. lat., 23° 55' E. long., above three degrees W. from Thebes. There is a warm spring of the temperature of 102° Fahr., which supplies several baths attached to the mosque. Three days to the eastward of Dakheh, in the direction of Esneh, is the Great Oasis, or Wah-el-Khargeh. It extends in length from 24° 30' to near 26° N. lat., and has many villages and springs, as well as ruins of the ancient Egyptian time, of the Roman period, and of the Christian and the Saracenic eras. Several roads lead from the Great Oasis to the Nile, to Esneh, Siout, Farshout, and Thebes. The road to Dar-fur passes through it. This oasis, as well as that of Dakheh, are nearly on the same level as the Valley of the Nile, while the Little Oasis is about 200 feet higher than the Nile in the latitude of Benisouef.

4. *The Eastern Country.*—The large tract between the Valley of the Nile and the Red Sea has a different character from the western or Libyan Desert. Its general character is that of a mountainous region, which, although generally rocky and barren, is intersected by

numerous wadis, or ravines, fertilised by springs and clothed with vegetation. Several Arab tribes divide among themselves the whole tract, which cannot therefore be called properly a desert. In ancient times the roads leading from the Valley of the Nile to the shores of the Red Sea passed by regular stations, and villages and towns with a resident population. Mines of various metals and quarries of porphyry and other valuable stones are scattered among the mountains, and were once regularly worked. At present the only fixed habitations are at the port of Cosseir, and at the Coptic monasteries of St. Anthony and St. Paul. The convent of St. Anthony is about 17 miles from the shore of the Mersa, or Bay of Zaffarana, which terminates the Wadi Arabah. From St. Anthony to Deir Bolos, or St. Paul, is a distance of about 14 miles by the road. The Kolzim ridge lies between the two. Deir Bolos is only 9 miles from the sea to the south-east of Deir Antonios, and at Wadi Girf between it and the sea are the remains of houses and catacombs which appear to belong to the Greek period. At Jebel Tenesep, about 15 miles S.E. from Deir Bolos, the mountains diverge into the interior to the south and south-west towards the Nile, and are succeeded near the sea by a range of primitive mountains which run down the whole way to Cosseir, at a distance of from about 20 to 30 miles from the coast, the intervening space being occupied in some places by low limestone and sandstone hills. Jebel Gharih, about 25° 15' N. lat., in the primitive range, is described as resembling in its lofty peaks the Aiguilles of Chamouny; its height is estimated at nearly 6000 feet above the sea. About 20 miles farther south, in a range of low hills, are copper mines, which appear to have been once extensively worked. At Jebel Dokhan, 27° 26' N. lat., and about 25 miles from the sea, are the ruins of a town, and vast quarries of porphyry, with ancient roads crossing the mountains in all directions, and two wells cut through a solid porphyry rock. A small temple of red granite, with an inscription of the time of Hadrian, and dedicated to Serapis, has been left unfinished; all the materials are on the spot, but not a column was ever put up, and nothing was completed. A road led from Dokham to Coptos, now Koft, on the Nile, about 100 miles to the south-west, and another road to the port of Myos Hormos, once a great mart on the Red Sea, but which was already deserted in the time of Ptolemy. There are some fine valleys in these mountains, but the sea-coast is marshy and unwholesome. At Fatareah, about 40 miles S.E. from Dokhan, in the old road to Cosseir, are ruins of a Roman station, with a temple of the time of Trajan, and quarries of granite. South of Cosseir the mountains continue to run parallel to the coast as far as Jehel Zabarrah, or the Mountain of Emerald, which is about eight hours from the coast, and farther south-east to the ruins of BERENICE. The coast of the Red Sea was surveyed in 1830-33 by Commander Moresby and Lieutenant Carless, H.E.I.C. service.

Ancient History.—Egypt was one of the countries earliest civilised and brought under a fixed, social, and political system. The first king mentioned as having reigned over that country is Menes or Men, who is supposed to have lived above 2000 years B.C. The records of the Egyptian priests, as handed down to us by Herodotus, Manetho, Eratosthenes, and others, place the era of Menes several thousand years farther back, reckoning a great number of kings and dynasties after him, with remarks on the gigantic stature of some of the kings and of their wonderful exploits, and other characteristics of mystical and confused tradition. (See Eusebius, 'Chronicon Canonum libri duo,' edited by A. Mai and Zohrab, Milan, 1818.) The chronology of this early period is very uncertain. It has been conjectured that several of Manetho's dynasties were not successive, but contemporaneous, reigning over various parts of the country. Something like a chronological series has however been made out from the time of Menes by Champollion, Wilkinson, and other Egyptian archaeologists, partly from the list of Manetho and partly from the phonetic inscriptions on the monuments of the country. Lepsius, Buesen, and others have arranged the ancient history of Egypt under the Old, Middle, and New Monarchies: the Old extending from the foundation of the kingdom of Menes to the invasion of the Hyksos; the Middle from the conquest of Lower Egypt by the Hyksos to their expulsion; the New from the re-establishment of the monarchy by Amosis to the final conquest of Egypt by Persia, B.C. 350.

Menes was of This in Upper Egypt; soon after his death the country appears to have been divided into a southern and a northern kingdom, governed respectively by a Thinite and a Memphite dynasty. Other independent principalities appear to have existed at the same time. Of these the most famous were the Memphite kings, Suphis and his brother or brothers, to whom the great pyramid is attributed, and who are supposed to be the same as the Cheops and Cephren of Herodotus, although that historian has placed them much later, after Sesostris and Mæris, and Osirtasen I., who reigned about B.C. 2080, who appears to have become confounded with Rameses II., to whom also his name under the form of Sesostris was transferred. Abraham visited Egypt about B.C. 1920, and we have the testimony of the Scripture as to the high and flourishing state of that country at that early period. The Scripture calls the kings of Egypt indiscriminately Pharaohs, which is now ascertained to be not the proper name of the individual monarchs, but a prefix like that of Caesar and Augustus given to the Roman emperors. The word Phra in the Egyptian language meant the sun. Little or nothing is known of several successive

dynasties except the names of some of the kings. Under the 16th dynasty, about B.C. 1706, Joseph, and afterwards Jacob and his family, came to Egypt, where their descendants settled and multiplied in Lower Egypt. Egypt was then the granary of the neighbouring nations, and apparently the centre of a great caravan-trade carried on by the Arabs or Ishmaelites, who brought to it the spices and other valuable products of the east. (Genesis, xxvii. 25.) Joseph died very old, under the 17th dynasty, which was also from Lower Egypt, and which reigned from B.C. 1651 to 1575. About this period "there arose a new king who knew not Joseph." (Exodus, i. 8.) This was the head of the 18th dynasty, from Diospolis, or Thebes, which dynasty reigned 340 years, according to Eusebins and other chroniclers, and which contains the names of the most illustrious sovereigns of ancient Egypt. The irruption of the Hyksos, or shepherds, is supposed by some to have occurred during this period. Manetho's 17th dynasty consists of shepherd kings, who are said to have reigned at Memphis. These shepherds, who are represented as people with red hair and blue eyes, came from the north-east, perhaps from the mountains of Assyria; they conquered or overran the whole country, committing the greatest ravages, and at last settled in Lower Egypt, where they had kings of their own race. They were finally expelled by Amosis, the leader of the 18th dynasty, about B.C. 1530, who once more united Egypt under the dominion of a single monarchy, assuming the title of 'Lord of the Upper and Lower Country.' His succession marks the commencement of what has been termed the New Monarchy. The Exodus of the Israelites, about B.C. 1490 or 1460, occurred in the reign of Thothmes III. or his successor, some 430 years after the visit of Abraham to Egypt. Remeses II., or the Great, son of Osirei I., who ascended the throne about B.C. 1350, and reigned above 40 years, is supposed to be the Sesostris or Sesoosis of the Greek historians. He was one of the most warlike monarchs of ancient Egypt, and his wars extended far, and against many nations. Some of these are represented on the monuments of Thebes as of much lighter complexion than the Egyptians, with flowing beards, and dresses evidently Asiatic. His campaigns extended far into Asia, and the interior of Africa. That the old kings of Egypt extended their dominions to the east and north-east, as was done by their Greek and Mohammedan successors, is attested by the Scripture (2 Kings, xxiv. 7), and by the inscriptions on the Egyptian paintings and other monuments. (Wilkinson, 'Ancient Egyptians.')

The 19th dynasty, also of Diosopolitans, began about B.C. 1270, and reigned till about B.C. 1170. During this period the war of Troy took place, in the reign of a Remeses, supposed to be the fifth of that name, according to Pliny. The Pharaoh whose daughter Solomon married (B.C. 1013), must have been one of the 21st dynasty. It is curious that, from the Exodus till Solomon's time, a period of nearly five centuries, no mention is made in the Scripture of Egypt, which proves that the storm of war, if such there was, passed off either to the eastward of Palestine, or that the Egyptian conquerors followed the maritime road by Gaza and the Phœnician coast, leaving the high land of Judæa to their right. (Wilkinson, 'Materia Hieroglyphica,' part ii.) The 22nd dynasty began with Sesonchis, according to Manetho, the Sheshonk* of the phonetic signs, who began to reign about B.C. 978, and who is the Shishak of the Scripture, at whose court Jeroboam took refuge, and married his daughter, and who, after Solomon's death, plundered the Temple of Jerusalem in the 5th year of Rehoboam, about B.C. 971. Shishak is represented as coming to the attack with 1200 chariots and 60,000 horsemen, and an immense multitude of Libims (probably Libyans), of Sukkiims, and Ethiopians. (2 Chronicles, xii. 2, 3.)

The 23rd dynasty, called Diosopolitans, like the preceding, began about B.C. 908 with Osorkon II. Homer is believed to have flourished about this time, and he speaks of Egypt under its Greek name. The 24th dynasty, which is called Saite, from Sais, a district of Lower Egypt, begins with the Bocchoris of Manetho, the Bakhor or Pehor of the phonetic signs, about B.C. 812. Sabacos (Sabakoph, phonetic), begins the 25th dynasty of Ethiopians, who about this time invaded Egypt, or at least Upper Egypt. Tehrak or Tirkahak, one of his successors, attacked Sennaberib, B.C. 710. Sethos, a priest of Hephæsus, the great temple of Memphis, became king, and ruled at Memphis contemporary with Tirkahak. After the death of Sethos a great confusion or anarchy took place. At last twelve chiefs or uniorachs assembled at Memphis, and took the direction of affairs, which they retained for 15 years. After this, Psamatik I., or Psammithicus, the son of Necho or Necos, who had been put to death by Sabacos, became, by the aid of Greek mercenaries, king of all Egypt about B.C. 650 or 670. His son Necos II., the Pharaoh Necho of the Scripture (2 Kings, xxiii.), marched against the king of Assyria to the river Euphrates: he defeated and slew Josiah, king of Judah, B.C. 610; he also began the canal that joined the east branch of the Nile with the Red Sea. It was in his reign that the Egyptians lost possession of Syria. His successor, Psamatik II., was followed by Psamatik III., supposed by some to be the Apries of Manetho, and the Pharaoh of Hophra of the Scripture, who defeated the Phœnicians, took Sidou, and invaded Cyprus, which was finally subjected by Amasis, who succeeded him on the throne. The reign of Amasis lasted 44 years, according to a date on the monuments; his successor, Psammenitna, reigned only six months, when Egypt was invaded and subjugated by Cambyses, B.C. 525.

The 27th dynasty includes the Persian kings from Cambyses to Darius Nothus, during which time Egypt was a province, though a very unruly one, of the Persian monarchy. It was during this period that Herodotus visited Egypt. Though he saw that country in a state of humiliation and depression, yet he was powerfully struck by its buildings and its highly advanced social state, as well as by the peculiarities of its manners and institutions. Egypt appears to have made upon Herodotus an impression something like that produced by England upon French or other continental travellers in the last century, as being a country unlike any other. But Herodotus derived his information concerning Egyptian history chiefly from the priests of Memphis, and consequently his account is very meagre in all that relates to Thebes and Heliopolis, the two other great centres of Egyptian hierarchy. After several revolts the Egyptians succeeded in placing Amyrtaeus, or Aomahorte, a Saite, on the throne, about B.C. 414. This king alone constitutes the 28th dynasty. The magnificent sarcophagus of green breccia in which this monarch was interred is now in the British Museum. He was succeeded by the 29th dynasty, of Mendesians, who defended Egypt against the repeated attacks of the Persians, with the assistance of Greek auxiliaries under Agesilaus and others. At last Nectanebos II. being defeated by Ochus, fled into Ethiopia B.C. 350, and Egypt fell again under the yoke of the Persians. With Nectanebos ends the Egyptian dynasties.

The Persians were succeeded by the Macedonians, who, after the death of Alexander, founded the dynasty of the Ptolemies, or Lagidæ, who ruled over Egypt for nearly 300 years, and restored that country to a considerable degree of prosperity. At the death of Cleopatra, B.C. 30, Egypt was reduced to a Roman province by Augustus.

Having now closed this brief summary of the history of ancient Egypt, imperfect and conjectural in part as it unavoidably is, we shall in a few words advert to the social condition of the country under its native kings. That condition is now tolerably well known by the attentive examination of its remaining monuments and their sculptures and paintings. The researches of the French in the expedition to Egypt, and of Belzoni, Champollion, Rosellini, Wilkinson, and others, have put us in possession of a series of sketches evidently drawn from the life, and descriptive of the arts, industry, and habits of the ancient Egyptians. To these works and the plates which accompany them we must refer the reader for particular details; here we can only speak as to the general results. There is no doubt that this singular nation had attained a high degree of refinement and luxury at a time when the whole western world was still involved in barbarism; when the history of Europe, including Greece, had not yet begun; and long before Carthage, Athens, and Rome were thought of.

Egypt Proper, as we have said, consisted in ancient as in modern times of the narrow rock-bound valley of the Nile. It was at first divided into Upper and Lower Egypt, but a third province was subsequently formed out of these and called Heptanomis, or Middle Egypt: the capitals of these provinces were Thebes, Memphis, and Heliopolis. The provinces were again divided into nomes, or districts, which in the time of Sesostris amounted to 36, but were subsequently increased to 53. Each nome was presided over by a monarch, and subdivided into local governments, and these again into minor jurisdictions. This form of division of the country lasted till the time of Constantine, when it was divided into six provinces, but the subdivision into nomes lasted about three centuries longer.

The population of ancient Egypt was, if we may trust the Greek historians, much greater than that of modern Egypt. According to Diodorus, it once contained 30,000 towns and villages, and seven millions of inhabitants, though when he visited the country (B.C. 58) it only contained 18,000 towns and villages, and three millions of inhabitants. Herodotus asserts that in the reign of Amasis there were in Egypt 20,000 cities. These appear to be merely very vague statements, yet as they were obtained from the priests they may have been founded upon official data; for since in the most flourishing periods of its history the occupation of every male inhabitant was registered by the proper officer, it seems probable, though a census may not have been taken, that a tolerably correct estimate of the population may have been arrived at.

We cannot here enter into the vast and intricate ground of Egyptian mythology, and must refer the reader to the special works on that subject by Champollion, Wilkinson, and others. Their animal worship appears to have been originally symbolical, though it afterwards degenerated, at least for the vulgar, into gross idolatry.

Egypt attained its high state of material civilisation under a system of institutions and policy which resembles in some respects those of the Hindoos. It was a monarchy based upon an all-powerful hierarchy. The inhabitants were divided into a kind of hereditary castes or classes. The first of these classes consisted of the priests, who filled the chief offices of the state. They were the depositaries and the expounders of the law and the religion of the country; they monopolised the principal branches of learning; they were judges, physicians, architects; their sacred books, like their temples, were not open to the vulgar; they had a language, or at least a writing, the hieroglyphic, peculiar to themselves. The king himself, if not of their class, was adopted into it, was initiated into its mysteries, and became bound by its regulations. The priests were exempt from all duties, and a large

portion of land was set apart for their maintenance; and we read in Genesis, that when Pharaoh in a season of famine bought, by the advice of Joseph, all the land of the Egyptians on condition of feeding them out of his stores, "only the land of the priests bought he not, for the priests had a portion (of corn) assigned them of Pharaoh, and did eat their portion which Pharaoh gave them, wherefore they sold not their lands" (xlvii. 22, and see v. 26). The testimony of the Scripture is here perfectly in accordance with that of Herodotus and other historians. The priests were subject to certain strict regulations: they abstained from certain meats, and at times from wine; made their regular ablutions; had but one wife, while polygamy was allowed to the other classes; and they wore a peculiar dress according to their rank.

The soldiers formed the second class, for Egypt had a standing army from a very remote period, divided into regiments or battalions, each having its standard with a peculiar emblem raised on a pike and carried by an officer. Their arms were the bow, sword, battle-axe, shield, knife or dagger, spear, club, and sling. Their besieging-engines were the battering-ram, the testudo, and the scaling-ladder. They had a military music, consisting of a drum similar to the Indian 'tomtom,' cymbals, pipe, trumpet, and other instruments. The military caste was held in high repute, and enjoyed great privileges. Each soldier was allowed a certain measure of land, exempt from every charge, which he either cultivated himself when not on active service, or let to husbandmen or farmers. Those who did the duty of royal guards had besides an ample allowance of rations. They were inured to the fatigues of war by gymnastic exercises, such as wrestling, cudgelling, racing, sporting, and other games, of which the representations still exist on their monuments. The king and the princes, and indeed all persons of rank, were always either of the military or priestly class. The navy was not an exclusive service, the officers of it being chosen from the military class.

The husbandmen formed another class, which was next in rank, as agriculture was highly esteemed among the Egyptians. They made use of the plough and other implements. They had various breeds of large cattle, sheep, goats, pigs, and a quantity of poultry reared chiefly by artificial means, the eggs being hatched in ovens, as it is the practice of the country in this day. The peasants appear to have been divided into hundreds, each with a peculiar banner, which they followed when presenting themselves before the magistrate for the registration, which was taken at stated periods, when they were obliged to give an account of their conduct, and if found delinquent were punished with the stick. The boatmen of the Nile, huntsmen, and others were included in this class.

The next class was that of the artificers, shopkeepers, and the various tradesmen who lived in the towns. The progress made by the Egyptians in the mechanical arts is evident from their monuments, paintings, and sculptures, in which the various handicrafts are represented. The mines of gold, copper, iron, and lead, which are in the mountains between the Nile and the Red Sea, were worked at a very remote date under the early Pharaohs. The Egyptians were acquainted also with the art of gilding. The art of fabricating glass was early known among them. Beads of glass, generally coloured blue, are found on many mummies, as well as other ornaments of a coarse kind of the same material. A kind of ancient porcelain, sometimes covered with enamel and varnish, is found in great quantities in Egypt. Their pottery was often of the most elegant forms. The taste displayed by the Egyptians in several of their articles of furniture is not surpassed by our most refined manufactures of modern times. Many articles of furniture, especially chairs and couches, which have been discovered, and are now deposited in our museums or are represented in their paintings, are singularly beautiful in their forms. Linen cloth, plain or embroidered, white or dyed, was an article of Egyptian manufacture highly in repute among foreign nations. (Ezekiel, xxvii. 7.) The art of making leather was also known to them.

The last class or casto included pastors or herdsmen, poulterers, fishermen, labourers, and servants. The herdsmen and shepherds appear to have been held in peculiar contempt among the Egyptians. Besides servants, they had a number of slaves, both black and white. Fish was a common article of food, except to the priests. Wine of native growth was used by the rich, and a kind of beer was the drink of the poor.

The above-mentioned five classes, as specified by Diodorus, i. 74, were subdivided into ranks according to the various callings and trades, and this has occasioned some variety in their enumeration. Herodotus reckons seven classes, Plato six, Strabo and others have not reckoned the despised shepherds as a caste, and others have counted the military as one caste with the husbandmen, as being drafted from the body of the latter. Unlike the Hindoo, every Egyptian was not required to follow his father's profession and to remain in his class, but the effect was practically nearly the same: from the lowest class it was in fact hardly possible to obtain admission into any other.

The learning of the Egyptians was the admiration of every people who had communication with them. As already mentioned it was the almost exclusive possession of the priests. In science and art they also far excelled their less civilised contemporaries. Their pro-

gress in the exact sciences has however been taken for granted without sufficient evidence. Of their astronomy we know but little, but it appears to have been confounded with mythology and astrology, and made subservient to religious polity. Their year was of 365 days: their method of correcting it was by the adoption of the Sothic Period of 1461 years. Diodorus says that they foretold comets; but he also says that they foretold future events, leaving us in doubt whether they were successful in either or both cases. That they had some practical knowledge of geometry, which indeed must have been requisite for the construction of their buildings, &c., is generally admitted. Yet they appear not to have known until a comparatively late period that the level of the Red Sea was higher than that of the Mediterranean or of the Nile. Their boats were rude and clumsy, and chiefly constructed for river navigation. It was not until the period of the new monarchy that they had their ships of war both on the Mediterranean and Red Sea, but under Apries Egypt had sufficient naval power and skill to cope with the fleets of Tyre. His predecessor Necos II. is said by Herodotus to have dispatched some Phœnician vessels by the Red Sea to circumnavigate Libya (Africa), and to return to Egypt by the Pillars of Hercules, which they effected. The truth, or at least the extent of this expedition has however been much questioned. There is a curious story in Plato's 'Critias,' of Sonchis, an Egyptian priest, having told Solon of the Atlantic Isles, which he said were larger than Asia and Africa united, which seems to imply something like a knowledge of the existence of the Western Continent.

The fine arts were cultivated by the Egyptians with considerable success, though in every branch they exhibited a certain incompleteness. In architecture they had made great progress, as the ruins of many of their works attest: in sculpture their advance was stayed at a certain point by the rigid conventional laws, which forbade any material deviation from the established types in representations of the human figure, or in the symbols and forms of their deities: in painting there was somewhat more of freedom, because the objects depicted were of a more trivial kind, but as the rules of perspective were unknown, and scarcely any attempt was ever made to combine the parts of the painting into a complete picture, painting remained in a merely rudimentary stage. Yet though the arts of Egypt were thus imperfect, it is evident from existing early examples of Greek sculpture and architecture that for a considerable period the Grecian artists formed their works on Egyptian models, and only gradually emancipated themselves from Egyptian influence. The monuments recently discovered at Nineveh in like manner show that it was to Egypt that the Assyrian sculptors looked for their guiding principles. Indeed there can be little doubt that during the long period when Egypt was the dominant nation and the centre of civilisation, it exercised a very powerful influence over the intellect of other nations less advanced in civilisation.

With regard to the principal existing monuments of ancient Egypt we refer the reader to the respective heads, such as DENDERAH, EDFU, THEBES, &c., and for the general character of Egyptian architecture to the DIVISION ARTS AND SCIENCES in the ENGLISH CYCLOPEDIA.

The agriculture of ancient Egypt has been noticed in speaking of the class of husbandmen, and, as well as the commerce, incidentally in other parts of this article. For further particulars respecting the agriculture, commerce, resources, and policy of ancient Egypt, we must refer the reader to the various authorities quoted at the end of this article, especially to Heeren's 'Researches' and the works of Sir J. Gardner Wilkinson. The money of the Egyptians was in rings of silver and gold, similar to those still used in Sennaar, and its value was ascertained by weight, and its purity by fire. Gold was brought to Egypt from different tributary countries of Ethiopia and Asia, besides what they drew from their own mines. The revenue of Egypt, derived from the taxes alone, amounted, even during the negligent administration of Ptolemy Auletes, to 12,500 talents, between three and four millions sterling.

Modern History.—Passing over the ages during which Egypt was a province of the Roman Empire (for which see Hamilton's 'Ægyptiaca,' on the State of Egypt under the Romans, and 'Map of Egypt,' with the names of the Roman period, by Raoul Rochette), we begin the modern history of Egypt at the Mohammedan conquest. Under the caliphate of Omar, Amer Ebn el As invaded Egypt, A.D. 638, and took Pelusium and Babylon of Egypt, a strong Roman station, which sustained seven months' siege. John Mecaukes, governor of Memphis for the Byzantine emperor, treacherously surrendered his trust, and the Copts agreed to pay tribute or a capitation tax to the caliph, with the exception of old men, women and monks. The hatred, not only political but religious, which the Copts bore to the Greeks, facilitated the success of the Moslems. The first mosque on Egyptian ground rose with the new town of Fostat on the site of Roman Babylon. Alexandria made a long and obstinate defence; it fell at last, and was plundered. The Saraceu general asked the caliph what was to be done with the library, and Omar ordered it to be burnt. But the libraries of the Ptolemies had perished before—the Bruchion was destroyed during the siege of Julius Cæsar, and that of the Serapion was dispersed by Theophilus the Patriarch in 390; the library destroyed by Omar's order was therefore a more recent collection. The whole of Egypt as far as Syene was soon reduced to a province

of the caliphate, the capital of which was Fostat. In 868 Ahmed ebn e' Toolouh, governor of Egypt for the Abbasside caliphs, usurped the sovereignty of the country and founded the dynasty of the Toolouhides, which lasted till 906, when the caliphs retook Egypt. In 936 El Akhsbed Mohammed ebn Tughh, a Turkish chief in the service of the caliph, usurped the government of Egypt, and began a new dynasty which lasted till 970, when the Fatmeh, or Fatemides, the successors of Mahdee, who had continued to rule in Africa, took possession of Egypt, which they retained till 1171. This was the period of the wars of the early Crusades, in which the Fatemides acted a conspicuous part. The Kurd Salah e' deen Yoosef Ebn Eyoob succeeded to the Fatemides in 1171, and founded the dynasty of the Eyoobites, which lasted till 1250, when El Moez, a Turkoman memlook or slave, after murdering Touran Shah, usurped the throne, and founded the dynasty of the Baharite Sultans, who took possession of Syria also. Baybars, likewise a memlook, assassinated his master in 1261 or 1262, made himself Sultan of Egypt, retook Syria from the Tartars, took Damascus, and put an end to the caliphate of Asia, and extended his conquests as far as and over part of Armenia. His descendants reigned till 1382, maintained possession of Syria as far as the Euphrates, and encouraged agriculture and the arts. Their dynasty is known by the name of Baharite Memlook Meleks, or Sultans. They did not assume the title of caliphs, but allowed the descendants of the Abbassides to retain that name, and to live in Egypt under their subjection, as a sort of state prisoners.

In 1382 Dowlet el Memeleek el Borgééh, a Circassian slave, took possession of the throne and founded the dynasty of the Borgééh, or Circassian Memlooks, which lasted till 1517, when Selim 1., the Ottoman sultan, advanced into Egypt, defeated the Memlooks at the battle of Heliopolis, and caused Toman Bey, the last of their kings, to be hanged at Cairo. Selim abolished the dynasty, but not the aristocracy of the Memlooks; he even made conditions with the Memlooks by a regular treaty, in which he acknowledged Egypt as a republic, governed by 24 beys tributary to him and his successors, who appointed a pasha, or governor, to reside at Cairo. Under this form of government Egypt remained nominally subject to the porte, against whose authority the Memlooks often openly revolted, till the French invasion of 1798, when Bonaparte under the pretence of delivering Egypt from the yoke of the Memlooks, took possession of the country. The English sent an expedition in 1801 to aid the porte, which drove away the French, and restored the pasha appointed by the sultan. The Memlooks and the pasha however could not agree; scenes of bloodshed and treachery took place, and at last the late pasha Mehemet, or rather Mohammed Ali, contrived to collect most of the beys with their principal officers within the citadel of Cairo, under pretence of an entertainment, where he had them all massacred in March 1811. Thus ended the Memlook power, which had ruled over Egypt for more than four centuries.

The government of Mehemet Ali, too extravagantly praised by some, was certainly much more rational, orderly, and humane than that of the Memlooks or that of the old pashas in the other dominions of the Porte. He administered impartial justice to all his subjects, without regard to race or religion; established regular judicial courts and a good police; abolished tortures and other barbarous punishments; encouraged instruction to a certain extent; introduced European manufactures and machinery; established a printing office and a journal; and formed schools and colleges for the arts and sciences and for military and naval tactics. But his ambition and the difficulties of his situation obliged him to resort to an enormous taxation and an oppressive conscription. His ambition led him to extend his conquests until his sway stretched over at least as wide a tract of country as any of his predecessors of the Fatimite, Ptolemaic, or Pharaoh dynasties, including a considerable portion of Nubia, Abyssinia, and Kordofan, Syria, Crete, and part of Arabia. Though still nominally subject to the Porte, he had in fact rendered himself virtually independent. But the sultan, Mahmoud II., himself a reformer and a man of ambitious and energetic habits, had watched with increasing jealousy the growing power of the pasha, and at length (1832) sent a powerful army against him. Mehemet sent an equal force, under his son Ibrahim Pasha, into the field, and the Turks suffered two severe defeats. Ibrahim marched towards Constantinople, but the European powers interfered; Russia sent an army to oppose the progress of the Egyptians, and Mehemet was compelled to accept the terms proposed by the mediating powers. A hollow peace followed for some years; but in 1840 the sultan deeming himself strong enough to resume hostilities, again declared war. The Egyptians were again successful so long as they were only opposed to the Turks. Ibrahim Pasha almost annihilated the Turkish armies; the Turkish fleet placed itself at the disposal of the Egyptians, and the ruin of Turkey appeared imminent. But again the European powers interfered. An allied army dispossessed the Egyptians of various strongholds, and an Anglo-Austrian fleet bombarded Acre. Mehemet Ali was once more compelled to yield, and the European powers proposed terms, to which both Turkey and Egypt eventually assented. By this treaty, signed in London July 15, 1841, Mehemet Ali was deprived of all his Asiatic possessions, but the government of Egypt was ensured to him as a tributary to Turkey, and made hereditary in his descendants.

Present State of Egypt.—By geographers Egypt is commonly divided

into three regions, namely, Bahari, or Maritime, or Lower Egypt; Vostani, or Middle Egypt; and Said, or Upper Egypt. But the administrative division of the country is by districts, or prefectships, of which there are 15 in Lower Egypt, and 10 in Middle and Upper Egypt together. The districts are—1. Masr, or Cairo, with the town of that name, the capital of the whole country, and the town of Boulak, the port of Cairo on the Nile, Old Cairo, or Fostat [КАИРА], and Suez, on the Red Sea; 2. Kelloub, north of Cairo, with the towns of Kelioub, in which are a large government cotton factory and iron foundry, Mataryeh, near the ruins of Heliopolis; Artrib, Choubra, where the pasha has a fine country residence, and Abouzabel, where is the new college of medicine and surgery, with a considerable number of pupils, and a large hospital attached to it; 3. Belbeys, east of Kelioub, on the borders of the Desert: the town of Belbeys is an important station on the route to Syria, has 5000 inhabitants, and contains several mosques; 4. Chibeh, north of Belbeys, with the towns or villages of Chibeh, Tell Bastah, and Heydeh; 5. Mit Ghamer, north of Kelioub and near the Damietta branch of the Nile; 6. Mansurah, north of Mit Ghamer, likewise on the east bank of the Damietta branch, with the town of Mansurah, containing a government cotton factory, a public school, and five mosques, and the village of Tmay el Emdid, which has a monolith of grauite; 7. Damietta, with the towns of Damietta [DAMIETTA] and Menzaleh (which lies on the south bank of the Lake of Meuzaleh, and has a good fishing trade), and the forts of El Arish and Tyueh, on the borders of the Syrian Desert; 8. Mehallet el Kebir, with the town of that name, within the actual Delta, on the left bank of the Damietta branch, and the small towns of Semennout (which contains a large manufactory of earthenware, and some remains of antiquity), and Abousir [ABOUSIR]; 9. Tantah, south of Mehallet, with the town of Tautah, situated near the middle of the Delta, one of the principal towns of Lower Egypt, remarkable for its fine mosque, and the fair which takes place three times a year, and is much frequented by pilgrims who come to visit the tomb of Seyd Ahmed el Bedaouy, a celebrated Mohammedan saint; 10. Melig, south of Tantah, with the towns of Melig and Chibn el Koum; 11. Menouf, south of Melig, and within the angle formed by the bifurcation of the Nile; 12. Negileh, with the town of that name, on the left or west bank of the Rosetta branch, and the towns of Terraneh and Wardan; 13. Fouah, north-west of Mehallet, with the town of Rashid, or Rosetta [ROSETTA], and the towns of Fouah and Deiru; 14. Damanhour, on the left bank of the Rosetta branch, north of Negileh, with the towns of Damanhour (in which are some factories of coarse woollens) and Rahmauyeh; 15. Alexandria, with the city of that name.

On entering the valley of the Nile from the Delta side we find—1. Jizeh, on the left bank of the river, opposite Cairo, a small town, the head of the prefectship of that name, near the great pyramids, and not far from the ruins of Memphis, upon which are built three modern villages, Bedreshin, Mit Rahyneh, and Memf; 2. Benisouef, south of Jizeh, on the same side of the Nile, a considerable and industrious town, in one of the most fertile districts of the valley of the Nile, with nearly 5000 inhabitants, extensive cotton-mills, alabaster quarries, and large cavalry barracks: in this province are the towns of Abou Girgeh and Samallout, farther south; 3. On the opposite or right bank of the Nile is Atâh, a town and prefectship with 4000 inhabitants; 4. West of Benisouef is the district of Faioum, with the town of Medinet el Faioum, which contains 5000 inhabitants, several mosques, Coptic churches, a manufactory of woollen goods, and some trade in rose-water; 5. South of Benisouef, but extending on both banks of the Nile, is the district of Minyeh, with the towns of Minyeh, which has some manufactures of earthenware; Melaoui, and Eshmouein (which occupies the site of Hermopolis Magna) on the left, and those of Sheyk Abadeh and El Bershol on the right bank; 6. Manfalout, south of Minyeh, with the town of that name on the left bank, and several villages on both banks of the Nile; 7. Siout, with the town of that name, the capital of Upper Egypt, and the residence of a governor: it is situated on the left bank, was a great slave-market, and the entrepôt of the caravan trade with Dar-fur and Sennaar, has a spacious bazaar and 12,000 inhabitants; it also contains a fine palace built by Ibrahim Pasha, public baths, and barracks: Siout is an important military station: in its vicinity are numerous antiquities; 8. Girgeh, south of Siout, with the towns of Girgeh, 7000 inhabitants, on the left bank, containing a government cotton-factory, several mosques, and the oldest Latin convent in Egypt; and Ekhmym, 3000 inhabitants, on the right bank; 9. Keuéh, with the town of that name, on the right bank, which has 5000 inhabitants, and carries on a considerable intercourse with Cosseir and the opposite coast of Arabia, and is known for its manufactory of porous earthen vessels used for keeping water cool; it also contains a government cotton-factory: Kous, near the ruins of Coptos, Denderah on the left bank, and the ruins of THEBES and of ABYDOS, are in the prefectship of Keuéh; 10. Esneh, the most southern province of Egypt, contains the town of that name, on the left bank, with about 4000 inhabitants, manufactories of cottons and shawls, and pottery; it is a great market for camels, and the emporium of the Abyssinian trade: the great temple is now used as a cotton warehouse. The other towns are—EDFU; Assouan, or Syene, which contains many remains of ancient Syene, carries on a considerable trade

in dates, senna, &c., and has in its vicinity extensive granite-quarries; Koum Ombou, with a fine temple; and Selseh, with its quarries.

For the principal towns of Egypt see the respective heads—ALEXANDRIA, KAHIRA (Cairo), DAMIETTA, ROSETTA, &c. The population of the smaller towns is very difficult to be ascertained, as no census is taken or register kept.

The whole of the cultivable land of Egypt, in the valley of the Nile and the Delta, is reckoned at 17,000 square miles. The population, according to the most careful recent estimates, does not exceed 2,000,000, of whom probably the proportions are nearly the same as those given by Mr. Lane in his 'Modern Egyptians,' namely, 1,750,000 Mohammedan Egyptians, including the fellahs or peasants and the townspeople; 150,000 Copts or Christian Egyptians; 10,000 Osmanlees or Turks and Albanians, as yet the ruling race; 5000 Syrians, 5000 Greeks, 5000 Jews, and 2000 Armenians; with about 70,000 black slaves, Nubians, Moghrebins, &c. In this calculation the nomadic Arabs of the neighbouring deserts, whose number cannot be ascertained, are not included. The language of the natives is Arabic, but Turkish is still the language of the government. The great bulk of the Mohammedan natives is of Arab stock, but many Copts or aborigines have at different times embraced Mohammedanism, and numerous intermarriages have taken place between the Arab settlers and the Copts, Nubians, &c. The townspeople may be considered as having attained as high a degree of civilisation as any in the east; and "Cairo," says Mr. Lane, "must be regarded as the first Arab city of our age. There is no other place in which we can obtain so complete a knowledge of the most civilised class of the Arabs." The men are generally well proportioned and muscular, and about five feet eight or five feet nine inches in height; the women are well formed, and not too fat. Their complexion in Cairo and the northern provinces is clear though yellowish, and their skin soft; the lower classes are darker and coarser. The people of middle Egypt are of a more tawny colour, and those of the southern provinces are of a deep bronze complexion. Their countenance in general is of a fine oval form; the nose is straight though rather thick, the lips rather full, the eyes black and brilliant, the beard commonly black and curly but scanty. For the dress and habits of the various orders see Lane's 'Modern Egyptians,' vol. i.

The climate of Egypt during the greater part of the year is salubrious. The khamsen, or hot south wind, which blows in April and May, is oppressive and unhealthy. The exhalations from the soil after the inundation render the latter part of the autumn less healthy than the summer and winter, and cause ophthalmia and dysentery, and other diseases. The summer heat is seldom very oppressive, being accompanied by a refreshing northerly breeze, and the air being extremely dry. The thermometer in Lower Egypt in the depth of winter is from 50° to 60° in the afternoon and in the shade; in the hottest season it is from 90° to 100°, and about 10° higher in the southern parts of Upper Egypt. The climate of Upper Egypt, though hotter, is more healthy than that of the lower country. The plague seldom ascends far above Cairo. Ophthalmia is also more common in Lower Egypt. The houses of the wealthier classes in the principal towns are substantially built, roomy, and commodious; but the dwellings of the lower orders, especially of the peasants, are of a very mean description, being mostly built of unbaked brick cemented with mud. Many of them are mere hovels. Most of the villages of Egypt are situated upon eminences of rubbish, the materials of former buildings, and thus rise a few feet above the reach of the inundation: they are surrounded by palm-trees.

The agricultural produce of Egypt consists of the following winter plants, which are sown after the inundation and reaped in about three or four months: wheat, barley, beans, peas, lentils, vetches, lupins, clover, flax, colesseed, lettuce, hemp, cummin, coriander, poppy, tobacco, water-melons, and cucumbers; and of the following summer plants, which are raised by artificial irrigation by means of water-wheels and other machinery: durrha, maize, onions, millet, hennep, sugar-cane, cotton, coffee, indigo, and madder. Rice is sown in the spring and gathered in October, chiefly near Lako Menzaleh. Of the fruit-trees, which grow mostly in gardens near the principal towns, the mulberry and Seville orange ripen in January; apricots in May, peaches and plums in June; apples, pears, and carobs at the end of June; grapes at the beginning of July; figs in July; prickly pears at the end of July; pomegranates and lemons in August; dates in August; citrus medica in September; oranges in October; sweet lemons and banana in November.

The modern Egyptians being essentially an agricultural people, arts and manufactures are not pursued to any great extent. The domestic manufactures are chiefly of carpets, woollen cloths, pottery, glass, and other articles of home consumption, chiefly of a rude kind. The larger manufactures are for the most part a government monopoly. They consist of upwards of twenty cotton-factories, several large dyeing and printing establishments and woollen cloth factories, and one or two extensive iron-foundries, with manufactories of carpets, red caps, and fire-arms, mostly at Cairo and Boulak.

The trade with Europe is carried on through ALEXANDRIA. The traffic with Africa, which is very large, is carried on by means of caravans, which carry European and Egyptian produce in exchange for elephants' tusks, gold-dust, ostrich feathers, skins, wools, and

gums. The revenue, derived from land and capitation taxes and from the government monopolies, amounts on an average to about 2,225,000*l.*; the expenditure to somewhat less. There is no public debt. The army consists of about 148,000 regulars, of whom about 11,500 are cavalry; and an equally large body of irregular troops, militia, &c. The contingent which Egypt is bound to supply to Turkey, if required, amounts to about 40,000 men. The government may be regarded as absolute in the strictest sense of the word.

(For Ancient Egypt, the works of Champollion, Andreossi, Heeren, Lepsius, Bunsen, Kenrick, Sharpe, Gliddon, and especially Wilkinson, and the volumes on 'Egyptian Antiquities' in 'Library of Entertaining Knowledge,' should be consulted; for Modern Egypt, see especially Lane's 'Modern Egyptians,' and Murray's 'Handbook of Egypt' by Wilkinson; with the volumes of Plunat, Mengin, &c.)

EHRENBREITSTEIN, a town on the right bank of the Rhine, in the circle of Coblenz, and in the Prussian province of the Rhine. It is called Thal-Ehrenbreitstein (Vale Ehrenbreitstein) from its situation at the foot of a precipitous height 772 feet above the river, opposite to Coblenz, with which it is connected by a bridge of boats, in 50° 23' N. lat., 7° 36' E. long. It occurs in records of the year 1210 under the name of Mulne or Mullenheim; but in 1533 the name appears to have been changed into Mühlheim and Müllenthal. It contains two Roman Catholic churches, a synagogue, several mills, and 2400 inhabitants. The town has a tobacco manufactory, and a brisk trade in wine, corn, iron, clay for tobacco-pipes, &c. Above the town stands the fortress of Ehrenbreitstein (Honour's broad stone), one of the strongest fortified places in Europe. The platform of the rock is said to have been occupied in ancient times by a Roman castle or fort. During the middle ages it was a stronghold of the electors of Treves, who in later times had a palace at the foot of the rock, which is now used as a flour store. The French, under Marshal Boufflers, in vain besieged the fortress of Ehrenbreitstein in 1688, but they took it after a fourteen months' siege in 1799, and on their evacuation of it at the peace of Luneville (1801) they blew up its defences. Since 1814 however Prussia has spent large sums in reconstructing the fortress, the escarped rocks and steep slopes on three sides of which are defended by many mouthed batteries, numbering a total of about 400 guns. The weak point of the fortress towards the north-west is protected by three successive lines of defences. The platform on the top of the rock serves for a parade-ground, and covers vast cisterns capable of containing a three years' supply of water for the garrison, furnished from springs without the walls. A well also 400 feet deep cut in the rock communicates (it is said) with the Rhine. Ehrenbreitstein is included in the great system of fortifications which surround Coblenz. Strangers are admitted to visit it on presenting an order from the military governor of Coblenz. The views from the summit are extensive and beautiful. The road up to it from the town is about 1200 paces long; it is fortified, and rests almost entirely upon arches built over the chasms in the rock of which the height consists. [COBLENZ.]

EICHSTÄDT, a handsome town in *Bavaria*, is situated in a narrow but productive valley on the left bank of the Altmühl, in 48° 53' N. lat., 11° 10' E. long., and has about 7500 inhabitants. The town stands nearly in the centre of a triangle, in whose angles are the towns of Augsburg, Nürnberg, and Ratisbon, from each of which it is 40 miles distant. It is the capital of a small principality of about 116 square miles in extent, which was bestowed upon Eugene Beauharnois, duke of Leuchtenberg, in 1817. The town gives title to a bishop, and the family of the duke of Leuchtenberg resides here in the summer. The town is walled round, and has four suburbs. It has an ecclesiastical seminary, a grammar-school, a capuchin monastery, a nunnery, an hospital, an orphan asylum, and other charitable institutions, a cathedral church, and four other churches. Among the buildings of note are the duke of Leuchtenberg's palace, with the celebrated Brazilian cabinet, a library and museum of antiquities, &c.: the cathedral of St. Willibald, which dates from the 13th century, is built in the gothic style, and contains many curious monuments of the bishops and canons of Eichstädt; the Willibaldsburg, a castle on a height above the town, which was the residence of St. Willibald and of his successors in the see of Eichstädt; and the church of St. Walpurgis, a British saint, whose remains are interred beneath the high altar. Willibaldsburg, which is built on an eminence 1200 feet high, is said to occupy the site of Auretum, a Roman castle, and was the abode of the first bishop, Willibald, who was the builder of the cathedral church and the adjacent dwellings for his clergy, in the middle of the 8th century. For this purpose he cleared an area covered with oaks, whence the town derives its name of Eichstädt, or town of oaks. In the romantic grounds called Aumühlwald, near this place, is a tablet of cast-iron, set in a block of marble, 198 feet square, and laid into a mass of rock: it was erected by the citizens in memory of Eugene Beauharnois. The manufactures of Eichstädt are woollen-stuffs, earthenware, beer, iron-ware, &c.

EIFEL, a wild highland region in the Prussian Rhein-Province, extends along the left bank of the Rhine between Bonn and Coblenz. Its proper geographical boundaries are the Rhine on the east, which divides it from the Westerwald; the deep valley of the Moselle on the south, which separates it from the Hochwald and the Hunsdruck

north-eastern offshoots of the Vosges; the Our or Ourthe, the Ardenne hills, and the Meuse on the west; and the great flat plain of the Lower Rhine on the north. The name however is confined to the region that stretches eastward from the sources of the Our and the Roër to the Rhine. At the head of these rivers lies an extensive highland called *Veen*, or *Fanges* (from the Celtic 'fancq' for bog)—a dreary waste covered with turf-bogs, morasses, and reeds, and rising between 1500 and 2000 feet high, with a length of about 16 miles every way, which connects the Eifel with the Ardenne, and offsets of which stretch nearly to the Meuse below Aix-la-Chapelle.

The Eifel is a rugged, desert, and in parts swampy table-land, with a general elevation of 1400 to 1600 feet above the Rhine. Its slopes are scored in all directions by deep glens and valleys, which are traversed by tributaries of the three great rivers named above. The flat surface of the table-land, with the exception of some rather extensive forest-tracts, presents a wild moor covered with a thin barren soil; but here and there rise up abruptly naked crags and basaltic cones of various elevations, some of them richly wooded, with wide-spread layers of ancient lava between. The general components of the region are clay, flint, limestone, and slate; but the hills and rocks that flank the valleys, ravines, and glens of the Eifel are in many instances composed of basalt or capped with it; indeed the Eifel almost everywhere bears traces of violent convulsions and volcanic eruptions at some long-distant period. Extinct volcanoes, cauldron-shaped depressions, tarns of circular shape filling up ancient craters and locally called 'Maare,' mineral-springs, lava-streams, columnar basalt, fossil zoophytes and shells, proving submergence under some ancient waters, are among the natural curiosities of this interesting region.

Amongst the highest points in the Eifel the following may be mentioned:—The *Hoben-Acht*, above Adenau, 2434 feet above the sea; *Nürberg*, which is also near Adenau, and is crowned with the ruins of an extensive feudal castle, 2251 feet; *Kelberg*, near the source of the Elz, 2093 feet; *Michaelberg*, near Müstereifel, 1860 feet; and the *Schniefel*, or *Snow-Eifel*, in the circle of Prüm, in the wildest part of the region, 2100 feet.

The Eifel has a length from east to west, between the Rhine and the Our, of about 50 miles. Along the left bank of the Rhine, north of Andernach, it extends for about 20 miles; but in the interior the breadth is in some places more, in others less than this. Rivers flow from it in all directions. On the northern slope near Müstereifel (a small town in the government of Cologne with about 1600 inhabitants), rises the *Erft*, which flows with rapid course down into the low country, and enters the Rhine at Grimlighausen, a short distance above Düsseldorf. The *Roër*, or *Ruhr*, also flows down the northern slope, rising in the mountains between Malmedy and Moutjoie; after reaching the low country it runs north-north-west past Düren and Julich, and, entering Belgian Limbourg, joins the Meuse on the right bank at Ruremonde, after a course of above 80 miles. Both of these rivers sweep down stones and gravel from the highlands; they are subject to frequent and sudden swells, and abound in fish. Their water-power is turned to some advantage in driving machinery. Before it leaves the Eifel the Roër receives on its right bank the *Urs*, which rises near Blankenheim, and passes *Gemünd*, a small town in the government of Aachen with about 1000 inhabitants, who manufacture woollen-cloth and leather. Not far from the source of the Roër rises the *Warge*, which flows westward past Malmedy, and throws itself into the *Amblere*, a feeder of the Ourthe, in the Belgian province of Liège. The *Amblere* itself rises a little south of the *Warge*, which it joins a little below Malmedy. *Malmedy*, a town in the government of Aachen, stands on the *Warge*, and has about 4000 inhabitants. It is a quaintly-built place: the houses and gardens are all in the Dutch style. The town is famous for its manufacture of sole-leather: there are above fifty tanyards. It has also mineral springs; manufactures of woollen-cloth, lace, soap, potash, and glue. *Moutjoie* stands in a marshy country between two high hills on the left bank of the Roër, and has a population of 3000, who manufacture woollen-stuffs, leather, and iron. A large, strong, and gloomy castle above the town is said to occupy the site of a hunting-seat erected here by Charlemagne: it is a fine specimen of a feudal fortress.

On the southern slope flows the *Our*, which passes Renland and forms below this small town the boundary between Rhenish Prussia and the Dutch province of Luxembourg to its mouth in the Sure, a feeder of the Moselle. The Sure receives also from the Eifel the *Prüm*, which rises in the wildest part of the district. Just above its junction with the Sure the Prüm is joined by the *Nims*. The town of *Prüm* is in the government of Trèves. It is situated to the south of the *Schniefel* at the foot of a beautiful wooded hill, and has 2100 inhabitants. Its name is taken by corruption from that of the Benedictine Abbey of *Ad Pratum*, founded here in the 8th century, and in which Pepin, natural son of Charlemagne, and the emperor Lothaire were monks: the latter died here A.D. 853. The abbey buildings were destroyed by fire in 1769, with the exception of a small portion which is now a school; the church near it, which is built in the Italian style, replaces the magnificent church of the abbey, of which no vestige remains. The road from Aix-la-Chapelle to Trèves passes through Prüm, and coincides at some points with the old Roman road

from Trèves to Cologne, of which there are many traces south of Prüm. Near *Bitburg*, the ancient *Bædæ Vicus*, a town of about 2000 inhabitants, midway between Prüm and Trèves, a Roman villa, in excellent preservation, and two Roman milestones, set up in the reign of Hadrian, have been disinterred.

Southwards also, and from near the source of the Roër, flows the *Kill* directly into the Moselle a little below Trèves. At *Gerolstein*, a picturesque little town of 600 inhabitants, on its left bank, the river runs between cliffs of limestone and dolomite. Near the town are an old castle, a dry crater, the surface of which is cultivated, several old lava streams, caverns, basaltic rocks, and mineral springs. Fossil shells and corals are found strewed over the fields at Auberg, in the neighbourhood of Gerolstein. Olivine and glassy felspar are found about the dry crater of *Dreiser Weiher*, about 6 miles east of Gerolstein.

Further east, but still on the Moselle slope of the Eifel, flow the *Lieser*, the *Ues*, and the *Elz*. The *Lieser* passes Daun and Wittlich (2600 inhabitants), and enters the Moselle at the town of *Lieser*, which has a population of about 1000. At the village of *Daun*, which has an old castle (the family residence and birth-place of Marshal Daun, who led the Austrian armies in the Seven Years War), there are three maare, or crater lakes, separated from each other by a narrow partition of slaty rock. To the southward of Daun and on the left bank of the river, is the village of *Manderscheid*, famous for its old castle and for the beautiful maare in its neighbourhood. On the hill of *Mosenberg* near it are four volcanic cones of slag, from one of which a lava stream descends to the valley of the *Lieser*. The *Meerfelder maare* is about 100 fathoms deep, and the *Pulver maare*, one of the largest and most beautiful of the crater lakes in the Eifel, is 330 feet deep in the centre. The village of *Ströthuseh* is built in a dry crater.

The *Ues* or *Iss*, which has an old Celtic name, rises near *Kelberg*, and enters the Moselle at the pretty village of *Alf*. It flows with many windings and courtions down a valley distinguished for its varied scenery, for the umbrageous foliage of its woods, for its conical hills, and basaltic cliffs. The junction of the clayslate and lava is distinctly seen at several parts of the valley. In the vale of the *Issbach*, as the Germans call this small river, are iron-works and the mineral baths of *Bertrich*.

The *Elz* rises not far from the source of the *Ues*, and flows south-east down a wooded gorge, in which it makes innumerable windings, bounding from side to side against the cliffs that screen it on either hand, and enters the Moselle at the little village of *Mosel-Kern*. The *Elz* forms some pretty cascades, and passes the castles of *Pyrmount* and *Elz*. The *Elz-schloss* is one of the most picturesque and best preserved old feudal fortresses in Europe; it begins to yield to decay but is still inhabited. On the opposite rock stands the rival castle of *Trutz-Elz*, erected by the Bishop of Trèves, against the lords of *Elz*. The castle of *Pyrmount* was burnt by the Swedes in 1641. Between the mouths of the *Ues* and the *Elz*, on the left bank of the Moselle, stands the town of *Kochem*, prettily situated on a hill, with two old castles frowning from the adjacent heights. Although a pretty object from the Moselle it is a very dirty place: population about 2500.

On the eastern slope flow the *Nette* and the *Ahr*. The *Nette* rises to the east of Adenau, and runs first to the south-east and then eastward into the Rhine a little above Andernach, which town has been already noticed. [*ANDERNACH*.] The *Ahr* (*Aar*) rises near *Blankenheim* and running eastward through a valley abounding with wild and most picturesque scenery, past *Altenahr* and *Ahrweiler*, enters the Rhine between *Remagen* and *Sinzig*. In the upper part of its course the *Ahr* is joined on the left bank by the *Adenau* near the small village of *Dumpelfeld*. On the basalt capped hill of *Landskron* in the *Ahrthal*, are ruins of a castle built by the emperor Philip of *Hohenstaufen* in A.D. 1205. The *Ahr* is celebrated for its minnows, trout, and craw-fish. A fine road runs up the valley and in parts is carried by tunnels through the rocks. *Adenau*, is a small town of 1200 inhabitants, at the foot of the *Hohe-Acht*. *Ahrweiler*, is a pretty walled town entered by four gates, and has about 2500 inhabitants, who are chiefly engaged in the growth of the vine. It is the centre of the wine trade of the valley, and has a beautiful gothic church erected in the 13th century.

The *Brohlbach*, a small feeder of the Rhine, enters that river at *Brohl*, a small village, midway between the mouths of the *Nette* and the *Ahr*. The stream at *Brohl* drives a paper-mill and several trans-mills, in which the volcanic tufa, quarried in the neighbourhood, is ground for export to Holland; the tufa, reduced to dust, is used by the Dutch for subaqueous cement (trass or trass), as it hardens under water. In the tufa quarries in the valley of the *Brohl*, land shells and trunks of trees reduced to the condition of charcoal, are found imbedded. Mineral waters, resembling *Seltzer*, are got from springs in the valley of the *Brohl*. A little north of *Brohl* is the castle of *Rheineck*, recently purchased and repaired by Professor *Bethmann Hollweg*, of Bonn. *Sinzig* is a small ill-built walled town of about 1600 inhabitants, with an interesting gothic church, erected in the beginning of the 13th century; an adjoining chapel contains a natural mummy, which was carried away to Paris when the French extended their frontier to the Rhine, but was restored at the peace. *Sinzig* occupies the site of the ancient *Senticum*, near which the cross with

the inscription 'In hoc Signo vinces,' upon it, it is said, appeared to Constantine when marching towards Italy against Maxentius. The ancient Roman road along the left bank of the Rhine nearly coincides with the present diligence road between Bonn and Coblenz. *Remagen*, a small place of 1400 inhabitants, occupies the site of the ancient *Rigomagus*. Roman antiquities have been found here.

About 5 miles inland, from the mouth of the Brohl, is the large and beautiful crater-lake of Laach, or *Laacher-See*, which is 666 feet above the Rhine, of nearly elliptic shape, 2 miles long and about a mile and a half broad; its depth increases towards the centre where it is 214 feet deep. The lake is hemmed in on all sides by a ridge of hills covered with wood down to the water's edge. It is supposed to occupy the crater of a volcano. A stream of carbonic acid gas issues from an opening on the north-east side of the lake; and in a neighbouring pit bodies of birds have been found killed by the noxious vapour, which circumstance has given rise to a popular notion similar to that connected with *Avernus* in Italy, that no bird can fly over the *Laacher-See*. The lake is fed by numerous springs beneath its surface, which keep its basin always full. Its waters are clear, deep-blue in colour, very cold but never freeze; and abound in fish. It has no natural outlet, but its superfluous waters are carried off by an underground emissary nearly a mile long, cut in the 12th century by the Benedictine monks of the now ruined abbey of Laach, which is a little south-west of the lake. The shores of the lake are covered with masses of scoria, cinders, ashes, pumice, and other volcanic products. Laach abbey, or *Kloster-Laach* as it is called, was suppressed at the time of the first French revolution. Part of the old buildings that remain is now converted into a farm-house; the church, a beautiful specimen on a small scale of the round-arched gothic, erected in the early part of the 12th century, has been purchased in order to its preservation, by the Prussian government. The gardens of the abbey, the lake, and village of Laach, are favourite places of resort with the inhabitants of Coblenz. Between the lake and the *Nette* are the famous millstone quarries of *Nieder-Mendig*, which have been worked in the hard porous lava for 2000 years. The lava stream in which these quarries lie is 5 miles long and 3 miles broad. The lava separates into gigantic columns, some of which are left by the quarrymen to support the roof; there are vast caverns in it, probably the result of ancient excavations. At *Mayen*, a picturesque old town, on the *Nette*, with about 3000 inhabitants, defended by a castle and surrounded by walls and gardens, there are several millstone quarries, a paper-mill, tanneries, and mineral springs. To the geologist, the botanist, and lover of the picturesque, all the southern and eastern part of the Eifel is extremely interesting. Besides the *Laacher-See* no less than 27 more, marking as many extinct craters, exist between the *Nette* and the *Ahr*.

The climate of the table-land of the Eifel is damp, and much colder than that of the plain of the lower Rhine; cold mists very frequently hover over it. In all Prussia there is no district so poor in arable land as the Eifel. The rugged surface of the region is covered with wild heath or swampy bog, the thin coating of the soil not affording nourishment for the roots of trees. Some parts of it however as before stated are clothed with forests. This is especially the case in the districts covered with volcanic deposits. The chief species of forest trees are beech, oak, and fir, which are grown for the supply of fuel and timber. The valleys and glens are all inhabited, and in these the population is gathered into small towns, villages, and hamlets, most of which have sprung up under the frowning protection of some feudal castle, and a few in the neighbourhood of ancient monasteries. On the rapid slopes along the *Ahr* valley and towards the Rhine, vines and fruit trees yield valuable crops; here every piece of cultivated land is covered with walnut, apple, pear, or cherry trees. The wine of the *Ahrthal* is of excellent quality. The commune of *Rübenach* draws a revenue of 10,000 francs annually from Coblenz for cherries alone. Walnuts are a favourite crop on the hills but not in the valley bottoms, where, it is said, the leaves of the walnut tree injure the soil. The nuts are preserved for oil. Apples and pears are sliced and strung upon pack-thread to serve as vegetables with meat in winter. The fruit of the valleys of the Eifel is good generally; but the apples and pears grown on the Moselle slope are particularly delicious and not surpassed by those of any region in Europe. The corn crops of the region are necessarily restricted in quantity; the deficiency is supplied from the neighbouring districts.

The region of the Eifel is exposed to a phenomenon called *Wolkenbruch*, or *Cloud-Burst*, being a sudden discharge of water, which brings sudden destruction on everything that it may strike; trees are rooted up and hurled down by suddenly formed torrents; cattle, houses, soil, and crops are swept away. A cloud-burst of this description destroyed the greater part of *Münstereifel* in 1818.

The principal roads through the region of the Eifel are those from *Aix-la-Chapelle* to *Trèves*, and from *Coblenz* to *Bonn*; the high road up the left bank of the Moselle from *Coblenz* to *Trèves*, and the new road up the *Ahrthal* to *Trèves*. There are also numerous cross-roads, but most of them are bad. The great Roman road made by *Agrippa* from *Trèves* to *Cologne* traversed the western part of the Eifel. Along it were numerous post-houses (*mutationes*) and six 'mansiones,' serving as military posts and hotels. *Bæda Vicus*, now *Bitburg*, was one of these 'mansiones.' *Zulpich* (population 1200),

near the *Nassel*, a feeder of the *Erft* in the plain, at the northern base of the Eifel, was another of the mansiones, and was called *Tolbiacum*. The road is still in a perfect state at *Zulpich*. Remains of an aqueduct which ran parallel to the road, and along its whole length, to supply the stations with water, are still visible at ten or a dozen different places between the two cities. The road along the left bank of the Rhine, between *Remagen* and the precipitous projection of *Rolandseck*, which is composed of prismatic basalt, and is crowned with the ruins of an old castle, is cut in the rock. In making this part of the road several Roman remains were found. Connected with *Rolandseck* is the circular crater of *Rodersberg*, which is a quarter of a mile across and 100 feet deep; its sides, which are composed of tufa and scoria, are cultivated. The castle of *Godesberg*, a town of about 1000 inhabitants, a short distance north of *Rolandseck*, is an interesting object on the road and from the Rhine. Between *Godesberg* and *Bonn*, at the north-eastern extremity of the Eifel, are the coal and alum-mines of *Friedersdorf*. The coal is of the kind called lignite or fossil wood, and has evidently resulted from the subsidence of some primeval forest; fossil fishes, fresh-water shells, and very fine potters' clay are also found in these beds.

As the Eifel is a popular and not an administrative division of *Rhenish Prussia*, we have no means of stating its population. The region is divided between the three governments of *Aachen*, *Coblenz*, and *Trèves*. The inhabitants are less polished than their lowland neighbours, in their dress rather slovenly than neat, and their houses are in general rudely constructed. The principal mineral and other products have been already mentioned; here we must add iron and lead, mines of which are worked near *Gemünd*. The manufactures are unimportant, with the exception of leather. The chief exports are millstones, trass, wine, and fruit. The inhabitants are almost all Roman Catholics. Eifel is said to be an old German name for the *Ardenne*, of which region the Eifel is in reality a part. [ARDENNE.]

EILENBURG. [MERSEBURG.]

EIMBECK. [GRUBENHAGEN; HILDESHEIM.]

EINDHOVEN. [BRABANT, NORTH.]

EISENACH, a principality in the centre of Germany, belonging to the grand duke of *Saxe-Weimar-Eisenach*. It forms one of the three detached circles or provinces which constitute the grand duke's dominions, and is bounded N. by *Prussian Saxony*, E. by *Saxe-Gotha* and *Saxe-Meiningen*, S. by *Bavaria*, and W. by *Hesse-Cassel*. The detached district of *Ostheim*, part of *Eisenach*, lies to the south within the *Bavaria* confines. The principality is of greater extent than it formerly was, since it now comprehends the bailiwicks of *Liehtenberg*, *Kaltenordheim*, *Geiss*, *Dermbach*, *Vach*, *Fraunsee*, *Völkershäusen*, and some minor tracts which have been acquired by cession or exchange from the territories of *Fulda*, *Henneberg*, and *Hesse-Cassel*. Its area is 465½ square miles, and the population in 1853 amounted to 82,321. The greater part of this principality belongs to *Thüringia*, and a considerable portion of it is traversed by the *Thüringerwald*; between which mountains and the *Rhöngebirge* on the west, the principality comprehends a tract about 42 miles in length, and from 9 to 14 miles in width. The country presents a succession of hills and mountain heights, uninterrupted by any extensive levels, and the soil is consequently not very favourable to cultivation. It is watered by the *Werra*, with its tributaries, the *Nesse* and *Hörsel*, *Ulster*, *Fulda*, *Sulz*, *Ruhl*, and *Vach*. The climate is healthy, though from the proximity of the *Thüringian* heights, it is variable. The products consist of grain, which is not adequate to the consumption, timber, potashes, and tar, rape-seed, flax, hemp, hops, fruit, &c. Horned-cattle and sheep are reared in great numbers, as well as swine. Of minerals—copper, iron, alum, and coal in small quantities are obtained; and there are quarries of stone and marble, as well as salt-springs near *Kreutzburg*, from which about 500 tons of salt are annually extracted. Potters' clay and fullers' earth are found. The principal manufactures are linens, woollens, cottons, iron- and copper-ware, yarn, potashes, leather, earthenware, and articles of wood.

The principality fell to the dukes of *Saxe-Weimar* on the decease of the last duke of *Saxe-Eisenach*, who died without issue in 1741.

Eisenach, the chief town and seat of government of the principality, is situated at the confluence of the *Hörsel* and *Nesse*, which unite immediately north of the town, and then flow through it in one channel: the village of *Fischbach* touches it on the east; and the celebrated *Wartburg*, a mountain fastness, commands it on the south. *Eisenach* stands in about 50° 58' N. lat., 10° 18' E. long.; it is a first-class station on the *Thüringian* railway, 49 miles W. from *Weimar*, and 66 miles S.E. from *Cassel*. The town, which has a population of about 10,000, is surrounded by walls, has five gates, is well built, and has broad, clean, well-paved streets. The ducal palace (*Fürstenhaus*) is a large and handsome edifice. Among other public buildings there are five churches, a gymnasium, with an extensive library, a handsome civic school which ornaments the spacious market-place, a training school, and an academy for superintendents of woods and forests. The chief manufactures are woollens, cottons, linens, soap, white-lead, meerschau-pipes, leather, and carpets. A steep ascent through a fine park leads to the well-known stronghold called

the Wartburg, which is about a mile and a quarter from Eisenach and at an elevation of 1318 feet above the level of the sea. The original burgh was built in A.D. 1140, and was the residence of the landgraves of Thuringia until the year 1408: a large portion of it was rebuilt in the beginning of the present century. On this spot, in the early part of the 13th century, the German Minnesänger used to contend; and it is still better known as the place of refuge to which Luther was conveyed in 1521, on his way back from the Diet of Worms. The little chapel in which he frequently preached, and the cell which he inhabited, have been carefully preserved in the same state as when he used them. The Wartburg is now used as a prison.

Among the other towns, all of which are small, the principal are *Geistungen*, a station on the railway, 14 miles W. from Eisenach, on the left bank of the Werra: population, 1500; *Kreutzburg*, 10 miles N.W. from Eisenach, on the Werra: population, about 2000; *Lengsfeld*, a small walled town with two castles, and 2200 inhabitants, 15 miles S.W. from Eisenach, on the Fulda, a feeder of the Werra: and *Ruhla*, 5 miles S.S.E. from Eisenach, on the Ruhla, which here forms the boundary between Saxe-Eisenach and Saxe-Gotha; the larger part of the town, the total population of which amounts to about 3500, is in Saxe-Gotha. Ruhla has a normal forest school, manufactures of iron, hardware, pipes, gloves, stockings, and musical instruments. About two-thirds of the population belong to the Saxe-Gotha part of the town.

EISENSTADT, a royal free town in Hungary, finely situated in a noble expanse of country between the Leitha mountain range and the west coast of the Neusiedler-See, in 47° 50' N. lat., 16° 30' E. long., 26 miles S.E. from Vienna, 11 miles N. by W. from Oedenburg, has about 5700 inhabitants. The town itself is walled round, has two gates and three main streets, a church and a Franciscan monastery, in which is the sepulchral vault of the Esterházy family, a monastery and hospital of the Brothers of Charity, a town-hall, and offices for the administration of the Esterházy domains. The Schlossgrund is an extensive suburb, containing about 2600 of the population, and comprises the 'Judenstadt,' or Jew's Town, where 500 of that community reside; here are Mount Calvary, laid out in conformity with the supposed disposition of the site in Palestine, and adorned with a statue of the Blessed Virgin; and the palace called Kis-Martony, a splendid quadrangular structure, erected in 1805 by Prince Esterházy, to whose family the whole suburb belongs. The park is large, rises in terraces towards the Leitha hills, and is embellished with temples, a canal and cascades, an avenue of rose-trees, 262 paces in length, an orangery of 400 trees, nine large conservatories, containing nearly 70,000 plants, water-works impelled by steam, &c. North of the town are zoological gardens. The Prince of Esterházy has three other magnificent gothic castles in the neighbourhood of the Neusiedler-See.

EISLEBEN, a town in the circle of Merseburg, in Prussian Saxony, is situated 13 miles N.W. from Halle, 30 miles N.W. from Merseburg, on an eminence above the Böse, a small feeder of the Elster, in 51° 33' N. lat., 11° 32' E. long., and has a population of about 8000. The town has two subdivisions—the Old Town, which is surrounded by walls and ditches, and has seven gates; and the New Town; besides these it has five suburbs. It contains an old castle, four churches, a gymnasium, several elementary schools, and two hospitals. The chief manufactures are potashes and tobacco; and there are copper and silver-mines in the neighbourhood, with two smelting-works. The town has a brisk inland trade. Luther was born here on the 10th of November 1483, and died here on the 13th of February 1546. The house in which he was born was destroyed by fire in June 1689. On its site a more solid building of stone was soon afterwards erected, and on the 31st of October 1693, it was solemnly consecrated to the purposes of a poor-house and free-school. In it are shown several memorials of Luther. In the principal church (St. Andrew's), the pulpit from which Luther preached is still preserved.

EJEA DE LOS CABALLEROS. [ARAGON.]

EKATARINBURG, or YEKATARINBURG, the chief town of a circle in the government of Perm, in the western part of Asiatic Russia, was founded by Peter the Great in 1723. It is situated on both sides of the Ictch or Isct: the western quarter of the town is built along the slope of a gentle acclivity of the Ural Mountains, at an elevation of about 860 feet above the level of the sea, in 56° 49' N. lat., 61° E. long.: population about 11,000. The town is fortified and regularly built; the streets are long and straight, but they are unpaved, and have planks laid on each side of them by way of a foot-pavement. The greater part of the houses are of wood, but there are many handsome stone-buildings; the chief of them form three sides of a square, the fourth side of which is formed by the right bank of the Ictch: these buildings comprise the Mining Department (for Ekatarinburg is the seat of administration for the Ural mines), a museum of mineralogy, a public library, an excellent chemical laboratory, an imperial mint, works for cleansing and amalgamating metals, as well as for cutting and polishing precious stones, a school for educating miners, a hospital, storehouses, a guardhouse, &c. A handsome bridge unites both quarters of the town, and on the acclivity on the left bank of the river is a long range of wooden

tenements where the workpeople reside, with the stone residences of the public offices between them and the bridge. The merchants and dealers' houses in the town are also of stone, and would be an ornament to any city in Europe. Besides five churches, there are a Greek monastery, a public school for 300 pupils, a German school, a large bazaar, a magazine for grain, a house of correction, and several district and elementary schools. The population consists of Asiatics and Europeans, the latter principally Russians and Germans, among whom are numbers of persons exiled for public offences. There is a public hall for drugs and chemicals, and a botanic garden attached to the hospital. The greater part of the inhabitants depend upon the Ural mining concerns for their subsistence; and as Ekatarinburg lies on the high road from Russia to Siberia, it is a place of transit and of brisk trade. East and north of the town respectively lie the gold mines of Beresoff and Niviansk. A wood of pines encircles the north-western extremity of the town, and about half a mile beyond lies lake Isct.

EKATERINODAR. [TAURIDA.]

EKATARINOSLAV, or JEKATERINOSLAV, a province in the south of Russia in Europe. It is bounded N. by the provinces of Pultava, Kharkov, and Voronezh; E. by the territory of the Don-Cossaks; S. by the sea of Azof and the government of Taurida; and W. by the government of Cherson. An isolated part of the province, which constitutes the district of Taganrog and the territory of the Asovian Cossaks, extends round the north-eastern extremity of the Sea of Azof, and is separated from the remainder of Ekatarinoslav by the territory of the Don-Cossaks. The area and population of these three divisions are as follows:—

Provinces.	Area in Square miles.	Population in 1840.
Jekaterinoslav	23,727	787,200
Taganrog and its dependencies	1,680	70,990
Asovian Cossaks	116	6,000
Total	25,523	870,100

Upwards of two-thirds of the surface are an open steppe, destitute of wood, and adapted to pasturage only: this is peculiarly the case with that large tract which is situated east of the Dnieper. The districts west of that river are much more fertile, and are skirted by a range of hills which run northwards from Alexandrofsk along the Dnieper. Here it is principally that the arable lands of Ekatarinoslav, occupying about one-fourth of the soil, are situated. The whole extent of the woods and forests does not exceed 256,000 acres. The principal river is the Dnieper, which enters the province at its north-western extremity, and, winding through the western parts of it, quits it below Alexandrofsk. The immense blocks of granite which obstruct the course of the river at and below Kidak, give rise to 13 beautiful falls (parogiji); and below them the river is divided by islands into several channels. [DNEPER.] The Don skirts Ekatarinoslav only at its mouth; but its tributary, the Douecz, waters it partially in the east. The other streams in this province, such as the Samara, Kalmius, &c., are of no great importance. There are several lakes, the water of which is much impregnated with salt: swamps are of frequent occurrence. The climate is mild, and not exposed to much variation, and the winter is of short duration. The quantity of grain produced is scarcely adequate to the consumption; in some years it is so scanty that the supply is drawn from foreign parts. Hemp and flax, peas, beans, lentils, vegetables, fruit, and melons are cultivated. The grape ripens, and some wine is made. The forests do not furnish sufficient timber or fuel; straw, rushes, and even dung, are used for the latter. The chief kinds of trees in the forests west of the Dnieper are the oak, lime, and poplar. In consequence of the scarcity of timber, the houses are built of clay, and roofed with rushes. Cattle-breeding is carried on upon an extensive scale, for the steppes are one vast expanse of pasture-ground. The stock of horses, horned cattle, goats, and swine is immense; and numerous flocks of sheep are also kept. Cheese and butter are made of sheep's milk. The number of bee-hives approximates to 100,000, and vast quantities of honey and wax are obtained. The culture of the silk-worm is a favourite pursuit, and this branch of industry is rapidly on the increase. The chase forms a means of livelihood, as wild animals and game are plentiful: under this head may be enumerated the jerboa, wolf, fox, buffalo, antelope-goat, wild cat, tiger-martin, musk-rat, pelican, wild-duck, and partridge. The sturgeon and other fisheries on the Dnieper, Don, Kalmius, and Sea of Azof are very productive. Among the mineral products of the province, which are few and not of much importance, are lake salt, granite, chalk in large quantity, clay, and bog-iron. The garnet is occasionally met with.

The population is a mixed race, composed of Russians, Cossaks, Servians, Wallaks, Magyars, Albanians, Greeks, Armenians, Tartars, Germans, a few Mohammedans, and Jews. All but the Cossack part of the population, which is semi-nomadic, have fixed abodes. The religion of the majority is Russo-Greek: the province contains 690 parishes, and the ecclesiastical head is the archbishop of Ekatarinoslav, Cherson,

and Taurida. The Greeks are under the bishop of Feodosia, and the Armenians under the bishop of Nakitshevan.

Ekatarinoslav is divided into seven circles named from the chief town in each. The principal towns are:—*Ekatarinoslav*, described in the next article [EKATARINOSLAV]; *Alexandrofsk*, on the left bank of the Dnieper below the cataracts (about 4000 inhabitants); *Novo-Moskofsk*, a fortified town N.E. of Ekatarinoslav, on the Samara (3000 inhabitants); *Bachmut*, on the Bachmuta, a feeder of the Donez (about 4500 inhabitants); near it are Tartar tombs and three lines of old fortifications; a coal mine has lately been discovered near this town: *TAGANROG*, on the Sea of Azof (about 16,000 inhabitants); *Mariapol*, at the efflux of the Kalmius into the Sea of Azof, with about 3500 inhabitants; *Nakitshevan*, on the right bank of the Don, which is the seat of an Armenian patriarch, and has a population of 10,000 and manufactures of silk, woollens, and brandy; and *St. Demitria Rostofskaye*, or *Rostov*, a fortress a couple of miles west from Nakitshevan; population about 2500. The town of Azof has been noticed already. [AZOF].

The manufactures of Ekatarinoslav, which are of little importance, are woollen cloths, silk, tallow and candles, leather, and beer. The number of brandy distilleries is very great. The principal articles exported are fish, wool, tallow, and other animal products.

The province of Ekatarinoslav was first constituted by the empress Catherine in the year 1784, and was composed of the districts lying next the southern banks of the Dnieper (which were before this held by the Cossaks), of several large districts wrested from the Turks, and of Crimean Tartary as far as the shores of the Sea of Azof. In 1797 the emperor Paul augmented it by the addition of other lands between the Bog and the Dniester, which had been ceded by Turkey, and the peninsula of Taurida; and he designated the whole of this extensive country New Russia. In the year 1822 however the emperor Alexander reorganised New Russia, dividing it into the three provinces of Ekatarinoslav, Cherson, and Taurida.

EKATARINOSLAV, a town in South Russia, the capital of the province of Ekatarinoslav, is situated on the right bank and just above the cataracts of the Dnieper, at the junction of the Kaidak with that river, in 48° 27' N. lat., 35° 5' E. long. The first stone was laid by the empress Catherine II. in 1787. The town is built close to the foot of a hill, and according to an extended and regular plan adapted for a much greater number of inhabitants than the 13,000 which it at present contains. The streets are broad, and laid out in straight lines. There are several churches, a gymnasium, and an ecclesiastical seminary, an imperial manufacture of woollens, and several hospitals. Silk stockings are made, and some retail trade is carried on. The town is the residence of the archbishop of Ekatarinoslav, and has an ecclesiastical seminary and a gymnasium.

EL CALLAH. [ALGERIE.]

ELAM. [ELYMAÏS.]

ELATMA, or YELATMA. [ТАМБОВ.]

ELBA, the Ilva of the Romans, *Æthalia* of the Greeks, is an island in the Mediterranean Sea, near the coast of Tuscany, from which it is divided by the channel of Piombino. This channel is about five miles broad in its narrowest part opposite the town of Piombino, which is on the main land. The shape of Elba is very irregular; its length is about 18 miles, from 10° 6' to 10° 25' E. long., and its greatest breadth, which is on its east side, is about ten miles, from Cape Calamita 42° 43' to Cape Vito 42° 52' N. lat.; but in its west part it is six miles broad, and towards the middle of its length it is only three miles, owing to the coast (which is high and bold) being indented by gulfs both from the north and south. Its area including some adjacent islets is 97 square miles; and the population is 20,061. The island is mountainous; the highest summit, Monte della Capanna, in its west part, is 3600 feet above the sea. The mountains are mostly naked, but the lower ridges and the valleys between them are planted with the vine, olive, and mulberry, and other fruit trees. The island produces also some wheat and Indian corn, vegetables, and water melons. Wine, both white and red, and of good quality, is made in considerable quantities. A sweet wine is also made from the muscadell grapes. Horned cattle and horses are rather scarce, but there are plenty of sheep, goats, pigs, and asses. Fish is plentiful on the coast, and the tunny fishery yields a considerable profit. The salt-pans on the sea-shore produce about 50,000 cwts. of salt yearly. Elba is rich in iron, which is of the best quality, and was worked in the time of the Romans. It is found in a mountain, near Rio on the east coast, which is almost entirely a mass of ore, about two miles in circumference, 500 feet in height, and yields from 50 to 75 per cent. of pure metal. Owing to the scarcity of fuel the ore is embarked at Follonica on the channel of Piombino and taken to the mainland to be smelted, as it was when Strabo wrote. The other mineral productions of Elba are leadstone, alum, vitriol, and marble of various kinds. *Porto Ferrajo*, the capital and residence of the governor, has about 3000 inhabitants. *Porto Ferrajo* lies on the north coast of the island, and is strongly fortified with two citadels on the hill above it, and has an excellent harbour. The town has two parish churches, one hospital, and a lazzaretto; it has a garrison and military commander, a civil and criminal court. From *Porto Ferrajo* a good road, five miles in length, made by Napoleon I., leads to *Porto Longone*, a small fortress and harbour, on the east coast. The other villages in the island are *Rio*, *Marciana*,

Campo, and *Capo Liveri*. Napoleon I. Emperor of the French resided in *Porto Ferrajo* after his first abdication, from May, 1814, to the 26th of February, 1815, when he set sail for Cannes. Since that time Elba has been annexed to the grand duchy of Tuscany.

ELBE, one of the largest rivers in Europe, flows like the Weser entirely within Germany. It originates in the confluence of a number of rivulets and brooks which fall down the western side of the Schneekoppe, one of the highest summits in the Riesengebirge of Bohemia, and in that part of them which separates Bohemia from Silesia. The stream thus formed runs southward to Hohenelbe, thence in a general southern direction past Arnau and Königsgrätz where it is joined by the Adler, and higher up near Josephstadt by the Aupa and the Metau, all on the left bank. After receiving the Chrudimka at Pardubitz, a station on the Vienna-Prague railway, the river takes a westerly direction to Kollin, receiving in the interval the Dobrova on the left bank. From Kollin the Elbe runs north-west past Podiebrad to Nimburg, where it receives on the right bank the Czdilina. It now pursues a course due west for about 15 miles to Brandeis, above which it receives the Iser, thence north-west past Melnik, where it is increased by the waters of the Moldau on the left bank, and from which place (in 50° 20' N. lat., 14° 28' E. long.) it has an unobstructed navigation to its mouth. From Melnik it continues on a general north-west course to below Leitmeritz, a few miles above which town it is joined by the Eger on the left bank. [EGER]. From this place it flows northwards to Aussig, where it is joined by the Bila, and then takes a winding easterly course past Tetschen where it receives the Pulznitz, bends gradually north-westwards, quits Bohemia near Herrnskretsch, and enters the kingdom of Saxony, being at this point 355 feet in width. Below Tetschen the Elba flows through a defile between the Erz and the Riesen Mountains; bold cliffs and huge natural battlements of rock rising on either side, clothed with rich foliage wherever it is possible for a tree to hang or broken by smooth plots of verdure leading away into romantic dells. In Saxony the Elbe takes a north-westerly course past Schandau, between which place and Dresden it passes through the Lusatian and Ohre Mountains of Saxony, then flows to Pirna, Dresden, Meisseu, Riess, and Strehla, and enters Prussian Saxony at Loesnitz, about seven miles above Mühlberg. From Mühlberg its course is north-westerly to Torgau, and thence to Witteberg, above which it receives the Black Elster; here it takes a westerly direction, traverses the Duchy of Anhalt in which it receives the Saale and Mulde, and then turning northward, re-enters Prussia above Aachen, and flows N.N.E. past Magdeburg (receiving the Ohre on its left bank) and as far as Sandow, where it is joined by the Havel. Here it again takes a north-westerly direction, forming first the boundary between Brandenburg and Prussian Saxony till it passes Schneekendorf, and next for a short distance between Brandenburg and Hanover: thence it separates Hanover from Mecklenburg until it enters the north-eastern districts of that kingdom between Dömitz and Hitzacker. After traversing them as far as Boitzenburg, it divides the Hanoverian dominions from the duchies of Lauenburg and Holstein and the Hamburg territory, until it discharges itself into the North Sea. Altogether it traverses Hanover or forms its north-eastern boundary for about 120 miles. Below Winsen, which lies to the south-east of Harburg in Hanover, the Ilmenau falls into it, and below Neuhaus somewhat above Altona, but on the left bank like the former, the Oste. From Hamburg and Altona downwards to Glückstadt in Holstein and thence to the North Sea it becomes navigable for large ships. Vessels of 14 feet draught can at all times ascend the river to Hamburg. Its mouth lies north of Cuxhaven, about 85 miles below Hamburg, and is about 12 miles wide. Canals connect the Elbe with the Oder and the Trave tributaries of the Baltic. The railway from Vienna to Dresden runs at a little distance from the left bank of the river all the way from Pardubitz to Dresden (nearly 120 miles); and from this city the stream is in parts skirted and at points crossed by sections of the Saxon, Prussian, Hanoverian, Oldenburg, and Danish lines down to Glückstadt and Holstein.

In the lower part of its course, namely, between Harburg on its left bank and Hamburg and Altona on its right bank, the Elba is divided into several arms by five large and seven small islands; these arms however unite again in a single channel at Blankenese, about five miles below Hamburg. The whole length of the Elbe is between 600 and 700 miles, and it is navigable for about 470 miles. Its mean depth is 10 feet, and its average breadth 900 feet; but it widens at some points to 1000 feet and more, and near its mouth to several miles. The height of this river above the level of the sea is as follows:—Near its source, 4151 feet; at Königsgrätz, 618; at Melnik, 426; at Schandau, 320; at Pirna, 287; at Dresden, 262; at Wittenberg, 204; at Magdeburg, 128; at Tangermünde, 87; at Losenrade, 43; at Dömitz, 26; at Hitzacker, 19; at Bleckede, 11; and at Boitzenburg 9 feet.

There are 35 bridges across the Elbe between its source and Torgau, below which town the communication between both banks (except where the river is crossed by railways) is by ferries. The principal bridges are one at Leitmeritz, which is of wood and stone, and 823 feet in length; one at Dresden, of stone, 1420 feet long and 36 feet broad; one at Wittenberg, of stone and wood, 1000 feet long; and at Magdeburg, where there are three wooden bridges across the three arms of the river.

The waters of the Elbe are increased by the confluence of 17 rivers

and upwards of 70 minor streams. Since the year 1801 its depth has decreased nearly 9 inches at Dresden and about 18 inches at Magdeburg. In Bohemia, where less attention has been paid to the clearing of woodlands and drainage of swamps and marshes than in the other parts of Germany through which it flows, the diminution has been far less. The basin is estimated to occupy about 58,800 miles, and lies between 50° 2' and 53° 54' N. lat., 8° 41' and 16° 12' E. long.

The river is well stocked with salmon, eels, sturgeons, and other fish. Light steamers ascend the river as far as Melnik in Bohemia. The benefits derivable from the navigation of the Elbe have been always much curtailed by the number of duties levied by the different states through which it flows. So many and so high are the tolls imposed upon the navigation of this river and the Weser that trading along these routes has greatly diminished within the last twenty-five years. During this period the total receipts from tolls on these rivers were 260,000 rix-dollars, and the expenses 295,000 rix-dollars.

ELBERFELD, a large manufacturing town in the Düsseldorf government of Rhenish Prussia, stands in 51° 16' N. lat., 7° 8' E. long., 8 miles E. from Düsseldorf, and had 35,000 inhabitants in 1846. A railroad from Düsseldorf through Elberfeld joins the Cologne-Minden line at Dortmund. It is a long straggling town running along both sides of the Wupper, which here flows through a narrow valley screened by steep but not very high hills. Some parts of it are well built and paved, but most of the town is composed of irregular, narrow, and dirty streets. Here and there are seen spacious houses fronted with cut-stone and in the best architectural styles. The river is a most disgusting object, being the receptacle of all the sewers and offscourings of the numerous dyeing establishments of the town. The waters of the Wupper however are said to possess most valuable bleaching properties, and to this circumstance Elberfeld is indebted for its origin and prosperity. The town is the seat of an extensive cotton and silk manufacture, but is more important still for its dyeing, printing, spinning, and bleaching establishments. The cotton-printers and silk-dyers consume a large quantity of piece-goods that are woven by hand in the surrounding districts; their patterns, which are very superior, are designed on the premises of the large printers, who employ French artists at high salaries. About 40 firms are engaged in the silk manufactures. Merinos and fancy woollen goods are also manufactured here. The town has 69 dyeing establishments, 10 bleaching-grounds, 6 cotton-spinning factories, 1 large woollen mill, with machine-makers and colour-works; it has also block-pattern cutting, printing, engraving, and lithographic printing establishments. Tapes and ribands are an important article of manufacture, with which this town and Barmen (which touches Elberfeld on the east) supply all Germany. [BARMEN.] The colour called Turkey-red is produced in Elberfeld more cheaply and of better hue than in any other place in Europe. Of the public buildings the Roman Catholic church, which is in the Byzantine style, and the guildhall, in the great room of which is a beautiful frieze painted by the artists of the Düsseldorf school of painting, are the most remarkable. The town has a gymnasium, a museum, several banks, 2 orphan asylums, 3 hospitals, and a great number of educational establishments. Among these last is one for young manufacturers and the managers of factories, in which the mechanical processes in the construction of the jacquard-loom cards, and the calculations accompanying them in weaving, are taught, as well as pattern-drawing. This establishment, one of great efficiency and importance, is supported by the town, which also maintains its own poor by means of a rate. Elberfeld is well lighted with gas. (Banfield, *Manufactures of the Rhine; Handbook for North Germany.*)

ELBEUF, or ELBŒUF, a large manufacturing town in the department of Seine-Inférieure in France, stands in a beautiful valley on the left bank of the Seine, at a distance of 78 miles N.W. from Paris, and 13 miles S.S.W. from Rouen. The population amounts to above 16,000, exclusive of about 10,000 workpeople, who remain in the town only on the days they are employed at the factories, their fixed residence being in the villages of the neighbouring communes. The town is in general ill-built, ill-laid out, and badly paved; but within the last twenty years many improvements have been made. A great number of large factories and handsome edifices have been erected, the quays extended, the old streets widened, and a spacious *champ de foire*, or market-place, with side-avenues planted with chestnut-trees, has been constructed. The streets are lighted with gas, and the town is well supplied with water from eight Artesian wells, one of which feeds six public fountains. The most remarkable public buildings in Elbeuf are the churches of St.-Etienne and St.-Jean-Baptiste, the interiors of which are richly decorated and lighted through fine painted windows.

Elbeuf has a tribunal and chamber of commerce, a consultative chamber of manufactures, and a council of Prud'-Hommes for the settlement of differences between manufacturers and their workmen. The factories of the town and neighbourhood, which exceed 200 in number and are mostly worked by steam-power, produce a great quantity of woollen cloths; the descriptions are various, and include double-milled and waterproof cloths, zephyrs, and fancy cloths of all colours. From 60,000 to 70,000 pieces of 60 yards each, at from 10 to 20 francs a yard, are produced annually. The cloth is purchased of the manufacturers by large commission-houses, of which there are

about 70 in the town, and by them it is sent to various parts of France. This town is also celebrated for the manufacture of billiard-table cloth and fannel. It contains several dye-houses, fulling-mills, and large wool-stores, besides wool-washing establishments which lie along the Seine and the Puchot, a small winding stream that traverses the town. Steam-boats ply between Elbeuf and Rouen; the Tourville station on the Paris-Rouen railway is only four miles distant from Elbeuf.

(*Dictionnaire de la France; Commercial Statistics.*)

ELBING, a fortified sea-port town, and a place of considerable commercial importance, in the Prussian government of Danzig, is situated on the Elbing River, which is united to the Nogat arm of the Vistula by the Kraffuhl Canal about 4 miles N. from the town. The town is about 5 miles from the mouth of the river in the Frische-Haff. It stands at a distance of 356 miles by railway N.E. from Berlin, 31 miles S.E. by railway from Danzig, in 54° 10' N. lat., 19° 25' E. long., in a very fertile valley, and is surrounded by high walls, towers, and ditches. It is divided into the old and new town, 3 inner and 11 outer suburbs, and has 5 land and 2 water gates, 5 Lutheran churches, a Reformed Lutheran and a Roman Catholic church, a synagogue, 5 hospitals, a convent, an orphan asylum, work-house, house of correction, house of industry, a savings bank, and a gymnasium, with a large library.

Elbing was founded by the Teutonic knights about the year 1229. It was a member of the Hanseatic League, and now ranks in the second class of towns in the Prussian monarchy. The population is about 26,000, one-fifth of whom are Roman Catholics. The inhabitants manufacture woollen cloth, tobacco, sail-cloth, soap, starch, pearl-ash, caviar, stockings, oil, and linen; there are also tan-yards, ship-building yards, chieory-mills, sugar-refineries, &c. The town has a brisk trade with Poland, from which corn, potash, wood, lichen, wool, tallow, and wax are obtained; and iron, wine, manufactured and colonial goods, &c., are sent in exchange. By the Kraffuhl Canal small vessels can come up to the wharfs, but the larger ones are obliged to unload at Pillau, which is the harbour of Elbing. About 500 vessels belong to Elbing, but they are almost all of small burden. There is a considerable sturgeon fishery at Elbing.

ELBŒUF. [ELBEUF.]

ELBOGEN, or ELLENBOGEN. [EGER.]

ELBOURS, ELBURZ, or ELBRUZ. [CAUCASUS.]

ELCHE. [VALENCIA.]

ELEPHANTA, a small island about 7 miles in circumference, situated between the island of Bombay and the Malhatta shore, from which it is distant 5 miles, and 7 miles from the castle of Bombay, in 19° 2' N. lat., 72° 57' E. long. Its name among the natives is Gorapori; that by which it is known to Europeans was derived from the figure of an elephant twice the size of life cut out of the solid black rock on the acclivity of a hill about 250 yards from the landing-place. This figure is now completely dilapidated. At a short distance from the elephant stands the figure of a horse, also cut out of the rock. On this island is a remarkable temple-cave. The entrance to this cave, or temple, occurs about half way up the steep ascent of the mountain or rock out of which it is excavated. Its length, measuring from the entrance, which is on the north side, is 130 feet, and its breadth 123 feet; the floor not being level the height varies from 15 to 17½ feet. The roof was supported by 26 pillars and 8 pilasters, disposed in four rows; but several of the pillars are broken. Each column stands upon a square pedestal and is fluted, but instead of being cylindrical is gradually enlarged towards the middle. Above the tops of the columns a kind of ridge has been cut to resemble a beam about 12 inches square, and this is richly carved. Along the sides of the temple are carved between 40 and 50 colossal figures varying in height from 12 to 15 feet; none of them are entirely detached from the wall. On the south side, facing the main entrance, is an enormous bust with three faces, which is supposed to represent the triple deity, Brahma, Vishnu, and Siva. The central face is 5 feet in length. At the west side of the temple is a recess, 20 feet square, having in the centre an altar. The entrance to this recess is guarded by eight naked figures, each 13½ feet high, sculptured in a superior manner. The origin of this cave is quite unknown: it is frequently visited by devotees for the purpose of offering prayers and oblations. (Captain Hamilton, *Account of India*, 1744; Maurice, *Indian Antiquities*; Niebuhr, *Voyage en Arabie; Archæologia*, vol. vii.; *Asiatic Researches*, vol. i.)

ELEUSIS, a celebrated town of Attica, stood on rising ground near the northern shore of the Gulf of Salamis, and opposite to the Isle of Salamis, in 38° 4' N. lat., 23° 30' E. long., not far from the eastern boundary of Megaris. Eleusis gave its name to one of the twelve ancient divisions of Attica. It owed its celebrity in the historical age to its being the principal seat of the mystical worship of Demeter, who in search for her daughter Persephone (Proserpine), was said to have rested by the well Callichorus at Eleusis, and to have taught Triptolemus the use of corn on the Rharian plain. [ATTICA.] In very ancient times Eleusis is said to have been an independent state of some importance, and to have carried on a war with Athens, which resulted in its becoming subject to that city in everything except the celebration of the mysteries, of which the Eleusinians were to continue to have the management. (Thucyd. ii

15). This worship subsisted at Eleusis from the earliest period of history to the time of Alaric. The annual festival and celebration of the Eleusinian mysteries were by universal consent regarded as the holiest and most venerable in Greece. The great festival began on the 15th Boedromion, and lasted nine days. The first day was called the assembling (*ἀγυρμός*); on it all who had received the preparatory initiation in Elaphebolion at Agræ were invited to complete their sacred duty. The second day was named *ἄλδε μύσται*, 'to the sea ye initiated!' from the words of the proclamation by which they were admitted to purify themselves. This purification took place in the *ῥεῖοι*, two streamlets of salt water running into the Gulf of Salamis, and which separated the territory of Eleusis from the rest of Attica. Of the proceedings on the third and fourth days but little is known. The fifth was called the 'day of the torches,' *λαμπάδων ἡμέρα*, on account of a lampadephoría, or torch-procession, in which the initiated marched two and two round the temple. The initiation took place on the sixth and seventh days of the feast. The sixth day, which was called Iacchus, was the chief day of the Eleusinia. On this day the statue of Iacchus was adorned with a garland of myrtle, and carried in procession with songs and shouting from the Cerameicus to Eleusis, and back again on the following day, which was named the 'return of the fully-initiated' (*νοστροῦσαν οἰ ἐπόπται*). According to Herodotus this procession was not uncommonly attended by at least 30,000 persons. The seventh day was called Epidauria, in honour of Æsculapius, who did not arrive from Epidauria to be initiated until after the return of the Epopææ. The ninth day was called *πλημοχόη*. The ceremony of this day consisted in the symbolical overturning of two vessels filled with wine. Those initiated at the lesser mysteries were called *μύσται*, from *μύω* 'to close up,' because they were bound to strict silence; those who had passed through the Eleusinian ceremonies were called *ἐνόπται* or *ἐφόροι*, 'contemplators,' because they had been admitted to see the sacred objects; they were also hailed as happy and fortunate (*εὐδαίμονες, ὕβριοι*). In what the initiation consisted has been the subject of much fanciful speculation. The probability is that there was, according to the prevalent belief of many of the best ancient as well as recent writers, a setting forth of a higher and purer moral faith, with the adumbration of a resurrection to a future and happier life. Every Athenian was obliged to pass through these ceremonies once in the course of his life. Bastards, slaves, and prostitutes, as well as strangers, and in later time Christians and Epicureans, were excluded from the Eleusinia. To reveal any of the mysteries, or to apply to private purposes any of the hallowed solemnities, was considered a capital crime.

The great temple of Demeter, erected in the place of an earlier one burned by the Persians, was commenced in the time of Pericles, by Ictinus the architect of the Parthenon, and finished by Philo under the auspices of Demetrius Phalerius. It was the largest, and generally regarded as one of the four finest in Greece. From the researches of the commission appointed by the Dilettanti Society, the cella, or interior of the temple, appears to have been 166 feet square, and to have had in front a magnificent portico of 12 Doric columns, each 6½ feet in diameter at the bottom of the shaft; erected by Philo. This great temple occupied the eastern extremity of the rocky height on which stood the Acropolis of Eleusis. The town itself occupied a triangular space, each side being about 500 yards in length, lying between the hill and the shore. It was surrounded by a wall, the extremities of which, as was common in Greek military architecture, were carried into the sea so as to form moles, which sheltered a small circular artificial harbour. Eleusis was in a flourishing condition under the Romans, owing to the eagerness with which the Roman nobles sought initiation into the mysteries. It was destroyed by Alaric in A.D. 396, and from that time it ceases to be mentioned in history. When Spor and Wheler visited the site in 1676 it was entirely deserted. Some years later a few inhabitants collected about it; and the spot occupied by the great temple is now the centre of a village called *Lepsina*, until within the last year or two, but to which the ancient name has been since restored, in accordance with a recent law, by which the principal localities of Greece are to be in future called by their ancient and classical names. *Eleusis* is now a considerable village. Besides the fragments of the inclosure of the great temple there are some heaps of ruins of the propylæum, of nearly the same plan and dimensions as that of the Acropolis of Athens, and other works on the Acropolis; portions of a small temple 40 feet long and 20 feet wide, probably that of Artemis Propylæa, &c. A finely executed colossal marble bust, supposed by some authorities to be that of Persephone, was brought from Eleusis in 1801 by Dr. E. D. Clarke, and is now in the public library at Cambridge.

(Leake; Wordsworth; Murray, *Handbook for Travellers in Greece*, 1854.)

ELÉUTHERA. [BAHAMAS.]

ELGIN, Elginshire, Scotland, the county town, a royal and parliamentary burgh, and market town, is agreeably situated in a plain, in 57° 39' N. lat., 3° 32' W. long. The small river Lossie winds round the western and northern sides of the town, and is crossed by several substantial bridges. Elgin is 145 miles N. from Edinburgh, and 64 miles N.W. from Aberdeen. The population in 1851 was 5383. The town is governed by a provost, 4 bailies, and 12 councillors.

GEOG. DIV. VOL. II.

Conjointly with Banff, Cullen, Inverury, Kintore, and Peterhead, it returns one member to the Imperial Parliament.

Elgin, called anciently Helgyn, of which many derivations are given, most probably owes its origin to the fortress or castle on the top of Lady Hill. With the ancient fortress (a royal castle prior to the time of William the Lion, in 1188), its old jail and still more ancient church of St. Giles (its patron saint) in the centre of the town, and the cathedral and canons' houses at the east end, Elgin was a kind of ancient Edinburgh on a small scale. The modern public buildings in the town are numerous. Gray's Hospital, for the sick poor of the town and county, is entirely supported from funds left for the purpose by Alexander Gray, Esq. It is a handsome building with a Grecian portico and a cupola; it stands in a commanding and healthy situation at the western extremity of the town. A small pauper lunatic asylum, built in 1834, is within the grounds of the hospital. A pillar erected to the memory of George, the last of the dukes of Gordon, is placed on the top of Lady Hill, and forms a conspicuous object. A public fountain now occupies the site of the old jail; and in the centre of the High-street, on the site of old St. Giles, the ancient church of Elgin, is the new parish church, an elegant structure, erected in 1828. The Elgin Institution was built from and is entirely supported by the munificent legacy of the late General Andrew Anderson, who left 70,000*l.* for "the support of the aged and the education of youth" belonging to the town and county of Elgin. It is a handsome quadrangular building, surmounted with a circular tower and a dome, is constructed of freestone, and ornamented with Doric columns and sculptured figures. The building and grounds cover an area of about three acres. There are 10 old people and 44 children living within the building, and in the school there are about 200 children receiving education gratuitously. The court-house for the sheriff and burgh courts is a new building. The jail is in its immediate vicinity. The Elgin and Morayshire Museum was built about twelve years ago by private subscription. A small but neat Episcopal chapel with a parsonage, and the Mason Lodge, or Assembly rooms, are situated in North-street. The Roman Catholics have a new and handsome gothic chapel. The covered market-place just erected supplies ample accommodation for the market traffic. The buildings of the Elgin Academy are poor; but the seminary confers great advantages upon the community. The scholars are under the care of teachers of Latin, mathematics, and English, whose salaries are partially secured by an endowment. There are in the town an Infant school, a Trade school, a scientific association, a mechanics society, and a savings bank. The corn-market is held on Friday. The town is well supplied with gas and water. Lossiemouth is the sea-port to Elgin. The industrial occupations of the inhabitants and the means of communication are mentioned in the description of the county. [ELGINSHIRE.]

The charter erecting Elgin into a royal burgh was granted by Alexander II. in 1234. At an early period the neighbourhood was adorned with extensive ecclesiastical establishments. The cathedral was first built in 1224, but it was burnt down by the 'Wolf of Badenoch,' son of Robert II., in 1390. The ruins now extant are those of the second cathedral, a magnificent structure, erected in 1414. Its length of 264 feet, breadth at the transept of 114 feet, and central tower of 198 feet, give some idea of what its size and extent must have been; while the ground-plan, studded with bases of pillars, and the numerous carved stones, indicate that considerable taste and skill had been exercised in its erection. A college was attached to the cathedral, and included within its walls the house and gardens of the bishop and those of 22 canons. On the south side of the town are the ruins of a convent of Gray friars, and on a hill west from the town are the remains of an ancient fort.

(*New Statistical Account of Scotland; Communication from Elgin.*)

ELGINSHIRE, called MORAYSHIRE, as it formed the central part of Moray, one of the provinces into which Scotland was anciently divided, a county in the north of Scotland, lying between the Grampian Mountains and the Moray Frith, is bounded N. by the Moray Frith, W. and S. by the counties of Nairn and Inverness, and E. by Banffshire. Inverness-shire intersects the county, and cuts off a small portion of its southern extremity. Elginshire is situated between 57° 10' and 57° 43' N. lat., and between 3° and 3° 45' W. long.; its extreme length is 58½ miles, and extreme breadth 26 miles. The area of the county is 531 square miles, or 340,000 statute acres. The population in 1851 was 33,959. This county unites with Nairnshire in returning one member to the Imperial Parliament.

Coast-line.—The line of sea-coast extends upwards of 30 miles, and presents in the middle portion bold precipitous rocks of sandstone, with a few detached pieces, as the 'Holyman Skerries,' lying seaward. The two extremities of the line are for several miles formed of vast mounds and raised beaches of sand and gravel. Several small harbours are situated along the coast-line. On the east, at the mouth of the Spey, lie Kingston and Garmouth. The Spey is not ordinarily navigable even by the smallest craft, and can only be entered at high tide. The lighthouse on Coveea Skerries Point is one of the best of the Scottish lighthouses; it has a revolving light. Westward of the lighthouse lie the Caves of Coveea, in former times the resort of smugglers. They consist of large natural excavations in the sandstone cliff, and are remarkable from their number, size, and intricate windings. Hopeman is a fishiug-village with a small harbour. Burghhead, the

most marked and commanding point on the Elginshire coast, was the last stronghold of the Danes in this part of Scotland, and is supposed to have been a Roman station. Several vestiges of antiquity are still to be seen here, as the 'Roman Well' or bath, and remains of gravel-mounds raised for defence. At the harbour of Burghhead, where steam-vessels from London, Leith, and Sutherland touch, there are 11 feet of water at neap-tides, and 14 feet at spring-tides. Findhorn, the sea-port for the burgh of Forres and the western parts of the county, stands at the influx of the river Findhorn, and at the north side of a large shallow bay.

Surface and Geology.—The portion of the county which is bounded by the Moray Frith, and averaging about five miles in breadth, is flat, and characterised by its light and gravelly soil, with occasional ridges of clay, and protrusions of the underlying rocks, which are subordinate beds of the old red-sandstone formation. In a few spots may be seen traces of oolite, with its characteristic fossils. Except some sterile sands close by the sea and the Loch of Spynie, almost the whole surface of the flat or 'flow of Moray' is occupied by cultivated fields, of which wheat is the staple production, or by thriving plantations of Scotch fir, larch, and hardwood. Gneiss is the prevailing rock southward to the confines of Banff and Inverness shires, forming, with its associated granite, beds of limestone, and other primitive rocks, many high and rugged hills, which shelter numerous fertile valleys. Modern plantations have taken the place of the ancient forests of Morayshire.

Around Elgin, and at Coveasa, and in several other localities, are inexhaustible quarries of sandstone of every degree of hardness and texture, and of many tints of colour, from the fine rosy hue of Newton to the deep yellow of Bishopmill. The county otherwise is destitute of mineral productions; and with the exception of the supplies of peat and wood which it affords, the inhabitants have to depend for fuel upon the coal-fields of the south. Lime is imported in large quantities from the same quarter.

Hydrography, Communications, &c.—The only portion of Elginshire that touches the sea is the coast-line already described. The rivers belonging in whole or in part to the county, are the *Spey*, the *Findhorn*, and the *Lossie*, with some of their tributaries. The 'rapid *Spey*' rises in Badenoch, a district of Inverness-shire, and is said to drain about 800,000 acres. In its course through Elginshire it is joined by the *Nethy*, the *Dulnair*, and the *Avon*; after the junction of the *Avon* the *Spey* becomes much more impetuous than before. The river runs in a north-easterly direction along the eastern boundary of the county, and, from its numerous windings, its course is nearly 100 miles long, the direct distance being only 75 miles. The *Spey* winds its course through varied and picturesque scenery. It rises among the sterile hills of Badenoch, and passes the sylvan retreats of Rothiemurchus and Castle Grant; its banks are adorned by the mansions of Ballindalloch, Elchies, Aberlour, Arndilly, and Orton, and it waters the valleys of Dipple, Dundureas, Rothes, Dandaleith, and Dalvey. Its finest portion is that which lies between the villages of Rothes and Aberlour, and which has the iron bridge of Craiggellachie as its centre. The *Findhorn* rises among the Monadleadh Hills in Inverness-shire, and in its course passes through a succession of rugged hills and wooded dales, alternating with rock and meadow. Only a small portion of this stream, which is about 90 miles in length, traverses Elginshire, where it falls into the sea at Findhorn Harbour; it is a broad and shallow stream, being navigable only for small craft when the tide has risen. The scenery of Dumphail and Relugas, on the *Durie*, a tributary of the *Findhorn*, is much admired by tourists. Salmon are caught in the river *Findhorn*. The *Lossie* runs between the *Spey* and the *Findhorn*, traversing the central part of the county. The deep ravines in its course are often exceedingly picturesque. This river rises in the hills between Dallas and Strathspey. In its lower course it becomes more winding than either the *Spey* or the *Findhorn*. It is joined by the *Lochty*, or *Blackburn*, about two miles to the west of Elgin, and after sweeping round the north side of that town, and the eastern side of Barfathill, falls into the *Moray Frith* at Lossiemouth, or Stotfieldhead Harbour. Near its influx the *Lossie* receives the surplus waters of the *Loch of Spynie*. The circumference of this *Loch* and the quality of its waters have varied greatly at different periods. An underlying bed of marine shells shows it to have been once one of the best-furnished and most extended oyster and cockle-beds in Scotland. After it had been separated from the sea and converted into a lake or lagoon, the salt or brackish water gave place to the fresh, which destroyed all the marine mollusks, and nourished for ages large masses of *Typha* and *Cyperaceae*, with their attendant species. At various times the waters of the *Loch* have been partially drained off, and considerable portions of land have been reclaimed and cultivated. In August, 1829, memorable as the era of the 'Moray floods,' the waters in the *Loch* rose so high as to carry off the floodgate at the mouth of the small canal by which the superfluous water was allowed to escape. This has never been replaced; and consequently the lower part of the *Loch* rises and falls with the tide. The *Loch of Spynie* is a favourite resort for hosts of wild fowl, particularly of the migratory sorts. *Lochindorb*, with its island, and remains of a royal castle, is a fine piece of water, lying on the outskirts of the county. It abounds with excellent trout, as does the *Loch of Glenmore*, in Abernethy, which however excels *Lochindorb* in scenery, as it lies in a well-wooded valley. *Loch Nabo*, between *Fochabers* and *Elgin*,

Lochs Trovie, *Dallas*, and *Noir*, near the sources of the *Lossie*, are also habitats of the trout.

The leading lines of road are those from *Elgin* to *Forres*; from *Elgin* to *Lossiemouth*; from *Orton*, on the *Spey*, to *Elgin*; from *Elgin* to *Burghhead*; from *Burghhead* to *Forres*; from *Forres* to *Grantown*. Within the last thirty years good cross roads have been constructed in every direction over the county. Except in the winter steam-boats sail regularly from one or more of the *Elginshire* sea-ports, particularly *Burghhead*, to *London*, *Edinburgh*, *Aberdeen*, *Banff*, *Inverness*, *Cromarty*, *Luvergordon*, and *Golspie*. There is neither canal nor railway in the county.

Climate, Soil, Agriculture.—The climate of *Elginshire* is salubrious. The open, sandy, and gravelly nature of the soil acts as a great natural drain, and, unlike the strong clays of the adjoining counties, prevents the stagnation and consequent evaporation of water, which loads the atmosphere with moisture and reduces the temperature. The northern part of the county is but little elevated above the sea level, and is not so much exposed to cold and moist winds from the German Ocean as *Banff* and *Aberdeen*, and, being surrounded on all sides, except the north, by mountains which attract the clouds, it has the reputation of having forty days of fair weather more than the other parts of Scotland. The greatest differences as to the quantity and duration of snow are observed between the higher, or southern, and the lower, or northern divisions of the county. While every operation in agriculture can be carried on without interruption along the coast and for miles into the interior, yet among the hills, south of the line where wheat can be profitably cultivated, the ground sometimes remains for months together, either covered with snow or bound by frost, so as to be inaccessible to the ploughshare. In *Elginshire*, as indeed on the whole east coast of Scotland, spring is the most severe and trying season. Alternations of heat and cold, with prevailing east winds, frequent snow showers, and late frosts are the usual characteristics of this season. Occasionally north-westerly winds occur, which blow at all seasons of the year, and continue for three or four days at a time.

In the lower or northern division of *Elginshire* wheat is the staple produce of the arable land, in the upper districts the staple is oats. Its capability to grow and ripen wheat early gave a stimulus to the agriculture of the northern district, which was anciently reputed to be the 'granary of Scotland.' Drill husbandry was early adopted on the larger farms, and now universally prevails. Under the direction and example of the *Morayshire Farmer's Club*, instituted in 1799, the best breeds of cattle, horses, and sheep, and the most improved agricultural implements, have been introduced. Drainage has been largely and systematically carried out on most farms. Turpuis thrive well in all parts of the county; Swedish turnips have been more extensively cultivated of late years, and mangel wurzel has been introduced. On every farm, however small, a regular rotation is stipulated for by the proprietor, and includes a green crop or cleansing once every four, five, or six years. The great majority of farms are comparatively small—from 50 to 100 acres—but some contain from 400 to 600 acres. The almost universal term of lease is 19 years. The cattle chiefly used in *Elginshire* are the short-horned, and crosses of that breed with the old stocks of the district. Sheep husbandry is extending over the lower part of the county. In the higher part of the county the farms usually have extensive pastures attached, which are better adapted for grazing cattle than the lower districts. In the lower parts the flocks are chiefly composed of the *Cheviot* and *Leicester* breeds, with their crosses; while the black-faced variety are found in the remoter glens and hills. Large flocks of these however are brought down to winter in the more genial valleys near to, and opening upon, the low country. The horses used for agricultural purposes, by careful crossing, have been greatly improved. The improvement in the breed of swine has also been very marked. The dense population of the villages along the shore depend upon the produce of the fisheries for their subsistence. The herring fishery in July and August is their harvest, and affords abundant employment for about six weeks. Of late years the white fish (chiefly cod and haddock), have been cured and exported to the *London* and other markets.

Towns, Villages, &c.—There are two royal burghs in this county, *ELGIN* and *FORRES*. Besides the places already referred to as situated on the coast, the following villages may be noticed:—*Bishopmill*, a small village separated from *Elgin* by the *Lossie*, contains several grain-mills. Some good villa residences are situated on the north bank, which overhangs the river, and commands a fine view of *Elgin* and the range of the *Manoch* which lies southward. *Fochabers*, a burgh of barony in the parish of *Bellie*, one of the most beautifully situated villages in the north of Scotland. In the centre of the village is a fine open square in which are the parish church and an Episcopal chapel. *Miln's Institution* for the free education of the youth of the parish, stands at the east end of the village, and is an elegant structure. The chief ornaments of the neighbourhood, although locally situated in *Banffshire*, are the buildings and grounds of *Gordon Castle*, the seat of the *Duke of Richmond*. *Kingston* is on the *Spey*, one of the most valuable fish rivers in Scotland. Of late years the rent of the fishing in the *Spey*, which was at one time 8000*l.* a year, has been some 2000*l.* or 3000*l.* lower. The fish have been decreasing in number as well as in

size. Kingston is the chief ship-building station on the Moray Frith. *Lossiemouth*, or Stotfieldhead Harbour, in the parish of Drainsy, is the chief sea-port for Elgin, the county town, which lies $5\frac{1}{2}$ miles inland. A new harbour was completed in 1839. It has two inner basins. The depth at its entrance at low water spring tides is under 4 feet; the rise of tide at springs is 11 feet; at neaps, 8 feet, and sometimes 10 feet. There are many residences of proprietors and mansions dispersed throughout Elginshire, as Dalvey, Brodie, Moy, and Kincorth on the Findhorn; Sanquhar House, Inverern, Grangehall, Lea Park, and Drumduan, in the vicinity of Forres; Elchies, and Orton House on the Spey; and Innes House, Duffus House, Gordonston, Grant Lodge, Milton Brodie, Bromoriston, Westerton, Pitgaveny, Findrassie, Palmercross, Invergie, and Newton in the neighbourhood of Elgin.

Divisions, &c.—The whole county is included in, and forms part of, the Synod of Moray. According to the 'Census of Religious Worship and Education,' taken in 1851, it appears that, so far as was ascertained, there were then in the county 64 places of worship, of which 25 belonged to the Established Church, 20 to the Free Church, 8 to the United Presbyterian Church, 4 to the Independents, 3 to Episcopalians, 2 to Baptists, and 2 to Roman Catholics. In 62 of these 64 places of worship the number of sittings is stated at 28,293. The number of day schools in the county was 96, of which 65 were public schools, with 4649 scholars, and 31 were private schools, with 1077 scholars. Of Sabbath schools there were 61, with 4213 scholars. Of these schools 22 were connected with the Established Church, 18 with the Free Church, and 8 with the United Presbyterian Church.

History, Antiquities.—The names of many places in the county are of Celtic origin. The situation and climate of Elginshire caused it to be early visited and occupied by the Scandinavian tribes, who, under their sea kings, roamed over the north-west of Europe. The early history of Moray is closely connected with their inroads and settlements, which have no doubt largely contributed to mark the distinction which Elginshire, along with the eastern counties, shows in the language, features, names, and habits of its population, as contrasted with those of the central and southern parts of Scotland. About 1160 Malcolm IV. entered the province of Moray, and subdued the rebellious spirit of its inhabitants, transferring many of them, it is said, to other parts of his dominions. Subsequent to this there is little in the provincial history distinct from that of Scotland.

Among the antiquities of Elginshire the ruins of Elgin cathedral hold the first place. [ELGIN.] The Priory of Pluscarden, situated seven miles west of the town of Elgin, was founded in 1230 for Cistercian monks. In 1460 the priory was assigned to another order of the regular clergy. The ruins, which are very picturesque, stand in a well-wooded glen. The Abbey of Kinloss, two miles N.E. from Forres, once a noble structure, now exhibits but a few scattered ruins. This establishment was largely endowed, and was presided over by a mitred abbot. The oldest ecclesiastical building in the county of which there are any remains is the church of Birnie. Standing on a small isolated knoll this structure appears to have been raised prior to 1224, when the first Elgin cathedral was built. It is of early Norman style. Some of the earliest of the bishops of Moray are buried in it. It is still used as the parish church. The Bishop's Palace at Spynie, his town house, close by the cathedral, and the ruins of the Grayfriars, are of interest to the antiquary. The other objects of antiquity in Elginshire are Randolph's Hall, in Darnaway Castle, a room 89 feet long by 35 feet broad, with its lofty roof of oak, which was built by Randolph, Regent of Scotland, in the time of David Bruce: in it Queen Mary held her court in 1564; the castles of Old Duffus, Dallas, Rothes, and Dunphail; and the towers of Burgie, Blervie, Aslisk, and Coxton.

Industry.—The inhabitants of Elginshire are chiefly dependent on agriculture. The land is cultivated either by the tenant and his family, or by servants, male and female, engaged every six months. The only factory, properly so called, is one in the vicinity of Elgin, where about 50 of the population of the town are employed in the fabrication of tweeds, tartans, plaids, &c. One of the chief manufactures of the county is that of whisky, there being seven distilleries in constant work. Two breweries at Elgin and one at Forres carry on an extensive trade. Elgin ale and table-beer have been long in repute. At Elgin there are a foundry, a tannery, and two rope works. A brick and tile work is carried on near the Loch of Spynie. In 1851 there were two savings banks in the county, at Elgin and Forres. The amount owing to depositors on 20th November 1851 was 28,540*l.* 0*s.* 8*d.*

ELHAM, Kent, a small town and the seat of a Poor-Law Union, in the parish of Elham, is situated on a feeder of the Stour, in $51^{\circ} 10' N.$ lat., $1^{\circ} 6' E.$ long., distant 10 miles S. by E. from Canterbury, and 65 miles S.E. by E. from London. The population of the parish of Elham in 1851 was 1207. The living is a vicarage in the archdeaconry and diocese of Canterbury. Elham Poor-Law Union contains 20 parishes and townships, with an area of 36,923 acres, and a population in 1851 of 18,680. The parish church is a handsome and commodious edifice; the body of the church is of the transition from the Norman to the early English styles; the clerestory, the roof, and the east window of the chancel are perpendicular; the tower is decorated. There are chapels for Wesleyan Methodists and Bryanites; National and British schools; and a Free school, founded in 1727.

(Hasted, Kent; Communication from Elham.)

ELIMBERIS. [AUCH.]

ELIS or ELEA, a district of the Peloponnesus, included between Achaia, Arcadia, Messenia, and the Ionian Sea. Its coast-line extended from the river Larassus in the promontory Araxus on the north to the mouth of the river Neda on the south: on the east it was bounded by the Arcadian Moutaius, on the west by the sea. Elis was originally divided into three parts, the northern called hollow Elis (*κοίλη Ἠλίας*), the middle called Pisatis, and the southern Triphylia. The earliest inhabitants of this territory were the Epeans and Pyliaans, who occupied the whole western coast of the Peloponnesus from Araxus to Taygetum, the line of demarcation between these two tribes being on a line with Cape Ichthys. (Leake's 'Morea,' ii. p. 182.) The chief towns of the Epeans were, in the time of Homer, Elis and Buprasium. ('Iliad,' B. 615, Ψ 630.) The Eleans were the first people in the Peloponnesus who experienced the effects of the Dorian invasion, as their territory was the landing-place of the invaders, and was assigned by them to their ally the Ætolian Oxylyus, who claimed to be descended from Ætolus, the son of Endymion, a mythical king of the Epeans. Oxylyus and his new subjects conquered Pisa and Olympia, where the Olympian games were established about B.C. 1104, though they were not regularly celebrated till Corchus gained the prize in B.C. 776. Those games exercised a most important influence on the subsequent destinies of Elis. The reverence with which the Greeks in general regarded this festival was extended to the country in which it took place, and the districts in the neighbourhood of the cities of Olympia and Elis were always free from the ravages of war so long as the games maintained their respectability. In the earlier periods the Pisatans sometimes pressed over the celebration of the games; but the wars between Messenia and Sparta enabled the Eleans to form a very intimate connection with the Spartans, which ended in a tacit understanding that the intervening sea-coast should be divided between the two powers; the resistance of the Pisatans only brought upon them the destruction of their city, B.C. 572, which from this time disappears from history, and the annexation of all Pisatis and Triphylia to Elis. The harmony between Elis and Sparta continued uninterrupted during the Peloponnesian war till the peace of Nicias B.C. 421, when the Spartans assisted the Lepreatæ in their revolt against the Eleans, and the latter endeavoured to avenge this interference by excluding the Spartans from the Olympic games. After some years of misunderstanding, they were compelled to return to the Spartan alliance by the invasion of Agis, which deprived them of the greater part of their political importance. In B.C. 365 they were engaged in a war with the Arcadians, which deprived them of almost all their southern territories. The Eleans were firm supporters of the Ætolians during the social war, and never joined the Achæan league. Under the Romans Elis continued to possess a measure of prosperity, until the suppression of the Olympic games by Theodosius in A.D. 394. In 396 the country was laid waste by Alaric. In the middle ages the country was occupied by Gottfried of Villehardouin and other military adventurers, who built several fortresses, around which small towns grew up. Elis subsequently passed into the hands of the Venetians, under whom it continued to flourish for a considerable period. It has now lost nearly all its ancient prosperity, and is a poor and thinly peopled district; the only place of any importance in it being the small town of *Pyrgos*, which has an appearance of considerable industry and activity, it being the mart from which the produce of the country is exported and European goods are received.

The coast of Elis is an almost unbroken sandy level; the only protection for vessels being such as is afforded by the promontories of Araxus, Chelonatas, and Ichthys. From the nature of the coast the numerous small streams are prevented by narrow sand-banks from entering the sea and form shallow stagnat lagoons, which produce constant malaria and render the coast almost uninhabitable. During the summer months openings are made in the sand-banks, and the lagoons become speedily filled with fish, which are readily taken: this kind of fishing is believed to have been also practised here in ancient times. The fish are salted and cured on the spot, and largely exported. The principal sea-port of Elis was Cyllene, which Colonel Leake supposes to be the modern *Clarenza*. ('Travels in the Morea,' ii. p. 174.) The surface of the country is considerably diversified, but has a general elevation from the coast westward; the country consisting in fact of the eastern slopes of the Arcadian Mountains. Towards the coast the soil is sandy, in the valleys and meadows it is argillaceous, or a rich mould; and stone is found only in the mountains. (Leake, ii. p. 179.) The territory was more fertile than any other in the Peloponnesus, and very populous, and is said to have been the only one in Greece which produced flax; for which indeed the plain of Gastuni is still celebrated. A great quantity of fine timber, especially oak, still grows in Elis; wheat and cotton are cultivated. Horses, cattle, and oxen were reared in large numbers in ancient Elis. The principal rivers are the Alpheius (Rofea), which flows along a broad and fertile valley through the centre of Elis, and the Peneius (Gastuni). Its chief mountain, Pholoe, was celebrated in ancient poetry and mythology. This name appears to have been given to all the highlands of Elis north of the river Alpheius.

The plains of Elis were interspersed with numerous unvalled

towns and villages; the only fortified city was the capital Elis. This city was originally called Ephyra, and, according to Colonel Leake, changed its name in the time of Oxylius. It stood at the foot of the hill now called Kaloskopi (the Venetian 'Belvidero'), on which was the acropolis of the city. In the ancient city was a famous gymnasium, the largest in Greece, in which the athletes who contended in the Olympic games were obliged to undergo a month's preparatory training. There were besides several temples and stone, a theatre, in the agora (which also served as a hippodrome) were various statues; and on the acropolis was a temple of Athena in which was a



Coin of Elis.

British Museum. Actual Size. Silver. Weight, 183 $\frac{7}{8}$ grains.

statue by Phidias of the goddess in gold and ivory. When Pausanias visited Elis the city was one of the most magnificent and populous in Greece. Now little more remains of it than "several masses of Roman tile and mortar, with many wrought blocks of stone and fragments of sculpture scattered over a space of two or three miles in circumference." (Leake, i. p. 5.) On its site are two or three collections of mean houses, which together are called *Paleopolis*.

(Leake, *Travels in Morea*; Curtius, *Peloponnesos*.)

ELIZABETGRAD. [CHERSON.]

ELLENBOROUGH. [CUMBERLAND.]

ELLESMERE, Shropshire, a market-town, and the seat of a Poor-Law Union, in the parish of Ellesmere, and Ellesmere division of Pimhill hundred, is situated in 52° 54' N. lat., 2° 52' W. long., distant 19 miles N.N.W. from Shrewsbury, and 169 miles N.W. from London by road. The population of the town in 1851 was 2087. The living is a vicarage in the archdeaconry of Salop and diocese of Lichfield. Ellesmere Poor-Law Union contains 17 parishes and townships, with an area of 70,974 acres, and a population in 1851 of 15,226.

Ellesmere owes its name to the beautiful mere or lake close to which it stands. The manor was granted by King John to Llewellyn, prince of North Wales, who married Joan, the king's daughter; but it seems only to have been held at the will of the king. In the reign of Elizabeth it was alienated to Thomas Egerton, who was afterwards Lord Chancellor, and was created Baron of Ellesmere. There are no remains of the castle; the eminence on which it stood is now used as a bowling green. The town is neat and clean, and lighted with gas. The church is large, partly of the 14th century, but various portions are of later date. The nave, which was rebuilt in 1849, is in the early decorated style. The Independents and Wesleyan and Primitive Methodists have places of worship. There are National schools; a school at the Independent chapel; a church school; a dispensary, a provident society, a mechanics institute, and a savings bank. The market is held on Tuesday; flax and stockings are the principal articles sold. Malting and tanning are carried on. Six fairs are held in the year. The Ellesmere and Chester Canal is of great importance to the trade of the town.

(Communication from *Ellesmere*.)

ELLIHOOR, a principal city in the province of Berar, is situated in 21° 14' N. lat., and 77° 19' E. long., about 100 miles W. from Nagpore. It lies in the Doab, between the Sarpan and the Beechun rivers, which form a junction near Ellihpoor, and afterwards fall into the Poorna. This city is held, together with a small surrounding territory, by a petty chief, who is nominally dependent upon the Nizam of Hyderabad, but is under the protection of the English. The palace of the chief is a handsome and commodious building, and the bazaars and houses in the vicinity are built of brick. The rest of the city consists of mud houses.

ELLORE. [CIRCARS, NORTHERN.]

ELMINA. [GOLD COAST.]

ELORA, or ELLOTRA, a town situated near the city of Dowlatabad, in 20° 1' N. lat., and 75° 13' E. long. It forms a part of the Nizam's dominions, these being under British protection. This place was once of considerable importance. It is to the excavations near the town that Elora owes its celebrity. These excavations, which occur in a mountain about a mile to the east of the town, were formerly Hindoo temples of great sanctity, although they are now never visited except from curiosity. They are cut out of the solid rock, and the labour which they cost must have been prodigiously great. The largest cave, which is called the Kallasa, is 247 feet long and 150 feet wide. It contains sculptures of almost every deity of the Hindoo mythology, and most of them of colossal size. This chamber contains the Great Temple, which is a monolith, or solid piece of rock hollowed out; it is 103 feet long, and its greatest breadth is 61 feet; its interior height is 18 feet; but its exterior rises in a pyramidal form to the

height of more than 100 feet. There are several other large temple-caves in different parts of the mountain. There are also numerous smaller excavations without sculptures. The date of the excavation of these caves is unknown; they were probably constructed at various times and by different princes.

(Seeley, *Wonders of Ellora*; *Asiatic Researches*, vol. vi.; *Transactions of Lit. Soc. of Bombay*, vol. iii.)

ELPHIN, Roscommon, a post and market-town, and the seat of a bishop, in the parish of Elphin, is situated in 53° 50' N. lat., 8° 10' W. long., distant about 14 miles N. from Roscommon, and 77 miles W.N.W. from Dublin. The population of the town in 1851 was 1229. The town consists chiefly of one long irregular street of rather mean houses. The cathedral and the bishop's palace, which are seen from a considerable distance, give a picturesque appearance to the town. The cathedral is a plain building, 80 feet long, and 28 feet in breadth; it has a square tower; the interior of the structure is rather neat. The bishop's residence is an old building situated on the summit of the ridge on which the town stands. There is a dispensary here for the Carrick-on-Shannon Poor-Law Union. Four fairs are held in the course of the year.

The chapter consists of a dean, precentor, archdeacon, and eight prebendaries. The see of Elphin was founded about the end of the 5th century by St. Patrick, who set over it Asia as its first bishop. Asia, like many others of the primitive Irish bishops, was a distinguished worker in metals. Elphin is now united to the diocese of KILMORE and Ardagh.

ELSINORE, or ELSINEUR, in Danish *Helsingör*, a sea-port town in the Danish island of Seeland, is situated at the narrowest part and on the west shore of the Sound, opposite the Swedish town of Helsingborg, from which it is three miles distant, in 56° 2' 11" N. lat., 12° 36' 49" E. long., and has about 8000 inhabitants. It is here the Danish government collects the Sound dues from all merchant vessels except those belonging to Sweden and Denmark. [BALTIC.] On a tongue of land east of it is the castle and fortress of Kronborg, the guns of which command the Sound in all directions. The castle is built of white stone in the gothic style. From the top of the great tower or from the lighthouse which rises at the north-western angle of the court-yard, fine views of the strait and neighbouring countries may be obtained. At a short distance to the north-west of the town is a handsome palace called Marienlyst, with an hospital for seamen, built upon a commanding eminence close to it. The pleasure-grounds of the palace are open to the public, and command noble views. Elsinore itself is an open town, and has been much improved of late years. It consists of a main street of considerable length, with several lateral streets. The harbour is accessible to ships of small draught. The town contains two churches, a town-hall and high school, an infirmary and hospital, a theatre, and a quarantine establishment. Independently of a good foreign trade, the townsmen are employed in making straw hats, arms, refined sugar, brandy, &c., in printing cottons, and in the fisheries. The harbour is formed by a wooden pier. Elsinore is about 22 miles N. from Copenhagen, with which it is connected by electro-telegraphic wires. It was the birthplace of Saxo Grammaticus, a celebrated writer of the 12th century, and is the scene of Shakspeare's tragedy of 'Hamlet.' Foreign consuls reside at Elsinore. Caroline Matilda, wife of Christian VII. of Denmark, was imprisoned on a charge of adultery in the castle of Kronborg until the interference of her brother, George III. of England, procured her removal to Zell. Under the castle are casemates capable of holding 1000 men. The vaults beneath are the fabled residence of Holger Danske, the great mythic hero of the Danes. Steamers ply to Copenhagen daily, and Swedish, English, and Russian steamers to ports in the Baltic, call at Elsinore. In hard winters the Sound is frozen across.

ELSTER. [ELBE.]

ELSTOW. [BEDFORDSHIRE.]

ELTHAM. [KENT.]

ELVAS. [ALENTEJO.]

ELY, Cambridgeshire, an episcopal city, market-town, and the seat of a Poor-Law Union, is situated in 52° 24' N. lat., 0° 15' E. long., distant 16 miles N.N.E. from Cambridge, 67 miles N. by E. from London by road, and 72½ miles by the Eastern Counties railway. The population of the city of Ely in 1851 was 6176. For sanitary purposes the city is governed by a Local Board of Health. The livings are perpetual curacies in the archdeaconry and diocese of Ely. Ely Poor-Law Union contains 13 parishes and 1 chapelry, with an area of 82,270 acres, and a population in 1851 of 22,816.

Ely is the capital of that division of Cambridgeshire which is called the Isle of Ely, in the northern part of the county. Etheldreda, daughter of Anna, king of East Anglia, and wife of Oswy, king of Northumberland, retired here about the year 670, and soon after founded a monastery, of which she became the abbess. In 870 the abbey was pillaged and destroyed by the Danes, and its revenues were annexed to the crown. In 970 Edgar granted the isle to Ethelwold, bishop of Winchester, who rebuilt the monastery, and provided it with monks. After repeated attacks of William the Conqueror, the inhabitants, who made a gallant defence, were obliged to surrender; many of them were put to the sword, and most of the valuable furniture and jewels of the monastery were seized; but through the

firmness of Theodwin, who had been made abbot, the property was restored.

In 1107 Ely was erected into a bishopric by Henry I. Henry VIII., after the surrender of the monastery, granted a charter to convert the conventual church into a cathedral, by the title of the Cathedral Church of the Undivided Trinity. The cathedral of Ely displays a singular mixture of styles of architecture, but taken as a whole it is a noble structure. The most ancient part is the transept, which was erected in the reigns of William Rufus and Henry I. The nave and great western tower were built in 1174; the other parts were erected at different periods between that time and the year 1531. The interior is exceedingly beautiful; the nave is supported by lofty columns, which are almost without ornament. The octagon-tower combines solidity with gracefulness; and the choir is a perfect specimen of early English architecture. The stalls are beautifully carved. The Lady chapel is a most elaborate example of early English. The length of the cathedral, including the Galilee porch, is 517 feet; and the western tower is 270 feet high. There are many interesting monuments. Ely cathedral has been for several years undergoing the most extensive repairs and restorations under the supervision of the dean and chapter. The interior has been beautifully restored, and the works have been effected in a thoroughly substantial and judicious manner.

The city is situated on a considerable eminence near the river Ouse. It consists principally of one long street; the market-place, which is in the centre of the town, contains a commodious corn exchange. The city is lighted with gas. The town-hall is a commodious building, containing in the central portion court-rooms, in the south wing a chapel, and in the north wing an infirmary; a house of correction is at the back.

St. Mary's church is a handsome building, partly Norman with portions of early English. The church of the Holy Trinity, which is attached to the cathedral on the south side, was formerly the Lady Chapel. It was commenced in the reign of Edward II., and is one of the most perfect buildings of that age. It is 200 feet in length, 46 feet in breadth, and 60 feet in height; it has neither pillars nor side-aisles, but is supported by strong buttresses, surmounted with pinnacles. There are chapels in Ely for Baptists, Independents, Wesleyan Methodists, and the Countess of Huntingdon's Connexion. The Grammar school, founded by Henry VIII. in 1541, is under the control of the dean and chapter, who appoint the master. The school is free to 24 boys, called king's scholars, who in addition to instruction receive *3l. 6s. 8d.* each per annum. The number of scholars in 1853 was 41. There are also National schools, a Charity school, founded in 1730, a mechanics institute, and a savings bank. A county court is held in the town.

The soil in the vicinity is exceedingly fertile, and supplies great quantities of fruit, vegetables, and butter to the London market. There is a considerable manufactory for earthenware and tobacco-pipes, and there are several mills in the isle for the preparation of oil from flax, hemp, and cole-seed; lime-burning is carried on, and there are several breweries. By the river Ouse and by canal there is water communication with Cambridge, London, Lynn, and Wisbeach. The market is on Thursday for corn and cattle. The fairs are on Ascension Day and the eight following days, and October 29th for horses, cattle, hops, and Cottenham cheese.

The secular jurisdiction formerly possessed by the bishops of Ely is taken away by the 6th and 7th Will. IV. c. 87, and vested in the king, who is empowered to appoint a Custos Rotulorum for the isle. The assizes are now held by her Majesty's judges who join the Norfolk circuit.

The diocese of Ely is in the province of Canterbury. The diocese extends over Cambridgeshire, Bedfordshire, Huntingdonshire, and a part of Suffolk, and comprises 529 benefices. It is divided into four archdeaconries, Ely, Bedford, Huntingdon, and Sudbury. The chapter consists of the dean, the archdeacons, seven canons, five minor canons, and a chancellor. The income of the bishop is fixed at 5500*l.* The bishop has considerable patronage at Cambridge; he is visitor of four colleges, appoints absolutely to the mastership and one fellowship of Jesus College, chooses one out of two nominated by the society to be master of St. Peter's College, and has besides a considerable number of livings in his gift.

(Bentham, *History of Ely.*)

EMBRUN. [ALPES, HAUTES.]

EMDEN, the chief town of the province of Aurich, in Hanover, is situated in 53° 22' 3" N. lat., 7° 12' 33" E. long., a little below the outfall of the Ems into Dollart Bay, and has about 12,000 inhabitants, nearly 500 of whom are Jews. The town stands on the east shore of the bay, and is connected with the Ems by a canal about two miles long, called the Delf Canal, which was constructed in 1769. It is surrounded with walls and towers, and consists of Faldern, the old town, and two suburbs, which contain about 2250 houses. It is intersected by canals, over which are 30 bridges. Its spacious town-hall, with an old armoury and library, is one of the finest buildings in East Friesland. There are six churches, of which three belong to Dutch Calvinists, one to French Calvinists, one to Lutherans, and one to Roman Catholics. There are also a synagogue, a gymnasium, schools of navigation and design, elementary schools, a richly endowed

orphan asylum, a castle and custom-house, barracks, and societies of the fine arts and national antiquities.

The population of Emden in 1652 amounted to 20,000, and owned upwards of 600 vessels. A century afterwards the town had so much declined that the population did not exceed 8000. It came into the hands of Holland in 1803, was made the chief town of the department of Ostern in 1810, and in 1815 was, with the whole of East Friesland, incorporated with the kingdom of Hanover. The port, consisting of an outer and an inner harbour, is shallow. Emden has been a free port since 1751; but the Delf Canal, which unites the harbour with the town, and is drained and cleansed by means of five inland canals, has frequently no water in it, and can be entered at high water only; and even then it is not navigable by vessels which draw more than 13 or 14 feet water. All ships of greater draught are obliged to discharge their cargoes in the fine roadstead called Delf, into which the canal opens. There is a treckshuyt, or towing canal, about 14 miles in length, between Emden and Aurich.

Emden is the chief commercial place in Hanover; and ship-building is carried on to a considerable extent. As early as the year 1632 it had an African trading company, and in the middle of the last century an East India company. The herring fishery off Scotland, which is a source of great profit to the place, is carried on by four companies, who send out between 50 and 60 ships. Emden has brandy distilleries and sawing and oil-crushing mills, besides manufactories of fustian, cottons, stockings, sail-cloth, cordage, needles, leather, soap, tobacco, &c. It has considerable trade in linen, thread, corn, butter and cheese, tallow, wool, hides, &c. Opposite the harbour are the small remains of the island of *Nessa*, or *Nesserland*. It is separated from Delf by a swampy arm of the Ems, and previously to the inundations, which overwhelmed it between the years 1277 and 1287, formed a beautiful spot of about 80 square miles, with a town called Turum, two market-towns, numerous villages, and several monasteries and convents. All that is left of it at the present day is a church and five or six houses, built on high mounds of earth, but protected by dams from the sea. A railway is in course of construction from Emden southward through Liugen and Osnabrück to the Cologne-Minden line, which leads to Hanover.

EMSA. [SYRIA.]

EMLY, Tipperary, a small market-town which gives name to a bishopric, is situated in 52° 25' N. lat., 8° 17' W. long., about 7 miles W.S.W. from Tipperary, and 112 miles S.W. from Dublin by the Dublin and Cork railway. It is said that Emly was anciently a city of some importance, but it is now an insignificant place. The population in 1851 was 425. The parish church is a good building. The ruins of the cathedral present little of interest. The see of Emly was founded by St. Ailbe, who died in the year 527. It was united to the archiepiscopal see of Cashel in 1568. The sees of Cashel and Emly are now united with those of Waterford and Lismorc. The chapter consists of a dean, precentor, chaucellor, archdeacon, and five prebendaries.

EMMERICH. [DÜSSELDORF.]

EMPOLI. [FIRENZE.]

EMS, the ancient *Amisus*, a river in the north-west of Germany, which has its source in the Teutoburg Forest, to the north-west of Paderborn, in Westphalia. From this point the river pursues a sluggish westward course between low banks to Rietberg, then turns to the north until it approaches Harsewinkel, where it bends again to the west past Warendorf and Telgte, and thence flows north-westward to Schüttdorf, in Hanover, below the town of Rheine, where it quits the Prussian territory. At Fuestrup, about 5 miles below Telgte, it is from 4 to 5 feet deep; and about 5 miles lower down it becomes navigable for small flat-bottomed vessels. It enters the Hanoverian dominions above Schüttdorf, and traverses them for about 70 miles. The general direction of this part of its course, in which it makes numerous bends, is due north, until it quits the province of Osnabrück, in passing through which it approaches within a short distance of the town of Lingen, and has that of Meppen on its right bank. The Ems in this part, though full of water in the rainy season, is so shallow in dry weather that a canal, called the Ems Canal, has been opened from Haukensfähle, about 8 miles above Lingen, which runs parallel with the river, has a depth of 5 feet, and rejoins the Ems at the confluence of the Hase at Meppen. From this town to Papenburg its bed has been deepened, so that in the shallowest spots it has a depth of three feet. Just above Papeburg the river winds eastward, and then inclining somewhat to the north-east runs on to Leer, whence it pursues a northerly course till it has passed Vornhasen, and from this spot turns to the north-west, and ultimately enters Dollart Bay in about 53° 18' N. lat. The Oster (East) and Wester (West) Ems, which are formed by the sand-banks Rausel and Borkumriff, are the channels by which the Ems discharges its waters into the North Sea. Between the Rausel and Dollart the Ems is wide, and separates East Friesland from the Dutch province of Groningen. The Ems below Leer widens to a breadth of 300 feet, and between the Dutch and Hanoverian territories its width varies from 5 to 9 miles. The whole length of this river is estimated at about 210 miles, and it is navigable for vessels of 80 or 100 tons burden as high as Papenburg, where it ceases to be affected by the tides. Its principal tributaries on the right bank are the Hase, which passing Osnabrück

falls into it at Meppen, after a course of about 125 miles; the Aa, which rises in the northern part of the Teutoberger Wald, and falls into the Ems a few miles above Llugen; and the Leda, which enters Hanover from the duchy of Oldenburg and joins the Ems near Leer, after a course of about 56 miles. On the left bank the Ems receives only the little river Ahe, which passes Münster. The basin of the Ems has an area of only about 5000 square miles, the smallest area of any of the rivers which fall into the North Sea.

Dollart Bay, which was formed by the terrible inundation of 1277 [EMDEN], is about 10 miles long from north to south, and about 6 miles across at its greatest width. At its north-western extremity the Ems leaves it by a channel about two miles wide at its narrowest part. It has been slowly filling up for centuries past, and about two square miles of land are recovered from it every forty years by pushing out embankments to protect the newly-formed alluvial soil.

ENARYA, a country in Africa, west of Abyssinia, which was visited by the Portuguese Antonio Fernandez in the 17th century. Modern travellers have collected information respecting it; according to which, this country is situated 15 days' journey from Basso, on the Nile, or twenty days' from Gondar, between 6° and 8° N. lat., 33° and 37° E. long. It is described as more elevated than all the countries which surround it. In the centre of the country is a group of very high mountains called Kheresa; on its northern declivity originate the Kibbe and the Maleg rivers, which fall into the Abai. The rivers which originate on the southern declivity of the Kheresa Mountains fall into the Goshop. A great portion of the country is covered with forests, in which several kinds of trees are found which bear edible fruits, and one of them is used for dyeing black. The coffee-tree is indigenous, and met with in such abundance that the wood is used as fuel; it attains a height of 12 to 14 feet. Elephants, giraffes, and buffaloes are stated to abound, as well as some other kinds of wild beasts. Civet cats are so numerous that civet musk forms an important article of exportation. Gold is also exported; but it is not known if it is collected in the country, or brought to it from some distant part of Africa. The capital of Enarya is *Sakka*, which appears to be a considerable place not far from the banks of the river Kibbe, and is visited by caravans which come from Basso and from Gondar in Abyssinia. These Abyssinian merchants bring to Sakka rock-salt, which under the name of 'amolé' constitutes the currency of the country, heads of different kinds, several kinds of cotton-goods, copper, daggers, knives, guns, and kitchen utensils. They export from Enarya coffee, musk, slaves, gold, and the skins of lions, panthers, black leopards, and antelopes; also ivory and horses. The inhabitants of Enarya belong to the widely-spread nation of the Gallas. A small portion of the population and the royal family are Mohammedans; but the larger number of the inhabitants are still heathens. It is said that among them a small number of Abyssinian Christians is found. (Isenberg and Krapf, *Travels in Abyssinia*; *London Geographical Journal*, vol. x.)

ENDEAVOUR STRAIT. [TORRES STRAIT.]

ENFIELD. [MIDDLESEX.]

ENGADIN, the valley of the Upper Inn, in the canton of the Grisons, in Eastern Switzerland, runs from south-west to north-east, from the sources of the Inn at the foot of Mount Maloya to the defile of Finstermünz, where the Inn enters the Tyrol, a length of about 50 miles. It is the largest valley in Switzerland next to the Valais, and one of the finest; it lies between the Lepontian and the Rhetian Alps, both of which branch off from Mount Malaya. The northern or Lepontian ridge, which contains the summits known by the names of Julier (6800 feet), Albula (7200 feet), Scaltta (8000 feet), &c., divides the waters of the Inn from those of the Albula, the Lanquart, and the Iller, which flow into the Rhine. The southern range, in which there are several glaciers, consists of the Monte dell' Oro (8000 feet), the Bernina (6200 feet), the Casanna, the Fraele, &c., and divides the valley of the Inn from the Valtellina, and from the valley of the Upper Adige in the Tyrol. More than twenty transverse valleys open into the longitudinal valley of Engadin. The width of the plain which forms the bottom of the valley of Engadin is from one to two miles in its widest parts, but it is much narrower in many places.

The slopes of the mountains are covered with pine forests or pastures. The Upper Engadin being more elevated than the lower part of the valley has a keener air and sharper winters; snow hardly disappears in June; winter commences in September, and in the short summer frosts at night are frequent. Here potatoes sometimes succeed; but the barley harvest is uncertain. The Lower Engadin enjoys a milder climate: barley, rye, peas, potatoes, and hemp succeed; in the lowest part of the valley flax is cultivated with success. The cherry and other fruit-trees are also met with. But the chief wealth of Engadin, and especially of the upper part of it, consists in its cattle; its cheese equals that of Gruyère, and is largely exported. Many of the men emigrate to Italy and other foreign countries, where they follow the trade of pastry-cooks and confectioners. Some of them make money, with which they return home and build fine houses, which are conspicuous objects in most of the villages. Bands of Tyrolese spread themselves over the valley to make the hay harvests. Masons, carpenters, and smiths are mostly foreigners. Leather is imported, while a quantity of raw hides are exported. Most of the pastures on the high Alps are let to herdsmen from Bergamo, who migrate thither with their cattle in the summer months.

The villages of Engadin are chiefly along the road which follows the course of the Inn for the whole length of the valley, and then leads into Tyrol by St. Martinsbrück, and joins the high road coming from Italy by the Stilfser Joch to Innsbruck. New roads have been recently completed from the Val Caonica to Tiraio in the Adda, and over the Bernina to Sondrio in the Valtellina. Several paths lead from Engadin into the other valleys of the Grisons.

Upper Engadin is divided into 11 communes; Lower Engadin into 10. The whole population is estimated at about 8000, of which Lower Engadin contains 5000. Upper Engadin returns three members and Lower Engadin four to the Great Council, or legislature of the canton. Every commune elects its municipal magistrates, and each of the two divisions of the valley has its landamman and its court of justice, the members of which are renewed every two years.

The people of Engadin are Reformed Calvinists, with the exception of the commune of Tarasp, which is Catholic, and which belonged to Austria till 1801. They speak the Ladin or Romantsch, a dialect which has much resemblance to Italian. There are books printed in Ladin.

Schuols, or *Schulz*, in Lower Engadin, is the largest village in the whole valley; it contains 1150 inhabitants, and has a handsome parish church. *Zernetz*, pronounced and sometimes written *Cernetz*, also in Lower Engadin, has about 500 inhabitants. *Samaden*, which is the principal village of the Upper Engadin, has about 500 inhabitants, some fine houses, and three churches. [GRISONS.]

ENGLIEN. [HAINAULT.]

ENGLAND. The general description of this part of the island will be found under the head of GREAT BRITAIN; and that of Roman Britain under the head of BRITANNIA. We here give a short account of its state before the Norman Conquest.

England, originally Engla-land, Engle-land, and Engle-lond, means the land of the Angles, Aengles, or Engles. It is usual to speak of the people who occupied the south of Britain before the Norman Conquest by the names of the Saxons or the Anglo-Saxons; but each of these appellations is apt to lead to some misapprehension. By the Anglo-Saxon people and language seem commonly to be understood the nation and language of the English Saxons, as distinguished from the Saxons of Germany. In this sense however we believe the word is altogether a modern formation. Our ancestors before the Norman Conquest did not call themselves Anglo-Saxons, as meaning the English Saxons or the Saxons of England. Asser indeed designates Alfred as Angul-Saxonum Rex; but the meaning intended to be conveyed by this awkward compound term appears to have been, not the English Saxons, but the Angles or English and the Saxons. When the Saxon part of the population alone was spoken of, they were never called the Anglo-Saxons or English Saxons, but simply the Saxons, or, as the case might be, the West or East or South Saxons. It is true that foreigners and others did not always use the term with proper discrimination. The Welsh and the Scots of North Britain appear to have employed the designation in its more general sense. The Sasacnagh is still the name given to the English by the Scottish Highlanders, by the Irish, and by the Welsh; and anciently the southern part of the present Scotland, which was chiefly occupied by a population of English descent, was known in the more northern parts by the name of Saxonia or Saxony. The prevalence again of the term Saxou in modern times, as applied to the entire population of England before the Norman Conquest, and to the language then spoken in the country, is to be attributed principally to the appropriation of the term English to the inhabitants and the language of the country since the Conquest, and also perhaps in part to the circumstance of the state which eventually obtained the general sovereignty in the times previous to the Conquest having been a Saxon state. But the name by which the entire population was commonly described in those times by natives of the country was certainly not the Saxons, but the Angles or the English; and that from the earliest date to which our evidence on the subject extends. We find the Kentish king Ethelbert subscribing himself to a charter "Ego Ethelbertus, Rex Anglorum," in virtue apparently of his dignity as Bretwalda, or supreme monarch, which he held from about the year 589 till his death in 616. The kings of Wessex, after they acquired the sovereignty of the whole country, although their own state was Saxon, called themselves, not kings of the Saxons, but kings of the Angles and of England. From circumstances like these we may reasonably conclude that the country was called Englaud, and the people and their language English, from the time of the introduction of Christianity.

To the circumstances of that introduction we would trace this use of the names. The captives from Britain exposed for sale in the market-places of Rome, who first drew upon their country the attention of Gregory, afterwards pope, were Angles, as the well-known pun, "They would be not Angles, but angels, if they were but Christians," which the name of their nation and their fair appearance suggested to Gregory, may remind us. It was the Angles therefore that Gregory formed the desire of converting; and it was to the inhabitants of Britain considered as Angles that Augustine and his companions were some years afterwards sent as missionaries. These circumstances were enough to fix the name as the proper Christian appellation of the nation. The constant use of this appellation by the venerable Bede in his great work, "Historia Ecclesiastica Gentis Anglorum," may be

reasonably supposed to have had much effect in establishing its acceptation in the sense in which it is there employed. In this way the terms England and English came into universal use as the proper names of the country, the people, and the language, just as they are at this day.

According to the statement of Bede, which, repeated in the Saxon Chronicle, is the only distinct account we possess of the invaders from the Continent who effected the conquest of South Britain in the 5th and 6th centuries, they consisted principally of three nations or tribes, the Jutes, the Saxons, and the Angles. ('Hist. Eccles.,' i. 15.) In another place however (v. 10) he mentions Frisians as being mixed with these; and there are other ancient testimonies to the same effect, especially a remarkable passage in Procopius ('Bell. Goth.,' iv. 20), where, in his account of the island under the name of Britia, he describes it as inhabited by three nations, the Angles, the Frisians, and those of the same name with the island, the Britons, each of which nations had a king. Sir Francis Palgrave ('Rise and Prog. of the English Com.,' pp. 41, 42) considers the name Frisians in this passage to include both the Jutes and the Angles, as well as the Frisians proper, all these apparently being alike Belgic tribes. "By the Frisians," he adds, "Hengist is deemed to be a Frisian king; and the legend of Rowena, or, as they term her, Rouix, is incorporated in their history. A better proof of affinity is to be found in the resemblance of the Frisic and Anglo-Saxon languages, which in many instances amounts to an absolute identity. But the most conclusive argument of the unity of the nations is deduced from the judgments dictated by Wulemar, and incorporated in their respective laws of the Frisians and Angles, showing thereby that they obeyed the dictates of a common legislator." It is to be recollected that anciently the Frisians appear to have been spread in detached settlements along the whole line of the coast from the Schelde to the North Sea. Down to the 8th century, what was called the Greater Friesland (or Frisia Major), then forming part of the empire of Charlemagne, extended all the way from the Schelde to the Weser. But the Frisians who passed over into Britain with the Saxons, Angles, and Jutes, were most probably the Straudfrisii, or inhabitants of the small district called the Lesser Friesland (Frisia Minor), lying opposite to the Isle of Northstrand, on the western coast of Schleswig.

According to the statements of the earliest chroniclers, the first of the Germanic invaders that arrived after the departure of the Romans were a body of Jutes, under two leaders named Hengist and Horsa. They arrived A.D. 449 at Ebbesfleet, now an inland spot, but then on the coast of the Isle of Thanet, and near the mouth of the Wansum, now a mere rivulet, which divides Thanet from the rest of Kent. The Jutes who came to Britain with Hengist and Horsa appear to have come immediately from what was formerly called South Jutland, and is now the duchy of Schleswig. They were probably therefore, in part at least, from the district called the Lesser Friesland, which, as already mentioned, was situated on the coast of South Jutland. The Jutes, according to Bede, were the ancestors of the people of Kent, and also of the inhabitants of the Isle of Wight, and of the part of the coast of Hampshire opposite to it: that is to say, the Jutes settled in those parts, mixing most probably with the former inhabitants.

The Jutes under Hengist and Horsa were followed in A.D. 477 by a body of Saxons under Ella, who made their descent on the coast of Sussex. The next leader that arrived was Cerdic, with another colony of Saxons, in A.D. 495. At this period the name, in its most comprehensive acceptation, appears to have been used as that, not of one nation, but of a great confederacy of nations, the territories occupied by which extended from the Baltic far into the interior of Germany. We are inclined however to derive the Saxon invaders of Britain from the immediate vicinity of the Baltic, most probably from the country now forming the duchy of Holstein, with perhaps part of the north of Hanover or the west of Mecklenburg. Thus situated, they would be the next neighbours of the Jutes and the Angles. In the account of Germany which Alfred has inserted in his translation of the 'Geography of Orosius,' the 'Eald Seaxan' are described as lying to the north of the Thyringas (or Thuringians); to the south-east of the Frisians (this must mean the Strandfrisians); to the east of the mouth of the Aelfe (the Elbe) and Frysland; and to the south-east of Angle and Sillende (Zealand), and part of Dena (Denmark). Bede expressly brings the English Saxons from "the land now called the country of the old Saxons." They appear to have eventually occupied Sussex, Essex, Middlesex, the south part of Hertford, Surrey, Hampshire (with the exception of the coast opposite to the Isle of Wight), Berks, Wilts, Dorset, Somerset, Devon, and part of Cornwall.

It was not till the year 527 that the first Angles arrived. From that time they made a succession of descents under various petty chiefs, whose names have not been preserved, upon the coasts of Suffolk and Norfolk. In 547 however a much more numerous body of them than had yet appeared landed under the conduct of Ida on the coast between the Tweed and the Forth, and eventually established themselves in the country to the north of the Humber. Tacitus, who in his 'Germany' has mentioned neither the Saxons nor the Jutes, merely notices the Angli along with several other tribes as lying beyond the Longobardi, and surrounded by the natural protection of their rivers and woods. As far however as anything can be made of his vague

account, he appears to place them somewhere in the peninsula of Jutland. This is the situation which is assigned to them by Bede and other ancient English writers. "From the Angles," says Bede, "that is to say, from the country called Anglia, and which from that time till now is said to have remained waste, between the provinces of the Jutes and the old Saxons, descended the East Angles, the Mercians, the race of the Northumbrians, and all the rest of the nations of England." Alfred, in his 'Orosius,' also places the Angles in the Danish countries on the Baltic. And Ethelwerd, a writer of the 11th century, describes Old Anglia as situated between the Saxons and the Jutes, and as having the city of Schleswig for its capital. The Angles obtained possession of the whole of what is now called England, with the exception of the parts already mentioned as occupied by the Jutes and Saxons; in other words, of all England to the north of the Bristol Avon and the Thames, except the present counties of Essex, Middlesex, and part of Hertford. They also extended their settlements over a great part of the south of Scotland.

This is the generally-received account; but it is only right to state that there are grave difficulties in the way of its strict acceptation, at least as to the dates. Mr. Kemble ('Saxons in England,' chap. i.) has shown the probability "that a large admixture of German tribes was found in England long previous to the middle of the 5th century;" and that "bodies, more or less numerous, of coast-Germans, perhaps actually of Saxons and Angles, had colonised the eastern shores of England long before the time generally assumed for their advent." He even goes so far as to say—and his opinion must be allowed great weight—"I confess that the more I examine this question, the more completely I am convinced that the received accounts of our migrations, our subsequent fortunes, and ultimate settlement, are devoid of historical truth in every detail."

Be that as it may, it will be convenient to have in a summary form the received view of the kingdoms founded by the several invading bands; the dates are those assigned in the valuable summaries of Anglo-Saxon history, given by Sir F. Palgrave in his Appendix of 'Proofs and Illustrations' to his 'Rise and Progress of the English Commonwealth,' pp. ccxxx-cccxl.

1. Kent, consisting of the present county of that name, founded by Hengist and Horsa, whose followers were Jutes, A.D. 457. From Æsc or Eric, the son and successor of Hengist, the kings of Kent acquired the name of Æscingas. Kent subsisted as an independent state till its conquest by Cenwulf, king of Mercia, in 796. In 823 it was finally annexed to Wessex by Egbert; but for at least a century after that date it is still mentioned as a separate though subordinate kingdom.

2. Sussex, consisting of the present county of that name, founded by Ella, whose followers were Saxons, A.D. 491. In A.D. 686 it was conquered by Ceadwalla, king of Wessex, and appears to have remained ever after in subjection either to that state or to Mercia. In 823 it finally submitted to Egbert; and "from this period," says Sir F. Palgrave, "Sussex and Surrey appear to have been considered as integral portions of the empire of Wessex, but as annexed to the kingdom of Kent and passing with it."

3. Wessex, including (in its greatest extent) Surrey, Hants with the Isle of Wight, Berks, Wilts, Dorset, Somerset, Devon, and part of Cornwall, founded by Cerdic and his son Cynric, whose followers were Saxons, A.D. 519. The Jutes of the Isle of Wight were conquered by Cerdic and Cynric, A.D. 530; but in 661 the island was wrested from Wessex by Wulfere, king of Mercia; some time after which it appears to have asserted its independence, which it maintained under kings of its own till the beginning of the 10th century, when it submitted to Edward the Elder. In the reign of Egbert (A.D. 800-836) the kingdom of Wessex attained a supremacy over the other states, which it never lost afterwards.

4. Essex, including the present counties of Essex and Middlesex, and the southern part of Hertfordshire, supposed to have been founded by Æscwin, or Ercenwine, whose followers were Saxons, A.D. 527. "It is doubtful," says Sir F. Palgrave, "whether this monarchy ever enjoyed independence." It certainly became subject to Mercia in the course of the 7th century, and in 823 it finally submitted to Egbert of Wessex.

5. Northumbria, consisting of the sometimes separate but commonly united states of Bernicia and Deira; the former (from the native name Bryneich) including the county of Northumberland, and the south-eastern counties of Scotland as far as the Forth, founded by Ida, whose followers were Angles, A.D. 547; the latter (from the native name Deifyr) including the counties of Cumberland, Durham, Westmoreland, York, and Lancaster, founded by Ella, whose followers were also Angles, A.D. 560. These two states appear to have coalesced before the beginning of the 7th century; and after the year 655 they were never separated, so long as they retained their independence. The limits of the kingdom of Northumbria to the north varied greatly from time to time, according to the fortunes of the almost constant warfare which it carried on with the Scots, the Picts, and the kingdom of Strathclyde. The Northumbrians made a formal submission to Egbert of Wessex in 829. In 867 the country was conquered by the Danes; and from this time it may be considered to have remained independent under the princes of Danish race till 924, when both the Danes and English inhabitants acknowledged the supremacy of Edward the Elder. Northumbria however continued to be governed by princes

of its own, who, although nominally subject to the English monarch, took the title of kings till 952. After this its rulers were only designated earls; the district forming sometimes one earldom, sometimes two, under the names of Bernicia and Deira, or Northumbria and York. It was not till some time after the Norman Conquest that the territories which had formed this Saxon state came to be considered as strictly included within the realm of England.

6. East Anglia, including Norfolk, Suffolk, Cambridge, and part of Bedfordshire, founded by Uffa, whose followers were Angles, and from whom the kings of this state took the name of Uffingas, A.D. 571. The East Angles placed themselves under the sovereignty of Egbert of Wessex about the year 823, but they continued for some time after this under the immediate government of their own kings. The country was conquered by the Danes in 883; and it was not completely brought back under subjection to the English crown till after the accession of Athelstane in 925. From this time it appears to have been governed by ealdermen, or dukes.

7. Mercia, including the counties of Chester, Derby, Nottingham, Lincoln, Shropshire, Stafford, Leicester, Rutland, Northampton, Huntingdon, Hereford, Worcester, Warwick, Gloucester, Oxford, Buckingham, and parts of Hertford and Bedford, said to have been founded by Crida, whose followers were Angles, A.D. 585. About the middle of the 7th century Mercia was conquered by Oswiu, king of Northumbria; but after a few years it recovered its independence; and before the end of the next century it had reduced to subjection both the neighbouring states of East Anglia and Kent. It was eventually subjugated however about the year 825, by Egbert of Wessex, and although for some time considered as a separate kingdom, it continued ever after dependent upon that state, with the exception of a short period in the latter part of that century, during which it was overrun and taken possession of by the Danes.

This assemblage of states has been commonly called the Heptarchy, for which Mr. Turner has proposed to substitute the Octarchy, on the ground that Deira and Bernicia ought to be considered as two distinct kingdoms. But in truth it may be doubted if there ever was a time when so many as seven of the states co-existed separately and independently. Various small districts also appear to have for longer or shorter periods preserved an all but nominal independence in the midst of the larger states, to some one or other of which they were severally considered as annexed. Such were the Isle of Wight; the Suthrige, or Southern Kingdom, now Surrey; the district of Hwiccas, or Magasettam, which was contemporaneous with the ancient bishopric of Worcester; and others, of which the annals were for the first time collected by Sir Francis Palgrave. But above all it would be difficult to show that either term is perfectly admissible, if it be intended to imply (as in strict propriety both heptarchy and octarchy would seem to do) that the several states were all connected together into any sort of union or confederacy; that they formed in fact any political system entitled to be designated by one word at all. We know that they were constantly at war with one another, and of the existence of any general controlling authority, except such as one king was occasionally enabled to maintain over the rest by his sword, their history affords no trace. To certain of the kings however by whom this temporary supremacy appears to have been asserted in the most marked manner, Bede, and after him, the Saxon Chronicle, have attributed the title of Bretwalda, that is, as it has been interpreted, Wielder, or Emperor of Britain; and it is probable that a species of superior honour and dignity, such as this title would imply, may have been claimed by the princes in question, and accorded to them by those of their neighbours whom they had brought under subjection, or who, although unsubdued, preferred not to provoke their enmity. Upon the whole, the title of Bretwalda cannot well be regarded as any thing more than an ostentatious and empty assumption on the part of some of the Saxon kings, or an epithet of distinction bestowed upon them by the flattery of the chrouclers. It certainly carried with it no real or legal authority.

ENGLISH CHANNEL, called by the French La Manche, is that narrow sea which separates the southern shores of England from the northern shores of France. On the west it opens into the Atlantic Ocean by a wide mouth, between the Land's End and the French island of Ushant (Ouessant), where it is about 100 English miles across. On the east it is united to the North Sea by the Strait of Dover (Pas de Calais of the French.) West of the Strait of Dover the Channel rapidly increases in width; and between Brighton and Havre is more than 90 miles across. Farther west however it is narrowed by the peninsula of Cotentin, which projects from the French coast into the Channel, and terminates in Cape de la Hague, its most north-western point. West of the peninsula is the widest part of the Channel, which between St. Albau's Head in Dorsetshire and the harbour of St. Malo is nearly 140 miles across. The remainder of the Channel to its junction with the Atlantic is between 100 and 110 miles wide.

It appears certain that a current from the west is generally, if not constantly, running up the Channel. This is evident from the eastern tides being stronger than the western or ebb tides, and their running longer in stormy weather from the west. It is also observed, that at the same time the surface of the Channel is raised two feet or more above that of the North Sea, and consequently discharges a great

quantity of water into that sea. The ports of the Channel are some feet deeper in strong westerly winds than at ordinary times. The French ports along the Channel are shallow, and none of them are deep enough to admit men-of-war, while England has some of its finest harbours on the coast-line of the channel. The French government has for a series of years made efforts to deepen the harbour of Cherbourg on the French coast of the Channel. [CHERBOURG.] The Channel is well stocked with fish, which gives constant occupation to a considerable number of fishermen on the coasts of England and France.

ENGLISH HARBOUR. [ANTIGUA.]

ENNIS, county of Clare, Ireland, a market and assize town, a municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Dromcliffe, is situated on the river Fergus, in 52° 50' N. lat., 8° 53' W. long.; distant 115 miles S.W. by S. from Dublin. The population in 1851 was 7340, besides 4365 in the Union workhouse and other public institutions. Ennis is governed by 21 town commissioners, and returns one member to the Imperial Parliament. Ennis Poor-Law Union comprises 20 electoral divisions, with an area of 112,490 acres, and a population in 1851 of 40,345.

The name of the place was originally Ennis Cuanruadha, so called from Clourad, a favourite dwelling place here of the O'Briens, lords of Thomond. In 1240 Donogh Carbrae O'Brien built a monastery at Ennis for Franciscan friars, of which the ruins are still standing. The town contains some good houses, but has altogether a mean appearance. Besides the parish church the town contains chapels for Roman Catholics, Independents, and Wesleyan Methodists; the court-house, the county jail, the infirmary, two hospitals, a workhouse, a market-house, and a town-hall. A short distance from the town is Ennis College, one of the four classical schools founded by Erasmus Smith. There is a moderate trade in grain and cattle. There are a brewery, large flour-mills, and a valuable limestone quarry. Ennis was incorporated by charter of James I. Fairs are held in April and September. In the vicinity of the town are several good mansions.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

ENNISCORTHY, county of Wexford, Ireland, a market and corporate town, and the seat of a Poor-Law Union, chiefly in the parish of St. Mary's of Enniscorthy, and partly in the parish of Templeshannon, is situated in 52° 35' N. lat., 6° 25' W. long.; distant 13 miles S.S.E. from Wexford, and 65 miles S.S.W. from Dublin. The population in 1851 was 5993, besides 1735 inmates of public institutions. The town is governed by 21 commissioners. Enniscorthy Poor-Law Union comprises 33 electoral divisions, with an area of 196,689 acres, and a population in 1851 of 53,862.

Enniscorthy dates from the erection of a castle here by Raymond le Gros, one of the early Anglo-Norman conquerors. Gerald de Prendergast, another Anglo-Norman noble, founded a monastery here for Augustinian friars about 1230; and Donnell Cavanaugh, an Irish potentate, founded a Franciscan convent for friars of the strict observance in 1460. Some ruins of both edifices still remain. The castle is in good preservation. It consists of a square keep flanked by round towers, and stands at the west end of the bridge, on the bank of the Slaney. Enniscorthy was taken by Cromwell in 1649. It was stormed and burned by the Irish rebels in 1793.

The town is situated on rising ground on both banks of the river Slaney, which is here navigable for sloops. The bridge which crosses the Slaney and connects the two parts of the town is a neat stone structure of three arches. Besides the church, which is a plain building, the town contains a Roman Catholic and a Methodist chapel, a Quakers' meeting-house, a court-house, market-house, workhouse, and hospital; also a presentation convent. Enniscorthy possesses a good retail trade; and nearly all the corn of the county of Wexford passes through its market. Coal, timber, iron, limestone, &c. are brought up by the Slaney from Wexford. Two quays, which facilitate the trade, were constructed chiefly at the expense of the Earl of Portsmouth. A factory for flannel, frieze, and blankets, and a large brewery and distillery afford employment. A market is held three times a week; and a fair every month. Enniscorthy was incorporated by charter of the 11th James I. The valley through which the Slaney flows is exceedingly rich and fertile and the scenery on its banks both above and below the town of Enniscorthy is very beautiful. In the vicinity of the town are several pleasant villas and mansions.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

ENNISKILLEN, county of Fernanagh, Ireland, chiefly in the parish of Enniskillen, but partly in the parish of Rossory; a market-town, the capital of the county, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 54° 22' N. lat., 7° 38' W. long., distant 81 miles N.W. from Dublin. The population in 1851 was 5792, besides 869 inmates of public institutions. The town is governed by 21 town commissioners, and returns one member to the Imperial Parliament. Enniskillen Poor-Law Union comprises 42 electoral divisions, with an area of 203,610 acres, and a population in 1851 of 53,543.

Enniskillen is well built and beautifully situated. The principal part of the town is built on an island on Lough Erne, and two bridges connect the island, which is covered to the water's edge with the

buildings of the town and its defences, with the suburbs on each side. The extended boundary of the borough includes the island and the two suburbs which are situated north-east and south-west of the island, in the parishes of Enniskillen and Rossory respectively. The country around swells into highly cultivated eminences; and numerous mansions occupy the shores of the lake above and below the town. From its position, commanding the only pass into Ulster within a distance of 50 Irish miles, Enniskillen is a place of considerable military importance.

The town contains a handsome church, chapels for Roman Catholics, Presbyterians, and Wesleyan Methodists, infantry and artillery barracks, a new market-house, a jail, court-house, and hospital. A small fort is situated at each end of the town; and the royal school, founded by Charles I., which occupies a conspicuous place, is one of the most richly endowed in Ireland. The manufacture of linen, a small factory for cutlery, two distilleries, a brewery, and a tannery, afford employment. Many of the females are employed in straw-plaiting. Timber, coal, and other commodities, are imported by barges from Belleek, at the western end of Lough Erne. A brisk retail trade is carried on. Fairs are held in May, August, and November.

Enniskillen was altogether the work of the Protestant settlers introduced into Ulster by the new patentees. [FERMANAGH.] It was erected into a corporation in 1612; but had increased so far as to cover the greater part of the island in 1641, when, through the exertions of Sir William Cole, it proved a most important asylum for the Protestants on that border of Ulster. Throughout the war of the Revolution the local levies of Enniskillen and its neighbourhood did excellent service to the cause of the Prince of Orange; their exploits have been recorded in Hamilton's 'Actions of the Enniskilleners.'

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

ENNISTYMON, county Clare, Ireland, in the parish of Kilmaheon, a small market-town, and the seat of a Poor-Law Union, is situated in 52° 55' N. lat., 9° 20' W. long., distant 12 miles W. by N. from Ennis, and 104 miles W.S.W. from Dublin. The population of the town in 1851 was 1729, exclusive of 1070 inmates of the workhouse and 12 in the bridewell. Ennistymon Poor-Law Union comprises 20 electoral divisions, with an area of 99,281 acres, and a population in 1851 of 31,612. This little town is delightfully situated on the river Ennistymon, and surrounded by a low range of picturesque hills. The river falling over some ledges of rock forms a rapid of great beauty. The town, which has very little trade, contains a church, a Roman Catholic chapel, the district bridewell, and a Union workhouse. In the vicinity are the ruins of Glen Castle, which formerly belonged to the O'Briens; there are also several large and handsome mansions. Six fairs are held in the course of the year.

ENOS. [ANRIANOPLE.]

ENS, the Provinces of the, constitute the archduchy of Austria, which, with Styria, Carinthia, Carniola, Görz, Trieste, part of Istria, the Tyrol, and Vorarlberg, form what are denominated the hereditary dominions of the house of Austria. The archduchy is divided into the two provinces of the Lower and Upper Ens, commonly called Lower and Upper Austria, and has (exclusive of the duchy of Salzburg, which until 1849 was included in the archduchy) an area of about 12,298 English square miles, and 2,244,363 inhabitants. Lower Austria is the most ancient possession of the house of Austria, and was acquired by conquest from the Avari in the year 796. Charlemagne, who subjected it, formed it into a margraviate; it became a Bavarian fief, and so continued until Count Leopold of Babenberg was recognised as its independent possessor in 944. It continued in the possession of the princes of Babenberg, who added Upper Austria to it and raised the whole into a duchy, until Ottokar, king of Bohemia, expelled them in the middle of the 13th century. In 1276 however Rudolph of Hapsburgh wrested the duchy out of his hands, and his descendants have remained in possession of it to the present day. They assumed the title of archdukes in 1359, but were not recognised as such until the year 1453.

The province of the *Lower Ens*, or *Lower Austria*, lies nearly in the centre of the Austrian dominions, on both sides of the Danube, between 47° 26' and 49° 1' N. lat., 14° 26' and 17° 1' E. long. It is the eastern portion of the archduchy, and it is bounded N. by Bohemia and Moravia, E. by Hungary, S. by Styria, and W. by Upper Austria. The area is 7674 square miles; the population in 1850 was 1,538,047.

Surface.—The Lower Ens is walled in both on the north and south by ranges of mountains. A branch of the Noric Alps, of limestone formation, not only occupies its southern districts, but spreads its branches over the whole country south of the Danube, with the exception of the most eastern parts. Its most elevated points are the Schneeberg, in the south-west of the Lower Wienerwald, which has two peaks, the Alpengipfel (Alpine peak), 7383 feet, and the Grosse Riese (Great Giant), 7331 feet high. A series of wooded heights, denominated the Wiener Wald (Vienna Forest), separates the Upper from the Lower Circles of the Wienerwald, and runs from south-west to north-east. On the left bank of the Danube, and throughout the western and nearly the whole of the eastern districts of the northerly portion of the Lower Ens, the Bohemian and Moravian chains of the great Sudetsch range [AUSTRIA, vol. i. col. 715] extend their last offsets

in all directions until they subside in the valley of the Danube. A succession of these heights, called the Mannhart group, running from north to south, divides the Upper from the Lower Mannhart circles, and gives their name to them. The most elevated point in this quarter is the Yauerling, close to that river, in the south of the Upper Mannhartsberg circle, which is 3330 feet high. In the northern and eastern parts of the Lower Mannhartsberg circle the ranges of hills are of inferior height. The Cetian Mountains on the right bank of the Danube are connected with the Noric Alps. Many of these chains are densely wooded; others are entirely naked. The most extensive forests are the Wiener (Vienna), Ernstbrunn, Hochleiten, and Mannhart; the line of the first of these divides the Lower from the Upper Wienerwald circle. It is estimated that the area occupied by the mountains of the Lower Ens is at least one-third of its whole surface; they are furrowed by numberless valleys, which give the province a beautifully varied and picturesque appearance.

The mines of the Lower Ens are not of any great importance. The Annaberg no longer yields silver. There are iron-mines at Reichenau, Pütten, Schottwien, Erdweis, Weitra, and other spots, but the quantity raised is but inconsiderable. There are numerous quarries of marble, freestone, &c., particularly in the south; gypsum and calcareous rocks, from which much lime is made, are abundant; mill-stones, granite, slate, alum, potter's clay, quartz for making glass and china, and porphyry are among the other mineral products. Coals are raised in the south and in some other parts.

Hydrography and Communications.—The fine valley of the Danube spreads out on both banks of the river in a continuous level from Korneuburg as far as Krems, and the greater part of the streams which water the Lower Ens discharge themselves into that river. The Danube itself traverses the province from west to east for about 156 miles, entering it a little to the north-east of Neustädte, and quitting it between Hainburg and Theben, which latter town is within the Hungarian borders. Between these towns it has a fall of more than 510 feet (450 Vienna feet), and its current is accordingly so rapid that it flows beneath St. Sophia's bridge, in Vienna, at the rate of nine feet per second. Its breadth across the island of Lobau, close to Vienna, is 3050 Vienna fathoms (18,986 English feet); but in some parts, particularly below Marbach and at Thalerndorf, its channel is so narrowed by the high lands that it rushes forward with a violence which in former times rendered the navigation extremely perilous. The tributaries of the Danube, so far as the Lower Ens is concerned, are of no great length or volume of water. On the right bank are the Ens, Erlaf, Billach, Traisen or Traisen, Schwechat, Great Fischa, and Leitha, all of which flow from the Alpine Mountains in the southerly districts of the Lower Ens, and are remarkable for the green colour of their waters; the Great Fischa has also the peculiar characteristics of seldom varying in the body of its water and never freezing. The Danube on its left bank receives the Krems, which irrigates the south of the Upper Mannhartsberg circle, flowing through the beautiful valley of the Krems, anciently called the 'Vallis Aurea,' or Golden Valley, and falling into the Danube at Krems; the March, which next to the Danube is the largest river in the Lower Ens, and which, entering the province from Moravia, forms its boundary on the side of Hungary for about 48 miles, and is navigable to its mouth, where its breadth is about 1420 feet; and the Kamp. [AUSTRIA, vol. i. col. 719.] The only streams which are not tributary to the Danube are some rivulets which, like the Salza and the Mürz, flow down from the Alpine heights in the south of the province and join the Mürz; and the Lainsitz in the north-west, where it takes the name of the Braunau at Gmünd and of the Schwarzbach at Schwarzbach, under which designation it ultimately falls into the Moldau, a tributary of the Elbe.

Independently of the Donau Canal (Canal of the Danube), near Vienna, which is merely an enlarged arm of the Danube, the only canal in the Lower Ens is the Vienna or Neustadt Canal, which opens out from the preceding and terminates at Wiener-Neustadt, about 34 miles S. from the capital.

There are some large natural sheets of water, but none deserving of the name of lakes; the largest is the Erlaf, or Zeller-see, which is about 4998 feet long, 1890 broad, and from 620 to 630 feet deep. Near the Mitter-see there is a beautiful waterfall 200 feet high, and close to it is a spot called the Brüllender Stier (Roaring Bull), where the roar of a subterranean cascade is heard.

The mineral waters of Baden, 19 miles S.W. from Vienna, are in considerable repute; those of Medling, Deutschalteburg, Heiligenstall, and Döbling are also used.

The railways in Lower Austria are—a portion of the Northern States; the Vienna and Glognitz; a portion of the Vienna and Presburg; and the Vienna and Stockerau; all of which are noticed under AUSTRIA, col. 723.

Climate, Soil, Productions.—The varied character of the surface occasions considerable difference of climate. The mountainous nature of the north-western and southern parts of the province renders the temperature colder than it is in the lowlands about the Danube and in the eastern districts. The average annual temperature in Vienna is about 51° Fahr.: the summer heat is between 77° and 83°, and the maximum heat does not exceed 97°; the winter cold varies between 10° and 12° below the freezing point, and has never been greater

than 22°. The weather is very variable, and on the lofty summit of the Schneberg it changes, according to Blumenbach, almost every hour. About Annaberg, in the south of the Lower Wienerwald, the country is so desolate that it goes by the name of the Siberia of Austria.

The soil of the Lower Ens differs much in productiveness. The richest tracts are in the centre of the province, from the confluence of the Ens eastward as far as the Pulnsfeld on the right bank of the Danube; and on the left bank, from Krems they extend until they spread over the south-eastern parts of the Upper Mannhartsberg to the efflux of the March into the Danube. The lands about the Lower March indeed, which are called the Marchfeld, are a delta, which under efficient cultivation might become the granary of the Austrian metropolis. There is an extensive level also in the vicinity of Vienna which in parts is extremely fertile. On the whole, the Lower Ens does not rank among the more productive provinces of the empire. It is a manufacturing rather than an agricultural province.

The productive land in the Lower Ens was thus occupied in 1846:—Arable, 1,994,173 (English) acres; vineyards, 114,173 acres; meadows and gardens, 637,831 acres; pasture, 353,044 acres; woodland, 1,598,696 acres. The grain grown in the same year was, in English quarters, as follows:—Wheat, 261,619; rye, 1,144,223; barley, 231,944; oats, 1,157,756; maize, 6982; also 2,964,323 bushels of potatoes. Vegetables of most kinds are very largely cultivated. A good deal of fruit is also grown. Some hemp and flax are raised. The forest-trees are chiefly beech, oak, maple, linden, elm, alder, pine, and fir.

The rearing of horned cattle has not yet recovered from the blow which it received during the repeated invasions of the French armies. The total quantity in the Lower Ens in 1846 was 109,091 oxen and steers, and 251,634 cows. A portion of the stock is of a very superior native breed. Although the establishments for breeding horses belonging to the crown and several noblemen have done something towards improving the race, this branch of economy is not pursued with much activity; the stock in 1846 was 70,361. Independently of several extensive sheep-walks in many of the upland districts, every peasant feeds his little flock of from 10 to 30 sheep. Upwards of one half of the whole stock, which was 500,705 in 1846, are of breeds improved by crossing with merinoes and other foreign races. The largest flocks are those on the imperial estates. Much of the wool obtained is exported. Goats and swine are not bred in great numbers. Poultry is fed on a large scale for the Vienna market. Some honey and wax are made. The stock of game is much diminished.

The Lower Ens ranks next to Bohemia in a manufacturing point of view; and the principal seats of industry are the districts south of the Danube, the northern being chiefly agricultural. Flax and hemp yarns are spun wherever the materials are grown, and several thousand hands are employed chiefly in the manufacture of house-linen. Cotton is also spun somewhat largely, 8317 persons being employed in cotton-spinning in 1848, of whom 1425 were under 14 years of age. Cottons of the finer sorts are manufactured rather extensively at Vienna. Large calico-printing works are carried on at Neunkirchen, Friedau, St. Pölten, Kettenhof, &c. Cotton-embroidery, stockings, &c., are made at Vienna and elsewhere. There are some large woollen-factories in Vienna, at Rittersdorf, &c. The silk manufacture has risen to great perfection in the capital, and it is a very important branch of the manufacturing industry in other parts of the province. Iron and steel in bars and sheets of remarkably fine quality are produced in very large quantities. Iron and steel wire is also largely made. Laces, iron-ware, and cutlery; tools, copper-ware, brass-work, buttons, jewellery, and trinkets; articles of wood, leather, glass, mirrors, porcelain, earthen-ware, paper, musical instruments, soap, &c., form so many additional branches of industry. Besides the great printing establishment of the government at Vienna, there are other printing works on an important scale. A good deal of very excellent wine is made.

The Lower Ens has a considerable trade with the neighbouring countries and foreign parts by means of its communications by land with the Adriatic, Germany, Poland, &c., and by the Danube with Hungary, Turkey, and the East.

Divisions, Towns, &c.—The Lower Ens is divided into four circles—the Upper and the Lower Wienerwald, south of the Danube, the former having St. Pölten and the latter Traiskirchen for its capital; and the Upper and Lower Mannhartsberg, north of the Danube, the former having Krems and the latter Korneuburg for its capital. The capitaneate of Vienna forms a fifth division. The following are the more important towns:—

Korneuburg, the capital of Lower Mannhartsberg, on the left bank of the Danube, 9 miles N. by W. from Vienna, is a place of little trade, with a population of about 2500.

Krems, the capital of Upper Mannhartsberg, population 6537, is situated at the confluence of the Krems with the Danube, 38 miles W.N.W. from Vienna. The town is walled, has large infantry barracks and military schools, and wears a very military appearance. There are some chemical works, mustard and vinegar factories, and manufactures of metal buttons.

St. Pölten, the capital of the Upper Wienerwald, is a fortified town, standing on the left bank of the Traisen, 33 miles W. from Vienna;

population about 6000. In it are a cathedral and bishop's palace, several schools, an hospital, and a theatre; also some cotton factories, potteries, glass-works, and paper-mills.

Traiskirchen, the capital of the Lower Wienerwald, is a small place of little more than 1000 inhabitants, situated about 15 miles S. by W. from Vienna.

Baden, on the Glognitz railway, 20 miles S.S.W. from Vienna, population about 4000, is a much-frequented bathing place, and well provided with suitable establishments for visitors. In Baden is an imperial castle, and in its vicinity is the castle of Weilburg. *Bruck*, on the left bank of the Leitha, 23 miles S.E. from Vienna, has a population of about 3000, manufactures of machinery and wire, and a botanic garden. *Feldsburg*, 49 miles N.N.E. from Vienna, population 2500, is famous for its wine, and for the splendid palace of Prince Liechtenstein. *Hainburg*, on the right bank of the Danube, 30 miles E.S.E. from Vienna, population 4000, is a place of considerable trade: here is the largest tobacco manufactory in Austria. *Klosterneuburg*, on the right bank of the Danube, 8 miles N.W. from Vienna, population about 4000, has manufactures of leather and fancy cotton goods. At Klosterneuburg is one of the oldest and richest Augustine monasteries in Austria: it has a library of 30,000 volumes. *Mödling*, on the Glognitz railway, 8 miles S. by W. from Vienna, population 3500, is an old looking town, but has some manufactories of woollens and muslins. *Neustadt*, or *Wiener-Neustadt*, on the Glognitz railway, 25 miles S. from Vienna, population 9323, is a garrison town, and was formerly the residence of the emperors. It contains the imperial castle, an ancient cathedral, a Cistercian abbey with a very extensive library, a grammar school, a military academy, and a museum; and carries on considerable manufactures of sugar, beer, and paper. *Stockerau*, 15 miles N.W. from Vienna, population 3650, is connected with Vienna by the Stockerau railway, and has a considerable linen manufacture; soldiers' clothing is also largely made. *Waikhofn*, 31 miles W.S.W. from Vienna, population about 3000, is the centre of the iron manufacture.

The inhabitants of this province, as well as those of the other division of the archduchy of Austria, are of German descent. After the Avari were driven out, it was re-peopled by Bavarians, Swabians, Saxons, and Franconians, principally indeed by the first mentioned; a circumstance which accounts for the similarity in language and manners between the native Austrian and his Bavarian neighbour. In the eastern and north-eastern districts there are many Slavonians, here denominated Croats.

The majority of the population are Roman Catholics. According to the census of 1846 there were 1,474,904 Roman Catholics, 673 Greek Catholics, and 390 Greeks not in the Union; 14,136 Protestants, and 4296 Jews.

The public provision for education consisted of 1 university, 13 schools of arts, 1 school of philosophy, 8 gymnasia, 6 theological academies, 30 special and 29 general schools, in all 88 upper schools. The popular schools numbered 2173, being 18 head schools, 1098 lower schools, 20 girls, 11 infants, and 1026 adult schools. The number of children capable of attending school was 163,486, actually in attendance 164,710. The adult schools were attended by 59,283 persons, 37,449 males and 21,839 females.

The public libraries and scientific institutions, especially in VIENNA, are numerous and of much importance. The benevolent institutions are also numerous and well supported.

The province of the *Upper Ens*, or *Upper Austria*, forms the western part of the archduchy, and is situated on both banks of the Danube, but chiefly on the south, between 46° 57' and 43° 46' N. lat. The duchy of SALZBURG, which was incorporated with it in the year 1816 now forms a separate division. Upper Ens is bounded N. by Bohemia, E. by the Lower Ens, S. by Styria, Carinthia, and the Tyrol, and W. by Bavaria. Its area is 4625 English square miles: the population in 1850 was 706,316.

Surface, &c.—The Upper Ens is a mountainous country. The parts south of the Danube contain some of the most elevated Alpine regions in the Austrian dominions, and those north of it are intersected by lower ranges which are offsets of the great Bohemian forest range. The Rhoetian Alps occupy a small portion of the south-west, and terminate at the Dreiherrspitz, from which point the Noric Alps occupy the whole of the southern circles of Hausruck, and Traun; but the loftiest peaks belong to Salzburg. There are many wide and numerous small valleys among the mountain masses that overspread the land south of the Danube. The only level country in the province is the immediate borders of the Danube. In the Mühl circle, which is north of the river, the most elevated point is the Plöckenstein, close to the common boundary of Bavaria, Bohemia, and the Upper Ens: its height does not exceed 2177 English feet.

The Upper Ens is not rich in native products. Gold and silver are however found on the Gastein range at Kauris and Schellgaden. Copper abounds in several places; and a plentiful supply of iron is procured from the mountains of the Traun circle, whence copper and lead are also obtained. Salt also abounds especially in the Traun circle, where is the Salzkammergut (Salt-domain of the Crown), which contains an area of 236 square miles, and has about 80 villages and hamlets, and above 17,000 inhabitants: the salt mines yield upwards of 40,000 tons annually. Coals are dug in several quarters, but princi-

pally in the Traun circle; and there are extensive peat-mosses. Marble of good quality, alabaster, and gypsum are obtained.

Hydrography, &c.—Among the numerous streams of the Upper Ens there are five navigable rivers: the Danube, which enters the province in the north-west, below Passau, and quits it after receiving the Ens at the south-eastern corner of the circle of the Mühl; the Inn, which forms the western frontier for a short distance, and receives the Saal, another navigable river that divides the Upper Ens in part from Bavaria; the Ens; and the Traun, which last stream flows out of a small lake not far from Ansee, in Upper Styria, then crosses into the circle of the Traun, at its south-western end, turning from the west to the north, passes through the lakes Halstätt and Traun, takes a north-easterly direction along the western side of the circle, throws itself over a precipice 60 feet high near Lambach, washes the eastern side of the town of Wels, in the Hausruck circle, and ultimately falls into the Danube, opposite Steyeregg, after a course of about 70 miles. It is navigable after quitting the Traun-see, and the obstruction from the fall at Lambach has been obviated by a side canal 1020 feet in length. Among the minor streams are—the Ayer, which unites the Mond and Kammer lakes, and joins the Danube near the Zizeleau and the Salzach or Salza, which however belongs principally to Salzburg.

The Upper Ens abounds in lakes, of which the following are the largest:—The Traun or Grunder-see, in the west of the Traun circle, 39,437 English feet long, 9812 feet in its greatest breadth, and 620 feet in its greatest depth. The Halstätt-see at the south-western extremity of the same circle, inclosed between high mountains, 26,622 feet long, 7062 feet broad, and 622 feet in its greatest depth. The Atter or Kammer-see, in the south of the Hausruck circle, 64,375 feet long and 10,906 feet broad; and the Matt or Mond-see (Lake of the Moon, from its crescent-like shape), which lies west of the southern end of the Atter-see, and is 35,000 feet long and 6637 feet broad. There is an immense number of smaller lakes, of which, in the Traun circle alone, 27 have been counted. Swamps and morasses of considerable extent occur in many parts, particularly near the Mond and Traun lakes.

The only railway in the Upper Ens is the line, chiefly for goods, which runs from Budweis through Linz to Gmunden, 120 miles: the carriages on this line are drawn by horses.

Climate, Soil, Productions.—The climate of the Upper Ens is much colder than that of the Lower Ens, though it lies in the same latitude; and much more so in the south than in the north. The warmest parts are in the valley of the Danube. On the whole it is not insalubrious, although not so healthy as the adjacent provinces.

Many extensive tracts, particularly among the alpine masses of the south, are extremely sterile. The valleys of the northern part of the Tauern group abound in clay, limestone, slate, quartz, &c. The lowlands of the northern parts of the Traun, and several districts in the Hausruck, and the western tracts along the Inn, are highly fertile.

Agriculture is said to be in a more advanced state in the Upper than in the Lower Ens. The productive land in the Upper Ens (including Salzburg, which was not then separated from Upper Ens), was thus occupied in 1846:—Arable 1,211,649 English acres; meadows and gardens 725,394 acres; pasture 636,300 acres; woodlands 1,562,262 acres. The grain grown in the same year was, in English quarters:—wheat, 245,254; rye, 561,859; barley, 227,362; oats, 600,916; and maize 436; of potatoes the quantity obtained was 1,692,691 bushels. A large quantity of fruit is grown. The vine is very little cultivated; only 38 acres were returned in 1846 as vineyards.

The province abounds in pastures, and the rearing of horses and cattle is general. The stock of horses of all kinds in the Upper Ens (including Salzburg, which has a much prized breed of very large horses), was only 54,450 in 1846. The horned cattle are of a large breed: the stock in 1846 was 99,790 oxen and 413,214 cows. The sheep are of an inferior race, and none of them yield fine wool, though some pains have been taken of late years to improve them: their number in 1846 was 341,400. Goats abound in the upland parts. The lynx, wolf, and bear are occasionally met with; foxes, stags, deer, marmots, polecats, squirrels, martens, hares, and wildfowl are more or less plentiful. Fresh-water fish are abundant; and the beaver and otter are at times seen on the banks of the Danube, Mühl, and Aschach. The pearl muscle is found in some of the rivulets in the upper part of the Mühl circle.

The manufactures of this province, though less extensive than those of the Lower Ens, are considerable. The peasantry in general manufacture their own linens and woollens, and make what leather articles they require. Much linen thread is spun as well as woollen and cotton yarn, especially in the Mühl circle, where some thousand hands are employed, and there are numerous factories where linens and cottons are printed: cotton spinning employed 1164 persons in 1843. The manufacture of cotton cloths is also extensive. There is a considerable manufactory of woollens and carpets belonging to the crown, in Linz; and others in Wels, &c. About St. Wolfgang in the Traun cloth of goats' hair is prepared. Large quantities of steel and iron-ware tools, &c., are made in the Upper Ens, particularly in Steyer and the districts to the south of it; Steyer, in fact, has been called the Birmingham of Austria, but its manufactures are of coarser workman-

ship. There are copper and brass works in several places. The preparation of wood for domestic and other purposes gives considerable employment to all the parts south of the Danube. Bleaching-grounds and tanneries are numerous. Paper, glass, leather, earthenware, chemicals, beer, and spirits are manufactured pretty extensively.

The exports of the Upper Ens are very considerable, and consist principally of salt, timber, and wood for fuel, yarns, linens, woollens, carpets, ironware, tools, nails, and screws, cutlery, flax, cotton-yarn, cottons, stockings, cheese, beer, fruit, cattle, earthenware, mill and polishing stones, stone for building, &c.

Divisions, Towns, &c.—The Upper Ens is divided into three circles:—Mühl, which has Linz for its capital, Hausruck, capital Wels, and Traun, capital Steyer. LINZ is noticed under its title, Steyer and Wels with the other principal towns of the province we notice here:—

Steyer, the capital of Traun, is situated at the junction of the Ens and Steyer, 20 miles S.E. from Linz: population, 10,000. Steyer is often styled the Birmingham of Austria, but neither the size of the town nor the character of the goods quite entitle it to be put into comparison with the Birmingham of England. It has however large manufactories of fire-arms, and cutlery, and iron goods, and also of cottons and cotton velvets. It is a walled town and has an ancient castle.

Wels, the capital of Hausruck, is on the left bank of the Traun, 16 miles S.W. from Linz: population, 4300. It contains several churches and schools, and a large hospital, has considerable manufactories of cotton, leather, metal wares, &c. It is on the Budweis and Gmunden railway, and is the centre of a considerable traffic. *Ens*, on a steep bank near the junction of the Ens with the Danube, 10 miles E.S.E. from Linz, population 3500, is an ancient walled town, and has some iron and steel works. *Ens* was the head-quarters of Napoleon in 1809. *Freistadt*, on the Budweis railway, 18 miles N.N.E. from Linz, population 3000, contains a church, a college, and two castles. *Gmunden*, at the efflux of the Traun from the Traun-see (or lake), and the terminus of the Budweis and Gmunden railway, 36 miles S.W. from Linz, population 3300, is the chief town of the salt district, and a place of considerable trade. It is visited for its saline springs and baths. Steam-boats ply on the Traun-see. *Ischil*, the capital of the Salzkammergut, on the Traun, 50 miles S.W. from Linz, population 2000, has become a somewhat fashionable bathing place on account of its saline springs, and picturesque situation and scenery. It contains two churches, schools, and excellent bathing establishments. A suspension-bridge crosses the Ischil. *Kremsmünster*, built round a hill on the left bank of the Krems, population about 1000, is celebrated for its rich abbey, observatory, museum of natural history, and public schools. *Urfahr*, or *Urfer*, on the Danube opposite Linz, with which it is connected by a bridge, and to which it is a sort of suburb, is a market-town with nearly 3000 inhabitants.

The majority of the population of the Upper Ens are of the same stock as the Bavarians. On the banks of the Ens and Traun are some villages peopled with individuals of Slavonian extraction. The proportions throughout the province are said to be five agricultural labourers to two operatives. The Roman Catholic is the predominant religion. According to the census of 1846 there were in the Upper Ens (including the population of Salzburg) 840,635 Roman Catholics, and only 16,058 Protestants of all sects.

The public provision for education consisted of 2 upper grammar schools, 3 gymnasias, 2 schools of philosophy, 14 special and 6 general schools, making in all 27 upper schools. The popular schools numbered 1251, being 8 head and 616 lower schools; 8 girls, 7 infant, and 609 adult schools. The number of children capable of attending school was 92,234; the number in actual attendance, 89,396. The adult or repetition schools (Wiederholungsschulen) were attended by 20,997 males and 19,010 females, in all 40,007.

(Von Lichtenstern, Hassel, Blumeubach, Röhrer, Jenny, &c. *Uebersichts-Tafeln zur Statistik der österreichischen Monarchie*; Gotha *Almanac*, 1854.)

ENTRAIGUES. [AVEYRON.]

ENTRE DOURO E MINHO, a province of Portugal, situated between 41° 5' and 42° 8' N. lat., 7° 48' and 8° 45' W. long., is bounded N. by Galicia, in Spain, from which it is divided by the Minho; S. by Beira, from which it is divided by the Douro; E. by Tras os Montes; and W. by the Atlantic Ocean. The greatest length north to south is about 70 miles; the greatest breadth east to west is about 45 miles. The area is 2040 square miles. The population in 1850 was 486,831. The province is divided into two districts, as follows:—

Districts.	Square miles.	Population.
Viana	954	187,191
Braga	1086	299,640
Total	2040	486,831

The districts are subdivided into 12 comarcas, or judiciary divisions; 32 concelhos, or communal divisions; and 760 parishes, as follows:—

Districts.	Comarcas.	Concelhos.	Parishes.
Viana	5	13	273
Braga	7	19	487
Total	12	32	760

Surface.—Three mountain ranges cross the province in a direction from north-east to south-west. The most northern range, called the Serra de Estrica, enters the province from Galicia, and extends nearly to the coast. It is the loftiest of the three ranges, its highest summit, Monte Cavarra, having an elevation of 7880 feet above the sea; and it occupies nearly the whole of the country between the Minho and the Lima. The central range, called the Serra de Geros, occupies the country between the Lima and the Cavado. The third range, called the Serra de Santa Catarina, has a mere southern direction than the other two, running parallel to the Tamega and extending its ridges westward towards the sea and southward to the Douro. These three mountain ranges, with their offsets, fill up the greater part of the province, but all of them sink down as they approach the coast, where there is a considerable extent of undulating country.

Rivers.—The Minho separates this province from Galicia on the north [GALICIA], and the Douro separates it from Beira on the south. [DOURO.] The principal rivers of the interior are the Lima, the Cavado, and the Tamega. The Lima is the largest of the rivers. It rises in the mountains of Galicia, and after a course of about 70 miles, generally west-south-west, enters the sea below Viana. It is navigable for small craft to about 12 miles from the mouth. The Cavado rises in Trás os Montes, and flowing in a direction mostly parallel to the Lima enters the sea below Barcellos after a course of about 60 miles: it is not navigable. The Tamega rises near Monterrey, in Galicia, and flows generally south-south-west, crossing a part of Trás os Montes, and entering this province at Caves. It forms the boundary between the two provinces of Entre Douro e Minho and Trás os Montes for about 12 miles, and has afterwards a course of about 30 miles to the Douro, which it enters about 30 miles above Oporto; its total length is about 90 miles: it is not navigable. In the rainy season it rises 30 or 40 feet, and the current is exceedingly rapid. A portion of the Serra de Marão, which enters from Trás os Montes, flanks the Tamega on the eastern side. The Neiva, the Grisoner, and the D'Ave (united with the D'Este) enter the sea. They are all small. The Souza, also small, flows into the Douro 10 miles above Oporto.

Climate and Productions.—The climate is very pleasant and wholesome. The breezes from the sea and the mountains cool the air in summer, and the winters are mild. The tops of the mountains are mostly sterile, but the sides are covered with good soil, and well wooded with oaks, chestnuts, and fruit-trees. The valleys are exceedingly fertile, watered by numerous streams, and well cultivated. The principal productions are wine, oil, flax, maize, wheat, barley, oats, and vegetables and fruits of all sorts. Pastures are rather scarce, yet a considerable quantity of cattle and sheep are reared. The principal article of exportation is wine, which is shipped at Oporto. The port-wines indeed are mostly produced in this province. Silk fabrics, linens, hats, porcelain, hardware, and cutlery are made in the towns. Iron and steel are imported. There are fisheries along the coast, which occupy a considerable number of the inhabitants.

Towns.—The city of Oporto is locally in this province, but is politically included in Beira, as the capital of the minor province of Porto. [BEIRA; OPORTO.]

Braga is the capital of the province of Entre Douro e Minho and of the district of Braga. It is situated on an eminence between the Cavado and the D'Este, 33 miles N.E. from Oporto. It is a city and the see of an archbishop, who is the primate of Portugal. The population is 17,000. It is a very ancient city, and was the *Braccara Augusta* of the Romans. It is surrounded by old walls and defended by a fortress. Ruins of an amphitheatre and an aqueduct existed at the beginning of the present century, but there are now no remains of them. The streets are narrow and irregular. There are two principal squares, and water is supplied from several fountains. The principal building is the cathedral, a stately fabric of perpendicular gothic; and the archbishop has a palace. About three miles east from the city is a lofty hill commanding a delightful view of the valleys of the Cavado and D'Este, and surmounted by the sanctuary of Jesus do Monte, which is still resorted to as a place of pilgrimage. *Amarante*, 35 miles E.N.E. from Oporto, stands on the western bank of the Tamega, which is here crossed by a good stone bridge. It is a very ancient town, well built, and contains two churches: population, 4000. *Barcellos*, 27 miles N. from Oporto, is pleasantly situated in a plain on the northern bank of the Cavado, which is here crossed by a bridge connecting Barcellos with the suburb of Barcellinhos. Barcellos is inclosed by old walls, and contains a collegiate church and two parish churches: population, 4000. *Caminha*, 55 miles N. by W. from Oporto, stands on the southern bank of the Minho, near its mouth. It is fortified by an extensive line of crown-works, horn-works, ditch, and covered way: population, 3000. The fort of Insoa is constructed on a rock at the entrance of the harbour of Caminha, and forms a cross-fire with the guns of the town. *Espouende*, a small town and harbour, stands at the mouth of the Cavado, on the north bank, 10 miles W. from Barcellos. *Guimarães*, 25 miles N.E. from Oporto, is situated between the D'Ave and the Arzilla, in a fertile plain at the foot of Monte Latito. It is an ancient town, surrounded by old walls, and encircled by suburbs. The streets are wide and the houses well built. It has several good squares, and contains a handsome collegiate church and three parish churches. There are manufactures of hardware, cutlery, and table-linen: population, 6000. *Monção*,

65 miles N. by E. from Oporto, is situated on the southern bank of the Minho. It is an old fortified town, but of no great strength for modern warfare, being commanded by some heights at no great distance: population, 1500. *Ponte de Lima*, 43 miles N. from Oporto, is a small town, so named from the solid stone bridge of 24 arches, mostly of Roman work, which here crosses the Lima. The town stands on the southern bank, 12 miles E.S.E. from Viana. The environs are very beautiful, richly wooded, and bounded by mountains. In the summer and autumn the vines, trained to trellis-work, hang down in festoons, covering a great extent of country, and presenting the appearance of an endless succession of luxuriant arbour. *Valença do Minho*, 65 miles N. from Oporto, is situated on the southern bank of the Minho, opposite to the town of Tuy in Galicia. Valença is a small place, but is strongly fortified with eight bastions and a crown-work, which were put in a state of thorough repair in 1812, and mounted with 50 pieces of cannon. *Viana*, the capital of the district of Viana, 42 miles N. by W. from Oporto, is situated at the mouth of the river Lima, on the northern bank, and has a harbour which admits small vessels not exceeding 200 tons burden. It is defended by the fort of Santiago, a pentagon with five bastions and two ravelins, next in strength to Valença. The town is inclosed by walls with five gates, and has four suburbs. It has three squares and is tolerably well built. It contains a collegiate church and two parish churches. The inhabitants carry on an active fishery: population, 8000. *Villa de Conde*, 15 miles N. by W. from Oporto, stands on the north bank of the D'Ave, near the mouth of the river, and has a small harbour defended by a battery. It has a good coasting and fishing trade: population, 3000.

ENTRE RIOS, one of the Riverine provinces of the Argentine Confederation, South America, owes its name to its situation between the rivers Paraná and Uruguay. It comprehends however only the southern part of the peninsula formed by those rivers, the northern portion forming the province of Corrientes. The boundary between the provinces is formed by the Rio Guayquirare, which falls into the Paraná, and the Mocoreta, which falls into the Uruguay, between 30° and 30° 30' S. lat. The area is about 32,000 square miles: the population is about 25,000.

The surface is gently undulating; it is only broken by hills along the middle portion or interior of the country. This part is covered with forests of low stunted trees. The southern part of the province is low, and especially along the banks of the Paraná subject to inundations. The northern part is occupied by a low swampy tract, known as the Forest of Monteil. Besides the rivers Paraná and Uruguay [ARGENTINE CONFEDERATION], the province is abundantly watered by numerous small streams. The soil of Entre Rios is in general fertile, and covered with luxuriant herbage. The climate is mild and dry. Frost never occurs. Rain seldom falls more than fifty days in the year. The highest range of the thermometer at the town of Paraná during the years 1844-47 was 96° in January 1844; the lowest, 50°, occurred in the month of June in 1844 and 1846. (M'Cann.) Cultivation is limited to a comparatively few spots. The principal grain crops are wheat, barley, and maize. Tobacco and cotton of excellent quality are also raised, but the crops are precarious in consequence of frequent droughts. Great damage is also done to all kinds of crops by the immense swarms of locusts and ants which sometimes devastate an entire district. The forest-trees are chiefly mimosas, nanubay, black and white espiuello, guebrache, and guayabo, but they are generally small, though in much request for carpenter's work and firewood. Vast herds of cattle are reared, but heavy losses frequently occur owing to the severe droughts to which the province is so often subject. In 1846 so great a drought occurred that the grass was everywhere burnt up; and Mr. M'Cann states that the whole of the cattle in the province went off from the feeding grounds in search of food and water: many estancias (cattle farms) lost from 5000 to 50,000 head of cattle, and one farm 150,000. Horses are bred in great numbers. Owing to the long-continued state of anarchy in the province there are, in the unsettled parts, numerous herds of wild cattle and horses. The rearing of cattle and horses is the chief occupation of the inhabitants. Mechanical employments are almost entirely neglected. The geographical position of the province admirably adapts it for commercial pursuits; but owing to the closure of the navigation of the two great rivers, and the disturbed state in which the country has so long been kept, comparatively little commercial progress has yet been made. Now however that the rivers are declared open to vessels of all nations, under the guarantee of the principal maritime powers, there seems to be required only internal peace for the rapid development of the great capabilities of the country. The exports are principally of hides, horns, tallow, and jerked beef.

Like the other provinces of the Argentine Confederation, Entre Rios is a federal state, owing but little dependence upon the central government. The government is almost entirely in the hands of a governor, elected for a term of two years. The Congress consists of deputies chosen from the several towns or districts. The revenue is derived chiefly from customs duties.

Except a few families of Guarini origin the country is almost entirely inhabited by the descendants of Spaniards. In the towns however a few foreigners are settled, mostly Italians, who mainly conduct the river navigation, with some French and English traders.

Some of the large estancias (cattle farms) and saladeros (tallow-melting establishments) are the property of and conducted by Englishmen. As mentioned under ARGENTINE CONFEDERATION, Entre Rios took a leading part in the revolt against the supremacy of Buenos Ayres, joining with Corrientes in the engagements with foreign powers, which led to the fall of Rosas, and in all the subsequent proceedings which have had for their main object the opening of the rivers Paraná and Uruguay. [ARGENTINE CONFEDERATION; CORRIENTES.]

Paraná, or *Villa del Paraná*, the capital of the province, is about a mile from the left bank of the Paraná, in 31° 45' S. lat., 60° 47' W. long., and contains about 6000 inhabitants. It is built on the summit of a lofty cliff, which slopes gently towards Santa Fé, which stands on the opposite side of the river, and hence the town derived its original name, *Bajada de Santa Fé*, or the 'Descent to Santa Fé.' The only public building of any consequence in Paraná is the recently erected government house. A large church which was commenced some years back remains unfinished. The climate is mild and dry, but not healthy. The houses have no fire-places; and all classes live much in the open air. The supply of water is very bad; all that is consumed is brought to the town in carts drawn by oxen. The town at present has a quiet listless appearance. Only a few small vessels belong to it. The exports are hides, hair, tallow, and lime.

Concepcion de la China, formerly called Uruguay city, on the Uruguay, is a small but old town of about 1500 inhabitants. It once carried on some trade with Monte Video, but it is now decayed and ruinous. The houses are mostly built of wood and mud, with thatched roofs. In the centre of the Plaza is a pyramid now falling to pieces. In the vicinity is a large saladero. *Concordia*, on the Uruguay, opposite Salta, from a village of a few mud huts, appears to be growing into a place of some importance. It has about 1000 inhabitants, and carries on a good deal of trade. But the situation is bad, as vessels are unable to reach the town at low water, and are obliged to anchor about two miles below it. It contains a church and a large school-house, endowed by the government. *Gualeguay*, on the river of the same name (33° 10' S. lat.), is a town of between 2000 and 3000 inhabitants, of whom nearly 300 are foreigners, chiefly Basques and Italians. It is a place of a good deal of trade, but vessels cannot approach nearer than about three leagues from the town. In the neighbourhood is the most extensive estancia in this part of the country, belonging to an English subject. It is the property of Mrs. Brittain of Sheffield, and occupies 200 square leagues of land. Several other estancias belonging to English subjects are in the vicinity. *Gualeguay-chu*, near the mouth of the Gualeguay-chu, about 60 miles E.N.E. from Gualeguay, population about 2500, including nearly 300 foreigners, contains a neat church and a good school-house, and is a place of some trade; but the situation is inconvenient, as vessels drawing more than 6 feet of water are sometimes obliged to wait two or three weeks to get across the bar at the mouth of the river. In the neighbourhood are some large tallow-melting establishments.

(Woodbine Parish, Buenos Ayres; M'Cann, *Ride through the Argentine Provinces.*)

ENTREVAUX. [ALPES, BASSES.]

ENYED, NAGY-ENYED, or STRASZBURG, a town in Transylvania, is situated in 46° 18' N. lat., 23° 42' E. long., in a valley on the right bank of the Marosh, and has about 5500 inhabitants. It is built in an old-fashioned style, and contains a Roman Catholic, a Lutheran, and a Reformed Lutheran church, but is most celebrated for its richly endowed Protestant lyceum. On the market-place are the remains of the ancient burgh or castle, with its towers and loopholes, in which the Saxons, who built the town, were accustomed to defend themselves against their Transylvanian assailants in former days. The streets still retain their Saxon names. The population is composed of Hungarians, Germans, Armenians, Greeks, and Wallachians. There are a paper-mill and some manufactures in the town, and extensive vineyards in the neighbourhood.

EPERIES, or PRESSOVA, a royal free town, and the capital of the county of Sáros, in Upper Hungary, is situated in 48° 58' N. lat., 21° 15' E. long., in an agreeable country on the banks of the Tartsza, and has about 9000 inhabitants. It is surrounded with walls defended by bastions, and encircled by extensive gardens and inclosures, among which are the suburbs. The streets are broad, and embellished with several handsome buildings, among which are the county hall, four Roman Catholic churches, a Lutheran church, a synagog, Protestant and Roman Catholic high-schools, the latter attached to the Franciscan monastery, a chapter-house, town-hall, orphan asylum, and poorhouse. It is the seat of a Greek Catholic bishopric erected in 1807, has a good episcopal library, and an imitation of Mount Calvary, on which several chapels are built. Eperies manufactures woollens and linens, and possesses a large earthenware manufactory and breweries, as well as a considerable trade in cattle, wine, and grain, to which the annual fairs greatly contribute. About 4 miles from the town, the environs of which are agreeably diversified, are the chalybeate springs of *Cremete*, or *Krasyna-voda*, with baths.

EPERNAY. [MARNE.]

EPHESUS, a city of Lydia, Asia Minor, and one of the twelve cities which belonged to the Ionian confederation (Herod. i. 142), was situated near the left bank and close to the mouth of the river

Caystrus, in 38° N. lat., 27° 48' E. long. By the mouth of the river was a lake, formed by the sea, called Selinusia, and close to this was another lake which communicated with it. The city itself stood on elevated ground; the country around was an alluvial plain. About a mile and a half N.E. from the site of the ancient city is the modern village of *AIASALUCK*.

There is a myth that the city was originally called Smyrna, from the Amazon of that name; it is also said to have borne three or four other names. The name of Ephesus does not occur in the Homeric poems; and Strabo says there is no proof that the city was in existence at the time of the Trojan war. According to him the oldest inhabitants of the site of Ephesus were Carians and Leleges, most of whom were ejected by the settlers from Greece under Androclus. The temple of Artemis (Diana), to which the city owed so large a part of its fame and consequence, was already built here. From a tradition preserved by Pausanias it would seem that the original temple was outside the city; and it is probable that the subsequent temples were erected on its site. The site of Ephesus was changed more than once. Before about B.C. 300 it appears to have occupied the low marshy plain between the heights and the river. But Lysimachus, who obtained possession of the western part of Asia Minor after the death of Antigonus, conceiving the higher ground to be a more advantageous situation for the city, built the walls which existed when Strabo wrote, and which are doubtless those the ruins of which still remain. The inhabitants however were unwilling to remove to the site which he had inclosed; and he therefore, says Strabo, waited till the rains set in, when he stopped up the channels which carried off the water, thereby flooding the old city, and making the inhabitants glad to occupy the new site. It appears more probable however that the old city, the site of which was too low, was destroyed by the sudden rising of the river in a violent storm, as described in a little poem by Dorus, who appears to have lived about the time of its destruction. Lysimachus gave the place the name of his wife, Arsinoë, but the old name was afterwards restored.

Though the Ionian Ephesus was an important place there is little of consequence related of its history. From the time of Androclus it was the kingly residence of the Ionians. Ephesus was the first of the Ionian towns attacked by Croesus. It fell successively into the hands of the Lydian and Persian monarchs. It was the scene of a defeat of the Ionians and their allies the Athenians and Eretrians in B.C. 499. Towards the end of the Peloponnesian war the Athenians were defeated here; and in B.C. 407 the Athenian fleet under Antiochus was defeated here by the Spartau fleet under Lysander. From an early period Ephesus was regarded as a sacred city, the temple of Artemis being looked upon with especial reverence; and it is noted that when Xerxes burnt the temples at Branchidæ and elsewhere he spared that of Ephesus. As a commercial city its rise may date from the erection of the new city by Lysimachus, and during both the Macedonian and Roman periods it grew into commercial importance in proportion to the decay of Miletus. After the great defeat of King Antiochus at Magnesia (B.C. 190) the Romans in partitioning Asia Minor gave Ephesus to the king of Pergamum. The king (Attalus Philadelphus), Strabo tells us, in order to improve the harbour, which had become shallow by the deposit of the alluvium of the Caystrus, directed his architects to place a mole in front of the harbour, thinking that by contracting the entrance, which was very wide, both the entrance and the harbour would become deep enough for large merchant ships. But the result was just opposite to his expectations; for the alluvium was now kept within the entrance, and the whole harbour made shallower, whereas before it was in a measure cleared away by the floods and the reflux of the sea. After the death of Attalus III. the Romans having taken possession of his dominions formed the province of Asia Minor, and Ephesus became its chief city, and the usual residence of the Roman governor and of the chief of the Asiarchs; and it was here that the Romans usually landed when they went to Asia. Strabo, who visited it in the reign of Augustus, says that the city was then in a state of great prosperity. It had both ship-houses and a harbour, though the harbour had become more shallow; in all other respects the city owing to its favourable situation was increasing daily. It was already the greatest place of trade of all the cities west of the Taurus. The port, called Panormus, was visited by ships from all the ports of the Mediterranean; and the city was connected by great lines of road with all the markets of the interior. It was probably in much the same condition when visited by St. Paul a few years later. The apostle stayed at Ephesus three years (Acts, xx. 31) and founded a church there, which in the book of Revelations (i. 11; ii. 1, &c.) is placed first among the churches of Asia. The heathen and Christian churches of Ephesus subsisted together for a considerable time. The final destruction of the great heathen temple was effected about A.D. 260 by the Goths, or Scythians, in what is known as their third naval invasion, and with its fall the splendour of the city may be said to have ended. It existed however some centuries longer, though its dimensions were contracted, and its trade was gradually decaying. The third great council of the Christian Church was held at Ephesus in A.D. 341. Of its general history whilst a Byzantine city nothing worthy of mention is recorded. Its final destruction has been sometimes attributed to Timur, who encamped here after his capture

of Smyrna (A.D. 1402); but it is not mentioned by his historian, and there is no doubt that Ephesus had perished long before.

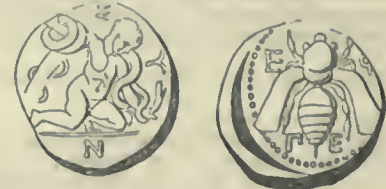
The only vestiges which now remain of the once great city are some confused heaps of ruins, chiefly those of its famous temple and theatre, with the somewhat more perfect lines of the walls by which it was encompassed. "Many other walls indeed remain to show the extent of the buildings of the city, but no inscription or ornament is to be found, cities having been built out of this quarry of worked marble. The ruins of the adjoining town [AIASLUCK], which arose about 400 years ago, are entirely composed of materials from Ephesus, and these old castle and mosque walls have become in their turn our quarry for relics of antiquity." (Fellows, 'Researches in Asia Minor,' p. 206.)

Both Pococke and Kiepert have given plans of the ancient city; they differ in many respects, and though Kiepert's is more in accordance with recent researches, it is possible that neither is accurate in its details. The whole compass of the walls, according to Pococke, is about four miles; in Kiepert's plan it is somewhat less. Hamilton, one of the latest and most careful of the travellers who have examined the ruins of Ephesus, describes the walls of Lysimachus as stretching in a south-east and north-west direction, along the ridge of Mount Coressus, from "immediately to the south of the gymnasium to the tower called the Prison of St. Paul, but which is in fact one of the towers of the ancient wall, closely resembling many others which occur at various intervals. The portion which connected Mount Prion with Mount Coressus, and in which was the Magnesian Gate, appears to have been immediately to the east of the gymnasium." Another wall, which Hamilton supposes to be an older one, extends from the theatre over the top of Mount Prion, and thence to the eastern end of the stadium. Besides these he was able to trace considerable remains of another wall "at the foot of Mount Coressus, extending from near the theatre westward to the port and temple of Diana." This, which he supposes to have been constructed by the Byzantines when the town had diminished in size, is built chiefly of brick. The walls of Lysimachus are, according to Pococke, built in a rough manner, but cased with hewn stone. Fellows says that this wall is "a fine specimen of very early Greek architecture, having only the horizontal line of joints, the others being irregular, as in the Cyclopean: the doorways are also of the early Græco-Egyptian, as seen at Assos." Hamilton gives an engraving of one of these gateways, which is in a nearly perfect state. In some places the wall remains tolerably entire; in others the foundations only are visible, and are ten feet thick.

The goddess Artemis was worshipped at Ephesus when the Ionians settled there. Herodotus mentions a temple of Artemis as existing there in the time of Cræsus, who added largely to its wealth: this temple and that of Hera at Samos he speaks of as among the great works of the Greeks. Chersiphron was the original architect, but another architect enlarged it. This enlarged temple is said to have been burnt by Herostratus on the night on which Alexander the Great was born. A new temple was commenced on its site; and so zealous were the Ephesians in the work that the people gave freely their property and the women their ornaments, in order to furnish the money requisite for constructing it with the desired magnificence: yet it was 220 years before it was finished. When Alexander entered Asia on his expedition into Persia he offered to repay all that had been expended upon the temple, and to furnish all that would be required to complete it, if he were permitted to place the inscription upon it; but the Ephesians, determined that the work should be their own, declined his offer. The temple was built on the marshy ground outside the city, Pliny says, as being thus more secure against earthquakes; the foundations were formed of well-rammed charcoal and wood. The length of the temple was 425 feet and the width 220 feet. It contained 123 columns (Pliny says 127, but this is of course an error), each 60 feet high, and each the gift of a king. This was much larger than any other Greek temple: the area of the great Olympieum at Athens was about two-thirds that of the temple at Ephesus; the area of the Parthenon was only one-fourth of it. And its splendour was equal to its size. The altar was chiefly the work of Praxiteles. In the temple was one of the great pictures of Apelles. It also contained some of the works of Thraso. Thirty-six of the columns were richly carved, one of them by Scopas. In the treasury of the temple was stored a large part of the wealth of Western Asia. From the earliest times it was an asylum for debtors and malefactors. The original limits of this asylum were extended to a stadium by Alexander, and still farther by Mithridates. M. Antoninus greatly advanced the limits of the asylum, making them to include a part of the city; but this ordinance being found productive of much inconvenience was abolished by Augustus. The service of the temple was conducted by priests called Megalobuzi, who were eunuchs, who were held in great honour; with them virgins were associated in the superintendence of the temple. The worship of the Ephesian Artemis served as the model of that of other cities and countries; and large numbers of strangers resorted to Ephesus to worship in the great temple: it was probably for the foreign visitors mainly that the "silver shrines for the goddess" were made, "which brought no small gain to the craftsmen" of Ephesus (Acta, xix. 24). It has been already said that the temple was destroyed by the Scythians about A.D. 260. A Christian church

was afterwards erected on the site. At the present time the very site is a matter of doubt. Hamilton thinks he has ascertained its site to be marked by some massive structures "near the western extremity of the town, which overlook the swamp or marsh where was the ancient harbour." The ruins which he fixed on as the site of the temple appear to be the same as those pointed out by Pococke, but the brick arches and other works which Pococke thought to be parts of the great temple, Hamilton with more probability attributes to "the Christians after the destruction of the temple and the removal of the columns by Constantine, when a church was erected on its ruins." Kiepert however places the great temple more to the north and east; but Mr. Falkener, who has more recently made an elaborate survey of Ephesus, thinks "it more to the west and nearer to the sea than in Kiepert's map;" in other words, restores it to the position assigned to it by Pococke and Hamilton, and which certainly most nearly corresponds with the statement of Pliny. The vast ruins of the temple probably long served as a marble quarry. There is little doubt that it furnished materials to many of the buildings in Constantinople as well as in Aiasluock.

But however it may be with the great temple, according to Sir Charles Fellows, "of the site of the theatre, the site of the tumulus raised by Demetrius, there can be no doubt, its ruins being a wreck of immense grandeur. But its form alone can now be spoken of, for every seat is removed, and the Proscenium is a hill of ruins." This theatre, the largest Greek theatre of which the remains have yet been traced, was 660 feet in diameter. The Stadium was another vast structure; its diameter being, according to Chandler, 687 feet. On the north side he found the seats to be constructed on arches, but on the south they are laid on Mount Prion, or Lepre, as it was also called. Besides these there are still visible considerable remains of another vast edifice of Roman date, which has been generally stated to be a gymnasium, but which Fellows thinks is a palace. It stands on the south-east side of the city, and the foundations of a large number of rooms are yet traceable. The outer walls are of brick and stone, of four or five courses of each laid alternately, and constructed with great solidity. A plan and a view of the remains of this edifice, and also several interesting views of the other remains of Ephesus, from sketches made when they were more perfect than at present, are given in vol. ii. of the 'Antiquities of Ionia,' published by the Dilettanti Society. One of these now less perfect buildings is a temple, represented in plates 44 and 45 of that work; it was 130 feet long and 80 broad. The cella is constructed of large coarse stone; the portico is of marble, and of the Corinthian order. The columns are nearly 47 feet high, and the shafts are fluted, and of one piece of stone. The style is Roman, and the temple was dedicated, probably with the permission of Augustus Cæsar, to the deified Julius.



Coin of Ephesus.
British Museum. Actual Size. Silver. Weight, 170½ grains.

The other vast heaps of remains are most of them as yet but imperfectly assigned. Among them are supposed to be the agora, close to which were the Corinthian temple, just noticed, and the large theatre. An Olympieum appears to have stood on Mount Prion. On the south-east of the Mount are the tombs, in one of which Pococke saw a very large marble sarcophagus. There are also the remains of an aqueduct near the city. Chandler and Hamilton both copied some inscriptions at Ephesus, but, according to Fellows, there are none to be seen there now.

(Pococke, *Travels in the East*; Chandler, *Inscriptions Antiquæ*; *Ionian Antiquities*, and *Travels in Asia Minor*; Leske, *Asia Minor*; Hamilton, *Researches in Asia Minor*; Fellows, *Travels and Researches in Asia Minor*; Guhl, *Ephesiaca*; Loug, in *Dictionary of Greek and Roman Geography*; Conybeare and Howson, *Life and Letters of St. Paul*, vol. ii.)

EPHORI. [DORIS; DORIANS.]

EPIDAURUS, a celebrated city of ancient Greece, situated on the eastern coast of Argolis, on a small bay in the Saronic Gulf, and surrounded by mountains on the land side, in 36° 45' N. lat., 23° E. long. Its more ancient name was Epicarus, from its earliest inhabitants, who were Carians, and who were subsequently joined by some Ionians from Attica. (Aristot. apud Strab.) When the Dorians got possession of Argos, Epidaurus yielded without resistance to them, and admitted a Dorian colony under Delphontes. (Pausan. ii. 26, l.) The constitution of Epidaurus was originally monarchical. Afterwards the government was aristocratical; the chief magistrates were called Artyneæ, or Artyni, as at Argos (Thucyd. v. 47), and were the presidents of a council of 180; the common people were termed 'konipodes' (κοιπόδες), or 'dusty-feet,' in allusion to their agri-

cultural pursuits. (Plutarch, 'Quæst. Gr.' l.) At an early period Epidaurus was an important commercial city, and the mother city of Ægina and Cos, the former of which was once dependent upon it. (Strabo, p. 375.) It also colonised the islands of Calydnus and Nisyros. (Herod. vii. 99.) As a commercial city its consequence had passed away by the 6th century B.C. As the chief seat of the worship of Æsculapius (Asclepius), Epidaurus was for a long period a highly important place. The temple of Æsculapius was situated at the upper end of a valley about five miles from the city, and was one of the richest and most renowned sanctuaries in Greece. In B.C. 293 it was so celebrated that during a pestilence at Rome a deputation was sent from that city to implore the aid of the Epidaurian god. (Liv. x. c. 47.) The temple was always crowded with invalids, and the priests, who were also physicians, contrived to keep up its reputation, for the walls were covered with tablets describing the cures which they had wrought, even in the time of Strabo. The temple stood in a sacred inclosure called the grove (ἄσχος), which was less than a mile in circumference, and contained several buildings besides the temple. The name of the sanctuary (ἱερόν), is still preserved in the modern name of the spot *Hieron*. The temple, which contained a chryselephantine statue of Æsculapius, was half the size of the Olympieum at Athens. But few vestiges of it are left. Near the temple was a remarkably beautiful theatre, built by Polycleitus (Pausan. ii. 27, 5), which is in better preservation than any other theatre in Greece, except that at Tramezus, near Ioannina; the orchestra is 90 feet long, and the entire theatre 370 feet; when complete it was capable of containing 12,000 spectators: 32 rows of seats still appear above ground. Of the other buildings mentioned by Pausanias, including temples of Athena Cissea, Artemis, Dionysus, and Aphrodite in the city, a temple of Hera on the promontory by the harbour, and two or three temples on the neighbouring heights; and the temples of Aphrodite, Artemis, and Themis, which together with a Tholus (circular building) erected by Polycleitus, and adorned with paintings by Pausias, a stadium, and some other edifices were within the sacred inclosure, there are but few remains.



Coin of Epidaurus.

British Museum. Actual Size. Silver. Weight, 38½ grains.

Epidaurus has acquired some celebrity in recent times as the place where the Congress of Deputies from all parts of Greece assembled, and promulgated on the 1st of January 1822 the constitution known as the Constitution of Epidaurus. Such was the state of Epidaurus at that time that the deputies, unable to find accommodation in the villages, were compelled to live in the open air. Epidaurus "is now a miserable village and can barely muster 100 inhabitants and a few small boats." It has a good and well protected port. The village is surrounded by a small plain, in which vegetables are grown for the market of Athens. (Leake, 'Morea,' vol. ii.; Curtius, 'Peloponnesos,' vol. ii.; and Murray, 'Handbook of Greece,' p. 255.)

There were two other cities of this name; one in Laconia, called Epidaurus Limera, which had also a well-known temple of Æsculapius. There are still some remains of the fortifications. (Leake, 'Morea,' i. p. 211.) This Epidaurus had a capital harbour, from which, according to Apollodorus, it derived its name Limera. (Strabo, p. 368.) The third Epidaurus was a maritime city of Illyria, mentioned by Hirtius ('De Bello Alexandrino,' c. 44).

EPINAL, the capital of the department of Vosges, in France, stands on the Moselle, about 234 miles E. by S. from Paris, in 48° 10' 24" N. lat., 6° 26' 55" E. long., and has 10,183 resident inhabitants in the commune. This is exclusive of troops, students, prisoners, the inmates of hospitals and religious houses, and all classes that go to make up the floating population of a place.

No mention occurs of Epinal earlier than the end of the 10th century, when it was the residence of the bishops of Metz: the lordship however passed subsequently into the hands of the dukes of Lorraine. It was formerly well fortified, and had a fine castle; but the fortifications have been razed.

The town is situated at the foot of the chain of the Vosges, and in a district abounding with delightful situations. The rapid clear stream of the Moselle which here separates into two channels inclosing an island, divides the town into three parts—the Graude Ville which stands on the right bank of the main stream, and at the foot of an eminence crowned with the ruins of the castle; the Petite Ville which is built on the island, and is joined to the Grande Ville by two bridges, one of stone, erected in 1840, and the other of iron, constructed on the suspension principle; and the Fanbourg of the Capuchins, which is built along the left bank of the smaller arm of the Moselle, and is named from a convent of monks of that order. The streets of Epinal are well-built, and regularly laid out and clean. The finest edifices in the place are the barracks, the residence of the prefect of

the department, the college buildings, the court-house, and the parish church, which is of gothic architecture, mingled with some parts in the style of a later age. The former Capuchin convent which stands on an eminence and is surrounded by large gardens, is now used as an hospital. The town has also a tribunal of first instance, a communal college, a chamber of commerce, a public library of 20,000 volumes, a museum, an orphan asylum, and a theatre. The manufactures are chemical products, lace, block-tin, wrought-iron, paper, earthenware, and leather; and some trade is carried on in corn, cattle, iron, timber, oak staves, deal planks, &c.

EPINE, L'. [MARNE.]

EPIRUS, (Ἠρεῖος, mainland), the name given to that district in Northern Greece which extended from the Acro-ceraunian promontory on the north to the Ambracian Gulf on the south, and from the Ionian Sea to the Chain of Pindus. In more ancient times the term included the entire western coast from the Ceraunian Mountains to the Corinthian Gulf, and the name was used in contradistinction to Corcyra and the other islands lying along the coast. (Strabo, p. 453; Homer, 'Odys.' xiv. 100; Thuc. i. 5.)

Epirus was a wild and rugged mountainous country corresponding generally with the southern portion of ALBANIA, under which title its physical features are described (vol. i. col. 170.) Then, as now, but comparatively a small part of the country was agricultural; the mountains were the resort of a wild and savage race, and the valleys, though numerous, did not produce sufficient grain for the requirements of the inhabitants. The general pursuits of the inhabitants were pastoral, and the fine cattle and horses of Epirus were celebrated among the Greeks. The population was mostly collected in villages, the towns in Epirus being but few, while those were probably of comparatively late construction. The inhabitants of Epirus were scarcely considered Hellenic. The population in early times had been Pelasgic. (Strabo, p. 221.) The oracle at Dodona was always called Pelasgic [ΔΩΔΩΝΑ], and many names of places in Epirus were also borne by the Pelasgic cities of the opposite coast of Italy (Niebuhr, 'Hist. of Rome,' i. p. 34); but irruptions of Illyrians had barbarised the whole nation; and though Herodotus (ii. 56) speaks of Thesprotia as a part of Hellas, he refers to its old condition, when it was a celebrated seat of the Pelasgians, rather than to its state at the time when he wrote his history. In their mode of cutting the hair, in their costume, and in their language, the Epirotes resembled the Macedonians, who were an Illyrian tribe. (Strabo, p. 327.) Theopompus (apud Strab., p. 323) divided the inhabitants of Epirus into fourteen different and independent tribes. Of these the most renowned were the Chaonians who occupied the northern, and Molossians who occupied the southern part of the country, and who successively maintained a preponderance in this district. The Molossians claimed a descent from Molossus, the son of Neoptolemy and Andromache, who according to the myth, migrated from Thessaly into Epirus after the Trojan war, and settled there in obedience to the injunctions of an oracle. Epirus rose into importance by the matrimonial connection of Alexander of Epirus with the king of Macedon. Philip married Alexander's sister Olympias, and gave him his daughter Cleopatra in marriage. Alexander was the first of the Molossian princes who bore the title of king of Epirus, having extended his power over most of the other Epirot tribes. He invaded Italy to assist the Tarentines against the Brutii and Lucani, and was slain near Pandosia. (Liv. viii. 24.) Pyrrhus, the grandson of Alexander, is the best known of the sovereigns of Epirus. The family of Pyrrhus became extinct three generations after his death, and the government was turned into a republic, which subsisted till the year B.C. 167, when the Epirotes were suspected of favouring Perseus of Macedon, and utter destruction was inflicted upon them by the Roman general P. Æmilius, who destroyed 70 towns, and carried away to slavery 150,000 of the inhabitants (Polyb. ap. Strab., p. 322; Liv. xlv. c. 34; Plut. 'Æmil.' c. 29), after which the greater part of the country remained in a state of absolute desolation, and even in the time of Strabo where there were any inhabitants they had nothing but villages and ruins to dwell in. (Strabo, p. 327.) Of the other Epirotic nations, the Thesprotians, who occupied the middle portion of the country, were most celebrated. They are



Coin of Epirus.

British Museum. Actual size. Silver. Weight, 151½ grains.

mentioned by Homer, who does not name the Chaonians and Molossians ('Odys.' xiv. 315), and are considered by Herodotus to have been the progenitors of the Thessalians (vi. 176). In their territory

were the oracle at Dodona, the old city of Ephyra, and the rivers Acheron and Coeytus, celebrated in the old mythology. The most celebrated city in Molossia was Ambracia, a Corinthian colony, founded about B.C. 635. It had a harbour on the Gulf of Arta, and a small naval force. Ambracia received a very severe blow in the defeats by the Athenians and Amphilocheians 423-426 B.C., but their losses were in some measure repaired by a new colony from Corinth. (Thucyd. ii. 63; iii. 105, &c.) Pyrrhus made Ambracia his usual place of residence. (Liv. xxxviii. 9.) It sustained a very remarkable siege during the war between the Romans and Ætolians. (Polyb. xxii. 13.) Under the Roman dominion it sunk gradually into insignificance, and its ruin was completed by the transfer of its inhabitants to Nicopolis, which was founded by Augustus to commemorate his victory at Actium. Its site is marked by the town of ARTA.

EPPING, Essex, a market-town and the seat of a Poor-Law Union in the parish of Epping, is situated in 51° 41' N. lat., 0° 7' E. long., distant 16 miles W. by S. from Chelmsford, and 16½ miles N.N.E. from London. The population of the parish of Epping in 1851 was 2255. The living is a vicarage in the archdeaconry of Essex and diocese of Rochester. Epping Poor-Law Union contains 17 parishes and townships, with an area of 46,442 acres, and a population in 1851 of 15,630.

Epping stands in a pleasant and healthy situation at the northern extremity of the extensive tract known as Epping Forest. The principal part of the town, called Epping-street, consists of a line of irregularly built houses extending more than half a mile. The church, pleasantly situated on rising ground, about 2 miles north-west of the street, and with the houses scattered about it, forms the hamlet called Epping Upland. In the 'Street' is a chapel of ease, originally belonging to the abbot and monks of Waltham. The chapel has been rebuilt, and is vested in trustees for the benefit of the inhabitants. There are chapels for Quakers and Independents, National and British schools, and a reading room. The market is held on Friday, and is well supplied with dairy produce. Butter is produced in large quantities for the London market. Fairs are held on Whit-Tuesday and November 13th. About 2 miles S.W. from Epping is Copped Hall, a mansion erected about a century ago near the site of a former residence of the monks of Waltham, and since that time much improved. It is one of the finest seats in the county. Near it are the remains of an ancient camp, probably British, now overgrown with trees, called Ambreys, or Ambersbury banks.

Epping Forest, now limited to the south-west part of the county, was formerly called the Forest of Essex, being the only forest in Essex, the whole of which was anciently comprehended in it. The metes and bounds of the forest were finally determined on the 8th of September, 1640, by virtue of a commission under the great seal of England. The boundaries as thus settled include 11 parishes and parts of 10 others. The extent of the forest is estimated at 60,000 acres, of which 48,000 acres are estimated to be inclosed and private property: the remaining 12,000 acres are uninclosed wastes and woods. That part of the waste which was called Hainault Forest, was disafforested by the Act 14 and 15 Vict., cap. 43, passed August 1st, 1851. On the first Friday in July a pleasure fair, known as Fairlop Fair, was held round the spot once occupied by an enormous oak called Fairlop Oak.

(Morant, *Essex*; Wright, *Essex*; Young, *Agriculture of Essex*; *Communication from Epping*.)

EPSOM, Surrey, a market-town and the seat of a Poor-Law Union, in the parish of Epsom, is situated on the margin of Banstead Downs, in 51° 19' N. lat., 0° 16' W. long.; distant 16 miles N.E. by E. from Guildford, 15 miles S.W. by S. from London by road, and 18½ miles by the London, Croydon, and Epsom railway. The population of the town in 1851 was 3390. For sanitary purposes the parish is under the management of a Local Board of Health. The living is a vicarage with the curacy of Hoo annexed, in the archdeaconry of Surrey and diocese of Winchester. Epsom Poor-Law Union contains 15 parishes, with an area of 39,559 acres, and a population in 1851 of 18,796.

The name appears to have been originally Ehbasham, 'the home of Ebba.' Epsom contains some good dwellings, and there is a public building called the Assembly Rooms, in which county meetings are held. The parish church, a gothic structure, was almost entirely rebuilt in 1824. In the chancel are some fine monuments by Flaxman and Chantry. The Wesleyan Methodists, Independents, and Calvinistic Baptists have places of worship. There are in Epsom National, British, and Infant schools; a savings bank; almshouses for 12 poor widows, and several charitable endowments. In the centre of the town is a sheet of water, and an ornamental clock tower, which serves for an engine-house to supply the water to the town.

The once celebrated medicinal springs of Epsom, containing sulphate of magnesia, and which gave name to Epsom Salts, are still in existence, though not now resorted to. Brick making, brewing, and malting are carried on in Epsom, and in the vicinity are nursery grounds. The market is held on Wednesday, chiefly for corn; a fair is held on July 25th, for cattle and wool. The famous Epsom races are held on the adjacent downs. The grand stand on the race-course is a large and convenient building. Woodcote Park, Horton Park, the Oaks, and many other seats are in the neighbourhood.

(Manning and Bray, *Surrey*; Brayley, *Surrey*; *Communication from Epsom*.)

EPWORTH. [LINCOLNSHIRE.]

ERBIL, or **ARBELA**. [BAGHDAD.]

ERETHIA. [EUBÆA.]

ERFURT, a government or administrative division of Prussian Saxony; is bounded N. by Hanover and Brunswick, E. by the government of Merseburg and the duchy of Saxe-Weimar, S. by Saxe-Gotha, Saxe-Meiningen, and Saxe-Weimar, and W. by Hesse-Cassel. Its area is 1272 square miles, and its population at the close of 1849 was 347,279, above one-fourth of whom are Roman Catholics, and the remainder, with the exception of about 1500 Jews, are Protestants. The surface is in general hilly, being traversed by numerous offsets of the Harz and the Thuringerwald. The soil of the province is favourable for the cultivation of grain, and rather more than one half of its surface is arable land. About one-fifth of it is appropriated to meadows or pastures, and rather more than one-fourth is occupied by woods and forests. It is watered by the Unstrut, the Gera, Werra, Salza, Erlau, Heide, Wipper, and Saale. The chief products are corn, flax, tobacco, hops, seeds, and salt. Great numbers of horses, horned cattle, sheep, goats, and swine are reared. In the circles of Weissensee and Schlusingen mines of iron, lead, and copper are worked; marble, gypsum, and sulphur also are among the mineral productions. The manufactures are considerable, and comprise iron and steel-ware, tin-plates, seed-oil, woollen-yarn, cloths, flannels, and carpets; linen and cotton, silk stuffs, hosiery, paper, glass, spirits, wooden clocks, &c. There are a number of mineral springs in the hilly districts.

The province or government of Erfurt is of most irregular shape, being broken into strips by Schwarzburg-Sondershausen (which is entirely inclosed by Prussian Saxony), and the small Thuringian states. The most connected portion of it lies south, west, and north-west of Schwarzburg, and the isolated bailiwick of Volkenrode belonging to Saxe-Gotha. The province also includes some small isolated detached tracts, the most important of which is the Prussian share of the old county of Henneberg, which lies between Saxe-Gotha, Saxe-Meiningen, and Schwarzburg-Rudolstadt on the western slope of Thuringerwald.

The province is divided into nine circles, named from the chief town in each—Erfurt, Nordhausen, Heiligenstadt, Mühlhausen, Worbis, Schleusingen, Langensalza, Weissensee, and Ziegenrück.

Erfurt, the capital of the government, is situated on the Gera a feeder of the Unstrut, in a richly cultivated plain, in 50° 58' N. lat., 11° 3' E. long., on the great road leading from Frankfurt-am-Main to the north of Germany, 14 miles by railway W. from Weimar, and has about 25,000 inhabitants. It was formerly the capital of Thuringia, and is a fortress of the second order, possessing two citadels, one the Petersburg, within the walls, and the other Cyriaxburg, on Mount Cyriax, outside of the town. Erfurt has six gates; five public squares, one of which, the market-square, is ornamented with a stone obelisk 50 feet high, erected in 1802, to Charles, elector of Mainz; several broad and well-built streets; 11 Roman Catholic and 8 Protestant churches. The cathedral church of St. Mary is a fine gothic structure; in this church there is a bell called the Maria Clara Susanna, cast in 1492, which weighs nearly 14 tons. The cell of the former Augustine monastery, in which Luther resided from 1501 to 1508, is still shown; it contains several memorials of him. The monastery is now used as an orphan house. Of the numerous religious houses which Erfurt formerly possessed the Ursuline convent alone remains, and has a female school attached to it, which is superintended by the nuns. Among the scholastic institutions in the town are—a high school, a gymnasium, a deaf and dumb school, schools of surgery, design, and architecture. There are also a botanical garden; a library of about 50,000 volumes, formerly belonging to the university, which was suppressed in 1816; an ophthalmic hospital; and a general hospital. Erfurt is the seat of provincial administration and of the provincial tribunals. It has considerable manufactures of cottons and woollens, besides less extensive ones of linen, ribands, leather, soap, earthenware, seed-oil, stockings, shoes, gloves, tobacco, &c., and it carries on a brisk trade in fruits, seeds, grocery, and drugs, grain, &c.

Heiligenstadt, situated on the Leine near the Hanoverian frontier, 50 miles, N.W. from Erfurt, is a regularly built walled town with about 5000 inhabitants. It has a castle, four Roman Catholic churches, a gymnasium, a house of correction, several spirit distilleries, and manufactures of woollen yarns and wooden clocks. From 1807 to 1814 Heiligenstadt was the capital of the department of the Harz in the kingdom of Westphalia.

Langensalza, 20 miles N.W. from Erfurt on the road to Göttingen and Hanover, stands on the Salza and near its mouth in the Unstrut, in 51° 6' 59" N. lat., 10° 38' 38" E. long., and has about 8000 inhabitants. The town is defended by a castle and surrounded by walls which are pierced by four gates. It contains four churches, a high school, a public library, and four hospitals. The manufactures are silk, cotton, and woollen stuffs, gunpowder, and starch. There are a sulphureous spring and baths about two miles from Langensalza, which are much frequented in summer.

Mühlhausen, 10 miles N.W. from Langensalza, is situated in a pretty and very fertile district on the right bank of the Unstrut, in 51° 27' 59" N. lat., 10° 28' 53" E. long., and has a population of about 13,000. It is an old town girt with wet ditches and high walls flanked with towers. There are four Lutheran churches, the finest of which is the Hauptkirche in the Oberstadt, or Upper Town; three hospitals;

a gymnasium; and an orphan asylum in the town. The industrial products of Mühlhausen are linen and woollen stuffs, and carpets; there are also several dye-houses, fulling-mills, tanyards, distilleries, breweries, oil-mills, starch manufactories, and wool-spinning establishments in the town: copper and iron ores are found near the town. Mühlhausen is one of the oldest of the former free towns in Germany; it maintained its democratic government till 1802 when it was ceded to Prussia. Münzer, a fanatic who gathered round him a large number of adherents from among the Thuringian peasantry during the progress of the reformation in Germany by his socialist harangues, made Mühlhausen his head-quarters, and here after the bloody defeat of his followers at the battle of Frankenhausen he was publicly executed.

Nordhausen, 40 miles N.N.W. from Erfurt, is situated on the Zorge, a feeder of the Helme, which runs eastward and joins the Unstrut. The town stands at the southern base of the Harz Mountains in a fine corn country, and has about 13,000 inhabitants. It is built in a mediæval style and is surrounded by a wall flanked with towers. There are four Lutheran churches, one of which contains the Ecce Homo and the Widow of Nain by Lucas Kranach; one Catholic church; and four hospitals. Nordhausen is a busy manufacturing town; its distilleries are among the largest in Germany, and it has numerous woollen factories, tanyards, oil-mills, soaperies, &c. Among its other industrial products are linen, sealing-wax, hats, and chemical products. Nordhausen is built at the head of the Goldener Aue, or Golden Vale, one of the most fertile and beautiful spots in Germany lying along the Helme, which separates the region of the Harz from that of the Thuringerwald. Its manufactures and its important corn-market make Nordhausen one of the most flourishing small towns of Prussia.

Schleusingen, chief town of the circle, formed out of the Prussian part of the old county of Henneberg, is situated on the Schlenze, a feeder of the Werra, 36 miles W.S.W. from Erfurt, and has 3200 inhabitants. The town is walled, entered by two gates, and defended by a castle. It has two churches, a gymnasium, and manufactures of woollens, white lead, hosiery, and paper.

Weissensee, 15 miles N. from Erfurt, between the Helbe and the Unstrut, has a population of 2600.

Worbis, 45 miles N.N.W. from Erfurt, between Nordhausen and Heiligenstadt, stands near the source of the Wipper, which after flowing across Schwarzburg-Sondershausen enters the Unstrut between the mouths of the Helbe and the Helme: population about 2000.

Ziegenrück, the chief place in an isolated circle drained by the upper Saale, and inclosed by Reuss, Saxe-Weimar, Saxe-Meiningen, and Schwarzburg, is a small place of about 1000 inhabitants. There are iron forges and slate quarries here, and some manufactures of linen and paper.

Beside the above the following towns may be mentioned:—*Benneckstein*, in an isolated district situated at the foot of the Harz, and surrounded by Brunswick, is 12 miles N.N.W. from Nordhausen and midway between that town and the Brocken: the population is about 3500. *Bleicherode*, 12 miles W. from Nordhausen, between the Bode and the Wipper, has mineral springs, oil-mills, manufactories of broadcloth, flannel, serge, stockings, paper, leather, oil, &c., and a population of 2600. Within a couple of miles of the town is the grotto of Kelle, which is reached by a descent of 100 steps in the calcareous rock, and presents an apartment 300 feet long by 270 feet wide; in its centre is a basin of limpid water about 50 feet deep. *Sömmerda*, 4 miles S.E. from Weissensee, on the right bank of the Unstrut, is a walled town with about 3000 inhabitants, who manufacture iron-ware, broadcloth, and spirits. *Suhl*, a manufacturing town of 8000 inhabitants, on the Lauter a feeder of the Werra, is situated at the base of the Domberg, a part of the Thuringerwald, in the former county of Henneberg, 7 miles N. by W. from Schleusingen. It is a well-built town with three churches, a town school, and a poorhouse. The inhabitants are weavers, gunsmiths, or metallurgists. The industrial products are fustians, white lead, arms, hardware, sheet iron, &c. Iron mines are worked in the neighbourhood. *Tennstädt*, 10 miles E.N.E. from Langensalza on the Schambach, a small feeder of the Unstrut, has sulphureous springs, three churches, an hospital, and about 3000 inhabitants, who manufacture linen, woollen cloth, and thread. There are tufa quarries and vineyards in the neighbourhood. Tennstädt is the birthplace of Ernesti, the great classical commentator.

ERICHT, LOCH. [INVERNESS-SHIRE.]

ERIDANUS. [Po.]

ERIE, LAKE. [CANADA; NEW YORK.]

ERITH. [KENT.]

ERIVAN, a town in Russian Armenia, is situated near 40° 10' N. lat., 44° 32' E. long., about 110 miles S. by W. from Tiflis, on the Zenghi, which is here crossed by a handsome stone bridge. The town is built partly on a hill and fortified, besides being defended by a fort or castle which stands on another eminence, is strong by nature on one side and defended on the other by mud walls. After its capture by Prince Paskevitch the castle was not repaired.

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but a fortress on a site less exposed to attack from the neighbouring hills has we believe been recently erected. The ruins of the last Persia governor's palace are seen on the steep side of the old fort next the river, which is rapid and not fordable at any season. A stone bridge of a single arch is thrown across the stream just below the castle. Erivan is an ill-built place, but contains a large bazaar, several Armenian churches, a Greek church, an Armenian convent, a public bath, and a few mosques. The site is unhealthy in summer. Caravans from Tiflis to Erz-rum pass through Erivan. The transit trade is considerable, but much less so than when the town belonged to Persia. Some cotton stuffs, leather, and earthenware are manufactured. The town is of considerable extent, but probably does not contain more than 12,000 inhabitants, the greater part of its area being occupied by gardens, which produce fruits and melons proverbial for their excellence.

ERLANGEN, a town in Bavaria, in the circle of Middle Franconia, is situated in a well cultivated plain, near the confluence of the Regnitz and the Schwabach, 11 miles N. from Nürnberg, 24 miles by railway S. from Bamberg, and has a population of about 11,500. It is divided into the Old and New Town, the latter of which was founded by Christian, margrave of Bayreuth, in the year 1686. It is surrounded by walls, and has seven gates. The New Town is handsome, and regularly built. Erlangen has three Lutheran and two Reformed Lutheran churches, a Roman Catholic church, an orphan asylum, an infirmary, and a military hospital. The palace, which was partially destroyed by fire in 1814, has been fitted up for the use of the Protestant university, which was founded by Frederick, margrave of Bayreuth, in 1743. The university of Erlangen has faculties of Protestant theology, arts, and medicine, museums of natural history, a library of upwards of 100,000 volumes, and a botanical garden. The average yearly number of students attending this university is about 350. On the revocation of the edict of Nantes many French Protestants settled in Erlangen and introduced various manufactures. The town has factories for weaving and printing cotton goods, and manufactures stockings and bats on a large scale, also gloves, leather, tobacco, looking-glasses, linen, toys, &c. Erlangen, together with the principality of Bayreuth, became an appendage of the Bavarian crown by the treaty of 1809.

ERLAU (Eger, Jager, Agria), a town in Hungary, capital of the county of Heves, is situated on the Erlau, in a beautiful valley in the midst of richly cultivated lands, skirted by mountains crowned by woods and vineyards; in 47° 53' 54" N. lat., 20° 21' 53" E. long., and has about 19,000 inhabitants, who are mostly Roman Catholics. The Erlaubach divides it into two parts, which are surrounded by fortifications about seven miles in circuit, through which are six gates. The majority of the inhabitants dwell in the suburbs outside the walls. Erlau was founded by Stephen, king of Hungary, who resided in it in A.D. 1010, and made it the seat of a bishop; since 1803 it gives title to an archbishop. It contains a cathedral, four Roman Catholic churches, two monasteries, a Greek church, and a Protestant church. The houses in the town are large, and built in a neat style; the principal ornament is the university, a very handsome and spacious edifice, begun by Count Charles Eszterhazy in 1760, and finished in 1775, at a cost of upwards of 160,000*l.*; there is an observatory 172 feet high, a handsome chapel, and a very spacious examination hall and library attached to the institution. The university has faculties of philosophy and jurisprudence, conducted by 16 professors, and is very numerously attended. Opposite the University stands the cathedral church, which has nothing remarkable about it; but the neighbouring church of the Minorites is a splendid structure. The archbishop's palace is a fine building situated on a hill. Erlau has a county hall, a high school, an ecclesiastical seminary, a training school, several libraries, an hospital, and two mineral springs. It has also an extensive traffic in red wines, the produce of the vineyards in the vicinity. The manufactures consist of linens, woollens, hats, &c.

ERMENONVILLE. [OISE.]

ERNE, LOUGH. [FERMANAGH.]

ERNEE. [MAYENNE.]

ERPINGHAM, Norfolk, a village and the seat of a Poor-Law Union, in the parish of Erpingham, is situated in 52° 50' N. lat., 1° 16' E. long.; distant 16 miles N. from Norwich, and 122 miles N.N.E. from London by road. The population of the parish of Erpingham in 1851 was 436. The living is a rectory in the archdeaconry and diocese of Norwich. Erpingham Poor-Law Union contains 49 parishes and townships, with an area of 63,638 acres, and a population in 1851 of 21,409. The parish church of Erpingham is a massive structure, with a square tower: it has been lately repaired. The population is chiefly agricultural.

ERROL. [PERTSHIRE.]

ERZGEBIRGE (the Ore Mountains) is a mountain range in Germany, extending along the boundary of Bohemia and Saxony. It begins about 25 miles S.E. from Dresden, on the left bank of the Elbe, and extends in a west by south direction to the source of the White Elster, about 12° 20' E. long., where it is connected with the Fichtelgebirge. The river Elbe divides its eastern extremity from the Winterberg, the most western of the mountains of Lusatia, or Lusatia. The Ore Mountains extend in length about 100 miles, and their mean width is about 30 miles.

The highest part of the range, which is towards its southern border, forms partly the boundary-line between Bohemia and Saxony, but is mostly within the former kingdom. Its southern declivity, which is steep and scored by narrow valleys, terminates in the valley of the river Eger, about 10 or 15 miles from the upper range. The valley of the Eger lowers gradually from west to east, from 1100 feet to 400 feet above the sea. The northern declivity of the range descends in more gentle slopes towards the great plain of Northern Germany; and these slopes are divided from one another by wide and open valleys. The undulating plain which lies contiguous to it may be from 500 to 600 feet above the level of the sea.

The highest portion of the range occurs on both sides of 13° E. long., but rather to the west of it. Here are the Keilberg, 4212 feet, the Fichtelberg, 3968 feet, the Schwarzberg 3988 feet, and the Hiasberg, 3248 feet above the sea. Farther east and farther west the range gradually sinks lower, the Great Chirstein, on the banks of the Elbe, rising only to 1824 feet above the sea.

The range consists chiefly of granite and gneiss, except along the Elbe, where sandstone almost exclusively occurs. It is rich in metallic ores of almost every kind. Gold occurs in a few places. The silver-mines are considerable, their annual produce amounting to 720,000 ounces; the iron-mines yield from 3500 or 4000 tons of iron. The tin-mines of Saxony are the most valuable on the European continent, and produce annually 140 tons. Copper is not abundant, and the annual produce does not exceed 30 tons; but from the lead-mines 400 or 500 tons are annually obtained; and of cobalt 600 tons and upwards. Arsenic, brimstone, and vitriol are likewise abundant: and there is also quicksilver, antimony, calamine, bismuth, and manganese. Coal abounds in the neighbourhood of Dresden and Zwickau. Kaolin, or porcelain clay, occurs in layers six feet thick at Aue, about 12 miles S.E. from Zwickau, whence it is carried to Meissen, and there used in the royal porcelain manufactory. Several kinds of precious stones are found, as garnets, topazes, tourmalins, amethysts, beryls, jaspers, and chalcodites.

The upper parts of the range are covered with extensive forests, which furnish fuel for the great smelting-works. The lower slopes and valleys are well cultivated, but the produce is not sufficient for the maintenance of the great population which is employed in the mines and in the numerous manufactures of cotton, silk, and linen. Great quantities of corn are annually brought from the plain which lies to the north of the range.

Six great roads pass over this range, the most important of which are those that connect Prague with Dresden and Chemnitz. The great railway from Vienna to Dresden, through Prague, crosses the Erzgebirge at its eastern extremity, and runs at a little distance from the left bank of the Elbe. [EGER; BOHEMIA.]

ERZINGAN. [ARMENIA.]

ERZ-RUM, a town in Armenia, capital of an extensive pashalic in Asiatic Turkey, is situated in an extensive and fertile plain watered by the western branch of the Euphrates, which runs at a few miles' distance from the town. [ARMENIA.] The population in 1823, at the time of the Russian invasion of Turkey, was estimated at about 130,000; in 1836 it did not exceed 15,000, but was then increasing; in 1844 the population reached 44,000, and was still on the increase. Indeed the number of inhabitants fluctuates considerably on account of the great number of strangers who arrive and depart in the caravans. The town is large, and is partly surrounded by an old castellated wall and a ditch. On its southern skirts stands a citadel, encircled by a double wall flanked with towers very close to each other, and with a ditch. The citadel has four gates, and incloses the palace of the pasha and a large part of the Turkish population. But a large portion of Erz-rum is unwall'd, and this part contains the principal bazaars and khana. The streets are narrow, dirty, and like all Turkish towns infested by dogs. The houses for the most part are low, and built of wood, mud, or sun-dried bricks; but the bazaars are extensive, and well supplied with provisions. Erz-rum has nearly forty mosques, a Greek church, a large Armenian church, a custom-house, and numerous caravanserais. Since its restoration to the Turks by the peace of Adrianople, Erz-rum has been slowly rising from its state of decay. Before the Russian invasion considerable quantities of silk and cotton cloth were made here, and much leather was tanned; there were also important manufactures of copper vessels. But since the return of peace manufacturing industry has not recovered its former activity. The country about it produces nothing for export except corn and sheep and cattle. The corn is too heavy an article to pay for conveyance to the sea in a country devoid of roads; the cattle and sheep are sent to Constantinople alive, or as dried meats. The commerce and transit trade of the city is extensive, owing to its position on the great caravan-route from Constantinople and Trebizond to Persia and Mesopotamia. The imports comprise shawls, silk goods, cotton, tobacco, rice, indigo, madder, rhubarb, &c., from the east; and broad-cloth, chintzes, cutlery, and British manufactures by way of Trebizond. The native exports, besides those above mentioned, are horses, mules, and gall-nuts. A few furs are exported to Russia.

Erz-rum stands in 39° 59' 30" N. lat., 41° 46' 23" E. long., at an elevation of 5800 feet (some say 7000 feet) above the sea. The winters are long and extremely cold. [ARMENIA.]

ESCAUT, L'. [SCHELDE.]

ESCHWEGE. [HESSR-CASSEL.]
 ESCORIAL, or ESCURIAL. [CASTILLA-LA-NUEVA.]
 ESCUROLLES. [ALLIER.]
 ESENS. [AURICH.]
 ESNEH. [EGYPT.]
 ESPALION. [AVETRON.]
 ESPIRITU SANTO. [BRAZIL; CUBA; NEW HEBRIDES.]
 ESPIRIT, ST. [BAYONNE.]

ESQUIMAUX, the name of a people that inhabits the most northern countries of America. On the eastern coast of America they are met with as far south as 50° N. lat. on the shores of the Strait of Belle Isle. They occupy the whole of the great peninsula of Labrador and the whole eastern coast of Hudson's Bay up to East Main River. On the western side of Hudson's Bay they inhabit the coast north of Churchill River, whence they extend northward over the Barren Lands to the Great Fish River, or Thleweschoetzeth, on both banks of which they are found east of 100° W. long. The whole country between this river, the Great Bear Lake, the Mackenzie River, and the Arctic Ocean is exclusively inhabited by them. The coast lying to the west of Mackenzie River is also in their possession; and they seem to be spread as far as Kotzebue Sound, on Behring Strait. They also occupy Greenland and all the other islands between the northern coast of America and the pole as far as they are habitable.

In stature the Esquimaux are inferior to Europeans. A person is rarely seen who exceeds five feet in height. Their faces are broad and round, cheek-bones high, cheeks round and plump, nose small, mouth large, and lips thick. Their eyes are in general of a deep black; but some are of a dark chestnut colour: they appear very small and deeply seated, owing to the eyelids being much encumbered with fat. The hair is uniformly long, lank, and of a jet-black colour. The ears are situated far back on the head. Their bodies are large, square, and robust, the chest high, and shoulders very broad. Their hands and feet are in general remarkably small. They are of a deep copper colour. Some of them wear long beards; but for the most part the beard is plucked out as soon as it appears. They show a good deal of ingenuity in making their dresses and instruments.

Their language is different from that spoken by the other savage nations who inhabit North America. The same language is spoken by all the different tribes of the Esquimaux, though of course each of them has expressions which are peculiar.

(Parry; Mac Keevor; Graah, *Voyage to Greenland*.)

ESSEN. [D'ESSELDORF.]
 ESSEQUIBO. [GUYANA, BRITISH.]

ESSEX, an English county, situated on the eastern coast of the island of Great Britain, and lying between 51° 27' and 52° 6' N. lat., 0° 4' W. long., and 1° 17' E. long. It is bounded N. by the county of Suffolk and by the county of Cambridge, W. by Hertfordshire and by the county of Middlesex, S. by the gradually widening estuary of the Thames, by which it is separated from the county of Kent, and S.E. and S. by the German Ocean. The length of a straight line drawn from the north-western to the north-eastern extremity of the county is 53 miles; but the northern boundary of the county, following its turnings, is about 75 miles; the length of a line joining the north-western with the south-western extremity is 37 miles; but the boundary line, from its many windings, extends to 53 miles. The length of a line joining the south-western to the north-eastern extremity of the county is 63 miles; but the boundary along the bank of the Thames and the coast of the ocean is about 85 miles. The area of the county is estimated at 1657 square miles, or 1,060,549 statute acres. The population according to the return of 1841 was 344,979; in 1851 it was 369,315.

Coasts, Islands, &c.—The bank of the Thames and the sea-coast of Essex are marshy almost throughout. The marshes extend inland in some places over a breadth of four miles, in other places the breadth is reduced to a very narrow strip. From the eastern end of Canvey Island the marshes cease; and about Leigh and Southend the coast rises into low cliffs. At Shoebury Ness, a low point of land at the mouth of the Thames, 6 miles from the east end of Canvey Island, where the coast turns to the north-east, the marshes re-appear; and with an interval of about a mile just beyond Shoebury, they continue along the coast 11 miles, to the mouth of the river Crouch. Nearly 4 miles from Shoebury a narrow creek, with many ramifications, penetrates inland into the channel of the river Crouch, and with that river cuts off from the mainland several low flat islands, Russells, Haveu Gore, New England, Potten, Wallasea, and Foulness. The edge of this creek and its various ramifications, as well as of the Broomhill and Crouch rivers, which unite with it, are embanked, and the islands are embanked all round. From the mouth of the Crouch the coast runs nearly north and south 8 miles to the mouth of the Blackwater River. In this part of the coast the sea encroaches upon the land. The marshes (Burnham Marsh, Southminster Marsh, Dengey Marsh, Tillingham Marsh, and Bradwell Marsh), extend in the southern parts nearly 5 miles inland, but gradually become narrow to the northward to St. Peter's chapel, where they are interrupted by the higher ground running down to the coast; the sand, which is dry at low water, has a breadth of from 2 miles to 2½ miles. Between the estuaries of the Blackwater and the Colne, in the inlet formed

by their junction, the mouth of which inlet, from St. Peter's chapel to St. Osyth Point, is above 5 miles over, is the island of Mersey, separated from the mainland by a marshy tract and an intervening narrow channel. The marshes terminate 4 miles beyond St. Osyth Point, and (with a slight interruption of a mile of marsh-land near the mouth of Holland Creek) a high broken coast extends between 9 and 10 miles to the Naze, the most eastern point of the county. This point formerly extended much farther toward the east. The ruins of buildings have been found at considerable distances from land; and a shoal called West Rock is 5 miles from the shore. From the Naze to Harwich, between 5 and 6 miles in a direct line north and south, the coast forms an inlet lined by salt marshes, and occupied by Horsey Island, Holmes Island, Pewit Island, and one or two smaller islands. The sea-coast terminates at Harwich; but the estuary of the Stour, which is in most parts more than a mile wide at high water, extends up to Catawade bridge, above Manningtree.

The islands have been named in the course of the foregoing description of the coast: we subjoin a few particulars of the chief of them.

Canvey Island is entirely marsh-land, banked in all round. Its extreme length from east to west is 6 miles; its greatest breadth from north to south $2\frac{1}{2}$ miles. Its area is about 3000 acres, chiefly appropriated to grazing sheep and cattle. It is connected with the mainland by a causeway leading to the village of South Benfleet. In 1841 the island contained 39 houses, and a population of 277; in 1851 it contained 16 houses and a population of 111. A timber chapel was built about 1622 for the use of some Dutchmen employed in embanking the island. The chapel has been twice rebuilt: the present chapel will hold 100 persons. A fair is held yearly on the island.

Foulness Island is situated on the shore of the German Ocean, and forms the right bank of the river Crouch at its embouchure. Its extreme length, from north-east to south-west, is almost 6 miles; its greatest breadth $2\frac{1}{2}$ miles. Its area is about 6300 acres, with a population of 640, almost entirely agricultural. The soil is good; the upper part produces corn; the lower part is used for pasturage. The houses are of wood—a material which is here liable to rapid decay. The church, also of wood, is situated near the centre of the island: it will hold 300 persons. A yearly fair is held.

Wallasea, otherwise Wallat or Wallis, is bounded N. by the river Crouch, E. and S. by the Broomhill River, and W. and S.W. by Paglesham Creek. A causeway over Paglesham Creek connects Wallasea with the mainland. The greatest length of the island is from east to west $3\frac{1}{4}$ miles; its greatest breadth is a mile and a half. The water is too salt to be fit for kitchen use, and the inhabitants have to fetch fresh-water from the mainland. The whole island is marsh-land; the area is 3255 acres; in 1851 it contained 13 houses, and a population of 133.

Potten Island, Haven Gore, New England, and Russelys or Rushley belong to the same group as the two foregoing; they are of small extent. In the creeks which surround or separate these islands are fed the small oysters called Wallfleet oysters.

Mersey Island is bounded S. by the estuary of the Blackwater River, S.E. by the German Ocean, E. by the estuary of the Colne, and on all other sides by a creek, which, running through the marshes on its north-west side, separates it from the mainland. The greatest length of the island is from east-north-east to west-south-west nearly 5 miles; the breadth varies from one to two miles. The island is divided into the two parishes of East and West Mersey or Mersea, of which East Mersey comprehends an area of 1957 acres, with a population in 1851 of 291; West Mersey an area of 3365 acres, with a population of 870. There is a passage from the island to the mainland over the Mersey Channel, dry at low water, called the 'Strode,' or 'Stroude.'

Horsey Island is in that inlet which occurs between the Naze and Harwich. Its greatest length is from north-west to south-east about two miles; its greatest breadth rather more than a mile. It consists almost entirely of salt-marshes: a spot rather more elevated than the rest, about one-fourth of the whole, on the south-west side of the island, is banked in. In the marshes there is a decoy for wild-fowl. The area is 1755 acres: the population in 1851 was 161.

Pewit Island and Holmes Island, with one or two others, are near Horsey: all these islands are separated from each other and from the mainland by narrow channels.

Surface, Hydrography, and Communications.—This county has few hills of any considerable elevation; its general slope, as determined by the watershed, is towards the south and east; the coast and the banks of the Thames present a succession of unhealthy marshes commonly known as the hundreds of Essex. High Beach, on the north-west side of Epping Forest, near Waltham Abbey (390 feet high), Langdon Hill, south of Billericay (620 feet high), Danbury Hill, between Chelmsford and Maldon, of nearly the same height, and Tiprey Heath, near Witham, are probably the highest parts of the county. The chalk downs which form the continuation of the Chiltern Hills just cross the north-western part of the county in their extension towards the north-east.

The rivers of Essex are—the Thames, with its affluents, the Lea (into which flows the Stort), the Roding, the Bourne Brook, the

Ingerburn, and some smaller streams; the Crouch, with its affluent the Broomhill; the Blackwater, with its affluents the Pods Brook, or Witham River, and the Chelmer (into which flow the Sandon Brook, the Ter, and some other streams); the Colne, with its affluent the Roman; the Stour; and the Granta or Cam. The Thames bounds the county on the south side. Its course, though winding, is on the whole nearly from west to east. It is a tidal river, and navigable for the largest merchant ships, and for frigates and other smaller ships of war throughout that part of its course which belongs to this county. The mouth of the Thames contains numerous shoals. [THAMES.] The Lea bounds the county on part of its west side. It more properly belongs to Hertfordshire, in which it has a considerable part of its course. It meets the border of Essex at the point where it receives the Stort, along which the boundary previously runs and flows south past Broxbourn (Herts), Waltham Abbey, Chingford, Layton, and Stratford (all in Essex), 20 miles, into the Thames. The banks of this river are marshy; and the marshes are from half a mile to a mile wide. The stream is frequently divided and flows in several channels, and in some places cuts have been made in order to improve or shorten the navigation, which comprehends all that part of the river which is connected with this county. The Stort rises in Hertfordshire, but soon enters Essex, through which it flows for some miles, and then touches the border again, and flows, sometimes on the border, sometimes in Hertfordshire, into the Lea. Its whole course is about 24 miles, for about 10 miles of which it has been made unavigable. The navigation of the Stort and the Lea serves for the conveyance of corn, malt, wool, and other agricultural produce to London; and for the conveyance in return of coals, timber, deals, bricks, groceries, cloth, and other articles of daily consumption. The Roding rises in the western part of the county, near Easton Park, a short distance north-west of Dunmow: it flows southward about 15 miles to the neighbourhood of Chipping Ongar, where it receives the Crispsey Brook (about 9 miles long) from the north-west. From the junction of the Crispsey Brook the Roding flows south-west in a very winding channel 14 miles to Woodford bridge; and from Woodford bridge it flows about 7 or 8 miles nearly south past Ilford and Barking into the Thames. Its whole course is about 36 miles. The banks are low and marshy from the neighbourhood of Ougar. The west bank from Ilford, and both banks from below Barking, are protected by embankments. It is navigable under the name of Barton Creek up to Ilford bridge. The Bourne Brook rises between the villages of Navestock and Havering-atte-Bower, and flows in a winding channel past Romford, and between Dagenham and Hornchurch Marshes into the Thames. Its length is about 12 miles. In the lower part of its course the Bourne Brook is connected with the pool formed by Dagenham Breach. This breach was occasioned in 1707 by the blowing up of a small sluice that had been made for the drainage of the land waters: an opening was formed by the rushing in of the Thames, 300 feet wide, and in some places 20 feet deep; 1000 acres of rich land in the adjacent levels were overflowed, and the surface of nearly 120 acres was washed into the Thames, where a bank was formed nearly a mile in length, and extending half-way across the river. After various ineffectual attempts, the breach was stopped, by driving dove-tailed piles and other expedients, under the direction of Captain Perry, who commenced his works in 1718. Within the embankment there is yet a pool of between 40 and 50 acres. Through the upper part of this pool the Bourne Brook flows. The Ingerburn rises near Havering-atte-Bower, not far from the source of the Bourne Brook, and flows southward, past Upminster, into the Thames. It is about 12 miles long. A stream of about the same length, which rises close to Thorndon Park near Brentwood, falls into the Thames near Purfleet. The Crouch rises on the slope of the hills south of Billericay, and flows east by north about 25 miles into the sea. The tide flows about 13 miles up the river and is kept from overflowing the lowlands on its banks by mounds. In the tide-way there are many arms; and the various channels by which the river communicates with the sea form the group of Foulness, Wallasea, and the adjacent islands. Just above its mouth it receives the Broomhill River (10 miles long), which is navigable for seven miles nearly up to Rochford. The Blackwater, which in the upper part of its course is called the Pant, rises near the village of Wimbish, in the north-western part of the county. It flows first south-east and then south about 30 miles, past Coggeshall to the neighbourhood of Witham. Here it is joined by the Pods Brook, a stream 14 or 15 miles long, which rises near Great Bardfield and flows past Braintree and Witham. From the junction of this stream the Blackwater flows south about 4 miles to the junction of the Chelmer; after which it flows east about 12 miles into the sea, having a course of about 46 miles. From Maldon, which is below the junction of the Chelmer, it is a tidal river; and its estuary, which is at high water from a mile and a half to $2\frac{1}{2}$ miles wide, contains the islands of Northey, Osey, Ramsey, and Pewit. Lawling Creek and Goldhanger Creek are channels in the ooze or strand of this tideway. The Chelmer rises near Debden, and flows south-south-east about 23 or 24 miles to the town of Chelmsford, where it is joined by a stream which rises near Thorndon Park and flows northward to Writtle, and then turns east, its whole course being about 14 miles. From Chelmsford the Chelmer flows east about 10 miles till it falls into the Blackwater near Maldon. Its

whole course is about 34 miles. The Sandon Brook, which rises near Stock, 2 miles north-east of Billericay, and has a course of about 10 miles, joins the Chelmer between Chelmsford and Maldon. The Ter rises between Felstead on the Chelmer and Rayne on the Polds Brook, and flows south-east 13 or 14 miles into the Chelmer, which it joins about 2 miles below the junction of the Sandon Brook. The Colne rises in the north-western part of the county, and flows east about 7 miles to the neighbourhood of Great Yeldham, where it is joined by another stream of nearly the same length. From this junction it flows south-east 6 miles, then east-south-east about 13 miles to Colechester. Below Colechester it becomes a tidewater and flows 8 or 9 miles south-east into the sea at the north-east end of Mersey Island. Its whole course is about 35 miles. The Roman rises about 2 miles north of Coggeshall on the Blackwater, and flows east by south about 13 miles into the tideway of the Colne, which it joins midway between Colechester and the sea. A brook 8 or 9 miles long from Layer Marney and Layer Breton joins the Roman about three miles above its junction with the Colne. The Stour may be considered as equally belonging to Suffolk and Essex. Of the three springs which may claim to be its sources, one which flows past the village of Kedington is in Suffolk; a second is in Cambridgeshire, and from it a stream flows by the town of Haverhill, on the borders of Suffolk and Essex; the third spring is in Essex, and the stream from it passes Steeple Bumpstead. From the junction of these three streams, which takes place about 6 or 8 miles from their respective sources, the river to its outfall divides the counties of Essex and Suffolk. Its course is first east about 10 miles to the neighbourhood of Long Melford, above which it receives two small tributaries on the Suffolk bank; thence its course is south by east about 8 miles: then east 13 miles to Catawade bridge, above Manningtree. Below Catawade bridge the stream widens into a considerable estuary, 11 or 12 miles long, and for the most part above a mile wide, which unites with the estuary of the Orwell, a Suffolk river, and passes into the open sea between Harwich and Langard Fort. Its whole course is about 50 miles. The Cam rises near Debden, 4 miles from Saffron Walden, and flows first south-west for 2 miles, and then turns north and flows 3 or 4 miles into Cambridgeshire, to which the principal part of its course belongs.

The Thames and the Lea are navigable throughout that part of their course which belongs to this county; the Stort is navigable from Bishop Stortford to its junction with the Lea. The tideway of the Crouch is navigable; near Burnham this river is a quarter of a mile wide, and has depth of water sufficient for a 98-gun ship: a 74 might go almost up to Hull bridge at the head of the tideway. The Blackwater does not appear to be navigable above the junction of the Chelmer. Vessels of considerable burden can get up to Maldon at spring tides. The Chelmer is navigable to Chelmsford. The navigation of the Colne extends to Colechester. The Stour is navigable up to Sudbury. Essex has no navigable canals.

The principal roads in the county are the three roads from London to Norwich, by Ipswich, by Bury, and by Newmarket. The road by Ipswich enters the county at Bow bridge, and crosses the county in nearly its greatest extent from south-west to north-east, passing through the market-towns of Romford, Chelmsford, Witham, and Colechester, 7½ miles beyond which the road crosses the Stour at Stratford bridge and enters Suffolk. The road through Bury branches off from the Ipswich road at Chelmsford, and passes through the towns of Braintree and Halsted, 8 miles beyond which the road crosses the Stour into the town of Sudbury in Suffolk. The road by Newmarket branches off from the Ipswich road at Stratford, crosses part of Epping Forest, and runs through the town of Epping, about 7 miles beyond which it crosses the Stort into Hertfordshire; between 29 and 30 miles from London it re-crosses the same river into Essex, runs northward near Saffron Walden, and finally quits the county at the village of Great Chesterford, 45 miles from London. Numerous roads of minor importance traverse the county.

The Eastern Counties railway is the only railway which passes through Essex. The main line enters the county at Old-Ford; at Stratford it turns northward, and continues for some 17 miles along the valley of the Lea, but for the greater part of the way on the Hertfordshire side of the river. At Roydon it enters the valley of the Stort, along which it runs to Stanstead, 14 miles, partly in Essex and partly in Herts. It then runs due north quitting Essex at Great Chesterford. The Colechester line traverses the county in a north-eastern direction and leaves it near Manningtree, 55 miles. From Stratford a branch runs to North Woolwich, 5 miles. Near Ilford a branch runs south-east to West Tilbury, and is to be continued to Southend. From Witham, on the Colechester line, a branch runs north-west to Braintree, 12 miles; and another south-south-east to Maldon, 5½ miles. From Marks Tey, on the same line, a branch runs north-north-west to Sudbury, 11 miles. A branch is in course of construction from Manningtree to Harwich, about 12 miles.

Geological Character.—A considerable tract in the northern part of the county, stretching along the river Stour from the village of Kedington to between Sudbury and Noyland, and extending for some distance into the interior of the county, is occupied by diluvial beds, consisting of loam with fragments of chalk. The coast of the north-east part of the county is covered with the sand or gravel of the

upper marine formation, which occupies a considerable part of the counties of Norfolk and Suffolk, and is locally designated 'crag.' At the headland of the Naze it constitutes about 30 feet of the upper part of the cliffs (which are about 45 feet high) resting upon the London clay: south of the Naze its thickness appears to vary from 10 to 40 feet. In the projecting cliff of Harwich it includes friable masses of ferruginous sand, somewhat cemented together, and inclosing shells. Fragments of fossil bones washed out of the strata of this formation, in which they had been imbedded, are found on the beach at Walton, but occur in much greater quantities at Harwich. The cliffs south of the Naze consist of fresh-water deposits, which contain shells and mammalian remains. In the valley of the Stour, while excavating for the Stour railway near Mark's Tey, fossil elephants' teeth were found.

The greater part of the county, including Epping and Hainault or Heubault Forests, is occupied by the London clay. The London clay of the cliffs near Harwich contains beds of stratified limestone: the same cliffs are very productive in the fossils with which this formation abounds. South of Walton, near the Naze, abundance of septaria are found, which are sent by sea to Harwich, where they are manufactured by government into a cement. The principal elevations in the county, High Beach, Langdon and Danbury Hills, and Tiptree Heath, are formed of London clay. The surface of the vegetable mould commonly rests on alluvial beds of rich marl and loam, which often alternate with gravel and sand, and sometimes have a thickness of 30 or 40 feet over the London clay. The sands and clays of the plastic clay formation skirt the district of the London clay on the north-west. Halsted and Coggeshall, with the intermediate tract, are both on the plastic clay. The border of Essex, near Hadleigh, is the most northerly point at which this formation has been found. The north-western extremity of the county, about Saffron Walden, consists of chalk: the great chalk district, in its extension from south-west to north-east, just crosses that part of the county. The chalk appears also at Purfleet, where is an extensive chalk pit, and Gray's Thurrock, on the banks of the Thames. A subterranean forest underlies the marshes on the banks of the Thames.

Climate, Soil, Agriculture.—The climate of Essex is favourable to vegetation: the sea and the numerous estuaries which bound it on the south and east soften the rigour of winter, and keep up a certain degree of moisture in summer. The same cause produces cold fogs and exhalations in spring and autumn, which are prejudicial to the health of those who are not inured to the climate, but improved drainage and the disappearance of the woods before the advance of cultivation, have diminished the source of unhealthiness. The soil all along the coast, and 10 or 12 miles inland, is a friable loam of greater or less tenacity in different parts, but peculiarly adapted to the cultivation of wheat, beans, and oats. The Isle of Mersey, which lies at the mouth of the Colne River, has been long noted for the fertility of its soil, which is a fine alluvial loam composed of the various earths deposited from the river and the sea, like the warp lands along the Humber, or the polders in the Netherlands. The best soils of Essex lie low, and require to be protected from the sea by embankments. Many marshes which formerly produced nothing but herbage, and were subject to inundations, are now converted into arable fields: and a great tract of land, all along the coast, which used to be covered by the sea at high tides, is now laid dry by proper deep and broad ditches, here called fleets, and protected by high and well-constructed sea-walls. In some of these marshes the want of fresh water in summer was often felt severely. But recourse has been had to boring, which has been attended with great success, especially in the marshes at St. Osyth, where the finest springs of water have been found, which flow over the surface, and keep ample reservoirs continually full. The depth at which the water was found did not exceed 50 feet. The soil in the uplands along the coast consists chiefly of good loams varying in tenacity from a strong clay to a light gravel; most of it is of such a nature as to bear both turnips and beans. The whole county has an undulating surface, which is very pleasing in districts where fields and woods are interspersed. The only level tract is that along the Thames, which extends to its mouth and along part of the south-eastern coast. Clay soils prevail in most parts of the county. There are few such light soils in Essex as there are in Norfolk and in Lincolnshire; and except on the borders of Hertfordshire and Cambridgeshire chalk and marl are rare.

In those farms which have marshes attached to them numerous cattle are kept, and the straw is converted into manure, by which the arable land is kept in a high state of fertility. Along the Thames the salt-marshes are extensive, and are profitable from the number of horses which are sent from London to feed there, after they have been over-worked and require rest, or when they have met with some accident. In some cases oxen and sheep are fed on the marshes.

Besides the crops usually cultivated a considerable quantity of cole or rape-seed is raised on rich alluvial soils. It is a profitable crop, owing to the abundant supply of manure brought from London by the Thames. Flax is not cultivated to any great extent, and very little hemp is sown. Some hops are raised in the western part of the county towards Cambridgeshire. The cultivation of carraway, coriander, and teasels is almost peculiar to this county.

In that part of Essex which lies within a few miles of London the

cultivation of the soil partakes to a great extent of the garden culture. Vegetables are raised in great quantities, and very extensive fields are almost entirely devoted to the raising of potatoes. The ground is ploughed and very highly manured with stable dung from London. Mangel wurzel for the London cowmen is also raised in considerable quantities. The meadows within 15 miles of London supply the Whitechapel market with hay, and every cart brings back a load of dung.

The cows and horses in Essex are chiefly reared in Suffolk, and Scotland supplies oxen for fattening. In some parts of the county there are a few large dairies; but in general the number of cows kept on a farm is not considerable. Many calves are fatted, which are killed in the country, or sold at Romford to London butchers. Sheep are kept in large flocks and with considerable advantage. By means of draining the land has been made capable of being folded over even in winter. Essex is not a sheep-breeding county, although many fine lambs are reared; but they are generally bought from the breeders in Wiltshire or Sussex in autumn and sold fat to the butcher in the succeeding spring. There is no peculiar breed of horses. The Suffolk punches are in general use for farm work, and it is scarcely possible to find a breed better adapted for every kind of work. Essex has been long noted for a superior breed of pigs, which has been produced and improved by crosses with foreign breeds, chiefly the Neapolitan and the Chinese.

Divisions, Towns, &c.—Essex is divided into 20 parts, of which 19 are called hundreds, and one, that of Havering-atte-Bower, a royal liberty. We subjoin a list of these divisions, with their situations:—Barstaple, S.; Becontree, S.W.; Chafford, S.; Chelmsford, Central; Clavering, N.W.; Denzey, or Dengie, S.E.; Dunmow, Central; Freshwell, or Freshwell, N.W.; Harlow, W.; Havering-atte-Bower, S.W.; Hincokford, N.; Lexden, N.E. (Colchester division and Witham division); Ongar, Central; Rochford, S.E.; Tendring, N.E.; Thurstable, E.; Uttlesford, or Utelsford, N.W.; Waltham, W.; Winstree, E.; Witham, Central.

There is no city in Essex. There are 19 market-towns: 3 of these are parliamentary boroughs—COLCHESTER, on the Colne; HARWICH, at the mouth of the Stour; and MALDON, on the Pant or Blackwater. CHELMSFORD, the county town, is on the Chelmer. Of these places, as well as of BARKING, on the river Roding; BILLERICAY, on the road from London to Rochford; BRAINTREE; BRENTWOOD, on the road to Chelmsford; COGOESHALL, on the Blackwater; DUNMOW; EPPING; HALSTEAD, on the Colne; LEXDEN, on the Colne; ONGAR, on the Roding; ORSETT, on the road from Romford to Southend; ROCHFORD, on the Broomhill River; ROMFORD, on the Bourne Brook; SAFFRON WALDEN, on one of the feeders of the Granta or Cam; TENDRING, on a small river which flows into the sea at Holland Creek; THAXTED, on the Chelmer; WALTHAM ABBEY, on the Lea; WALTHAMSTOW, on the Lea; WEST HAM, on the Lea; WENTREE; and WITHAM, a market-town on the Brain River—an account is given under their respective titles. Of the other towns and more important villages an account is subjoined; the populations given are those of 1851.

Burnham, 19 miles S.E. from Chelmsford, population of the parish 1869, is on the left bank of the river Crouch, which is navigable a considerable way above Burnham: there is here a convenient quay. The oyster-fishing employs many of the inhabitants. There is a good coasting trade. Besides the parish church, which is about a mile from the port, there is a chapel for Dissenters. A ferry maintains communication with Wallasea and the other islands at the mouth of the Crouch.

Dagenham, 22 miles S.W. from Chelmsford, population 2494: the lower part of the parish is a marshy district on the left bank of the Thames. The great breach made in the embankment in 1707 has been already noticed. There are National and Infant schools.

Gray's Thurrock, on the left bank of the Thames, 24 miles S.S.W. from Chelmsford, population 1713, consists chiefly of one irregular street on a creek of the Thames, accessible to hoys and other small vessels. The church is cruciform, with a tower on the north side. A considerable amount of trade is carried on. The market on Thursday is chiefly for corn; there are two yearly fairs. Brick-making is extensively carried on. Belmont Castle, a fine mansion in the vicinity, affords extensive river and inland views. In the adjoining parishes of *Little Thurrock* and *Chadwell* are some remarkable caverns or holes in the chalk, to which tradition has assigned the name of 'Cunobelin's Gold-mines.' They are also called 'Dane-Holes,' from having been used by those invaders as lurking-places or receptacles for plunder. There is a station of the Southend railway at Grays.

Hadleigh, 16 miles S.S.E. from Chelmsford, population of the parish 412, formerly had a market which has been discontinued. The church is an ancient edifice in the early English style. Near Hadleigh are the ruins of a castle built by Hubert de Burgh.

Harlow, 17 miles W. by N. from Chelmsford, population 2322, was formerly the seat of a large woollen manufacture and of a considerable trade. The church was originally cruciform, with a central tower rising from the intersection of the transepts; but having been much injured by fire in 1711, a cupola was substituted for the tower: the church is adorned with much painted glass. A new church was opened in 1842. There is a chapel for Baptists. A small market is held on Wednesday. There are three considerable fairs in the year for horses

and cattle. A sum of 8000*l.*, bequeathed by Mr. George Fawbert, has been vested in trustees for the establishment of a day school and library at Harlow, and for apprenticing or otherwise benefiting those educated at the school. There are also National and British schools. Brewing, malting, and rope-making are carried on.

Hatfield, 11 miles N.W. from Chelmsford, population 2034, is on the Pincey Brook, which flows into the Stort. This place was formerly part of the royal demesne, from which circumstance it was called Hatfield Regis: its other designation of Hatfield Broad Oak it obtained from a large oak supposed to have flourished here in the Saxon times. Aubrey de Vere founded in 1135 a Benedictine priory at Hatfield. The church has a western tower and a large porch in the perpendicular style; other parts are more ancient. The Methodists have a place of worship. There are a National and a Charity school.

The Heddinghams formerly constituted one parish; from the time of Henry III. they appear as two: *Sible Heddingham*, on the right bank of the Colne, 18 miles N. by E. from Chelmsford, population 2346; and *Castle Heddingham*, on the left bank of the river, 1 mile farther, population 1394. Sible Heddingham church is a neat building of the time of Edward III. A castle was built here by the De Veres about the beginning of the 12th century. The De Veres retained the castle until 1625. The keep, the only part remaining, is one of the best-preserved Norman keeps in the kingdom. The building forms a parallelogram, 55 feet on the east and west sides, and 62 feet on the north and south, and is upwards of 100 feet high. Castle Heddingham church is of stone with brick battlements, partly in the Norman and partly in the early English style: the tower is later. In the chancel is a superb but somewhat mutilated monument of John de Vere, earl of Oxford, who died in 1539. The Baptists have a chapel. There is a National school at Sible Heddingham. A Benedictine nunnery was founded here in 1190. Coach-making, malting, brick-making, and gardening give employment to some of the population.

Ingatstone, on the London road, 6 miles S.S.W. from Chelmsford, population 860, had formerly a considerable cattle market, and has still a large cattle fair. The church contains several monuments of the Petre family. There are here a chapel for Independents, a Charity school, and an almshouse. Ingatstone Hall, once the seat of the Petre family, is an irregular pile of ancient date.

Manningtree, on the estuary of the Stour, 31 miles S.E. from Chelmsford, population 1176, is a small place, neat and clean, though irregularly laid out. The church, built out of the ruins of a more ancient one, was enlarged in 1839. There are chapels for Independents, Quakers, and Methodists. A market is held on Thursday for corn and cattle, and a fair on Thursday in Whitsun week. A considerable trade in malt is carried on; and corn, coal, deals, and iron are imported.

Mistley, adjacent to Manningtree, is 32 miles S.E. from Chelmsford: population, 1516. Mistley Hall, the seat of the Rigby family, stands on an eminence in the midst of gardens and plantations elegantly laid out. On the bank of the Stour is a quay with warehouses. Ship-building, sail-making, and malting are carried on. A considerable number of good dwellings has recently been built in the neighbourhood.

Newport, 22 miles N.W. from Chelmsford, population 898, formerly a market-town, is situated on the Granta, where that river turns northward towards Cambridgeshire. There is here a station of the Eastern Counties railway. Three annual fairs are held. The church, which has a lofty tower, is in the highest part of the town. The Free Grammar school, founded in 1536, has an income from endowment of 200*l.* a year, and had 48 scholars in 1853. Some vestiges remain of St. Leonard's Hospital, founded in the reign of King John. There is a house of correction at Newport.

Raleigh, or *Rayleigh*, 15 miles E.S.E. from Chelmsford, population 1463, was one of the numerous lordships of Suene, who having joined the Conqueror at an early period was allowed to retain his possessions. He built a castle here, of which some earth-works remain. The village consists of one wide street of considerable length. At the upper end is the church, an edifice principally in the perpendicular style, with some portions of an earlier date. The Baptists have a chapel. The weekly market has been given up. There is a fair for cattle and horses, which is well attended. Lime-burning is carried on. In the neighbourhood are several good family residences, and some well-laid-out nursery grounds.

Roydon, or *Woodredon*, on the left bank of the river Stort, just before its junction with the Lea, 25 miles W. by N. from Chelmsford, population 902, was formerly a market-town: a station of the Eastern Counties railway is at Roydon. The parish church has an embattled tower.

Kirby le Soken, *Thorpe le Soken*, and *Walton le Soken* form a district called 'the Soken.' The word Soken is derived from the Saxon Soc, or Soca, signifying both the power to administer justice within a certain limit, and the circuit within which such power was exercised. The villages possess some peculiar immunities, to which they owe their designation. Ruins of buildings have been discovered under the water, particularly on a shoal called the West Rocks, nearly five miles from the shore, which is left dry at great ebbs. The wall thrown up to keep out the sea gave name to Walton parish. There is a church in each parish; that at Thorpe is the largest. The Baptists have a

chapel at Thorpe. A customary market is held there on Wednesday evening. Walton possesses a firm and extensive beach, and is resorted to for bathing by invalids from the eastern parts of Essex. Crescent Pier at Walton is neat and convenient. Besides the parish church, erected about the commencement of the present century, there are at Walton a chapel for Independents and an Infant school. The population of the three parishes in 1851 was as follows:—Kirby, 932; Thorpe, 1294; Walton, 729; total, 2955.

Stansted Montfichet, on the left bank of the river Stort, is 20 miles N.W. from Chelmsford, on the Newmarket road: population, 1719. It consists mainly of two streets containing some good houses. Montfichet was the surname of William Gernon, who built a castle here shortly after the Conquest. The church was erected in 1692. There are British and Free schools. A fair is held on May 1st. Some flour-mills are in the neighbourhood. Browing and malting are carried on.

Writtle, about 3 miles W. from Chelmsford, population 2423, was formerly a market-town, but declined as Chelmsford rose into importance. A square plot of ground with a moat round it, in which the foundations of a building were dug up in the last century, is supposed to have been the site of a palace of King John. The church contains many elegant monuments. There are here National and Free schools, and almshouses for six poor persons. Malting and brewing are carried on. Some corn-mills are in the vicinity.

The following are some of the more important villages, with the population of the several parishes in 1851, and a few other particulars:—

Ardleigh, 27 miles S.E. from Chelmsford, population 1737; chiefly agricultural. The church has a south aisle and a handsome tower. *Ashdon*, 30 miles N.N.W. from Chelmsford, population 1238, is supposed by some to have been the scene of a battle between Edmund Ironside and Canute; but the battle was more probably fought at Ashingdon, near Canewdon. *Aveley*, on the Marditch river, 26 miles S.S.W. from Chelmsford, formerly a market town: population 811. There are chalk pits in the vicinity. *Great Baddow*, $1\frac{1}{2}$ miles E. from Chelmsford, population of the parish 2122. *Little Baddow*, 4 miles E.N.E. from Chelmsford, population of the parish 622. The church of Great Baddow is an ancient building with a square tower, in which are eight bells. There is a Free school. A brewery and some corn mills are in the parish. *Little Baddow* is on the river Chelmer; the parish church is a good building with a tower. There are some good residences in the neighbourhood. *Great Bardfield*, 16 miles N. by E. from Chelmsford, is on the right bank of the Pant or Blackwater, over which is a brick bridge: population, 1110. A market formerly held here has been long discontinued. There was a church at Great Bardfield previous to the Norman Conquest. The Grammar school, founded in 1584, had 80 scholars in 1850. The income from endowment is a rent charge of 10*l.* a year. The classics are not now taught in the school. *Great Bentley*, 29 miles N.E. by E. from Chelmsford, population 1025, is an ancient village, pleasantly situated on the left side of Brightlingsea Brook. The church is built of flint and stone, and has a tower at the west end. There are here a chapel for Wesleyan Methodists and a National school. *West Bergholt*, thus distinguished from East Bergholt in Suffolk, is 21 miles N.E. from Chelmsford: population, 852. The manor belonged in the 17th century to Sir John Denham the poet. The south aisle is separated from the nave by strong Norman pillars; on the church are a small turret of wood and a shingled spire. The Wesleyan and Primitive Methodists have places of worship. There are three almshouses. Bricks are made, and there are some corn-mills in the vicinity. *Great Birch* and *Little Birch*, 18 miles N.E. from Chelmsford: population of the united parishes 962. The two villages are about a mile apart. The church of Little Birch is in ruins. The church of Great Birch consists of a nave and chancel and a steeple. There are some ruins of an ancient castle. In the vicinity are corn-mills, and malting is carried on. *Blackmore*, 8 miles S.W. by W. from Chelmsford: population, 704. Some ruins exist of a priory, established here for Augustinian canons in the 12th century. Henry VIII. frequently visited this place. Brickmaking is carried on. There is an Infant school. *Boreham*, an ancient village about 3 miles N.E. from Chelmsford, population 1040, occupies an elevated site; in the neighbourhood are extensive plantations. The parish church has an embattled square tower. Boreham House is near the village. New Hall, now a Roman Catholic Nunnery and educational establishment, was a royal residence in the reigns of Henry VII. and Henry VIII. It contained 107 inmates in 1851. *Bradwell-next-Sea*, or *next-Tillingham*, 24 miles E. from Chelmsford, population 1143, was a Roman station: the sea has here made considerable inroads upon the land. The church has a stone tower with a lofty spire. There is a National school. The village is on elevated ground, and commands extensive sea-views. *Brightlingsea* is on the estuary of the Colne, 32 miles E. by N. from Chelmsford: population, 1852. About 500 men and boys were absent at the oyster fishery when the Census was taken. The chief occupation of the inhabitants is furnished by the oyster and sprat fishery. Upwards of 400 persons are said to be licensed to engage in this branch of industry: the matters connected with the fishery are managed by a jury of 14 with a foreman and treasurer. More than 200 smacks of various sizes belong to the port. There is safe

anchorage for vessels of considerable burden. The parish forms a peninsula, surrounded by the marshes of the Colne and its inlets, except on the north-east side. The church tower, 94 feet in height, is a prominent sea-mark. There are a chapel of ease, a Wesleyan Methodist, and two other Dissenting chapels; a National school, and a temperance hall. Brightlingsea is a member of Sandwich in Kent, one of the Cinque Ports. The population has doubled within the present century. *Great Bromley* and *Little Bromley* are about a mile apart, and about 27 miles N.E. from Chelmsford: population of Great Bromley 797, of Little Bromley 405. Two small brooks rise here which run into the Colne. The parish church of Great Bromley is a handsome building; it has a beautifully wrought roof, and some fine stained-glass windows. The tower is of considerable height. *Helion Bumpstead*, 25 miles N. by W. from Chelmsford, population 951, is pleasantly situated on the Cambridgeshire border. The church is an ancient edifice, and contains some interesting monuments. *Steeple Bumpstead*, 24 miles N. by W. from Chelmsford, population 1295; also called Bumpstead ad Turrim, or Little Bumpstead. The manor belonged to Edith, queen of Edward the Confessor. The parish church and school-house are both ancient. In the neighbourhood are some remains of entrenchments. Rope and twine making are carried on, and there are corn mills. *Buttsbury* and *Stock*, two contiguous villages, usually regarded as conjoined about 5 miles S. by W. from Chelmsford: population of Buttsbury parish 606, of Stock 702. Both villages are ancient. Stock sometimes receives the name of Harford or Herwardstok. Buttsbury church, a very small building, with a square tower constructed of flint and stone, formerly belonged to the nunnery at Stratford-le-Bow. The church at Stock is ancient, and has several tombs and brasses. A superior quality of earth which is found here, is manufactured into the kind of bricks called Stock bricks. There is a National school. *Canewdon*, on the right bank of the Crouch, 20 miles S.E. from Chelmsford: population, 702. Roman antiquities have been found here, and the remains of an encampment exist. It is supposed that Canute resided at this place, from which circumstance it is said the name has been derived. The village being on elevated ground affords extensive and beautiful prospects. Ashingdon, supposed to be the field of battle between Canute and Edmund Ironside, is at a short distance. The church is ancient; it is built on Canewdon Hill, and has a steeple 74 feet high, which is a prominent landmark for the district. A fair is held yearly on June 24th. *Great Chesterford*, an ancient village on the right bank of the Cam, 32 miles N.N.W. from Chelmsford, population 1024, was a Roman station. Coins of several of the Roman emperors have been found. Great Chesterford had formerly a market. The tenure of land here is that of 'borough English,' by which an estate falls to the youngest son or kinsman. There are National and Infant schools. *Chigwell*, 20 miles S.W. from Chelmsford, population 1965, is situated on the left bank of the river Roding, near Epping Forest. From Chigwell Row a most extensive view is obtained over the south of Essex and the Thames into Kent. An Endowed Grammar school, founded in 1629 by Archbishop Harsnett, is free to 24 boys belonging to Chigwell and three neighbouring parishes. Many gentlemen's seats are in the vicinity. The parish church, an ancient edifice, has at the south door a Norman arch. There are National and Infant schools. At Chigwell Row is an Independent chapel. A considerable extent of ground is laid out in nurseries and market-gardens. Brewing is carried on. *Chingford*, on the left bank of the Lea, 26 miles S.W. by W. from Chelmsford, population 963, occupies a pleasant situation to the west of Epping Forest. The parish church is a neat structure, recently erected on the site of an ancient church. There is a National school. *The Colnes*: four villages bear this name:—*Earl's Colne*, on the river Colne, 20 miles N.E. by N. from Chelmsford: population, 1618. The church, erected in 1532, has a tower in which are six bells. The Baptists and Quakers have places of worship. The Grammar school, founded in 1520, has an endowment producing 200*l.* per annum, and is free to 42 boys from Earl's Colne and five neighbouring parishes. The number of scholars in 1853 was 30. There are National, British, and Infant schools. Some remains are traceable of a priory founded at the close of the 11th century. The parish has six almshouses. An annual fair is held on March 25th. *Colne Engain*, on the left bank of the Colne, about a mile N.W. from Earl's Colne, population 670; *Wake's Colne*, on the left bank of the river, 2 miles E. from Earl's Colne, population 499; *White Colne*, about a mile N.E. from Earl's Colne, population 459. *Danbury*, 5 miles E. by S. from Chelmsford, population of the parish 1221, supposed to be named from the occupation of the place by the Danes; remains of an encampment and military works are in the vicinity. The village is built on the side of the highest hill in the county: extensive prospects may be obtained from the summit of the hill, on which is the church. The church tower is surmounted with a lofty wooden spire, which, though several miles distant from the coast, is useful as a sea-mark. Some curiously-carved figures of crossed-legged knights are in this church. There are here National and Infant schools. *Debden*, 21 miles N.W. by N. from Chelmsford, population 1034, is a small village seated on elevated ground. The church was originally cruciform with a central tower; but the tower having fallen down, was not restored. There are a Free school and some small parochial charities. *Dedham*, on the right

bank of the river Stour, 28 miles N.E. from Chelmsford: population, 1792. This village was, in the 12th century, one of the chief seats of the clothing trade: it was at one time a market-town. The church is a commodious edifice of the perpendicular style, and has a tower of considerable height. There are a chapel for Independents, a Free Grammar school, founded in 1570, and an assembly room. A fair is held on Easter Tuesday. *Great Easton*, on the left bank of the river Chelmer, 14 miles N.N.W. from Chelmsford: population of the parish, 937. The parish church is a plain edifice, situated on a hill. In the southern doorway is a semicircular arch. There are Charity schools. *Little Easton*, on the right bank of the Chelmer, 13 miles N.N.W. from Chelmsford: population, 396. The church, an ancient edifice, has a square tower. On the south side of the chancel are numerous splendid monuments of the Maynard family. *Easton Lodge and Park*, in the vicinity of Little Easton, are the property of Viscount Maynard. *Elmstead*, 27 miles N.E. from Chelmsford: population, 908. A market was obtained for the place in 1253, but it has been long discontinued; the church, which is ancient, has at the west end a diminutive tower, its top being not higher than the walls of the church. A yearly fair is held. *Felstead*, 10 miles N. by W. from Chelmsford: population, 1715. The parish church, which is situated on high ground, has an embattled tower. In the church is a monument to Richard, Lord Rich, who died in 1567, the founder of the Free school and almshouses. The Free Grammar school and almshouses were regulated anew by an Act of Parliament passed in 1851. The income from the estates is now nearly 2000*l.* a year. The number of scholars in 1853 was 61. Dr. Isaac Barrow and three sons of Oliver Cromwell were educated at this school. In the vicinity are the remains of Lee priory, some parts of which are now used as a farm-house. *Finchingfield*, 18 miles N. by W. from Chelmsford: population, 2594. There are here, besides the parish church, a chapel for Independents, a Free school, an Infant school, almshouses for widows, and an apprenticeship fund for the benefit of free scholars. Numerous hop-gardens are in the vicinity. *Great Fordham*, on the left bank of the river Colne, 21 miles N.E. by N. from Chelmsford, population 740, so called from a ford over the Colne. The parish church has a tower, surmounted with a lofty spire. There is a chapel of the Countess of Huntingdon's Connexion. *Fryerning*, 7 miles S.W. from Chelmsford, population 743, an ancient village; the manor once belonged to the knights of St. John of Jerusalem. The church has a brick tower. *Hadstock*, on the borders of the county, close to Cambridgeshire, 26 miles N.N.W. from Chelmsford, population 576, had a market granted to it in 1337, which is not now held. The church is cruciform, with a central tower. There is a Free school. *Havering-atte-Bower*, 18 miles S.W. from Chelmsford, population 423, on the river Roman, otherwise the Bourne Brook. There is a National school. The early kings of England, among others Edward the Confessor, of whose palace remains may be traced, frequently resided here. Many fine residences are in the vicinity. In the neighbourhood are brickfields, hop-gardens, and a brewery. *Henham*, or *Henham-on-the-Hill*, 19 miles N.W. by N. from Chelmsford: population, 911. The parish church, a commodious structure, is seated on a considerable eminence; it has a tower, surmounted with a lofty spire. There is a National school. *Hornchurch*, on the Bowles Brook, 19 miles S.W. by S. from Chelmsford: population, 2378. In Henry III.'s time, the principal street was called Pell-street, from the peltmongers, or skippers, who carried on business there. The church is a commodious structure. Brick-making, brewing, and malting are carried on, and there is an extensive manufactory for agricultural implements. *Horndon-on-the-Hill*, 19 miles S. by W. from Chelmsford, population 532, is situated, as its name imports, on an eminence, from whence there is a fine view of the shipping on the river Thames, and of the surrounding scenery. The church is in the middle of the town; it has a stone tower, embattled. The market, when Morant published his history of Essex (1768), was very small; it has been discontinued. There is one fair in the year, chiefly for wool. *Great Ilford*, on the river Roding, 22 miles S.W. from Chelmsford, population 3745, a ward of Barking parish. The Roding is here navigable for barges. An hospital for lepers was founded here by Henry II. The chapel of ease, or hospital chapel, is a very ancient building. About half a mile from the town is a church erected in 1831. The Baptists and Wesleyan Methodists have places of worship, and there are National schools, a savings bank, and almshouse. A large house of correction for the county is situated at Ilford. Brick-making, lime-burning, and malting are carried on. There are steam saw-mills and flour-mills. *Kelvedon*, 13 miles S.W. from Chelmsford: population, 1633. The village is partly built on elevated ground, on the right bank of the Blackwater, and on the line of the Eastern Counties railway. The church has a square brick tower. The Independents and Quakers have places of worship. In the vicinity are nursery-grounds. *Laindon* or *Lamgdon Clay*, a name derived from the long down or range of hills, in the neighbourhood, 12 miles S. by W. from Chelmsford: population, 540. The church is built on high ground. There is an Endowed school. Basildon, a hamlet of Laindon parish, said to have been once a town, has a chapel occupying an elevated site. A fair is held here for two days annually in September. *High Laver*, 15 miles W. by N. from Chelmsford: population, 534. In the churchyard John Locke was

interred, he being at the period of his death, 1704, resident at Oates, the seat of his friend Sir Francis Masham. The mansion of Oates was pulled down several years ago. *Laver-de-la-Hay*, the principal of three parishes and villages called the Lavers, 23 miles N.E. by E. from Chelmsford, population 788, has a church consisting of nave, chancel, and stone tower: the population is agricultural. *Laver Marney*, 20 miles N.E. by N. from Chelmsford, population 279, is situated on the Lare Brook; the church has a brick tower. The great entrance tower is still standing of Laver Marney Hall, one of the finest and earliest brick mansions in the country. It was erected in 1520 by Henry Lord Marney. From the tower fine sea views are obtained. *Leigh*, 19 miles S.S.E. from Chelmsford: population, 1370. The houses are principally arranged in one street running along the foot of an eminence and on the bank of the Thames. The summit of the eminence is crowned by the church with its ivy-mantled tower, and the manor-house. The population consists chiefly of fishermen, engaged in the shrimp, oyster, and shell-fish trade. The oyster spawn is brought from the French coast and elsewhere, and placed in the Leigh oyster beds to grow and fatten for market. There are a small custom-house and coast-guard station here. The Wesleyan Methodists have a chapel, and there are National and Infant schools. Some Roman coins have been discovered at Leigh. *Great or Much Leighs*, or *Lees*, 7 miles N.E. from Chelmsford: population, 874. The church is an ancient edifice; it has a Norman door and window. Near it is a round tower built of flints and stones. There is a Charity school. *Little Leighs*, or *Lees*, on the river Ter, 7 miles N.E. from Chelmsford, population 164, has a small church with a wooden spire. *Lees Priory*, founded by Ralph Gernon in 1229, was at the dissolution granted to Sir Richard Rich, who built on its site a splendid family residence: it now forms a part of the estates of Guy's Hospital. *Leyton*, or *Low Leyton*, 27 miles S.W. from Chelmsford and $5\frac{1}{2}$ miles N.N.E. from London, population 3901, including 499 in the West Ham Union workhouse, is very pleasantly situated on the left bank of the river Lea. John Strype, the historian and antiquary, was vicar of this parish for nearly seventy years: his tomb is in the chancel of the church. There are chapels for Independents and Wesleyan Methodists, 2 Free schools, and 8 almshouses. Many London merchants reside at Leyton. Roman and other antiquities have been found in considerable number. *Leytonstone*, a hamlet of Leyton, has many handsome villas, a district church recently erected, and a National school. *Littlebury*, 31 miles N.W. by N. from Chelmsford, population 934, on the left bank of the river Granta or Cam, belonged in the 9th century to a monastery in the Isle of Ely. The church occupies the site of an ancient camp. There is a Free school. Agricultural implements are manufactured to a small extent. *Loughton*, 20 miles W.S.W. from Chelmsford: population, 1237. The manor was granted by Harold II. to Waltham Abbey; the houses are chiefly in Loughton-street on the Epping road: very pleasant rural scenery is found here. The church, about three centuries old, is a mile east from Loughton. The Baptists have a chapel, and there are National and British schools. *Great Maplestead*, 18 miles N.N.E. from Chelmsford, population 494, is an ancient village occupying an elevated site. The church has a square tower. There is an Infant school. Hops are extensively cultivated in the vicinity. *Little Maplestead*, 19 miles N.N.E. from Chelmsford, population 367: the Knights Hospitallers of St. John of Jerusalem had a preceptory of their order here, founded in 1186 by Julian de Burgh. The round church of the preceptory is one of the few round churches still existing in England. *Margaretting*, $5\frac{1}{2}$ miles S.S.W. from Chelmsford, population 517, is situated on the road from London to Colchester. A considerable part of the village is built along the road at some distance from the church. *Mountnessing*, or *Mountnessing-street*, 8 miles S.W. by W. from Chelmsford, population 845: some remains exist here of Thoby Priory, founded in 1141 for Augustinian canons. *Nazing*, or *Nasing*, 37 miles W. from Chelmsford: population, 757. The manor was given by Harold II. to Waltham Abbey: the church is situated on an elevation affording fine prospects over the course of the river Lea. There is a Charity school. *Nazing Park*, in the vicinity, is a fine mansion, the seat of the Palmer family. *Black Notley*, 10 miles N.N.E. from Chelmsford: population, 527. Numerous antiquities have been found here. There are corn-mills in the vicinity. Bishop Bedel was born in the parish; Ray, the distinguished naturalist, was buried in the churchyard of Black Notley. *Great Oakley*, 34 miles N.E. from Chelmsford, population 1177, on the cross road from Colchester to Harwich. The parish church is a very old building: the spire has been recently rebuilt. There are two Dissenting chapels and a National school. *South Ockendon*, 21 miles S.S.E. from Chelmsford: population, 1021. The church, a very ancient edifice, has a round tower and an elaborately designed Norman door. *Parn-don*, or *Parrington*, 36 miles W. by N. from Chelmsford, population 488, is seated on a hill. A monastery of the Præmonstratensian order was founded here by Roger de Parrington; it was removed in 1180 to Maldon. *Plaistow*, 26 miles S.E. from Chelmsford, is in the parish of West Ham: the population of Plaistow ecclesiastical district was 2668 in 1851. Much fertile marsh-land lies between the village and the river Thames; and there are extensive market-gardens. There are a church, built in 1830, a Quakers' meeting-house, an Independent chapel, National and British schools, an Infant school, and a Temperance hall. Many villa residences are in the neighbourhood.

Near Plaistow is the Barking Road station of the Eastern Counties railway. *Pleshey*, 7 miles N.N.E. from Chelmsford: population, 351. The church once formed part of a college founded in 1393 by Thomas de Woodstock, afterwards duke of Gloucester. There are some remains of the castle of Pleshey, where Gloucester was arrested by order of his nephew, Richard II. *Prittwell*, 20 miles S.E. from Chelmsford, population 2462; supposed to be so named from a well in the priory. The village is within a mile of the coast. The sea has made considerable encroachments on the land in this parish. The village of Prittwell consists of two streets on the slope of a hill, with the church on the summit. The church has a nave and chancel and a side aisle. At the west end is a fine tower in the perpendicular style, unbattled, with strong buttresses and rich pinnacles. A priory of Cinnia monks was once here. There is a National school. *Purfleet*, formerly written *Pourteflete*, or *Portflete*, on the left bank of the Thames, 21 miles S.S.E. from Chelmsford, population included in the parish of Thurrock, belonged to the Knights of St. John of Jerusalem; the Marditch stream here enters the Thames, forming a small harbour at the confluence, where is a good quay. Steam-vessels plying between London and Gravesend frequently call here, and the Tilbury and Southend railway has a station here. The village commands a fine view of the Thames. Chalk-pits and caverns occur in the vicinity. At Purfleet are large powder establishments belonging to government. *Purleigh*, 10 miles E. by S. from Chelmsford: population, 1184. The church is situated on a hill, and is a commodious and handsome edifice with an embattled tower. There is a National school. *Radwinter*, 22 miles N.N.E. from Chelmsford, population 916, is situated on the left bank of the Blackwater, near its source, here called the Pant or Freshwell; the church has a massive embattled tower and a lofty spire. Several gentlemen's seats are in the vicinity. *Rainham*, or *Raynham*, on the right bank of the Ingerburn, a feeder of the Thames, 22 miles S.E. by S. from Chelmsford: population, 863. The village stretches along the London road, and commands a fine view of the Thames. There is a station here of the Southend railway, and a convenient quay at the mouth of the river. There is a church and a Wesleyan chapel. *Ridgwell*, or *Redgwel*, 24 miles S. by E. from Chelmsford: population, 303. Roman coins and the remains of a Roman villa have been found here. In 1318 Ridgwell had a weekly market. The church has a square embattled tower with five bells. The *Rodings*, or *Rootherings*, between Ongar and Dunmow; ten villages receive this appellation, such as *High Roding*, *Aythrop Roding*, *White Roding*, &c. The name is derived from the river Roding. Of the nine parishes thus designated, the aggregate population in 1851 was 2235. The district is agricultural. *St. Osyth*, 33 miles E. by N. from Chelmsford, at the head of a small creek, which flows into the Colne near the mouth of that river, population 1696, chiefly agricultural. The creek is navigable up to the quays near the village. An abbey for canons of St. Augustine was founded here in or before 1113. The quadrangle of the ancient monastic buildings is almost entire, except on the north side, where it has been replaced by modern apartments; the entrance is by a beautiful gateway of hewn stone mixed with flint, having two towers and two posterns. The church is a large edifice with a handsome tower. There is a chapel for Wesleyan Methodists. Some husbandry is done in corn and coals; malting, brewing, and lime-burning are carried on. *Great*, or *Old Sampford*, or *Sandford*, on the left side of the small river Pant, 22 miles N. by W. from Chelmsford: population, 906. The parish church occupies an elevated site. There is a chapel for Baptists. The straw-plait manufacture is carried on here: a fair is held on Whit-Monday. *Shalford*, on the right bank of the Blackwater, 15 miles N. by E. from Chelmsford, population 816; the church consists of a nave, north and south aisles, and chancel, and a tower. Malting is carried on, and there are several corn-mills. Some good family mansions are in the neighbourhood. *Southend*, 21 miles S.E. from Chelmsford, is pleasantly situated on the side of a wooded hill, near the mouth of the Thames, and is in considerable repute as a bathing-place. The population of the village in 1851 was 1141. The Terrace, in what is commonly called New Southend, or the Upper Town, is a handsome range of buildings. There are a good hotel, an assembly room, a theatre, and a library. A new church has been erected, and there are a chapel for Independents and a National school. The London and Tilbury and Southend railway terminates here, and steamers ply regularly to and from London, and also Gravesend. A convenient pier, with a line of iron rails, has been carried out above a mile from the shore, for landing and embarking steamboat passengers. Vessels of small size are built, and there is a brewery. In the neighbourhood are extensive gardens. *Southminster*, 20 miles E.S.E. from Chelmsford, population 1432; the church is a handsome and commodious edifice; there are an Independent chapel and a National school. Three fairs are held annually. Malting is carried on. *Stanford Rivers*, 14 miles W. by S. from Chelmsford, population 1032, including 145 persons in the Ongar Union workhouse. The place has probably its name from a stone ford over the river Roding. The church chancel is very ancient and contains some curious monuments. There is here an Independent chapel. Several fine mansions are in the neighbourhood. *Stebbing*, 13 miles N. by W. from Chelmsford, population 1398, is situated on high ground, on the left side of a small brook, a feeder of the Chelmer; the church is ancient, and has a

spacious and lofty nave, two aisles, and a large chancel. The Quakers and Independents have places of worship. Near the village are two artificial mounds. Brick-making and malting are carried on, and there are corn-mills. *Stisted*, or *Stisead*, 15 miles N.N.E. from Chelmsford, population 888; on the left bank of the Blackwater. The church has Norman pillars, and on the south side a tower surmounted with a spire. There are a Free school and an infant school. Brick and tile making and malting give employment; and in the vicinity are some corn-mills. *Stratford*, or *Stratford Langthorne*, 25 miles S.W. from Chelmsford, and 3 miles E. from London: population, 10,586. Stratford is named from the ford over the river Lea, on the left bank of which it is situated. A district church was erected here in 1836. The Baptists and Wesleyan Methodists have places of worship. There are National, British, and Infant schools, and a savings bank. Numerous manufactures are carried on in the district; chemical and print works, coach factories, flour mills, and distilleries employ numerous hands. Many London merchants have residences in the village and its vicinity. *Takeley*, 17 miles N.W. from Chelmsford, population 991; the church has an embattled tower, surmounted with a spire. There is an Independent chapel. A small priory was founded here in the time of Henry I. *Terling*, on the Ter, a feeder of the Chelmer, 7 miles N.E. from Chelmsford: population, 900. The bishops of Norwich had formerly here a palace, and a large chapel which possessed the privilege of sanctuary. Henry VIII. had a residence here. The church, which is ancient, is in the centre of the village; it has a tower with a shingled spire. Malting is carried on. *The Tey*, are three villages called *Great*, *Little*, and *Mark's Tey*. *Great Tey* is near the head of a small brook, a feeder of the Colne, 19 miles N.E. from Chelmsford: population, 735. The church, which is on the summit of an eminence overlooking the river Roman, has a square tower of stone, in which are eight bells. *Mark's Tey*, 18 miles N.E. from Chelmsford, population 437, is situated on the Roman road from Colchester to St. Albans. *Mark's Tey* Hall, the remaining portion of which is now occupied as a farm-house, still retains part of the old moat. *Thoydon Garmon*, or *Coopersale*, 18 miles W.S.W. from Chelmsford, and about 1 mile N. from Thoydon Bois: population, 1237. The church consists of a nave and chancel, and has a steeple built in 1470 by Sir John Crosby, of Crosby Hall. There are almshouses for four poor widows. *Thoydon Mount*, 16 miles W.S.W. from Chelmsford, on the left bank of the Roding: population, 194. The church was erected by Sir William Smith, in the 17th century. The tower is of brick. Hill Hall, the seat of the family of Smytha, is a fine Elizabethan mansion, situated in a spacious park. *East Tilbury*, 22 miles S. by W. from Chelmsford, population 401, is on the left bank of the Thames, at that part of the river called the Hope. The tower of the church was destroyed by the Dutch in 1667; there is now a battery. *West Tilbury*, 20 miles S.S.W. from Chelmsford: population, 519. Tilbury Fort in this parish is on the left bank of the Thames, where is a ferry over the river to Gravesend on the Kent coast. The fort was originally built as a block-house by Henry VIII. Elizabeth lodged for awhile in the fort, and reviewed the troops collected here in preparation for meeting the Spaniards of the 'Armada.' The fort is maintained for the protection of the Thames. *Tillingham*, 22 miles E. by S. from Chelmsford: population, 1048. The church, erected in 1708, has a western stone tower. The Baptists have a place of worship. Two fairs are held annually. There are almshouses for four poor persons. *Tollesbury*, at the mouth of the estuary of the Blackwater, and on its left bank, 18 miles E. by N. from Chelmsford: population, 1193. The church is a venerable structure of large size. The Independents have a place of worship. Many of the inhabitants are engaged in the oyster fishery. A fair is held annually in June. In this parish is Tiptree Farm, on which so many interesting experiments with improved methods of cultivation have been made of late years by Mr. Mechi. *Tolleshunt D'Arcy*, 18 miles E. by N. from Chelmsford, population 792; the church is built chiefly of stone, and has at the west end an embattled stone tower. Malting is carried on. *Toppersfield*, or *Toppesfield*, 23 miles N. by E. from Chelmsford, population 1051; the church, erected in 1519, is a spacious and handsome edifice. There is a Free school. In 1800 some skeletons, and several Roman antiquities, were discovered here. *Great Totham*, 12 miles E.N.E. from Chelmsford, population 786, is an ancient village. The parish church is a small edifice. In the vicinity are some flour-mills. Bricks are made here. *Upminster*, 20 miles S.E. by S. from Chelmsford, population 1228, is on the left bank of the Ugerburn. Upminster Hall was given by Harold II. to Waltham Abbey. The abbots took up their residence here, and built the mansion of brick. It has a chapel of stone, and an old font. There are a church and an Independent chapel. A brick manufactory employs some hands. *Great Wakering*, 24 miles S.E. from Chelmsford, population 905; is near that part of the coast which is skirted by the Maplin sand; the islands of Great Potten and Russells belong to this parish. There are here a church with a western tower, an Independent chapel, and a National school for boys and girls. *Great or Much Waltham*, 4 miles N. by W. from Chelmsford, population 2335; is on the right bank of the Chelmer, on the road from Chelmsford to Dunmow; the church is a commodious and handsome building, with a square tower and eight bells. In the parish is Black Chapel, a chapel of ease, constructed of wood. Malting employs some of the population. There are corn-mills near

the village. In the neighbourhood are several fine mansions and gentlemen's seats. *Little Waltham*, on the left bank of the Chelmer, 4 miles N. by E. from Chelmsford: population, 651. The church has a square tower and 5 bells. Corn-mills and malting employ several hands. *Wanstead*, 25 miles S.W. from Chelmsford, population 2207, is on the right bank of the Roding; the church, erected in 1790, is a small edifice. A tessellated pavement and other Roman antiquities were found in the park in 1735. *Wanstead Park*, occupying a considerable extent of ground, is close to the village; and near *Wanstead* and *Snaresbrook*, a hamlet in the parish, are many villa residences. At *Snaresbrook* is the Infant Orphan Asylum, opened June 1843, for 500 orphans. The number of inmates when the Census was taken in 1851 was 404. There are in *Wanstead* a National school for boys and girls, and an Infant school. *North Weald*, 15 miles W. by S. from Chelmsford, population 842, is known also as *North Weald Bassett*; the church is an ancient edifice with an embattled tower. The houses are irregularly built; there are several parochial charities. *South Weald*, 14 miles S.W. from Chelmsford, population 3588, of which the hamlet of *Brentwood* contains nearly two-thirds. The church, partly of Norman date, is very interesting to the architectural antiquary; it contains some fine Norman sculpture. Near the village is *South Weald Hall*, a fine mansion in a richly wooded park, from which are obtained prospects over a wide range of interesting scenery. Traces of a circular camp have been found in the neighbourhood. Many residences of opulent families are in the vicinity. A Charity school, founded by the Rev. C. A. Belli, is for boys and girls. *Wethersfield*, 17 miles N. from Chelmsford: population 1770, is near the left bank of the *Blackwater*. The church, which is ancient, consists of a nave and two aisles, with a tower. There are in *Wethersfield* National and Charity schools for boys and girls; and at *Beazley End* a Charity school. A brewery, a brick manufactory, and corn-mills, give employment to some of the population. *Great Wigborough*, 22 miles E.N.E. from Chelmsford: population, 471. The parish belonged anciently to the abbess of *Barking*; the church is on the summit of a hill, from which is an extensive prospect over the mouth of the *Blackwater* to the sea. The building consists of a nave and chancel, with a tower. *Wivenhoe* is on the left bank of the river *Colne*, at the junction of the Roman, 27 miles E.N.E. from Chelmsford: population, 1672. The village is on the slope of a hill, and commands a pleasant prospect down the river. The church, an ancient edifice, has an embattled tower. The Independents have a place of worship. *Wivenhoe* has a commodious quay and a custom-house; it may be considered the port of *Colchester*. The fishing of oysters and soles gives employment to many of the inhabitants. Boats for the oyster-dredging are built here. Brewing, malting, and rope-making are also carried on. A fair is held on 4th September. *Wix, Weeks, or Wicks*, 34 miles N.E. from Chelmsford: population, 778. The church is a small edifice, built in 1740. There are a Wesleyan chapel and a National school. Some remains exist of a nunnery for Benedictines, founded in the time of *Henry I.* Bricks and tiles are made in the parish; and there are corn-mills. *Woodford*, is on the east side of *Epping Forest*, and to the west of *Hainault Forest*, 25 miles S.W. from Chelmsford: population, 2774. It is a long straggling place with a number of good houses, inhabited chiefly by London merchants and tradesmen. The church is modern. The Independents and Wesleyan Methodists have places of worship. A group of houses about a mile north from the main part of the village takes the name of *Woodford Wells*, from a mineral spring, now in little repute. A considerable amount of retail trade is carried on in the village. *Woodham Ferrers, or Ferris*, 8 miles S.E. from Chelmsford: population, 981. The church consists of a nave, two aisles, and chancel, with a square tower; and contains some monuments of the family of *Sandy*. There are here an Independent chapel, and a National school for boys and girls. *Great Yeldham*, 22 miles N. by E. from Chelmsford, population 716, is situated on the river *Colne*. The church is a massive stone building; it contains some handsome monuments. There are a Free Grammar school and an almshouse for 6 tenants. In the centre of the village is the *Yeldham great oak*, 80 feet high, and 30 feet in girth at 4 feet from the ground. Hops are cultivated here.

Divisions for Ecclesiastical and Legal Purposes.—Essex constitutes the largest part of the diocese of *Rochester*, which is in the ecclesiastical province of *Canterbury*; and is divided between the three archdeaconries of *Colchester*, *Essex*, and *St. Albans*; a portion of the county is in the diocese and archdeaconry of *London*. According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 768 places of worship, of which 433 belonged to the Established Church, 134 to Independents, 63 to Wesleyan Methodists, 59 to Baptists, 24 to Primitive Methodists, 19 to Quakers, and 34 to minor bodies. The total number of sittings provided was 218,467.

By the Poor Law Commissioners the county is divided into 17 Poor Law Unions: *Billericay*, *Braintree*, *Chelmsford*, *Colchester*, *Dunmow*, *Epping*, *Halstead*, *Lexden* and *Winstree*, *Maldon*, *Ongar*, *Orsett*, *Rochford*, *Romford*, *Saffron Walden*, *Tendring*, *West Ham*, and *Witham*. These Poor-Law Unions include 370 parishes and townships, with an area of 869,085 acres, and a population in 1851 of 341,564; but the boundaries of the Poor-Law Unions are not strictly co-extensive with those of the county. Essex is in the home circuit. The assizes and

quarter-sessions are held at *Chelmsford*, where is the shire-hall, an elegant structure, and the old county-jail and house of correction. The county-jail is at *Springfield*, a village about a mile from *Chelmsford*, on the road to *Colchester*. The northern and the southern divisions of the county each return two members to the Imperial Parliament.

History and Antiquities.—In the earliest dawn of the authentic history of our island, Essex was inhabited by the *Trinobantes*, a powerful tribe whose dominions perhaps extended across the *Stort* and the *Lea* into *Hertfordshire* and *Middlesex*. At the time of *Julius Cæsar's* invasion (B.C. 55 and 54), *Imanuentius*, as he is called in Latin, prince of the *Trinobantes*, had been slain by *Cassivellaunus*, the chief of a neighbouring tribe. *Mandubratius*, the son of *Cassivellaunus*, was driven into exile, and had gone as a suppliant to *Cæsar* in *Gaul*. By *Cæsar's* help *Mandubratius* was restored to his father's throne, and was afterwards secured in its possession by an express stipulation in the treaty between *Cæsar* and his British opponents. The alliance of *Rome* seems to have promoted the aggrandisement of the *Trinobantes*: *Cunobelin*, king of that tribe, was a potentate of considerable name, and some coins of his yet extant attest the commencement of civilisation and the arts in this county. [BRITANNIA.] *Cataractacus*, or, as he is commonly called (after *Tacitus*), *Caractacus*, and *Togodumnus*, sons of *Cunobelin*, succeeded to their father's power, and had to bear up against the weight of Roman hostility when the invasion was renewed in the reign of *Claudius* (A.D. 43). After sustaining several severe defeats, the Britons retired into the marshes of *Essex*, and fighting with the vigour of despair, were enabled for a time to repel their assailants, though with the loss of *Togodumnus*, one of their leaders. The *Trinobantes* were subdued by *Claudius* in person, and their capital, *Camulodunum*, was taken, and subsequently made the seat of a Roman colony. This colony was however destroyed in the revolt of the Britons under *Boadicea*, and the Roman garrison was slaughtered. But the overthrow of *Boadicea* by *Suetonius* (A.D. 61) put an end to their revolts, and decided, though it did not complete, the reduction of *South Britain*. In the Roman division of *Britain*, *Essex* was included in *Flavia Cæsariensis*.

Several Roman stations were in *Essex*. Of these the most important is *Camulodunum*, of which antiquarians are now pretty well agreed that *Colchester* is the site. The other stations appear to have been *Duroilitum*, near *Romford*; *Cæsaromagus*, near *Widford*, a village about a mile south-west of *Chelmsford*; and *Canonium*, near *Kelvedon*. If these positions are fixed with tolerable approximation to accuracy, the Roman road must nearly have coincided with the modern road from *London* to *Colchester*, which is probable. Another station of the *Itinerary* of *Antoninus*, *Ad Ansam*, was probably on the border of the county, perhaps at *Stratford*, just across the *Stour*, in *Suffolk*. A Roman road, the line of which is still visible in many places, crossed the county from *Bishop's Stortford*, in *Herts*, by *Dunmow* and *Coggeshall* to *Colchester*.

Roman antiquities have been dug up in many parts of the county, but especially at *COLCHESTER*; around which town are the remains of intrenchments and other military works. Tessellated pavements and other antiquities have been discovered on *Mersey Island*. Roman remains have also been found at *Wanstead*; at *Caneudon*; at *Coggeshall*; at *Toppesfield*; at *Ridgwell*; at *Watsoe bridge*, between *Birdbrook* and *Steeple Bumpstead* parishes, near the *Stour*, where is a Roman camp; and at *Great Chesterford*, which was undoubtedly the site of a Roman station. *Colchester* appears to have been, in the latter period of the Roman dominion, the seat of a bishop. *Adelfric*, the bishop of *Colin*, or *Colchester*, assisted at the councils of *Arles*, A.D. 314; *Sardica*, A.D. 347; and *Ariminum*, A.D. 359.

When the Saxons established themselves in *Britain*, *Essex*, with some parts of *Hertfordshire* and *Middlesex*, constituted a small kingdom, the possessors of which were, from their relative situation, called the *East Saxons*; from them the county has derived its present designation. This kingdom of *Essex* gradually extended across the *Lea* into *Middlesex* and *Hertfordshire*; and comprehended *London*, then a flourishing trading place, and which appears to have become the capital of the *East Saxon* kingdom. The episcopal church of *St. Paul* in *London* was founded by *Æthelbyrht*, king of *Kent*, the first of the *Saxon* princes who embraced Christianity, and to whom his nephew, *Saebryht*, king of *Essex*, was in subjection. *Mellitus*, who had been sent from *Rome* to assist the missionary *St. Augustine* in evangelising *England*, was appointed Bishop of *Essex*, into which kingdom he had been sent as missionary by *Augustine*. Upon the death of *Saebryht* (A.D. 616), his successors restored Paganism and persecuted the professors of Christianity. About 653, *Sigebriht*, or *Sigeberht*, the Good, being converted by his friend *Oswy*, king of *Northumberland*, whom he used frequently to visit, and baptized by *Finan*, bishop of *Lindisfarne*, restored Christianity in *Essex*, and sent for some *Northumbrian* monks to come and instruct his subjects. *Sigebriht* was assassinated two years afterwards. About 823, *Kent* and *Essex*, which had sunk into mere dependencies of *Mercia*, were subdued by *Egbert* of *Wessex*, and probably united, under the designation of the kingdom of *Kent*, occupied by *Ethelwulf*, son of *Egbert*, as subordinate to his father. Of the kingdom of *Kent* mention is occasionally made in the history of *Ethelwulf* and his sons, until the reign of *Alfred*, by whom the *Saxon* kingdoms were finally incorporated; and *England*, with the

exception of those parts which were occupied by the Danes or retained by the Britons, was consolidated under one sceptre.

When Alfred, after the recovery of his throne, assigned to the practical Northmen, or Danes, a settlement in and about East Anglia (878), Essex was included in the ceded territory. Thirteen or sixteen sail of Danish piratical vessels were destroyed in the month of the Stour, near Harwich (884) by the ships of Alfred; but the victorious fleet was destroyed near the Thames mouth by some ships fitted out by the colonists of East Anglia, in violation of their engagements with the king. For a space of about three years (894-896) Alfred had much trouble in resisting the attacks of Hasting, the Danish piratical chief; ultimately however, Hasting was compelled to abandon England, and Essex returned peaceably under the West Saxon sway.

After the death of Alfred (901), and the choice of Edward the Elder as his successor, Æthelwald, son of Ethelbert, Alfred's elder brother, claimed the throne, and having obtained foreign aid, returned and subdued Essex. The subsequent death of the invader in battle (905) put an end to the strife, and restored Essex to the sway of Edward, who subsequently rebuilt or fortified Witham in order to bridle the rebellious temper of the Danish colonists; and some years after (920) fortified Maldon. For about a century after this the Danes continued their attacks, and were on two occasions brought off by the payment of a large sum of money. In 1016 Essex was the scene of a fierce battle between Canute and Edmund Ironside, who had succeeded to the thrones and the hostility of their respective fathers Svein and Ethelred. Canute, by the treachery of Eadric (brother-in-law and foster-father to Edmund), obtained the victory, in a battle fought at Assandun, which some suppose to be Ashdon, near Saffron Walden; others, with more probability, fix the scene of conflict at Assingdon, or Ashingdon, about 3 miles north from Rochford. At Canewdon, a short distance eastward from Ashingdon, are the remains of a camp, supposed to have been that of the Danes; the fosse is yet visible.

In the civil war between King John and his barons, the Earl of Winchester, one of the confederated lords, with an army of foreigners whom he had brought into the country in the year 1215, besieged Colchester castle, and he or some of his party took the castle and plundered the town: but it was retaken by the king, after a few days' siege. During the minority of Henry III. Colchester fell into the hands of the Dauphin Louis (1218).

Essex contains many historical memorials in the form of encampments, castles, and other ruins. Camps may be traced at the village of Danbury (Danes-byrig), on a high hill between Chelmsford and Maldon, at Maldon (probably the work of Edward the Elder), at Witham, at Ambresbury Banks, near Epping, at Ruckholt, near Barking, at South Weald, near Brentwood, at Canewdon, and at Blunt's Walls, near Billericay. Of the castles of the Norman period there are several remains. Those at Colchester, Heddingham, Walden, Ongar, and Raleigh have been noticed in this article or under their respective heads. Pleshy castle was probably built by William de Magnaville, to whose father, Geoffrey de Magnaville, the place had been granted by Stephen. The keep, with the moat which surrounded it, was within an intrenchment which had previously formed part of a Roman camp or station; the mound on which the donjon was built, and the bridge which led to it over the surrounding moat, are all that remain of the once proud structure. Of Hadleigh Castle, near Raleigh, dilapidated portions of two towers yet remain, forming a picturesque ruin.

Of the halls and manor-houses which succeeded the Norman castles may be mentioned Heron Hall, near East Horndon, Nether Hall, near the confluence of the Lea and the Stort, Tolleshunt Beckingham, or Tolleshunt Magna, between Maldon and Colchester, Layer Marney Hall, in the same neighbourhood, Belhus or Bellas House, near Purfleet, Covey or Covey Hall, near White Roding, Eastbury, near Barking, Danbury Place, between Chelmsford and Maldon, New Hall, near Chelmsford, and Toppinghoe Hall, between Chelmsford and Witham, some of which are still nearly entire, and of others considerable portions remain. Besides ancient houses which have been already noticed in the course of this article, we may mention Gosfield Hall, near Halstead, which is probably of the time of Henry VII. This mansion is of brick, and incloses a quadrangular court, into which all the lower tier of windows formerly opened. There were no outside windows on the ground floor, and those of the upper story were strongly barricaded, so as to give to the place considerable strength.

At the Reformation Essex possessed several religious houses, of which there are some remains. There were at the time of the suppression seven of the greater monasteries, that is, of those which, according to the valuation of their lands and endowments, possessed a clear yearly revenue of above 200*l.*: they were—the Benedictine abbey of Barking (Barking), Chich (or St. Osyth), Colchester, Walden, and Waltham, and the Cistercian abbey of Coggeshall and Stratford Langthorne. Their aggregate yearly revenue was 4201*l.* 3*s.* 4*d.* gross, or 4099*l.* 11*s.* 2*d.* clear.

Of the smaller religious houses there are remains of Bileigh or Beleigh Abbey, near Maldon; of Tilley Priory, between Dunmow and Thaxted; of Byckuere Priory, between Chelmsford and Maldon; of

Latton Priory, near Harlow; of Lees Priory, between Chelmsford and Braintree; and of Thoby Priory, between Brentwood and Ingatstone. The churches of Blakemore or Blackmore Priory, between Ingatstone and Ongar, and of Hatfield Peverel Priory, between Chelmsford and Witham, have been made parochial: the latter has been much altered; it retains a good Norman door, with zigzag mouldings.

Of the early churches, besides those which we have already had occasion to mention, the following deserve notice:—Greenstead church, near Ongar, is a very curious edifice, and one of the most ancient in the kingdom: it seems probable that it was built as a sort of shrine for lodging the body of St. Edmund, king of East Anglia, on its being taken back from London to Bury St. Edmund's, in the early part of the 11th century; and that it was afterwards enlarged to serve as a parish church. The nave is entirely composed of wood, the sides being formed of the trunks of large oaks, split or sawn asunder, and set upright close to one another. They are let into a wooden sill at the bottom, and into a plate at the top, and secured with wooden pins. The remainder of the church is modern. The entire size of the original or wooden part of the church is 29 feet long by 14 feet broad, and 5½ feet high to the spring of the roof. The whole was carefully restored in 1849; every portion of the ancient woodwork having been scrupulously replaced in its original position. Little Maplestead church, near Halstead, is a building of great interest, being the latest of the few round churches in the kingdom; it is of pure Decorated character, and its details are plain, but very good. The chancel end of this church is also semicircular, and is probably the latest erection of that form in England. South Ockendon church, near the Thurrocks, has a round tower, such as may be commonly seen in Norfolk, but not much elsewhere: it has an elaborately and variously enriched Norman door. Corringham and some other churches have Norman portions.

When the Roman Catholic faith regained a temporary predominance under Queen Mary, the persecution was very severe in Essex. Seventeen Protestants (five of them women) were burnt at Colchester, and one died in prison; and two persons (one a woman), were burnt at Stratford.

The year 1571 was remarkable for the settlement of the Flemish refugees at Colchester; they introduced the woollen manufacture into that and several other towns in Essex. Reference has already been made to the preparations at Tilbury to resist the invasion of the Spauiards, who fitted out the 'Invincible Armada' in 1588. On that occasion Colchester furnished two ships and a pinuace to the English fleet. In 1595 the same town furnished three ships for the expedition to Cadiz.

In the war with Spain at the beginning of the reign of Charles I., a Spanish fleet caused alarm by appearing off Harwich; but they made no attempt to land (1625). In the civil war at the close of the same reign, Essex was almost entirely in the interest of the Parliament, and joined in an association for mutual aid and succour with the other eastern counties of Norfolk, Suffolk, Cambridge, and Herts: this was called the Eastern Association. In the year 1648 Essex was the scene of an abortive attempt of the Royalists. A part of the royalist forces which had been raised in Kent under Goring, earl of Norwich, and Sir William Waller, and were pressed by Fairfax and the parliamentary army, crossed the Thames into Middlesex, and retreating thence into Essex, were joined by the Royalists of that county (who had previously seized the parliamentary committee at Chelmsford), and by some royalist gentlemen from Hertfordshire. They retired first to Chelmsford, thence to Braintree, taking in their way Lees House, and thence to Colchester. The siege and capture of the town by the Parliamentarians is mentioned in the article COLCHESTER. The history of the county presents no later events of any interest.

In 1851 the county possessed 15 savings banks—at Barking, Chelmsford, Colchester, Great Dunmow, Epping, Halstead, West Ham, Harwich, Castle Heddingham, Leyton, Manningtree, Rochford, Romford, Saffron Walden, and Witham: the amount owing to depositors on the 20th November, 1851, was 478,955*l.* 8*s.* 6*d.*

ESSEX. [CONNECTICUT.]

ESSINGTON, PORT. [NORTH AUSTRALIA.]

ESSLINGEN, a town in Württemberg, in the circle of the Neckar, is situated in a pretty and fertile country on the river Neckar, surrounded by heights crowned with forests and vineyards, 8 miles by railway E. from Stuttgart, and has about 7000 inhabitants. It is an old town, and was a free city of the Gorman empire and the favourite residence of some of the emperors. The inner town has massive walls and towers round it; and the five suburbs, one of which stands on an island in the river, while another is attached to the old burg or castle which crowns a hill, are also protected by stout walls. Esslingen has five churches, one of which, the Franen-kirche (Church of Our Lady) is distinguished by its fine gothic spire, 230 feet high, and was built in 1440; a handsome town-hall; a richly-endowed hospital; a high school; a training-school for teachers; and an orphan asylum. On the Rothenberg, a hill near the town, is a Greek chapel, erected on the site of the old castle of Württemberg, over the remains of a Russian princess, queen of Württemberg; it contains statues of the four Evangelists by Danueker and Thorwaldsen. Esslingen has manufactures of woollens, cotton and woollen yarns, lackered iron and

tin wares, paper, &c., and a good trade in wine and other agricultural products.

ESSLING, or ESSLINGEN, a small village in Lower Austria, about 7 miles E. from Vienna, from which Marshal Massena derived his title of Duke of Essling, bestowed upon him by the Emperor Napoleon I. [ASPERN.]

ESSOVES. [AUBE.]
 ESTAING. [AVEYRON.]
 ESTAIRES. [NORD.]

ESTHONIA, or REVEL, one of the Baltic provinces of Russia, is bounded N. by the Gulf of Finland; E. by the government of St. Petersburg, from which it is separated by the Lake Peipus and the Narova; S. by Lake Peipus and the government of Livonia; and W. by the Baltic. The area is 7993 square miles, including the islands along the coast—*Dago* (434 square miles), *Worms* (36 square miles), *Nuuk*, or *Nouks* (33 square miles), *Wrangel*, *Nargen*, the two *Roogs*, *Odenholm*, *Eckholm*, *Heft*, *Krankholm*, and 59 smaller islands, and the portion of Lake Peipus that belongs to this government, and extends over 142 square miles. The population of Esthonia was estimated in 1846 at 310,400.

Esthonia, which is called by the native inhabitants *Werova*, 'borderland,' or *Meie-Maa*, 'our land,' was subjugated by the Danes in 1220, and in 1346 sold by them to the Teutonic knights, whose grand master, the first duke of Livonia and Esthonia, acknowledged the king of Poland as lord paramount in 1561. After being an object of continued contest between the Russians, Poles, and Swedes, it became at length a province of Sweden in 1660. It was wrested from the Swedish crown by Peter the Great in 1710, and was ceded finally to Russia under the treaty of Nystädt in 1721. The extent of the coast is about 350 miles long, without reckoning its windings. The surface of the province is level, occasionally varied only by isolated hills and eminences. The northern coast from Revel to the mouth of the Narova is several fathoms higher than the Baltic, and strewn with masses of granite: the western coast is lower, but both are edged for some miles inland by a deep bed of sand. The soil of the interior districts of Esthonia, which are the most fertile, is a mixture of loam, sand, and clay; in all parts are large swamps, many of which are impassable, except when hardened by the frosts of winter. The ratio of the cultivated to the uncultivated and wooded soil hardly exceeds one third.

Esthonia contains 228 small lakes, besides the northern end of Lake Peipus. The Narova, which flows northward out of the Peipus into the Baltic, skirts the east of the government of Esthonia, but the stream belongs entirely to the province of St. Petersburg. This province has no streams larger than rivulets or brooks, some of which flow under ground, and occasionally contain pearl-mussels. There are sulphureous and saline springs.

As the province lies between 58° 30' and 59° 40' N. lat. the climate must be severe, but owing to the proximity of the sea it is less so than that of some of the neighbouring provinces. The winter lasts from the end of October till May, and is very cold and stormy; there is hardly any spring, summer, which is short and hot, following almost immediately on the melting of the snow; the autumn is dreary and rainy, and the marshy soil then becomes a sea of mud, impassable till the frost hardens it. Rain and snow often fall at the same time; mist prevails all through the year, and for weeks together it drizzles without either clearing up or coming to rain. In October and November the nights and days are scarcely distinguishable, so dense are the clouds. The summer nights, which are as light almost as day, and the Aurora Borealis in winter, are pleasant peculiarities of the climate.

The soil, though deficient in fertility, yields more than sufficient for the maintenance of the population. Agriculture is the principal branch of industry, and about one-fifth of the whole surface is under the plough. The chief crops are rye, barley, and oats; some wheat, maize, hemp, flax, hops, and tobacco are also raised. The surplus corn is used for making spirits. The Weissenstein districts, in the south-east, produce much hemp and flax. As the harvest season is attended by heavy rains, the farmers have kilns in which the moist grain is dried, as described in the article COURLAND, vol. ii. col. 615. Esthonia has large meadows, and produces abundance of hay; it has likewise good grazing grounds. Vegetables are of universal growth, but little attention is given to fruits. The woods and forests, composed of the fir, pine, elm, birch, larch, and beech, occasionally intermixed with the oak, alder, lime, crab-apple, &c., spread over an area of about 3300 square miles; they are densest in the eastern districts of Wesenberg and Weissenstein. The land is in some parts manured with decayed wood.

Next to agriculture the rearing of cattle is the most important branch of rural industry. The native horses and horned cattle are small. Large droves of oxen from the Ukraine are fattened for the St. Petersburg market. The sheep are of the German white and black species. Goats, swine, and poultry are reared in great numbers. Of wild animals, wolves are the most common; next come bears, lynxes, foxes, badgers, martens, and squirrels; a few elks are to be met with in the Wesenberg forests. The fisheries along the coast and in Lake Peipus are very productive. The mineral products are stone for building, potters'-clay, and gypsum. There is abundance of peat, but wood is alone used for fuel.

The majority of the inhabitants are Esthoniaus: they are of Finnish descent, of diminutive stature, and have light-coloured hair, blue eyes, a small flat nose, and flattened face. The landholders are universally of German or Danish extraction, and constitute the aristocracy of the country; and there are some Russians and a few Swedes and Finlanders intermixed with them. The estates are all large; their management, the nature of the farm-buildings, and the relation between the aristocracy and the peasantry, are the same as stated in the article above referred to. [COURLAND.] But the dwellings of the peasantry are in general wholly inferior to those of the same class in Courland or almost any other part of Russia. The Esthonian peasant's house has only one apartment, with one opening—the door—through which the smoke has to make its way, for there is no chimney. This apartment serves as bed-room, sitting-room, kitchen, store-room, sheep-pen, and hog-sty. In these houses during the winter the men employ themselves in making sledge-runners, staves, hoops, wooden dishes and spoons, or in preparing sheep-skins for clothing. The women spin, weave, sew, and bleach, cut torches of hircwood, and plait birch-bark into sandals. The peasants were formerly serfs bound to the soil, but by a ukase of the emperor Alexander they are now bound to furnish only a fixed quantity of labour (not the whole time) to their masters; and by giving the lord half a year's notice, a peasant may quit the estate; but as the lord manages to keep him continually in his debt, this abstract right is of little use to the peasant. The peasant cannot acquire or hold landed property; if he leaves one master, it is only to place himself under another.

The Lutheran is the predominant religion of the province; even the Russo-Greeks have not more than eight or ten churches in it. The superintendence of all ecclesiastical affairs in the Lutheran Church is vested in the provincial consistory at Revel. The department of education, which includes a gymnasium at Revel and about fifty other schools, is under the control of the university of Dorpat.

The manufactures of Esthonia are extremely limited; the peasantry are clothed not only with linen but with coarse woollen cloth woven in their own houses. The only establishments of any importance are in Revel, where hats, leather, powder and starch, vinegar, and some iron-ware are made. Ships and boats are constructed in the capital and in the islands, and spirits are made on many estates as well as in the towns: the distilleries of spirits amount to nearly 400.

All transports of corn and other articles are made in winter, and if the season is mild, and consequently the forests and roads are marshy, communication between towns is cut off. In December, when the ground becomes firmly frozen, all the paths and roads are occupied by long files of sledges, each drawn by one small horse and laden with a few small sacks of corn, hastening away to the sea-port towns. All forest-labour is performed in the winter; in other seasons the marshy soil would not support the workmen. The quantity of wood used for fuel in the houses, distilleries, and kilns is enormous; the peasants' shoes and the bark for the house-roofs alone consume a large number of trees.

Revel is the emporium of trade, but for want of water-communications it is not of any great extent. The exports consist of corn, brandy, salt-fish, skins and hides, butter, tallow, smoked herrings and salmon, and salt.

Though public affairs are administered on the same footing as in the other Russian governments, the country retains some vestiges of its ancient constitution, among which are—a provincial college or council, an inferior tribunal of justice, a consistory, and the right of making brandy without a licence from the government.

Esthonia is divided into four circles. There is no town deserving the name in the whole province with the exception of Revel, which is described under its proper head. [REVEL.]

ESTISSAC. [AUBE.]
 ESTRELLA, SERIA D'. [BEIRA.]

ESTREMADURA, a province of Spain, is bounded N. by the province of Leon, S. by the province of Sevilla, W. by Portugal, E. by Castilla la Nueva, and S.E. by the province of Cordova. It is situated between 37° 58' and 40° 32' N. lat., 4° 32' and 7° 26' W. long. The greatest length north to south is about 180 miles; the greatest width east to west is about 180 miles. It is divided into the two following modern provinces:—

Provinces.	Area in Square Miles.	Population in 1849.
Badajoz }	14,330	336,136
Caceres }		264,988
Total	14,330	601,124

Surface.—A range of mountains, which is a continuation of the Montañas de Toledo, enters Estremadura from Castilla la Nueva, and crossing the province from east to west, joins the Serra de Portalegre on the frontiers of Portugal. This mountain range divides the province into two nearly equal parts, of which the northern part constitutes the modern province of Caceres, and the southern that of Badajoz. The northern part, or Caceres, is usually called Estremadura Alta, or Upper Estremadura, and the southern part, or Badajoz, Estremadura Baja, or Lower Estremadura. This central mountain

range separates the waters which flow northward into the Tagus from those which flow southward into the Guadiana. The eastern part, called the Sierra de Guadalupe, has an elevation of from 5000 to 6000 feet above the sea; the central part, called the Sierra de Benito, and the western, called the Sierra de San Pedro, are much lower. The Sierra Morena enters Estremadura from Andalusia, and fills up the whole of the southern part of the province with an irregular mass of hilly ground. The space between this portion of the Sierra Morena and the central mountain range is occupied by the basin of the Guadiana, which extends from east to west through the province of Badajoz, or southern division. The northern division, that of Cáceres, is chiefly occupied by the valley of the Tagus, which has also a direction from east to west, and is closed in on the north by the Sierra de Gata, which enters Portugal, and the Sierra de Gredos, which extends in a south-western direction between the rivers Alagon and Tietar. Both of these mountain ridges have a direction from north-east to south-west, and inclose between them the valleys of the Alagon and other affluents of the Tagus.

The geological formation of all the mountain ranges of Estremadura consists of clay-slate alternating with quartzite, and pierced by masses of granite. The slates are generally of blue and black clay, and the beds are in general highly inclined, some being almost vertical. The Estremadura slate-formation extends through the Sierra Morena to the Guadalquivir. The quartzite occurs in beds which are intercalated with the slate-beds, and is of a fine texture. Besides the granite other igneous rocks are protruded, forming considerable masses in themselves, but small in comparison with the extent of country covered by the slates. A deposit of phosphorite of lime, a rare mineral, and valuable for agricultural purposes, occurs in the clay-slate between the towns of Guadalupe and Logrosan. It sometimes emerges from the surface, and is sometimes below it, in a bed which is in some parts 10 feet deep, and from 6 to 7 feet wide. Lead, silver, iron, and copper, occur more or less in all the mountain ranges, and are wrought in some places, but with little advantage.

Rivers.—The two great rivers which flow across Estremadura are described separately. [GUADIANA; TAGUS.] The other rivers of this province all enter the two great rivers. The Alagon rises in the Sierra de Gata, and flowing southward receives the Jerte from the Sierra de Gredos; it then flows south-westward, and having received the Arago united with the Gata, enters the Tagus on the north bank about 10 miles above Alcantara, after a course of about 70 miles. The Tietar rises in the Sierra de Gredos, and flowing south-westward enters the Tagus, after a course of about 60 miles. The principal rivers which enter the Tagus on the south bank are the Rio del Monte and the Salor, the former having its origin in the Sierra de Guadalupe, and the latter in the Sierra de Benito. The rivers which enter the Guadiana on the north bank are all short, and flow from the central ridge, the spurs of which in many parts flank the river. The rivers which flow into the Guadiana on the south bank above Badajoz and the west bank below it, are numerous, and of considerable length, but of small size; they all flow from the northern slopes of the Sierra Morena.

Climate and Productions.—The climate in summer is very hot, but is not unwholesome, except on the banks of the Guadiana, which in several parts are uncleared and swampy, and infested with mosquitoes and other insects. In winter the climate is much milder than it is on the high plains of the Castiles and Leon, in consequence of which on the approach of cold weather, the flocks of merino sheep, to the number of more than three millions, begin to travel from their summer-pastures, attended by their shepherds and dogs, and gradually take up their usual winter-quarters in Estremadura. These migratory flocks of sheep are called Los Trashumontes, and the system itself is termed the Mesta.

Estremadura is naturally the most fertile province of Spain, and is capable of producing very large quantities of the finest wheat and other kinds of grain; but vast districts are appropriated as sheep-pastures, and others equally or more extensive are abandoned as mere wastes overgrown with various species of cistus (jardales) and other aromatic shrubs. Everywhere except on the tops of the mountains the exuberant vigour of the soil is apparent. Under the Romans and Moors it was carefully cultivated, and still in many parts, and under very imperfect management, produces large quantities of wheat, rye, barley, maize, flax, garbanzos (the common pulse of Spain), wine, and olive-oil.

The swine of Estremadura are of great importance to the inhabitants, not only as supplying food for themselves, but on account of the pork, bacon, and hams, which are sent to the other provinces of Spain. Extensive districts are covered with woods of oak, beech, and chestnuts, the acorns and mast of which afford abundance of provision for the swine. Cork-trees are also numerous, and cork is exported. Olive-trees and fruit-trees flourish in perfection. Game, both quadrupeds and birds, is abundant; and there is plenty of fish in the streams and rivers. Honey and wax are collected from the nests of the wild bees. The manufactures are few, consisting chiefly of leather, hats, and coarse cloths.

Towns.—Badajoz is the capital of Estremadura and of the province of Badajoz. [BADAJOS.] The other towns of the province of Badajoz, are as follows:—*Albuquerque*, 22 miles N. from Badajoz, is a small

town, with a fortified castle, and a population of 5470. *Jeres* (*Xeres*) *de los Caballeros*, 42 miles S. from Badajoz, is a walled town, and has some manufactures of leather, hats, coarse cloth, and soap. The population in 1845 was 5628. *Herena*, 63 miles S.E. from Badajoz, standing at the Sierra Morena, is an agricultural town, ill-built, and in a state of decay. It has two churches and an hospital, and had in 1845 a population of 6022. *Medellin*, 50 miles E. from Badajoz, stands on the south bank of the Guadiana, and has a large but ruined castle: population, 2000. Cortes was born here in 1485. *Merida*, 32 miles E. from Badajoz, stands on the right or northern bank of the Guadiana. It is the *Emerita Augusta* of the Romans. The Guadiana is here crossed by a fine Roman bridge of 81 arches, and 2575 feet in length. Close to the bridge is an old castle of considerable strength. The town contains a large convent, two churches, and a prison, and a great number of Roman remains, including an amphitheatre, an aqueduct, a circus, baths, and a triumphal arch. It was taken by the Moors in 713, and was finally annexed to the kingdom of Castilla in 1228. The population in 1845 was 4112. *Olivenza*, 16 miles S.S.W. from Badajoz, stands on the eastern bank of the Guadiana, in a fertile plain, and has a good trade in wine, corn, and oil. The population in 1845 was 7587. *Zafra*, 40 miles S.S.E. from Badajoz, is a very ancient town. It was the *Julia Restituta* of the Romans. It is full of remains of grand buildings, such as the palace of the Duke of Feria, the convents of Santa Marina and Santa Clara, which were desecrated and plundered by the French, and other structures, some of which were never completed: population, 4890.

Caceres, 53 miles N.E. from Badajoz, is the capital of the province of Cáceres. It was the *Castra Cecilia* of the Romans. It stands in a district where large quantities of swine are reared, and is the principal place in Estremadura for the trade in bacon and hams, which are said to be excellent. The town stands in an elevated situation, and is kept clean by streams which also serve to irrigate the gardens, whence there is a plentiful supply of fruit and vegetables. It contains four parish churches, a fine suppressed Jesuit convent, an hospital, and some remains of sculpture in the plaza: population, 9520. *Alcantara* (in Arabic *Al Kantarah*, 'the Bridge'), 60 miles N. from Badajoz, stands on the south bank of the Tagus, just below the junction of the Alagon. It was the *Norba Cusarea* of the Romans, and is now chiefly distinguished for the magnificent bridge which they here constructed across the Tagus, and which, after the lapse of seventeen centuries, is still a solid and substantial structure. It was built by order of the emperor Trajan, in A.D. 105. The river is here flanked by lofty rocks, and the bridge is 245 feet above the usual level of the stream, which when low is about 40 feet deep, but when flooded rises to a height of about 180 feet. The bridge is of granite, without cement, and rests on six arches: it is 600 feet long, and 28 feet wide. One arch was destroyed by the English in 1809, but was repaired by them with timber in 1812. It was burnt by the Spanish national troops in 1836, and still remains unrestored with stone. The town stands on an eminence overlooking the bridge. It was plundered by the French under General Lapisse in 1809, and roofless houses and churches deprived of their ornaments still attest the state to which the invaders reduced it. The granite-built convent of San Beuto is almost a ruin. The church is lofty, the slender pillars of the interior are elegant, and the high altar has some injured pictures by Morales. The town formerly belonged to a military order of monks, the Knights of Alcantara, originally founded in 1158. In 1494 the king was appointed Master, their wealth was absorbed by the state, and the independence and importance of the order were at an end. The population of the town in 1845 was 4273. *Amaraz*, 85 miles N.E. from Badajoz, stands near the north bank of the Tagus, over which there is here a stone bridge of two arches, 580 feet long, 25 feet wide, and 134 feet high, across a picturesque gorge. General Hill fought here a brilliant action, in consequence of which he was made a peer with the title of Baron Hill of Ammaraz. The place is a poor village, with a population of only 493, though it occupies a fine position whence four roads diverge in opposite directions. *Coria*, 75 miles N. by E. from Badajoz, is a decayed town, with a population of less than 2000. It stands on the northern bank of the Alagon, which has here changed its course, leaving the bridge dry: the river is crossed by a ferry. The town was the *Caerium* of the Romans; and the walls, of granite, without mortar, 19 feet thick, and of an average height of 30 feet, still remain. The walls are defended by towers; the gates have been modernised. There is an old gothic cathedral, the interior of which is without aisles, and resembles a large college-hall. It contains some interesting sculptures. The town was sacked by the French in 1809, and was the winter-quarters of Lord Hill in 1812. *Placencia*, or *Plascencia*, 105 miles N.N.E. from Badajoz, is encircled on the south by the river Jerte, which is here crossed by three bridges. The town is inclosed by old walls with semicircular towers, and is also defended by a castle, now in a ruinous state. It is the see of a bishop, suffragan to the archbishop of Santiago, and contains a handsome but unfinished cathedral, a bishop's palace, several churches, and three or four large conventual buildings. The town was plundered by the French in 1809, but still possesses many fine pictures as well as sepulchral monuments and other works of art. It is supplied with water by a long aqueduct resting on 80 arches. It has manufactures of leather, hats, and woollen, linen, and hempen stuffs. The population in 1845

was 6800. *Trujillo*, 70 miles N.E. from Badajoz, is situated on a hill of granite, which has been protruded through the slate strata. The ancient city occupies the highest part, and is now chiefly used as a cemetery. The modern town is built lower down on the eastern side. The northern and western sides are rugged and precipitous. The upper town commands the surrounding plain. It is encircled by a wall with flanking towers of granite, and at the northern extremity is a castle, on the site of the ancient Roman fortress. The upper town was much injured by the French, but there are still some very interesting objects in it. The lower town contains a picturesque plaza, in which is the church of San Martin, with some curious tombs, the Casa de Ayuntamiento, or town-hall, the vast palace of the Duke of San Carlos, which was never finished, and other buildings indicative of the former grandeur of the city. The streets are narrow and ill-paved, and the whole place looks poverty-stricken. The population in 1845 was 5212: they are mostly engaged in rural occupations, the only manufacture worth mention being that of earthenware. Trujillo was the birth-place of Pizarro. *Valencia de Alcantara*, 43 miles N.N.W. from Badajoz, is a fortified town on an eminence near the frontier of Portugal. It contains a citadel and barracks, and has manufactures of leather, hats, and coarse cloths: population, 4700.

(Miñano, *Diccionario Geografico*; Madoz, *Diccionario de España*; Ford, *Handbook of Spain*.)

ESTREMADURA, a province of Portugal, situated between 38° 6' and 40° 15' N. lat., 7° 43' and 9° 32' W. long., is bounded N. by Beira, S. by Alemtejo, E. by Beira and Alemtejo, and W. by the Atlantic Ocean. The greatest length north to south is about 135 miles; the greatest width east to west is about 80 miles; but the form is very irregular, and some parts are less than half this width. The area is 7242 square miles. The population in 1850 was 748,461. The province is divided into three districts, as follows:—

Districts.	Square Miles.	Population in 1850.
Leiria	1312	138,414
Santarem	2315	151,830
Lisbon	3615	455,217
Total	7242	748,461

Leiria comprises the northern part of the province, Santarem the central part, and Lisbon the southern part.

The three districts are subdivided into 25 comarcas, or judiciary divisions, 76 concelhos, or communal divisions, and 473 parishes, as follows:—

Districts.	Comarcas.	Concelhos.	Parishes.
Leiria	5	16	109
Santarem	6	22	144
Lisbon	14	38	220
Total	25	76	473

Surface.—The mountain-range which in the province of Beira is called the Serra de Estrella, enters Estremadura, where it is named the Serra de Louzão, Serra do Junto, and Serra de Baragneda. It crosses the province in a direction from north-north-east to south-south-west, and terminates on the coast between Lisbon and Torres Vedras, where it fills up nearly all the country between the Tagus and the sea. The central ridge, or Serra do Junto, has an elevation of about 2300 feet above the sea. Several offsets or spurs extend from it on both sides. Between Torres Vedras and Lisbon, a distance of about 28 miles, the ridges have a general direction from east to west; and along the northern slopes of three of the principal ridges the Duke of Wellington, then Sir Arthur Wellesley, constructed the series of defensive works called the 'Lines of Torres Vedras.' The great mass of the Monte Junto advances directly towards the centre of the first of these ridges, but stopping short at a few miles distance, it sends a rugged offset in a slanting direction towards the heights of Torres Vedras, from which it is only divided by a deep defile. This offset is the Serra de Baragneda. The coast as far as Peniche, or about 50 miles north of the mouth of the Tagus, consists of rocky cliffs, the Cabo da Roca, opposite Lisbon, being 1920 feet high. From Peniche to the mouth of the Mondego the coast is mostly low, and the country for some distance inland is flat, sandy, and barren, or covered with forests of pines. The valley of the Lis however, in which Leiria is situated, is fruitful and cultivated, and the sides of the hills are covered with plantations of olive-trees. The valley of the Zezere and of the western side of the Tagus, especially about Thomar and Santarem, is very fertile, has good pasture-land, and is also planted with vines, olive-trees, and fruit-trees. The country east of the Tagus is mostly low and flat, and in several places unhealthy; but the ground rises towards Alemtejo, from which province several ranges of hills enter Estremadura. One of these ranges extends from Evora past Setubal, and terminates at Cape Espichel in the Serra de Arrabida, which has an elevation of 1740 feet.

Rivers.—The Tagus enters Estremadura about 15 miles above Abrantes, and has a western course till it receives the Zezere, when it

takes a south-south-west direction, and enters the sea below Lisbon. [TAGUS.] The Zezere, a large and rapid river flowing along the south-eastern base of the Serra de Estrella, enters Estremadura, and flowing first along the eastern base of the Serra de Louzão, takes afterwards a southern course through the plains of Thomar, and enters the Tagus below Punhete. The other rivers which enter the Tagus in this province are all small. On the right, or north-western bank, the only river of importance is the Azembuja, called also the Rio Mayor, which flows round the foot of the heights of Santarem, and passing the small town of Cartaxo, enters the Tagus about 30 miles above Lisbon. The chief affluents of the Tagus on the left bank are the Zatas and the Almansor; both flow from Alemtejo, and enter the river close together by the eastern of the two branches into which it divides above Lisbon. Several small rivers and streams enter the sea from the north-western slopes of the great central mountain-range. The Lis flows by Batalha, receives the Lena below Leiria, and enters the sea about 20 miles south of the mouth of the Mondego. The Alcoa, joined by the Baça, enters the sea below Alcobaca. The Arnoya passes by Óbidos, and falls into the sea-lagoo of Óbidos. The Marceira has a very tortuous course past Vimiera and Marceira. The Zizambre passes in front of Torres Vedras, and flows west to the sea, through the ravine which separates the Serra de Baragneda from the ridge of Torres Vedras. The two chief rivers of Estremadura south of the Tagus are the Marotea and the Sado, or Sadão, both of which flow from Alemtejo, and enter the sea by the Bay of Setubal.

Climate and Productions.—The climate of Estremadura is in most parts very salubrious. The breezes from the sea and the mountains temper the air in summer, and the winters are very mild. The soil is generally fertile, but some parts are sandy and swampy. Wheat, barley, and maize are cultivated, but wheat and flour to some extent are imported. Legumes and vegetables are produced in abundance. Some of the wines are much esteemed. Olive-oil, chestnuts, oranges, lemons, and other fruits are grown in large quantities. Cattle and sheep are not numerous, but large numbers of swine are fed on the produce of the woods. Game is plentiful in the mountains, and fish on the coast and in the rivers. There are several minerals in the mountains, but none are wrought to any extent. The manufactures are unimportant.

Towns.—The city of Lisbon (Lisboã) is the capital of the kingdom of Portugal, of the province of Estremadura, and of the district of Lisbon. [LISBON.] *Abrantes*, 80 miles N.N.E. from Lisbon, is situated on the northern bank of the Tagus. The town occupies an eminence, and is surrounded by old walls, outside of which are gardens and plantations of olive-trees. The Tagus is navigable by small vessels as far as Abrantes, which is by this means the medium of an active trading intercourse between Lisbon and the provinces of Beira and Alemtejo. Large quantities of grain, oil, and fruits are sent down the river to the Lisbon market. The town contains four churches: population, 5000. *Alcozer do Sal*, 50 miles S.E. from Lisbon, stands on the northern bank of the Sado. It is defended by a castle on a rocky height. The neighbourhood is marshy, and large quantities of salt are made and exported: population, 2400. *Alcobaca*, 63 miles N. from Lisbon, is situated at the confluence of the Baça with the Alcoa, whence the name. The town is small, but contains five churches, one of which belongs to a Benedictine monastery which was one of the richest and most magnificent in Portugal. Several of the kings of Portugal were buried in it, and have monuments of beautiful workmanship: population, 2000. *Aldea Galega* (the Gallician Village) is situated at the bottom of a bay on the southern side of the Tagus, nearly opposite to Lisbon, and about 10 miles distant. It is a ferry-station on the route to Evora and Badajoz: population, 4000. *Alenquer*, 27 miles N. by E. from Lisbon, stands on the north bank of the river Alenquer, a small tributary of the Tagus. It contains five churches and an hospital, and has large paper-mills: population, 3200. *Alhandra*, 18 miles N.N.E. from Lisbon, is situated on the western bank of the Tagus, and has a small port: population, 1800, who are chiefly employed in fishing, and in tile and brick works. *Almada*, 6 miles S.S.W. from Lisbon, stands on the south shore of the estuary of the Tagus. It has an old castle and a fort to defend the entrance of the river, and contains extensive wine-stores: population, 4000. *Batalha*, 7 miles S.S.W. from Leiria, is a small town, with a handsome convent and church of gothic architecture. It was founded by João I., king of Portugal, in commemoration of the battle of Aljubarota, fought in August 1385, when the Castilians were defeated with great slaughter: population, 1500. *Caldas*, 50 miles N. from Lisbon, is remarkable for its sulphur-baths, royal and public gardens, and a fountain of very fine workmanship: population, 1500. *Chamusca*, 12 miles N.E. from Santarem, is situated near the eastern bank of the Tagus: population, 3200. Good red wine is produced in the vicinity. *Cintra*, 15 miles W.N.W. from Lisbon, is situated near the northern base of the Serra de Cintra, which terminates at the lofty Cabo da Roca. The town is small, containing only about 1000 inhabitants, but is celebrated for the picturesque beauty of the country in which it is situated, and the delicious climate. The La Pena convent, now a royal palace, crowns the highest summit of the mountain, the ruins of an ancient Moorish castle occupy another lofty ridge, and numerous villas are scattered about on the richly-wooded sides of the hill. The view extends to the sea down the beautiful valley in which the small town of *Colhares*

is situated. *Ericeira*, 27 miles N.W. from Lisbon, is a small fishing town on the coast, with a population of 2500. *Leiria*, 75 miles N.N.W. from Lisbon, is the capital of the district of Leiria. It occupies the angle formed by the junction of the Lena with the Lia. It is defended by a castle, and contains a cathedral, two colleges, an hospital, and a small theatre. Much of the town was destroyed by fire when the French retreated in 1811, and the rebuilding was commenced by the Portuguese government in 1813: population, 2500. *Mafra*, 20 miles N.W. from Lisbon, is a large village on the top of a hill, and in front of a vast edifice, which was a combination of a royal palace with a convent. A wall 15 miles in circumference surrounds the royal hunting-grounds belonging to the palace. The convent was formerly inhabited by 300 Franciscan monks, and some of the royal family generally occupied the palace, which still possesses one of the finest libraries in Portugal. The palace as well as the conventual buildings are fast falling into decay. The population of the village is about 3000. *Obidos*, 47 miles N. from Lisbon, stands on an eminence, and is defended by an old Moorish castle. There are extensive remains of a Roman aqueduct. About three miles to the south is the strong position of *Roliça*, which was stormed by the British army, August 17, 1808: population, 3000. *Ouren*, 12 miles S.E. from Leiria, is situated on an eminence, and is surrounded by walls, and defended by a castle: population, 3700. *Palmella*, 18 miles S.E. from Lisbon, occupies a strong position on the slope of a hill, which is crowned by a castle. It contains two parish churches and an hospital, and has a population of 2700. *Panhete*, 73 miles N.N.E. from Lisbon, stands on the eastern bank of the Zezere, which is here crossed by a bridge. It forms a strong military position: population, 1100. *Santarem*, 50 miles N.N.E. from Lisbon, is the capital of the district of Santarem. It stands on the western side of the Tagus, and occupies the summit and eastern and northern sides of a hill. It contains several churches, and there are some palaces now in a ruinous state, which indicate its former grandeur, when the court was held here in the 15th century. The adjacent country is very productive, and it has a brisk trade with Lisbon by the river: population, 8000. *Setubal*, or *St. Ubes* (St. Ubes being a corruption of Setubal), 20 miles S.E. from Lisbon, stands on the north shore of the Bay of Setubal, which there forms a large and deep harbour, but the entrance is impeded by sand-banks. The quays are wide and convenient. A fine valley extends to some distance round the town. The old walls of the town are in a ruinous state, and would now indeed be of little use, owing to some adjacent heights which command the whole valley, and which are crowned by two or three forts. The houses are tolerably good, but the streets are narrow, crooked, and dirty. There are four squares, each supplied with a fountain, four parish churches, two or three hospitals, and two schools for Latin and the sciences. Great quantities of salt are made in the neighbourhood, and the exportation of this article, and of wine, oranges, and lemons is considerable. An active fishery is also carried on: population, 15,000. *Thomas*, 75 miles N.N.E. from Lisbon, stands on the south-western bank of the Nabão, a small affluent of the Zezere, in a plain covered with gardens and plantations of olive-trees. The town is tolerably well-built, and contains several fountains, two parish churches, of which one is collegiate, and the fine buildings which belonged to the convent of the military order of Christ, where the grand-prior resided: population, 3800. *Torres Vedras*, 28 miles N.N.W. from Lisbon, stands on the Zizambre, in front of the first of the ridges which were fortified by Sir Arthur Wellesley in order to enable him to resist the French army under Massena. The series of redoubts, entrenchments, and other defences, were called the Lines of Torres Vedras. Sir William Napier ('Peninsular War') says, "The Lines of Torres Vedras consisted of three distinct ranges of defence:—1. From Alhandra on the Tagus to the mouth of the Zizambre on the sea-coast, following the inflections of the hills, was 29 miles long. 2. The second line, traced at a distance of 6 to 10 miles in rear of the first, stretching from Quintella on the Tagus to the mouth of the St. Lorenza, was 24 miles long. 3. The third line, intended to cover a forced embarkation, extended from Passo d'Arcos on the Tagus to the tower of Junquera on the coast." The population of the town of Torres Vedras is 2300. *Vimiera*, 36 miles N.N.E. from Lisbon, is a small town about two miles from the mouth of the Maceira. Here Sir Arthur Wellesley defeated the French, August 21, 1808. This victory was the immediate occasion of the treaty for the evacuation of Portugal by the French army, which has been improperly called the Convention of Cintra; it was signed August 22, in the neighbourhood of the field of battle, and 30 miles distant from the town of Cintra. (Napier, 'Peninsular War,' vol. i.)

ESTREMOZ. [ALEMTEJO.]

ESZEK (*Eszek*, in Slavonic *Oszek*), capital of Slavonia in Austria, is a royal free town situated in a level and marshy district on the right bank of the Drave, and about 12 miles above its mouth in the Danube. Its site is that of the Mursa, or Mursia of the Romans, which was founded A.D. 125 by the emperor Hadrian, and afterwards became the residence of the Roman governors of Lower Pannonia. It gave title to a bishop from A.D. 335. It now consists of four quarters; the present fortress, begun under the emperor Leopold I. in 1712, and finished in 1719, is well built, contains 147 handsome and lofty houses, an arsenal and barrack, and is regularly fortified:

an esplanade runs round it, and to the north-west of it stands the Felső-Varos (Upper Town), which is approached by an avenue 1100 paces long, is the residence of the merchants and dealers, and has well-attended fairs. South-east of the fortress lies the Alsó-Varos, or Lower Town, the site of the ancient Mursa, which consists of broad and handsome streets, and has some fine churches; and in the east is the New Town, composed rather of farms and gardens than of lines of streets. The fortress and suburbs contain altogether about 1800 houses, 5 Roman Catholic churches, 4 chapels, a Greek church, and about 12,000 inhabitants. There are several handsome buildings, such as the town-hall, the house of assembly for the states of Verőce, the county in which Eszek is situated, the barracks, engineers' house, officers' pavilion, and arsenal. Eszek has a Roman Catholic high-school, a gymnasium, a Greek school, a military cadet academy, and Franciscan and Capuchin monasteries. A causeway or bridge about 2½ miles in length, 55 feet in breadth, and 9 feet in height, constructed in the year 1712, leads across the Drave and the swamps on its northern bank into the Hungarian county of Baranya. With the exception of some silk-spinning there is little mechanical industry in the town. There is a considerable trade in grain, cattle, and raw hides. Steamers ply between Eszek and the towns on the Danube.

ÉTAMPES, a town in France, capital of an arrondissement in the department of Seine-et-Oise, is a first-class station on the Orleans railway, 35 miles S by W. from Paris. It is the seat of a tribunal of first instance, of a college, and agricultural society, and has a population of 8083, including the commune. The town stands in 45° 26' 49" N. lat., 2° 9' 23" E. long., on the bank of two little streams, that unite just below the town with the river Juine (or, as it is sometimes called, the river Étampes), which flows into the Essonne, a feeder of the Seine.

The town is mentioned more than once in the chronicles of the first race of French kings. In A.D. 604 Clothaire II. was defeated near *Stampae* (Étampes) by his nephew Thierry, who here took Merovee prisoner, and soon after entered Paris in triumph. In the year 911 Étampes was burnt by the Northmen under Rollo. In the latter part of the same century, or the beginning of the next, Constance, wife of Robert, king of France, built here a castle, and Robert himself converted the castle chapel into a collegiate church dedicated to Sainte Marie. In A.D. 1147 an assembly of the *graudeles* of the kingdom was held in Étampes, a crusade was determined upon, and the Abbé Suger and Raoul de Vermandois were appointed regents of France in the absence of Louis VII. The castle was held for the king in the 11th and 12th centuries by officers who had the titles of Prévôt, Bailly, or Vicomte. There was a Jews' synagogue at Étampes, which, on the expulsion of that people from France by Philippe Auguste, A.D. 1182, was converted into a church, that of Notre Dame, yet standing. After the death of Philippe Auguste the castle of Étampes ceased to be a residence of kings, and was used as a state prison. In the 14th century Étampes was given by Philippe le Bel to his brother Louis, count of Evreux. The town and castle surrendered after a siege to the Bourguignons, who massacred the Orleanist garrison in 1411. In the 16th century Étampes, with its territory or county, was erected into a duchy in favour of Jean de Brosse, whose wife was mistress of François I. In the religious wars of France, A.D. 1562, the town was taken by the Gernaus brought into France by the Prince of Condé. In A.D. 1567 it was taken by assault by the Hugueuots; in 1589 it was the rendezvous of the troops of the League, from whom it was taken by Henri III. In A.D. 1590 it was taken from the party of the League, into whose hands it had again fallen, by Henri IV., who caused the fortifications of the castle to be razed. The town was unsuccessfully besieged by Turenne during the civil war of the Fronde in 1662. In the revolutionary frenzy of 1792, a seditious band of about 800 men entered the market-place, and fixed the price at which corn must be sold. Simoneau, mayor of the town, in opposing this violence and in defending the freedom of trade, was murdered by the ruffians. The National Assembly decreed that a monument should be erected to his memory in the market-square of Étampes; but the decree has not yet been executed.

The town is in a tolerably fertile valley. It is pretty well built, and surrounded by shady promenades. The tower of Guiette is all that remains of the ancient castle. There are four churches. That of Notre-Dame has a lofty tower and spire; the semicircular arch may be observed in it. The architecture and the style of the sculptures mark the edifice as a work of the 13th century. The church of St. Basil, founded by King Robert, has a handsome portal decorated with graceful columns, and statuary representing a scene at the Last Judgment. The church of St. Giles is also very ancient, probably not later than the 11th century; it has the semicircular arch, with zigzag mouldings. The church of St. Martin is perhaps the finest ecclesiastical edifice in the town. There are in the town several houses built about the time of the revival of the arts. One of these, it is said, was built and inhabited by Diana de Poitiers, duchess of Étampes, and mistress of François I. The town-hall is an ancient turreted building. There is also a large public granary, three stories high, capable of containing nearly 1400 tons' weight of wheat. Near the town are remains of an ancient building, probably of Roman origin, but popularly called the 'Tower of Brunehaut.' A modern castle has been erected upon these ruins.

The population of Étampes manufacture soap, leather, woollen-yarn, counterpanes, and hosiery; and trade in wool, corn, flour, and honey. There are more than forty mills of different kinds on the two brooks which water Étampes. Sandstone is quarried in the neighbourhood, and much garden-stuff is grown for the supply of Paris. The corn-market of Étampes is a very important one; it is held on Saturday in every week, and attracts the farmers of the Beauce and Gatinais districts. A vast number of flour-mills in and about the town are constantly at work for the supply of Paris. Geoffroy de St. Hilaire was a native of Étampes.

ETHIOPIA (*Aiθiopia*) was the name given by the ancient geographers to the countries south of Egypt. In a general and vague sense they called all the inhabitants of the south part of Africa, from the Red Sea to the Atlantic, Ethiopians. Herodotus (iv. 197) speaks of the Ethiopians as inhabiting the whole of South Libya (Libya with him being synonymous with our Africa), as distinguished from the Libyans who inhabited the Mediterranean coast and the interior adjoining it. He also speaks of the Ethiopian Troglodytes (iv. 183) who lived to the south of the Garamantes, and tells strange stories of them; but these particular Ethiopians must be considered included under the general name. Strabo places the Hesperian Ethiopians near the Atlantic Sea, and south of the Pharusii and Negretes, who were themselves south of the Mauri. In this general sense, Ethiopians corresponded with the inhabitants of the countries south of the Great Desert, of which the ancients knew very little. Herodotus (vii. 70) also speaks of Asiatic Ethiopians, who formed part of the great army of Xerxes, and of ong-lived Ethiopians (iii. 17), whom he places on the shores of the southern sea; but their localities are not easily determined. The historian however observes that the Asiatic Ethiopians were black, like those of Libya, but differed from them in language, and had straight hair; whereas those of Libya had very curly hair, by which term some modern writers have somewhat hastily concluded that the woolly hair of the negro is intended. But Eastern Ethiopia, properly called Ethiopia above Egypt (Herodotus, vii. 69), and also Ethiopia Orientalis, was a distinct and better-defined country. It included those regions which we now call by the name of Nubia and Sennaar, with parts of Kordofan and the northern part of Abyssinia: it may be said to extend from the debateable ground sometimes called Ethiopian Egypt on the north to the Abyssinian highlands on the south, though on the south the limits were unknown or undefined; and from the desert on the west to the hilly and desert country between the Nile and the Red Sea on the east. Meroë, which lay above the confluence of the Astaboras (Takkazzie) and the Nile, was the ancient capital of Ethiopia, in the limited and more definite sense of Ethiopia above Egypt, in which sense we shall now consider the term. The Troglodyta bordered upon Ethiopia to the east, extending along the coast of the Red Sea. To the west of Ethiopia were the Blemmyes, a barbarian tribe, of whom wonderful stories were told as having no heads, but eyes and a mouth fixed in the breast.

The physical features of Ethiopia are described under NUBIA and SENNAAR; ABYSSINIA and KORDOFAN may also be referred to. Here, a few words must serve to point out the general character of the country. Although Ethiopia was scarcely so strictly confined as Egypt to the Valley of the Nile, the Nile was the great central feature of the country, and along its banks the towns and cities were nearly all placed; the high civilisation of Ethiopia was confined to the insular district of Meroë and the country known as Ethiopian Egypt. The Ethiopian Nile is in many respects a very different river from the Nile of Egypt. In the southern part of the country both the White and Blue branches of the river receive numerous affluents. The two streams join at Khartum, below which the Nile traverses a gloomy defile for 14 or 15 miles, when it emerges as a broad majestic river into "immense plains of herbage bounded only by the horizon." Through these plains it flows past Meroë to Damer, where it receives the Takkazzie, or Atbara, the Astaboras of the ancients, and the last affluent of any consequence which the Nile receives. At its junction with the Nile the Takkazzie is said to be two-thirds of a mile wide; the Nile itself being from a mile and a half to two miles wide. A little lower what is called the Fifth Cataract of the Nile is reached, and thenceforward for more than 600 miles succeed alternate rapids and cataracts, so that the river is of little service for navigation, while high limestone banks restrain its annual overflow, the source of so much prosperity to the Egyptian territory. The southern part of Ethiopia is humid, owing to the proximity of the Abyssinian highlands, and there is a good deal of fertile soil. Along the vast plains of the island of Meroë, and the country on either side, periodical rains are said to occur, and the land supports a luxuriant vegetation. North of Meroë the climate becomes more and more dry, and the soil (except where watered by the overflow of the Nile) more arid; but the remains of rude canals prove that the ancient occupants of the land rendered it available for agricultural purposes by means of artificial irrigation. In the northern districts however there must always have been much waste and desert land; and both the east and west was a dry and thinly-peopled country, becoming at length a sandy desert. As the land in the southern parts receded from the river it appears to have been devoted to pasture, the inhabitants being chiefly herdsmen; beyond were jungles abounding with wild beasts, the prey of savage tribes who lived chiefly by hunting. Some of the

border tribes, the Elephantophagi and Struthophagi, seem to have depended chiefly on hunting elephants and ostriches. In the northern hills were gold-mines, which yielded a considerable amount of treasure. The Macrobi were workers in metal, and had attained a high state of cultivation.

Ethiopia was a country early reduced to a fixed social state. Its religion and sacred language were the same, or nearly the same, as the religion and language of Egypt. Its government was monarchical, but the monarch was subordinate to an all-powerful hierarchy, more absolute than that of Egypt. Diodorus (iii. 6) says, "In Ethiopia, when the priests think proper, they send a message to the king with orders for him to die, the gods having so communicated their pleasure, which no mortal should dispute."

It has been long a subject of discussion among the investigators of antiquity whether the arts of civilised life descended from Ethiopia to Egypt, or ascended from Egypt into Ethiopia. Here, as in many other contested historical points, much discrimination is required; but the balance of probability appears to be in favour of the tradition that Ethiopia was the parent of Egyptian civilisation and religion. It was a very ancient tradition, that at a very remote period religious colonies came down from Meroë into Egypt. Herodotus (ii. 29) says, "At Meroë, the great city of the Ethiopians, the people worship only Zeus and Dionysus (Ammon and Osiris), and them they honour greatly. They have an oracle of Zeus, and they make their expeditions whenever and wherever the deity, by his oracular answers, orders them." The probable explanation of this passage seems to be that the priests of Meroë sent colonies into other countries, and Egypt was naturally one of the first lands to which they would resort. The procession of the Holy Ship, with the shrine of the ram-headed Ammon (the Zeus or Jupiter of the Greeks and Romans), which took place annually at Thebes, and which was carried across the Nile to the Libyan side, and brought back after a few days, was said to be in commemoration of the first advent of the god from Ethiopia by the river. This ceremony is sculptured on several Egyptian and Nubian temples, and especially on the great temple of Karnak. Homer probably alludes to it when he speaks of Jupiter's visit to the Ethiopians and his twelve days' absence. Diodorus (iii. 3) says that "the people above Meroë worship Isis and Pan, and besides them Hercules and Zeus, considering these deities as the chief benefactors of the human race." Heads of Isis have been found by Caillaud at Naga, near Shendy (about 17° N. lat.), in Upper Nubia, the sculptures bearing all the marks of an original style, though of a coarser art than that displayed in the same figures in the Egyptian temples. The head of Isis is placed above that of Typhou, as in some of the temples of Egypt. These temples of Naga however may be supposed, from their style and sculptures, to be of a later date than those at El-Mesaourab, which are also in the district of Shendy, in a valley in the desert, at some distance from the Nile, and about 12 miles E. from Naga; they consist of eight temples of small dimensions, the largest, which stands in the centre, being only 34 feet long, connected by galleries and terraces, with a great number of small chambers, the whole being surrounded by a double inclosure. There are no tombs nor remains of private habitations in the neighbourhood. Traces of a large tank are seen, protected from the sand by mounds of earth all round it, the water of which served probably for religious and other purposes. No sculptures or hieroglyphics adorn the walls; only on the six pillars which form the portico of the larger temple are there hieroglyphics and figures in the Egyptian stylo. This temple seems to be of a much later date than the rest. (Caillaud, 'Voyage à Meroë.') It is supposed that this secluded inclosure may have been the sacred city of Meroë, the college of its priests, and the original seat of the oracle of Jupiter Ammon, whence issued those religious colonies which carried religion and civilisation from Ethiopia as far as the Delta and the Oasis of the Libyan Desert. According to the tradition of the country the name of El-Mesaourab was that of the ancient fakirs, or recluses, who inhabited these edifices.

The ruins of Meroë itself are now believed to be those discovered by Caillaud at Assour, above the confluence of the Takkazzie and the Nile, and its situation between the two rivers probably gave rise to the appellation of the Island of Meroë. The extent of the ruins is said to be more considerable than that of Napata, near Barkal, or of any other place yet examined in Nubia; they are also in general more dilapidated, and vast mounds of rubbish appear heaped up everywhere, as if formed by the ruins of private as well as public buildings. The latter consist, as at Napata, of temples and pyramids. Of the temples there is not one the remains of which can be traced with any certainty; the front wall of the largest appears to have been 25 feet thick. The pyramids, about 80 in number, stand in groups on the borders of the desert. The largest is about 60 feet at the base, but most of them are much smaller, and generally in a ruinous state. Most of the pyramids have little exterior sanctuaries attached to them, and in one of them Caillaud found the roof arched with a keystone, as in those of Mount Barkal.

The connection between Egypt and Ethiopia was renewed at various periods remote from each other, and under various circumstances. Herodotus says that he saw in the records of the priests of Memphis (ii. 100) 18 Ethiopian kings registered among the 330 successors of Menes, who preceded Sesostris. Whatever we may think of this scroll

of kings, still it shows that a tradition existed of a very remote influence of Ethiopia over Egypt. This perhaps was the epoch when the worship of Ammon and Osiris was introduced into the latter country. Osiris, according to tradition, led a colony from Ethiopia into Egypt, which received also from the parent state the practice of deifying kings, together with hieroglyphical writing, the usage of embalming, the whole sacred ritual, and the forms of their sculptures. (Diodorus, iii. 3.) Sesostris is said to have subsequently conquered Ethiopia; but this was probably a partial incursion, for Herodotus says that Ethiopia was never conquered by any foreign power. We hear nothing of the intercourse between Ethiopia and Egypt for many centuries afterwards, during which the latter country made great progress in civilization and the arts, and built its stupendous monuments. In the 8th century a.c. the Ethiopian invasion of Egypt took place, and Sabakos, an Ethiopian king, reigned over both countries. Herodotus, who lived between two and three centuries later, says that Sabakos evacuated Egypt in obedience to an oracle, a circumstance which, if correct, shows that the power of the Ethiopian hierarchy still continued in full vigour. Still we find other Ethiopian kings ruling successively over at least part of Egypt; among these was Tirhakan, mentioned in the Scriptures as having fought against Sennacherib. (2 Kings, xix. 9.) This period of renewed intercourse between Egypt and Ethiopia, under circumstances highly favourable to the latter, was probably the time when the improved arts of Egypt were introduced into Ethiopia, and it was then perhaps that the splendid structures of Mount Barkal were executed. Again, under the Ptolemies there is evidence to show that the Græco-Egyptian colonies found their way into the regions of the Upper Nile and along the shores of the Red Sea, and even as far as Axum and Adulo in Abyssinia [ADULE; AXUM]: these colonies or adventurers probably spread the Egyptian arts as improved by the Greeks into Ethiopia. All these vicissitudes may account for the various styles of building and sculpture found along the banks of the Upper Nile. The monuments of Assour and El-Messourah are probably older than those of Naga, and these much older than those of Barkal, which appear to be anterior to the temple of Soleb. We know from a passage of Diodorus that after the Ptolemies came to reign in Egypt a great change took place in Ethiopian politics. In the time of the second Ptolemy the Ethiopians had a king, Ergamenes, who had a knowledge of Greek manners and philosophy. Being weary of the yoke of the hierarchy he went with a band of soldiers to the inaccessible place (by some supposed to be Barkal, but more probably the sacred inclosure of Meroë, El-Messourah), which contained the golden temple of the Ethiopians, and massacred all the priests.

Of the manners of the Ethiopians we know little, except what we may infer from their monuments and the scanty records we have of their religion and institutions, as above stated. Their sacred language appears to have been the same as that of the Egyptian priests. From some sculptures at Barkal it has been supposed that human sacrifices were occasionally offered. A peculiarity in the Ethiopian institutions is, that their women sometimes went to battle, and were not excluded from the throne. Strabo (Casauh., p. 820) speaks of the Ethiopian warrior queen named Candace. (See also 'Acts of the Apostles,' viii. 27.) On the propyla of one of the temples of Naga, besides the hero or king, is a female figure likewise of regal dignity, with a large knife in each hand, going to cut off the heads of a number of captives; the vulture is hovering over her head. The figures of both king and queen are remarkable for the magnificence of their dress, and though they have many characteristics of Egyptian style, they are much thicker than the Egyptian form, especially the female, which is remarkably large from the vest downwards. (Cailliaud's Plates, 14. 16.)

After the Romans became possessed of Egypt, we read of several expeditions into Ethiopia, but of no permanent impression made by them upon that region. Caius Petrouinus, prefect of Egypt under Augustus, is said to have advanced as far as Napata, called Tenape by Dion, the first town of Ethiopia after Meroë. He defeated queen Candace, who was obliged to sue for peace. But the Romans ultimately kept none of their conquests in that quarter. In subsequent times it appears that they conquered again, and retained a strip of territory along the banks of the Nile of seven days' march above the first cataract, but this was given up by Diocletian to the Nubæ or Nabate, on condition that they should prevent the Ethiopians and the Blemmyes from attacking Egypt. Of the vicissitudes and ultimate dismemberment of the ancient kingdom of Meroë we have no information.

The early Christian historians seem to restrict the name of Ethiopians to a people occupying part of the country now called Abyssinia. Procopius and Cedrenus call the Axumites Ethiopians. [ADULE; AXUM.] From those times the name of Ethiopia has been given more particularly to Abyssinia, and the Geez, or sacred language of that country, has been called Ethiopian.

The origin of the name 'Ethiopia' is uncertain. Salt says that Itiopjawan is the favourite term by which the Abyssinians designate themselves; but this name was probably introduced among the Abyssinians by the half Greeks of the kingdom of Axum. The word in Greek has the appearance of being significant, and is sometimes interpreted 'dark-coloured;' but like many other Greek names of

nations, it is probably a native Asiatic or African term corrupted into the semblance of a genuine Greek word.

Ethiopian Languages.—Under the general designation of the Ethiopian languages, three different dialects are usually comprised—namely, the ancient Ethiopian, or Geez, the Tigré, and the Amharic. The ancient language properly called the Ethiopian is now extinct, or at least survives only as the language of books and of learned men (whence it is also called 'lesana mas'haf,' or book-language); and its place is now supplied by the two other dialects, of which the Tigré approaches nearest to the Ethiopic, whilst the Amharic has more widely departed from it.

The Ethiopian belongs to the family of languages usually called the Semitic, and among them it shows the closest affinity to the Arabic. It is written from the left to the right, in a peculiar alphabet, which however appears to be of Semitic origin. The alphabet consists of 26 consonants and 7 vowel sounds; but the latter are not expressed by distinct characters, nor by points or accents, but by slight changes in the shape of the consonants, so that each character represents an entire syllable. Gesenius calculates that about one-third of the roots and primitive words of the Ethiopian language exists also in Arabic; and a considerable portion of the remainder is found in Hebrew, or in the Chaldee and Syriac dialects.

The literature extant in the Ethiopian language is almost exclusively biblical and ecclesiastical: among the chief works are—a complete translation of the Old and New Testament, made by an unknown author from the Alexandrian text of the Greek version, probably not anterior to the 4th century; and an apocryphal writing, peculiar to themselves, called the book of Henoch. There exists moreover a translation of the Didascalia, together with 56 canones and 81 constitutions or rules of the early Christian church, considered by the Ethiopians as apostolical; besides a collection of the decrees of the councils, extracts from the writings of the early fathers, liturgies, martyrologies, and histories of saints. The profane literature of the Ethiopians comprises several chronicles.

(Heeren, *Historical Researches*; Gau, *Antiquités de la Nubie*; and the antiquarian works of Rossellini, Wilkinson, &c.; 'Egyptian Antiquities,' in *Lib. of Ent. Knowledge*; Cailliaud, *Voyage à Meroë*; and the *Travels* of Ruppell, Waddington, Lord Valentia, &c.)

ÉTIENNE-DE-BAIGORRY. [PYRÉNÉES, BASSES.]

ÉTIENNE-EN-DÉVOLMY. [ALPES, HAUTES.]

ÉTIENNE-LES-ORGUES. [ALPES, BASSES.]

ÉTIENNE, ST., a large manufacturing town in the department of Loire in France, stands in a narrow valley on the Furens, a small feeder of the Loire, in 45° 26' 9" N. lat., 4° 23' 43" E. long., 288 miles S.S.E. from Paris, and has 53,741 inhabitants including the commune. It is situated at the junction of the railroads that lead to Lyon and Roanne, from which it is distant respectively 35 and 51 miles; and to the two towns just named railways from Paris are nearly completed, one through Dijon and Chalou, the other through Orleans and Bourges; the latter is completed to Varennes within 30 miles from Roanne. By these railroads, by the Loire, which is navigable from Roanne, and by the Rhone, the coals and other important products of St.-Étienne find easy and rapid outlets to all parts of France. The older part of the town is ill built; the modern part is well built, with spacious squares, lofty houses, wide and regular streets; and the whole, always enveloped in the dense smoke of its numerous workshops and factories, is superlatively dirty. The finest street is that through which the road from Paris to Marseilles runs; it divides the town into two nearly equal parts. In the middle of this street and of the town stands the town-house, which, with the exception of an ancient church that dates from the 11th century, is the most remarkable structure in St.-Étienne. The handsome obelisk, fountain, and the termini of the railroads to Lyon and Roanne, also deserve attention. The town is well lighted with gas.

St.-Étienne stands in the centre of one of the most important coal-fields in France, from which about 500,000 tons of coal are raised annually. It is especially famous for the manufacture of silk-ribands and fire-arms, including rifles and fowling-pieces. Its ribands, which are exported to all parts of the world, are unequalled for richness of colour and beauty of pattern; of the quantity manufactured an idea may be formed from the statement that their value amounts annually to upwards of 40,000,000 francs. When government orders for fire-arms fall off, the workmen turn their attention to making fowling-pieces, of which 30,000 a year are sometimes disposed of, besides a great number of pistols, &c. The manufacture next in importance is that of hardware and cutlery. To these leading objects of industry are to be added manufactures of scythes, nails of all kinds, saw-blades, files, anvils, vices, files, silk and cotton velvets, &c. The town has also many dye-houses and tanyards; and in the suburb of Terre-Noire there are important iron-forges and furnaces.

St.-Étienne is the seat of tribunals of first instance and of commerce: it has a consultative chamber of manufactures, a council of Prud'-Hommes, a college, a school for deaf mutes, a mining school, a small theatre, a public library, and a museum which contains a collection of the minerals and fossils of the neighbourhood and also specimens of the staple manufactures of the town.

According to some accounts the town originated in a Roman station named Forum, whence the town and river were named by corruption Furens and Furania: according to others it sprung up round a castle

built here in the 10th century by the counts of Forez. For some centuries after this last-mentioned period Furania was a small place of no importance. In the troubled reign of Charles VII. the townspeople obtained permission to inclose their town with walls. In the civil wars of the 16th century it was taken and plundered. From 1585 to 1629 it was three times visited, and all but depopulated, by destructive plagues.

ETIVE, LOCH, an inland lake in the northern part of Argyleshire, branching off from the Linnhe Loch, and running about 20 miles inland, first in an easterly and afterwards in a north-easterly direction. It varies in breadth from half a mile to two miles. The Awe River falls into it at the village of Bunawe, which is about half way up the lake. On the north side of the loch are the ruins of Ardchattan Priory (near the modern mansion), the scene of a parliament held by Robert Bruce after his victory over the MacDougals of Lorn. The priory dated from the 13th century. Near Connel Ferry, farther down the lake, is a vitrified fort; and on the southern side of a projecting flat rock at the mouth of the loch, are the ruins of Dunstaffnage Castle, captured by Bruce. It was previously the stronghold of the MacDougals, and since then it has been a royal castle. From this castle the stone in the coronation-chair in Westminster Abbey was removed to Scone Palace, whence it was taken by Edward I. Loch Etive is navigable for small coasting-vessels. Besides the Awe, the Etive River at its south-eastern extremity, and one or two small mountain-streams, fall into the loch.

ETNA. [ÆTNA.]

ETON, Buckinghamshire, a town and the seat of a Poor-Law Union, in the parish of Eton, is situated on the left bank of the river Thames, in 51° 29' N. lat., 0° 36' W. long., distant 42 miles S.S.E. from Buckingham, and 22 miles W. by S. from London by road. The Windsor station of the Great Western railway, which is about three-quarters of a mile from Eton, is 21 miles distant from London; that of the South-Western railway is 26 miles from London. The government of the town of Eton is parochial, but without churchwardens. The district is under the management of a Local Board of Health. The population of the parish in 1851 was 3666, besides 130 in Eton College, which is extra-parochial. The living is a rectory in the peculiar jurisdiction and incumbency of the Provost of Eton College. Eton Poor-Law Union contains 19 parishes, chapels, and hamlets, with an area of 41,560 acres, and a population in 1851 of 21,432.

Eton, though in a different county, forms in effect one town with Windsor. The line of houses is interrupted only by the river Thames, which is crossed by a cast-iron bridge, erected in 1824 by Mr. Hollis. Eton parish church, a chapel of ease to the College Chapel of Eton, formerly the parish church, has been recently erected, in great part by subscription. This church is a handsome building in the early English style; it was consecrated June 1st, 1854, and advantageously replaces the former brick edifice. The spire forms a very ornamental feature in the general landscape. The building cost about 8000*l.*, of which the Queen and Prince Albert contributed a portion; part was also contributed by the College authorities, and a considerable amount by old Etonians. The sittings are all free. The town consists chiefly of one long street, which is well paved. The college, and the tenants of the college property, pay for the watching, lighting, and sewerage of the college district. Pomy's Charity school is for the education of 60 boys and 30 girls. Eton College is the distinguishing feature of Eton, and has rendered the town famous for four centuries.

ETON COLLEGE was founded and endowed by Henry VI. as the 'College of the Blessed Marie of Eton by Wyndesore.' The foundation charter, which is in good preservation, is dated at Windsor, 12th September, 1440. It was confirmed by Act of Parliament at Westminster, May 4th, 1441. The original foundation was a provost, 10 priests, 4 clerks, 6 choristers, 25 poor grammar scholars, with a master to teach them, and the like number of poor men. It now consists of a provost, 7 fellows, 2 conductors, 7 clerks, 70 king's scholars, 10 lay-clerks, 10 choristers, and a number of inferior officers and servants. The scholars must be born in England, of parents lawfully married. By the foundation statute, they should be clothed in some coarse uniform, but this is not done; and their education should be gratis, but a sum of 6*l.* or 7*l.* a year is now charged for their instruction. Practically, however, the children of persons who are really poor do not pay anything; but generally speaking, there is little difference in the relative situation or comparative opulence of the parents of the oppidians (scholars who are not on the foundation) and the collegers. The foundation scholars are admissible from the age of eight to sixteen, and unless elected at the age of seventeen, and put on the roll for admission to King's College, Cambridge (another foundation of Henry VI.), they are superannuated at eighteen. The scholars who are elected may continue in college till nineteen; and even at eighteen they may leave the college and continue as oppidians. The annual election to King's College takes place in July or August, after an examination of the upper class by the provosts of Eton College and King's College, Cambridge, the vice-provost of Eton, two fellows of King's College, called 'posers,' and the head master of Eton. The successful candidates are not immediately transferred to Cambridge, but remain at school until a vacancy occurs on the foundation of King's College. On their removal to Cambridge the Eton scholars are received on the foundation and maintained out of its endowments,

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and after three years they succeed to fellowships. On an average four scholars go to Cambridge yearly. There are two scholarships at Merton College, Oxford, for foundation scholars who are not elected for King's College, Cambridge. There are some other exhibitions, amongst which are several for superannuated scholars. In 1829 the Duke of Newcastle founded and endowed three scholarships of the value of 50*l.* each; and in 1842 Prince Albert instituted an annual prize of 50*l.* for promoting the study of modern languages. Besides the scholars on the foundation, Eton College is attended by about 600 scholars called 'oppidians,' many of whom are the sons of persons of rank and fortune, and board with the masters, from whom they receive instruction as stipendiary pupils. The school is divided into an upper and a lower, and each is subdivided into three classes. There are a head master and a lower master, 12 assistant-masters in the upper school, and four in the lower school, and a mathematical master. There are masters for the French, Italian, and German languages, and other branches of education.

At the dissolution of the monasteries the revenues of Eton College were estimated at 1100*l.* In 1506 the total income of the college was 652*l.*, and the disbursements amounted to 645*l.* The income of the college from its endowments at present amounts to about 7000*l.* a year, derived from its reserved rents, corn-rents, sale of woods, and also from manors, by fines and heriots.

The college buildings form a conspicuous and ornamental object, especially if viewed from the terrace of Windsor Castle. They consist of two quadrangles, built partly of freestone, but chiefly of brick, in a style somewhat resembling the north front of St. James's Palace. In one quadrangle are the school and the chapel, with lodgings for the foundation scholars; and in the other are the library, which contains a rich and valuable collection, the provost's house, and the apartments of the fellows. A few years back the college was considerably enlarged. The new school buildings, which have a frontage of 120 feet, form an elegant structure in the Tudor collegiate style. They are devoted to masters' apartments, separate sleeping-rooms for the 49 senior collegers, a boys' library, museum, &c. A sanatorium for the scholars has also been recently erected. The chapel, which is built of stone, is a handsome structure, though much less elaborate than was intended by the founder. Its length is 175 feet, including an ante-chapel, which is 62 feet long. It has recently been restored with great care and at considerable expense; and the stalls of the most discordant character, which were erected by Provost Godolphin, have been replaced by elegant gothic canopies. Several modern painted windows contribute to the ornament of the chapel. In the centre of one quadrangle is a bronze statue of Henry VI., and in the chapel is another statue of the same king by Bacon. The extensive playing-grounds on the north-west of the college are ornamented with numerous stately trees.

(Lipscomb, *Buckinghamshire; Land We Live In*, vol. ii.; *Communications from Eton*.)

ETRURIA was the name given by the ancient Romans to one of the principal divisions of Central Italy: it was bounded E. by the Tiber, W. by the Mediterranean, or Tyrrhenian Sea, and N. by the river Macra and the Apennines. By the Romans the inhabitants were called indifferently Tusci and Etrusci, though Tusci appears to be the older form. The Greeks called them Tyrrheni, or Tyrseni (Τυρρηνοί, Τυρσηνοί), and the country Tyrrhenia. The most ancient Roman form, Turscus, has been identified by some modern scholars with the Tursenos of the Greeks. The natives of Etruria, however, called themselves Rasena or Rasenna.

Respecting the origin of the Etrurians there has been much diversity of opinion among modern writers, arising from the conflicting character of the ancient traditions of their migrations, and the statements of Greek and Roman writers concerning them, together with the entire absence of any production of an Etruscan poet or annalist. The most commonly received theory is that founded on the tradition preserved by Herodotus, which makes the Etruscans to have been a tribe of Lydians, who, on account of a protracted famine, left their country under Tyrrhenus (or Tyrsenus), the king's son, and settled in this part of Italy, having vanquished its earlier occupants—the Umbri or Siculi. They took the name of Tyrrhenians, or Tyrsenians, in honour of their leader. This is the theory accepted by most Greek and Roman writers (see the list of subsequent authorities in Dennis's 'Etruria,' vol. i. p. xxxii.), and also with more or less modification by many recent ones. But this tradition did not meet with universal acceptance even among ancient writers, having been expressly rejected by Dionysius on the ground that Xanthus, a very early Lydian historian, does not mention any such colonisation, though he speaks of others, which render such a one the more improbable; whilst Hellanicus makes the Tyrrhenians of Etruria to be Pelasgians who had migrated from Thessaly. Diouysius however rejects the Pelasgic origin also, and asserts his belief that the Etrurians were an aboriginal or indigenous race, they being wholly dissimilar in manners, religion, and language from any other people. This opinion has found a hearty supporter in Miceli, a recent Tuscan author of considerable reputation, but out of Italy it has met with little acceptance. Niebuhr was the first to show clearly that the Etruscans were in reality a mixed people; and he conjectures that they were formed probably of two leading races,—the Pelasgi, who occupied chiefly the southern parts of Etruria, and were much the more numerous, but existed mainly in a

state of vassalage, having been conquered by the other race, a tribe of northern invaders from the mountains of Rhetia—the true *Rasena* or *Etrusca*. This hypothesis, even when not admitted by later writers, has considerably modified their view. Müller ('*Etrusker*,' vol. i.) has made an ingenious effort to reconcile these theories by supposing that a body of Tyrrhæian Pelasgians who had settled early on the Lydian coast, being compelled to migrate, repaired to the coast of Etruria, and there founded the cities of Tarquini and Argylla, mingling gradually with the Etruscans or *Rasena* of the interior, whom with Niebuhr he supposes to have come originally from the Rhetian Mountains. Lepsius again discards altogether the hypothesis of a separate nation of *Rasena*, and supposes the Etruscans to be derived from a mixture of the invading Pelasgians with the Umbrians, the original occupants of the country; and Dennis, who supports the Lydian origin of the Etruscans ('*Etruria*,' vol. i. Int.), while admitting the connection of the *Rasena* with the Rhetian and Noric Alps, appears inclined to adopt the assertion of Livy that the emigration was from the plains to the mountains on the invasion of Povalé by the Gauls.

While therefore it cannot be said that anything like agreement has yet been arrived at respecting the origin of the Etruscans, we may perhaps venture to assert that certain conclusions have been pretty generally admitted. Their mixed origin, for instance, is clearly established. Unfortunately, the Etruscan language is still an almost unknown tongue; but it is not now doubted that while it is radically distinct from the other languages of Italy, it has many words and inflections in common with its nearest neighbour, the Umbrian; at the same time the researches of Lepsius and others have shown that it has an unquestionable Pelasgian element, and those of Steub appear to prove its connection with that once spoken in the Rhetian Alps and even now not wholly lost; while Klenze, Schwegler, and others have adduced arguments tending to establish the affinities of the *Rasenic* element with the Gothic or Scandinavian group of the Indo-Teutonic. On the whole the view which seems most to accord with the present state of our knowledge of Etruria is that the original occupants of the soil were Umbrians; that a tribe of Pelasgians invaded the country and obtained possession of the southern portion of it, and a dominant influence over the whole; that at a later period a tribe from the Rhetian Mountains descended upon the land and subjugated the dominant Pelasgians; and that these three races gradually intermingled, and from their union sprang the Etruscans properly so called.

Several centuries before the time assigned for the building of Rome we find these *Tusci* or *Etrusci* settled in Italy, both north and south of the Apennines, in the plains of the Po, and on the banks of the Arno. They had extended their dominions across the centre of the Peninsula from the Adriatic to the Mediterranean. *Cupra maritima*, now *Grottamare*, in the territory of Fermo, on the Adriatic coast, and *Cupra montana*, which stood near the banks of *Æsis*, not far from the present village of *Massacio*, in the province of *Ancona*, were Etruscan colonies. Of the great plain of the Po, the Etrusci occupied the central part, from the left bank of the *Ticinus* and the right bank of the *Trebbia*, which separated them from the *Ligurians* on that side to the *Athesis*, or *Adige*, which divided them from the *Veneti*, who remained in possession of the coast of the Adriatic as far as the mouths of the Po. (Livy, v. 33.) South of the Po the *Ligurians* retained possession of the highlands of the Apennines as far eastward as the sources of the Arno, which river formed at first the boundary between them and the Etruscans, who afterwards extended to the *Macra*, where they built *Lnna*. The Etruscan towns in the plain of the Po are said to have been twelve, like those of Middle Etruria, south of the Apennines; but *Mantua* and *Felsina* (*Bologna*) were the only two remaining in the time of Pliny. The others had been destroyed by the Gauls long before. The Etruscan origin of *Adria* has been disputed. For the names of the other Etruscan towns north of the Apennines see *Mazzocchi* '*Catálogo alfabetico de' Luoghi compresi nell' Etruria circumpadana*.'

Towards the south, Etruria is known to have extended as far as the Tiber previous to the existence of Rome. But the Etruscans at one period went also far beyond that river. There was a tradition of their having conquered the *Volsci*, who afterwards recovered their independence. (Servius in '*Æneid*,' xi. 567.) Their regular settlement in *Campania*, where they are said to have also built twelve towns, was however of a later date, probably in the 2nd or 3rd century of Rome, when the Etruscan power, south of the Apennines, was at its height, and after they had lost by the *Gallie* irruption all that they possessed in the plains of the Po. The Etruscan colony founded at *Capua* would fall, according to *Cato's* statement, about the year 283 of Rome. The war of the Etruscans against *Cume*, in which they were defeated by the *Syracusans* in a naval fight, had happened some time before. According to this calculation the Etruscan dominion in *Campania* did not continue long, as the country was conquered by the *Samnites* about the year 330 of Rome. The extent of the Etruscan possessions in *Campania*, and the number of towns which they built or colonised there, is a matter of much doubt. (Niebuhr, vol. i. 'On the *Opicans* and *Ansonians*,' and, for a conflicting opinion *Micali*, vol. i. chap. 7.)

The permanent power of the Etruscans lay in *Etruria Proper*, or *Etruria Media*, as it has also been called, which corresponds in great

measure to the present *Tuscany*, with the addition of that part of the *Papal State* which lies on the right bank of the *Tiber*. For a geographical description of the country we refer to *TUSCANY*. The Etruscans had twelve principal states, each having its representative city, all situated between the *Arno* and the *Tiber*, for the country between the *Arno* and the *Macra* was annexed at a later period by conquest over the *Ligurians*. Each state formed an independent community, the twelve being bound together by a sort of loose confederacy: at times indeed very loose, for we find repeatedly one state going to war without the assistance or interference of the rest. Of the twelve cities no complete list is preserved by any ancient writer, eight are mentioned by *Livy* (xxviii. 45) on the occasion of his enumerating the allies who volunteered to assist in equipping *Scipio's* armament against *Carthage*. Modern authors have differed as to the enumeration of these twelve cities; we adopt that of *Dennis*, which appears to be sanctioned by ancient writers: in the south were *Tarquini*, the oldest and chief city of Etruria, *Veii*, *Falerii*, *Cere*, and *Volturni*; in the north *Vetulonia* and *Rusellæ* on the coast, *Clusium* and *Arretium* in the valley of the *Clanis*, *Corythum* and *Perusia* on the heights near the *Thrasymene*, and in the extreme north *Volaterræ*; but some other towns have strong claims to be reckoned among the twelve, the members of which probably varied at different periods of Etruscan history, some of the newer towns as *Capena*, *Fesule* (*Fiesole*), and *Populonium* taking the place of *Vetulonia* and one or two others which fell into decay. Besides these there were numerous other towns, some of which acquired considerable celebrity either on account of their strength or opulence, or of their historical associations.

The sites of the twelve representative cities appear to be as follows:—*Tarquini*, the modern city of the same name [*TARQUINI*]; *Veii*, near the village of *Isola Farnese* (*Dennis*, vol. i. p. 2.); *Falerii* at *Civita Castellana*; *Cere* near *Cervetri*, between *Rome* and *Civita Vecchia*; *Volturni* near *Bolsena*; the most probable site assigned to *Vetulonia* appears to be between *Magliana* and the sea, from which it is about 5 miles distant (*Dennis*, ii. ch. 48); *Rusellæ*, on the slope of *Moscona* about 5 miles N. from *Grosseto*; *Clusium*, *CHIUSI*; *Arretium*, *AREZZO*; *Corythum*, *CORTONA*; *Perusia*, *PERUGIA*; *Volaterræ*, *VOL-TERRA*. Of all these towns vestiges more or less perfect and extensive are yet remaining; of some indeed the sites are only marked by heaps of shapeless and half buried ruins, others are scarcely traceable among the buildings of the more recent towns which occupy their place and yet bear their name, but of some the ruins are still such as to command admiration as well as respect: and besides these the massive walls and extensive fortifications, and the numerous extraordinary tombs with their rich and various contents, belonging to the many other towns of Etruria which have been laid bare by Italian antiquaries and treasure seekers, attest the wealth as well as the populousness of the country. For, as *Mr. Dennis* observes, "Etruria was of old densely populated, not only in those parts which are still inhabited, but also, as is proved by remains of cities and cemeteries, in tracts now desolated by malaria, and relapsed into the desert; and what is now the fen or the jungle, the haunt of the wild-boar, the buffalo, the fox, and the noxious reptile, of old yielded rich harvests of corn, wine, and oil, and contained numerous cities mighty and opulent, into whose laps commerce poured the treasures of the East, and the more precious produce of Hellenic genius. Most of these ancient sites are now without a habitation, furrowed yearly by the plough, or forsaken as unprofitable wildernesses; and such as are still occupied are, with few exceptions, mere phantoms of their pristine greatness—mean villages in the place of populous cities." ('*Cities and Countries of Etruria*,' i. Int. p. xxix.)

Such of the twelve cities as have the places which now occupy their sites printed in the above enumeration in small capitals, will be found noticed and their more important remains mentioned under the title so indicated; for more full descriptions of them, as well as of all the principal places where Etruscan remains have been discovered we refer the reader to the work of *Mr. Dennis* above quoted, which will indeed be found by the general reader a sufficient guide in every branch of Etruscan antiquities.

The little we know of the national history of Etruria previous to its wars with *Rome*, is gathered from fragments and incidental notices in Greek and Roman writers. The Etruscan power appears to have been at its height in the 3rd century of *Rome*, about the beginning of the 5th century before *Christ*. Their dominion extended over the country of the Umbrians to the *Adriatic* on one side, and to the *Gulf of Luni* on the other; and this also was the period of their naval greatness, when their powerful fleets secured for them an almost undisputed supremacy over the adjoining sea, which derived from them the name of the *Tyrrhenian*. After *Perseus* had dictated a humiliating peace to *Rome*, the *Tuscans* overran *Latum*, and conquered *Campania*. They at first allied themselves with their maritime rival *Carthage* against the *Phœnicians*, who had settled at *Aleria* in *Corsica*, but afterwards the allies quarrelled together for the possession of that island. They fought against the *Cumans* and *Syracusans* united about the year 279 of *Rome*, and were defeated. Half a century later they lost *Campania* to the *Samnites*, after which the *Romans* began to encroach on that part of Etruria which lay between *Mount Ciminius* and the *Tiber*. *Veii* was the first Etruscan city that fell by the *Roman* arms; *Falerii* and *Fescennia* next; then

Sutrium submitted; Cernæ and Tarquinii became the allies of Rome; and the Ciminius ridge with its haunted forests formed the boundary between Rome and Etruria. The Roman arms halted nearly a century longer before they passed that boundary. The total defeat of the confederated Etruscan forces at the lake Vadimonis, in the year 444 of Rome, opened to the Romans the access into the Etruria Transciminia. Vulsinii and Vulcia fell before the slow but sure progress of their arms; the other cities, such as Arretium, Perugia, Volaterræ, Populonium, disguised their submission under the name of alliance, but Etruscan independence was gone. This appears to have been a period of general corruption of manners, when all national spirit and independence became extinct, but wealth, luxury, and internal peace remained, and sensual pleasures were the chief occupation of the people; and this was also the time when the earlier Roman writers who speak of the Etruscans, such as Plautus, Cato, and Varro, became acquainted with that people. The wars and proscriptions of Sulla gave a final blow to the existence of the Etruscans as a nation; their towns were destroyed, and their lands were given to military colonists. The proscriptions of Octavianus after the battle of Perugia, completed the desolation of Etruria. The language itself gradually became obliterated among the people, and was only known to the priests, with whom it became finally extinct, probably by the spreading of Christianity in the 4th century of our era.

With regard to the political and social institutions of the Etruscans, we ought to bear in mind that all the accounts we have of them were written after their subjugation to Rome, and that a nation which had a political existence of eight or ten centuries must have undergone considerable changes in its manners and institutions. All the accounts are agreed in representing the Etruscans as forming a confederacy of twelve principal cities, each of which was a sovereign state, and ruled over the population of its respective district. Mention is made of a general annual assembly of deputies from the cities; but the ordinary meetings appear to have been rather for religious than political purposes, though they were made available for discussing measures which concerned the general welfare; yet it appears certain that the decisions of the assembly were not binding on the respective cities. In the city itself were two orders, the hereditary families of patricians, or senators, and the commonalty. Political and religious power were in the hands of the former, who elected from their own body the annual magistrate called 'lucumo,' or 'lauchme.' We know that the lucumo occasionally contrived, especially in times of war, to protract his term of office, and sometimes to retain it for life; but all attempts to make it hereditary appear to have failed. The patrician and hierarchical order appears to have maintained to the last its sway among the Etruscans, the arts of divination, of which it was in exclusive possession, being a powerful instrument in its hands, among a people so much fashioned to religious observances and rites, for repressing all attempts of the commonalty. Accordingly, we hear of no struggles of the kind in Etruria, as at Rome; but we hear of revolts of slaves against their masters, as in the case of the Vulsinii, for the Etruscans had numerous slaves. The country people were mostly serfs, probably the descendants of the conquered Umbri and Pelasgi. The sway of the Etruscans over the people whom they conquered appears to have been mild: they did not destroy their towns, but surrounded them with walls, or built new ones; they taught them agriculture and other arts, and they instructed them in religion.

The Etruscans were celebrated among ancient nations for their strong attachment to their national religion, which was bound up with all their institutions and habits. It was partly of native, partly of oriental invention. They believed in two principles, a good and an evil one, each having its respective agents or genii, and their paintings and sculptures are often representative of the perpetual struggle between the two. Their three chief deities, whose temples were in every Etruscan city, were Tinia (Jupiter), Cupra (Hera, or Juno), and Menvra (Minerva). Twelve gods, six male and six female, formed the upper hierarchy. Nine great gods (Dii Novensiles) had the power of hurling the thunderbolts. The most awful and mysterious of their deities were the shrouded gods (Dii Involuti), whose behests, gods as well as men were forced to obey. Other inferior divinities presided over the various elements and phenomena of this earth, as well as over the occupations and domestic comforts of man. Among the most characteristic features of the Etruscan mythology were the female deity Lasa, or Mea, the goddess of Fate, so frequently represented in Etruscan painting, winged, and with a hammer in her hand; the more awful deities of the lower world, Mantus and Mania (the Etruscan Pluto and Proserpine), with Charon, the messenger of death; and the Genii, the tutelary spirits of every individual, with the Lares, or presiding spirits of families. Their religion was distinguished by the fulness and minuteness of its ceremonial observances, and especially by their attention to divination and augury. From some sculptures found on their monuments it appears that the offering of human sacrifices was at one time in practice among them. The Romans regarded the Etruscan religion, in all its parts, with great veneration, and borrowed largely from it. Cicero speaks very favourably of Etruscan theosophy, saying that they referred everything to God, and that all their religious institutions were studiously calculated for the prosperity and security of the state.

The Etruscans were fond of good living and of sumptuous

banquets, and they are called gluttons, fat, and corpulent by the Roman satirists. Virgil (xi. 735) accuses them of being given to all kinds of sensual pleasures. Their women seem to have had no great reputation for chastity (Plautus, 'Cistell.' 2, 3, 20; and Horace, iii. 'Ode' x. 11; and see Dennis, v. i., Int. p. xlii. note 9); yet we find the female sex in higher honour among them than among most nations of antiquity. The women reclined at table on the same triclinia with the men, as appears by their monuments. Their funerals were pompous, and accompanied by athletic games, but the combats of gladiators appear to have been of late introduction.

Although there may in recent times have been often entertained a somewhat exaggerated notion of Etruscan civilisation, there can be no doubt that Etruria was by far the most cultivated and refined nation of ancient Italy. Rome, as well as a great part of Italy, is acknowledged to have derived its earlier civilisation from Etruria. No Etruscan writings have come down to us, yet there is ample evidence that Etruria possessed a national literature; not only are her sacred books, histories, and poems spoken of by ancient writers, but the names of many of her authors are mentioned; indeed, it was customary for the Romans to send their sons to Etruria to be instructed in her higher learning. In the arts the Etruscans had made great progress. As Müller however very justly observes, Etruscan art in general was imitative rather than creative, and at every period it bore the marks of a foreign influence. And, accordingly, Dennis, whilst asserting that a distinct national character is generally preserved, admits that Etruscan art is most properly divided into three styles, distinguished by the predominant foreign influence:—"1st, the Egyptian, which has also Babylonian analogies; 2nd, the Etruscan, or Tyrrhenian, as it is sometimes called, perhaps in compliment to its more than doubtful Greek character; 3rd, the Hellenic, when, in the meridian of Greek art, the Etruscan was an almost servile copyist of the Greek artist; 4th, the period of decadence."

The existing monuments of Etruscan architecture are merely such rude and massive structures as the walls of cities, sewers, vaults and bridges, and subterranean tombs, which, though they afford evidence of the power, wealth, and constructive skill of the people, are quite insufficient as examples of their architectural ability. Of their temples, the works on which their highest art would be exercised, not a vestige is extant beyond some doubtful foundations. We know however from ancient authorities that their architects were of eminent merit, and that their public and private edifices were richly adorned. But they seem to have turned their attention particularly to works of a practically useful kind, and they were renowned for their success in the art of fortifying walls, the laying out of streets and roads, and the construction of sewers. The Cloaca Maxima at Rome was an Etruscan work; and it shows that they were early acquainted with the use of the arch, though it is not correct to assert, as is often done, that the arch was an Etruscan invention. The walls, which still exist on the site of the ancient cities, are formed in the southern parts of Etruria of large irregular blocks, not fastened by cement, but rudely squared and laid in horizontal courses; in the northern parts they are more massive and rude, having a general resemblance to the Cyclopean walls of Central Italy. The best preserved and most interesting of the monuments of Etruria are the cemeteries; which, though presenting many varieties, are all subterranean. Where the site admits they are hollowed out of the solid rock, which, in the better class, has received some architectural decoration. Where the rock is friable the tomb is constructed with masonry, on which loose stones and earth are heaped so as to form a tumulus. In general the interior is made to resemble an abode of the living. The walls are often painted with mythic or festive scenes. "The ceilings are sometimes adorned with coffer, and the walls with panelling; benches and stools surround the chambers; weapons and other furniture are suspended from the walls; and easy arm-chairs, with foot-stools attached, all hewn from the living rock, are found in the subterranean houses of these Etruscan 'cities of the dead.'" (Dennis.)

Of Etruscan painting we can now best judge by the examples on the walls of the painted tombs of Tarquinii and Clusium. They are of very different dates and style, but generally display rude and conventional design, inaccurate and archaic outlines, and unnatural, or rather fantastic colouring. The earlier examples are decidedly Egyptian in manner; the later are of Aeginctau type. Copies of some of these paintings may be seen on the walls of the Etruscan room in the British Museum. The paintings on the vases are often of a much superior order, but it is probable that they are the work of Grecian artists.

The sculpture and carving of the Etruscans in marble and wood was not greatly celebrated by ancient writers, and the specimens of it discovered in the tombs, though very numerous, are not of a superior order. But the bronze statues of Etruria were very famous; they filled the temples of Rome, and were sought after all over Italy. The Etruscans themselves seem to have greatly delighted in exhibiting them. The city of Vulsinii alone is said to have contained two thousand bronze statues. Some of them were of great size; that of Apollo, on the Palatine, is said by Pliny to have been 50 feet in height, and as wonderful for its beauty as for its weight of metal. Several of the existing specimens of bronze statuary are of superior design and execution. Smaller works in bronze, larcs, penates, and figures

of various kinds must have been produced in marvellous quantities, innumerable specimens even now being diffused through the museums of Europe. The useful and ornamental works in the same material, and in gold, were also famous; their bronze candelabra and mirrors, and gold craters and cups, being eagerly sought for by Greeks as well as Romans; and, as with their larger works, their skill in these is attested by many existing specimens of exceeding beauty.

The works by which Etruscan art is commonly supposed to be characterised are the painted vases usually termed Etruscan, which form so striking a feature in our museums. They are found in vast numbers in the tombs of Etruria, but they are also found in Campania, the south of Italy, Sicily, and even in Greece; whence, as the subjects painted on them are Grecian in design, and always belong to the Grecian mythology, and the names of Greek artists, as well as Greek words, are frequently found on them, it is evident that they are the work of foreign and probably of Greek artisans. The only point on which authorities now differ is, whether the vases were imported into Etruria or were made by Greek workmen who were settled there. Of the great skill of the Etruscans in the manufacture of pottery there is no question, but the only kinds now assigned to them with any certainty are the red ware of Arretium and the black ware of Clusium. In the production of statues, bassi-relievi and ornaments in terra-cotta, the Etruscans greatly excelled. Not only were their own temples adorned with terra-cotta work, but even some in Rome received similar decorations. They were also skilled in working iron and steel; copper and silver; in the manufacture of all kinds of weapons, domestic utensils, &c., and indeed in all the ordinary handicrafts. They were likewise noted for their superiority as agriculturists; and they understood what has been termed agricultural engineering, being celebrated for the practice of filling up marshes by diverting into them the course of muddy streams, an art still practised with success in Tuscany under the name of 'colmate.' The invention of the termini, or stones fixing the limits of property, is attributed to them. From the Etruscans the Romans derived their method of dividing the months by Ides, Nones, &c., their system of numerals, and also their divisions of weights and measures.

(Micali, *Antichi Popoli Italiani*, and *Monumenti Inediti*; Dempster, *De Etruria Regali*, with the continuation by Passeri; Inghirami, *Monumenti Etruschi*; Abeken, *Mittel Italien*; Lepsius, *Tyrrhenische Pelager in Etrurien*; Steub, *Urbewohner Rhetiens*; Gerhard, Bunsen, &c., in the *Annali* of the Instituto di Corrispondenza Archeologica, at Rome; Müller, *Etrusker*; Dennis, *Cities and Cemeteries of Etruria*.)

ETSCH. [ADIGE.]

ETSHMIADZIN (Echmiadzin) is an Armenian convent in Russian Georgia, situated about three hours distance (15 miles) west from Erivan, in the plain which separates the mountain masses of Ali-Gheez and Ararat, and in that part of it that lies between the Zenghi and the Kharsakh, feeders of the Araxes. The convent is of great extent, and surrounded by a wall more than thirty feet high. The circuit of the wall is stated to exceed two versts, or nearly one mile and a half. This convent has for many centuries been the seat of the Armenian patriarch called Catholicos. Within the inclosure are several distinct churches, each surrounded by a high wall flanked with round towers. All these churches are rudely built, cruciform, and surmounted each by a sort of cupola that rises from the centre of the roof and is crowned by a low spire. The masonry of all the buildings and walls is very solid, the material a deep red-sandstone. Fronting the principal gate of the cathedral are the apartments of the Catholicos and the other bishops (for each church has its bishop). The cells of the monks are along one side of the cathedral-square, and the refectory—a long vaulted chamber with tables and benches made of massive blocks of stone—on the other. Outside the cathedral, near the door, is a white marble monument to Sir John Macdonald, the English minister, who died some years ago at Tabriz. Among the other structures may be mentioned the Synodal Hall, a long room hung round with portraits of the old Armenian kings. The Catholicos presides over the synod, but the emperor appoints a moderator, without whose concurrence nothing can be decreed—a condition which renders the Czar virtually head of the Armenian church. The convent contains a library, in which are 635 manuscripts; of these 462 are in the Armenian language, and the remainder in foreign languages. A catalogue of the library was published at St. Petersburg in 1840.

(Ouseley; Ker Porter; Wilbraham, *Travels in the Trans-Caucasian Provinces of Russia*.)

EU, a town in France in the department of Seine-Inférieure, the seat of a tribunal of commerce and of a college, is situated on the left bank and near the mouth of the little river Bresle, midway between Abbeville and Dieppe, 91 miles N.N.W. from Paris, and has about 4000 inhabitants, including the whole commune. In the middle ages Eu became a strong and flourishing place; but on the threat of a descent by the English it was burnt in 1475 by order of Louis XI., and has never recovered. Only the churches and a few houses that were overlooked escaped the general destruction. The massive ruins of the walls and towers yet remain.

Eu has several churches: the finest, that of Notre-Dame, is a large and beautiful gothic structure, lighted through magnificent painted windows. The crypt contains the monuments of the counts of Eu, of the house of Artois. The college church contains the monuments of

the Duke of Guise, murdered at Blois in 1588, and his wife, Catherine of Cleves. Both of these churches are chased among the historical monuments of France. There is an hospital attended by Sisters of Charity. The market-place is good. La Chaussée d'Eu is a suburb of Eu on the opposite bank of the Bresle. Tréport, at the mouth of the river, is the port of Eu. [SEINE-INFÉRIEURE.] The manufactures of Eu are linseed-oil, soap, locks and other ironmongery, leather, cotton and woolen yarn, glass, sail-cloth, linen, and lace. Eu trades also in corn, hemp, flax, wool, and timber. The products both industrial and agricultural of the neighbourhood of Eu find an outlet at Tréport, whence they are conveyed in small coasters chiefly to the several towns along the Somme and the Lower Seine. The species of timber exported are oak and beech, which are used for ship-building, for making staves, &c.

The territory of Eu was given, with the title of count, by Richard I., duke of Normandy, in 996 to his natural son Geoffroy, whose family held it till 1227. The county next came to the house of De Brienne, in which it remained till 1350, when on the death of Raoul de Brienne it was given to the house of Artois. The house of Cleves afterwards inherited it, and in their favour the county was erected into a duchy in 1539. In 1570 Catherine of Cleves brought the duchy of Eu into the house of Guise by her marriage with Henri of Guise (Le Balafre), who was murdered at the parliament of Blois. On the death of his mother in 1638 Charles of Lorraine took possession of the duchy, and his son Henri sold it for 2,500,000 francs to Mademoiselle de Montpensier, who made a present of it to the Duke of Maine, the natural son of Louis XIV., in order to obtain the liberty of Lauzun. On the death of the heirs of the Duke of Maine their inheritance fell to the Duke of Penthièvre, whose daughter and heiress brought the county of Eu into the family of Orléans by her marriage with the late King Louis Philippe's father.

The château of Eu, which stands in a splendid park traversed by avenues of noble beech-trees, and commands fine views of the valley of the Bresle and the sea, occupies the site of a fortress built here by Rollo. In the beginning of the 11th century Guillaume d'Exmes added to the fortress a castellated residence for his family, and close to it erected the abbey and collegiate church of Eu. In 1049 the castle was taken and plundered by William the Conqueror, who gave it to Robert Guiscard, who enlarged and improved it; and here soon after the marriage of William with Maude of Flanders was celebrated. This castle was entirely destroyed when the order of Louis XI., above alluded to, was executed in 1475. The present château was commenced by the Duke of Guise (Le Balafre) in 1581. Mademoiselle de Montpensier, whose shade seems still to hover about the spot, inclosed the park with walls, planted the trees which now form such noble alleys, and built a small château which was destroyed under Napoleon I. The Duke of Penthièvre repaired and furnished the château. By a decree of the revolutionary government, dated Oct. 4, 1793, the château, then in possession of Louis Philippe's mother, was sequestered, the furniture sold by auction, and the building converted into a military hospital. The events of 1814 restored the property to the Duchess-dowager of Orléans, and her son Louis Philippe commenced the restoration of the château in 1821, and frequently resided in it in summer after his accession to the throne: here he was visited by the Queen of England in 1843. The apartments contain the most complete collection of historical portraits in Europe. When the impotent endeavours of wrangling democrats to govern France were put an end to by Louis Napoleon assuming despotic power, Dec. 2, 1852, one of the first acts of the new government was to compel the sale of the Orléans property; but we are unable to say who is now the possessor of the château of Eu.

EUBŒA (*Εὐβοία*), until lately called Negropont, is an island of the Mediterranean, lying along the coasts of Attica and Bœotia, from which it is separated by the Euripus, a very narrow channel, over which a bridge has been thrown, connecting the island with the mainland. Eubœa is 90 miles in length in a north-west direction, and 30 miles in extreme breadth; but in one part, between Aliveri Bay and Port Petries, it is scarcely 4 miles across from shore to shore. The population in 1851 was 65,066.

The island generally is elevated, and contains among its mountains some of the highest in this part of Europe. Mount Delphi rises on the eastern shore to the height of 7266 feet above the sea, and its summit is scarcely ever free from snow; Elias of Karystos, at the southern extremity, is 4748 feet high; Mount Khandhili, 4200 feet, and Telethrius, 3100 feet, are both on the western shore north of Egripos. The general formation of these mountains is gray-limestone, with much clay-slate. The small peninsula to the north-west, which terminates in Cape Lithada, is mountainous, and contains one elevation, Mount Lithada, which rises to the height of 2837 feet above the sea. A little south of the point where this peninsula joins the mass of the island, and on the west coast opposite to Bœotia, is Mount Telethrius, with some hot springs near its base. From Telethrius the mountains spread out north-east to Cape Amoni, the most north-eastern point of the island, and eastward to the coast, filling the northern part of the island, and containing several elevations above 2000 feet. Along the northern coast of the island, opposite to Theasaly, and stretching at the base of this mountain group, is the fertile and extensive plain of Histiaea. South of Telethrius there is high

land, with some interruptions, along the west coast as far as Cape Politika: within these limits is Mount Khandhili, near the coast, and another mountain 2694 feet high. Between Cape Politika and Chalcis, and extending several miles inland, is the fertile plain of Chalcis, bounded on the north and north-east by the high mountains which extend to the eastern coast. The centre of this mountain mass is Delphi, already mentioned, and it contains several other elevations which are between 4000 and 5000 feet. South of the narrow channel on which Chalcis is situated there is a tract of lowland along the Bay of Vathia, backed by the range of Mount Vathia (3821 feet), which appears to be separated by a depression from the group of Delphi, and forms part of the south-east boundary of the plain of Chalcis. Farther south, and near the west coast, there is also the plain of Aliveri. The rest of the island south of Aliveri, along the west coast, and the whole of the eastern coast from the plain of Mandhoudi, appears to be mountainous. The southern extremity of the island is filled by the mass of Mount Elias (4748 feet), which presents to the Archipelago an iron-bound and dangerous coast.

To the southward the plains are generally cultivated with corn and olives, but those to the northward, called the Plains of Histiaea, are more particularly devoted to the vine, from which a light red wine is made, which is the common beverage of the Greeks, and forms a staple article of trade. The wine is kept in pig-skins, well coated with resin, which communicates its unpleasant flavour to the contents. A deleterious ardent spirit is distilled from the husks of the grapes. Cotton is also planted more to the northward.

The passage between Thessaly and Eubœa, called the Trikiri Channel, from the town of that name at the eastern entrance to the Gulf of Volo, is about four miles in average width; the narrowest part, which is towards the western extreme, is not quite one mile and a half: the depth of water is regular, steep from both shores, and decreasing gradually from about fifty fathoms at the entrance to thirty fathoms towards the western end of Negropont, off which lie some small rocky islands called Lithada Islands. Passing these islands, and turning to the southward, is the Gulf of Talanda—so called from the town of that name on the Boeotian shore. A remarkable feature in this part of the channel is the amazing depth of water under Mount Telethrius, where for about twelve or fifteen miles there is no bottom with 220 fathoms within half a mile of the shore; but from this point the water shoals gradually towards Chalcis. Towards the north-west extremity of this shore there is a very safe and excellent harbour, called Port Ghaltra, or Port Kalos. There are two villages on its shores, Ghaltra to the westward and Elypsos to the eastward: near the latter are some ancient remains and beautifully-sculptured fragments of white marble.

In the southern part of the channel there are many islands along the Eubœan shore, which offer good anchorage, more especially among the Petalion Islands, which abound in rabbits, but possess only one spring of fresh water. The bed of this part of the channel is level, but compared with the northern part it is shallow; the general depth is from 35 to 40 fathoms.

The eastern side of Eubœa is a continuation of rocky coast, the high land descending precipitously to the shore with few interruptions of level ground, and this only, as already mentioned, towards the northern part of the island. In the bight between capes Doro and Octonia, it is an unbroken line of precipitous shore, in which it is scarcely possible to find a ravine sufficiently wide to haul a boat up. Fragments of wreck are found at the height of 80 feet perpendicular, washed up by the heavy sea which a north-east wind throws into this bay. These winds, which always blow very strong, are called by the Greeks 'meltem,' probably a corruption of 'mal tiempo.' In addition to this, the Dardanelles current, preserving the course communicated to it by the direction of that strait, sets strong to the south-west into this bay, and renders it a most dangerous coast; no vessel once embayed here can escape destruction. The current being deflected to the southward sweeps round Cape Doro, frequently at the rate of 3 miles an hour. Port Petries is the only refuge which this coast offers, and so little has hitherto been known of this shore that even this shelter has only recently been discovered. The village of Kumi, in the bay of that name, is populous, and being celebrated for its wine, has considerable trade in that article by the small caiques, which however are always obliged to be hauled up on the beach for safety.

Immediately opposite Chalcis the land rises suddenly to hills of considerable height, beyond which lie the plains of Thebes, which town is distant about four hours, or 12 miles. The breadth of the Euripus is here diminished by a rock in mid-channel, on which a fort is built, dividing it into two channels: that towards the main, though rather the broader, is only practicable for small boats, as there is not more than 3 feet of water at any time. Between the rock and the walls of Chalcis is a distance of 33 feet, and the least depth at the highest water is 7 feet. It is here that the extraordinary tides take place for which the Euripus was formerly so noted: at times the water runs as much as 8 miles an hour, with a fall under the bridge of about one foot and a half; but what is most singular, is the fact that vessels lying 150 yards from the bridge are not in the least affected by this rapid. It remains but a short time in a quiescent state, changing its direction in a few minutes, and almost immediately resuming its velocity, which is generally from 4 to 5 miles an hour

either way, its greatest rapidity being however always to the southward. The results of three months' observation, in which the above phenomena were noted, afforded no sufficient data for reducing them to any regularity.

In and about Chalcis fragments of antiquity may be seen forming parts of the walls of houses, in common with the grosser materials, like diamonds set in lead. They are generally of white marble, beautifully chiselled; but in no place can any building be traced, or vestiges of walls. The pieces of columns are generally of the Corinthian order, fluted. On Chalcis Island there is the appearance of a rude wall traversing the island; and on the mainland, at the southern shore of the channel, between the two ports, where the land rises to about 400 feet, are the remains of Cyclopean walls of very high antiquity. The blocks of stone, which are very massive, rude and irregular, but fitting closely, are of limestone, and in construction the walls resemble those of Mycenæ. This is most probably the ancient *Aulis*; though there may have been houses at a less elevation and nearer the shore more convenient for commerce, the ascent to these ruins being steep and difficult.

The site of Eretria, next to Chalcis the most powerful city in ancient Eubœa, is near the west coast, a little south of Chalcis. Of the walls which surrounded it, the towers, a theatre, and some other buildings, there are still considerable remains. Near its site is the village of Nea Eretria, which occupies the site of the New Eretris, built after the destruction of the olden city B.C. 490.



Coin of Eretria.

British Museum. Actual Size. Silver. Weight, 86 $\frac{1}{2}$ grains.

The mountains of Eubœa are said to contain copper, and the marble quarries near Karystos have long been famous. (Strabo, p. 446.) The soil, favoured by the diversities of climate which such a variety of elevation affords, is capable of yielding the productions of tropical as well as of more northern regions, and of supporting an infinitely larger population than now occupies the land. Corn is raised in considerable quantities for the supply of the adjacent mainland as well as the island itself. The chief product however is wine. Cotton, wool, &c., are also exported. The island abounds in sheep of an excellent breed; but bullocks are scarce, and bred principally for agricultural purposes. Of late years agriculture has been considerably improved, chiefly owing to the exertions of a few English and other foreign settlers. In the mountains are abundance of wild boars and deer, and the plains are overrun with hares and rabbits. Among the trees are the olive, oak, fir, chestnut, walnut, mulberry, and oriental plane. In the whole island there is not a stream deserving the name of a river into which the smallest boat could enter, and the inhabitants generally supply themselves with water from wells.

The only towns are CHALCIS, Karystos at the south-end of the island, Kumi at its eastern extremity, and Xerochori, the ancient Histiaea, at the northern end; all except Chalcis small and unimportant places.

The villages are few, and, for the most part, wretchedly poor as well as small places. They generally stand at some distance from the beach, and on an elevation so as to be difficult of access.

Among other remains of the former greatness of the island may be mentioned an aqueduct, apparently of Venetian construction, which commencing at the foot of Mount Delphi winds its way to within half a mile of Chalcis, and forms a very picturesque object. Though it no longer conveys water, it is by no means in a ruinous condition.

On the summit of Mount Elias (the Oche of Strabo) are the remains of an ancient temple, consisting of rude unornamented blocks of limestone, and columns of the same material; and antiquarian remains still exist in various other places.

The first inhabitants of this island were probably a Pelasgic race, which is said to have occupied, before the historical times, most of the islands of the Ægean Sea. The Dryopes from Mount Ceta were said to have founded Carystus and Styra (Herodotus, viii. 46; Thucyd. vii. 57); and the Athenians founded Chalcis and Eretria, before the siege of Troy. Homer ('Iliad,' ii. 536) calls the inhabitants of Eubœa by the name Abantes, and mentions them as having taken a distinguished part in the expedition against Troy. The Hestiazots were said to be a colony of the Perrhœbi, a Pelasgic tribe; but the Athenians appear to have been from a very remote epoch the principal colonisers of Eubœa. At the dawn of the historical times we find Chalcis and Eretria, two independent but allied towns, which had advanced to a high state of prosperity, holding dominion over the islands of Andros, Teos, and Ceos, and sending colonies to the coasts of Macedonia and Thrace, as well as to the shores of Italy and Sicily. Naxos, the first Greek settlement in Sicily, and Cuma, one of the oldest in Italy, were colonies of Chalcis. Eretria and Chalcis however quarrelled, and Thucydides (i. 15) mentions the war between

the two states as one of the oldest wars on record among the Greeks. The towns continued still to flourish under the government of their Hippobote, or wealthier citizens, until they joined with Cleomenes in his invasion of Attica, which followed the expulsion of the Pisistratids, in consequence of which, after the Athenians had repulsed Cleomenes, they invaded Eubœa, about 506 B.C., defeated the Boeotians, who had come to the assistance of Chalcis; and having taken the latter city, they punished it severely, put many of the citizens in fetters, until they ransomed themselves, confiscated all the property of the Hippobote, and gave their lands to Athenian colonists, whom they sent over to the island to the number of 4000. (Herodotus, v. 77.) Eubœa now became in great measure a dependency of Athens; although the Athenian supremacy was at times disputed by the Thebans. The Eubœans, with the Athenians, sent assistance to the Ionians of Asia in their war against Darius Hystaspes; and their troops were among those which burnt Sardes (B.C. 499). The first invasion of Greece was the consequence of that expedition. The Satraps, Datis and Artaphernes, landed in Eubœa with an immense force, completely destroyed Eretria, and sent its inhabitants as slaves into Asia. A general revolt of Eubœa against Athens broke out in B.C. 445, but Pericles with 5000 regular troops marched into the island, and recovered possession of it; reducing the towns of Eubœa to the condition of tributaries to Athens. This island was of great importance to the Athenians; it furnished them with corn, supplied them with horses, and was considered of more value to them than all their other colonies put together. During the Peloponnesian war, after the defeat of the Athenians in Sicily, another general revolt of Eubœa took place, and the island placed itself under the protection of Lacedæmon, but afterwards returned to the Athenian allegiance, when Athens had recovered its independence; and from that time its four principal towns, Chalcis, Eretria (which had been rebuilt near the site of the old town destroyed by the Persians), Caryetus, and Oreus, possessed a kind of municipal independence under the supremacy of Athens. The Eubœans however joined the Theban league against the Spartans, and fought under Epaminondas. In the general prostration into which the principal states of Greece fell after the death of Epaminondas, Eubœa seems to have been left in great measure to itself. Its principal towns came under the rule of chiefs, or tyrants, as they were called, without any interference on the part of the Athenians. About B.C. 350 Callias and Taurosthenes, sons of the late tyrant Mnesarchus, who were ruling in Chalcis, made overtures to Philip of Macedon, in order to have his assistance in subduing the rest of the island, an opportunity which was eagerly seized by Philip. Plutarch, who was at the same time tyrant of Eretria, applied to the Athenians to check Philip's interference. The Athenians sent an expedition under Phocian, who defeated the Chalcidians after hard fighting; but this led to no favourable result, as Callias remained in possession of Chalcis, and the Macedonian influence was established over the island. When the Romans began to extend their influence to Greece, Chalcis and the other towns of Eubœa contracted alliance with Rome, and they remained steadfast to that alliance during the Ætolian war. (Livy, xxxv, 37, 39.) Chalcis afterwards submitted to Antiochus. (Livy, xxxv, 50, 51.) In the Achaean war, after the defeat at Corinth, Chalcis was taken and destroyed by the Romans, and the island was included in the province of Achaia. It then gradually declined in population and importance; and Pausanias and Dion speak of its fallen state under the emperors.

In the middle ages Eubœa was called Egripo, a corruption of Euripus. On the dismemberment of the eastern empire by the Latins the Venetians obtained possession of Eubœa, which they called Negropont, probably a corruption of Egripo, and 'ponte,' meaning the bridge which united it to the mainland. The Venetians lost the island in 1470, when the Turks took the capital, Negropont, and massacred all the inhabitants. The Venetian doge and general Morosini blockaded it in 1683, but after a murderous siege he was obliged to re-embark with great loss. The people of Eubœa took part in the general rising of the Greeks against the Turks, and the island now forms part of the kingdom of Greece; here as in the other parts of the kingdom the classical names have been restored.



Coin of Eubœa.

British Museum. Actual size. Silver. Weight, 61½ grains.

EULÆUS, RIVER. [BAGINAD.]

EUPEN, a town in Rhenish Prussia, in the government of Aachen, is situated in a fertile valley at the foot of the Eifel, 12 miles S. from Aix-la-Chapelle, near the Belgian frontier, and has about 11,000 inhabitants. The town is well-built, and extends over a considerable surface, as it includes several gardens and meadows. It contains four churches, a custom-house, an orphan asylum, and several large woollen factories which turn out large quantities of broadcloth and kersey-

mere. A district court for the circle of Eupen and a court of petty sessions are held in the town. In the region of the Eifel between Eupen and Malmédy is a Roman bridge. When the French extended their frontier to the Rhine, Eupen was one of the towns in the department of Ourthe, and was then named *Néau*. The circle of Eupen is, though wooded and mountainous, full of fine pastures. It contains 68 square miles, and produces timber, grain, vegetables, flax, &c.; large quantities of cheese are made. Iron, calamine, and potters'-clay are among its mineral products.

EUPHRATES. [TIGRIS.]

EURE, RIVER. [EURE, Department of.]

EURE, a department in the north of France, comprehending a portion of the old province of Normandie, is bounded N. by the department of Seine-Inférieure, E. by the departments of Oise and Seine-et-Oise, from both of which it is in part separated by the river Epte, a feeder of the Seine, S. by the departments of Euro-et-Loir and Orne, and W. by Calvados. The department lies between 43° 39' and 49° 29' N. lat., 0° 20' and 1° 47' E. long. Its greatest length from east to west is 65 miles, from north to south 60 miles. The area of the department according to the cadastral returns of 1851 (which differ considerably from those that accompanied the census of 1846) is 2689'43 square miles. The population in 1851 was 415,777, or 150'83 to the square mile, being 23'83 below the average per square mile for the whole of France. The population was less by 10,000, and the area given 440 square miles more in 1851 than in 1841.

Surface, &c.—The department presents a varied succession of well-cultivated fields, farms inclosed with hedge-rows, large forests, hills of moderate elevation, rivers, bustling manufacturing towns, ancient castles, a few marshes in the south-west, and a small extent of coast along the embouchure of the Seine. The surface on the whole is level; the highest elevations, Mont-Rôti near Pont-Audemer and the rocky promontory of Quillebeuf, are not more than 300 feet above the sea-level. The department belongs almost entirely to the basin of the Seine, which river crosses it from south-east to north-north-west, and divides it into two unequal portions. The Seine also touches the east of the department at two or three points between Elbeuf and its embouchure. On the right bank of the Seine, and between the Andelle and the Epte, lies the richly-cultivated territory of the Norman *Verin*, and the forest of Lions, which extends also into the department of Seine-Inférieure. In the centre of this forest Henry I. of England built the castle of St-Denis in which he died. On the left bank of the Seine there is a series of five plains, which in most instances consist of a dry soil, and have no watercourses except the rivers that bound them. 1. Between the Seine and the Eure is a narrow well-wooded plain, which also extends into the department of Seine-et-Oise. 2. The district between the Eure and the Iton consists of the plain of St-André and the Terres-Françaises, a portion of the ancient territory of Perche, of which Verneuil was the capital. 3. The Iton, the Eure, and the Rille inclose a third plateau, the north part of which comprises the old territory of *Roumois*, and is separated from the plain of Neubourg (on the south) by a series of depressions or valleys that run east and west between Montfort and Elbeuf. 4. Between the Rille and its feeder the Charentonne lies a fourth plain, which forms part of the district formerly called *Ouche*. The Charentonne, the Rille, and the Toucque inclose the fertile plain of *Lieuvin*, the eastern part of which is in this department, and the western part in that of CALVADOS.

Hydrography.—The department takes its name from the *Eure*, the ancient *Autura*, which, rising in the department of Orne, runs from north-west to south-east into the centre of the department of Eure-et-Loir, whence turning north-east it passes Chartres and Maintenon. From this last town it runs nearly due north till it reaches the boundary of the department of Eure, along which it runs for a few miles in a north-east direction, and again turning north it passes Pacy and Louviers, and enters the Seine on the left bank near Pont-de-l'Arche, after a course of 93 miles. This river was formerly navigated from Chartres to the Seine, but only that portion of it which is within this department is now navigable. The objects of transport along the Eure are salt, timber, and fuel-wood. Its principal feeders are—the *Vesgre*, which joins it on the right bank near Ivry; the *Blaise*, which joins it on the left bank below Dreux; the *Avre* or *Aure*, which flows from the department of Orne along the confines of Eure and Eure-et-Loir, and enters the Eure at the point where that river becomes navigable; and the *Iton*, which rising in the east of the department of Orne, near the monastery of La-Trappe, flows north-east into the department of Eure, passing Broteuil and Damville; below this last-named town it has an underground course for 9 miles, but reappears through numerous springs near Conches, and passing Evreux, enters the Eure at Planches, after a course of 72 miles. The other rivers are—the *Rille*, which rising in Orne, flows in a northern direction through this department, passes Beaumont, Brionne, and Pont-Audemer, from which to its entrance into the Seine it is navigable for large barges: the *Epte*, which rises in Seine-Inférieure, flows in a southerly direction along the eastern boundary of the department, and joins the Seine on the right bank a little above Vernon: and the *Andelle*, which rises near the source of the Epte, and flowing south-west enters the Seine on the right bank nearly opposite Pont-de-l'Arche. On the two last-mentioned streams are

several important iron-works; the other rivers drive the machinery of a great number of corn-mills, paper-mills, and factories. The Seine is navigated by small steamers and large river barges between Rouen and Paris, and by large sea-going vessels below Rouen. [SEINE.]

Soil and Produce.—The department is almost entirely occupied by the chalk that encircles the Paris basin, and is covered with a vegetable and clayey soil which is very thin on the crests of the hills. Along the Seine there are some tracts covered with barren sand quite incapable of cultivation. A good deal of marsh-land near the mouth of the Seine has been reclaimed by embankments and brought into cultivation.

The extensive cultivation of corn in the plains gives them a rich but monotonous appearance. The roads, as in all parts of Normandy, are lined with rows of apple and pear-trees. Besides corn of all kinds, more than enough for the consumption, hemp, flax, apples and pears for cider, plums, cherries, teazles, weld, leguminous plants, and garden stuffs are abundantly grown. Horses of the Norman breed are reared in considerable numbers; sheep are numerous, and esteemed for their flesh, especially when fed on pastures near the sea. The best fat cattle brought to the Paris markets are from the rich pastures of Roumois and Lieuvain. Hogs of large breed are reared in great numbers. Poultry is abundant and of excellent quality. The rivers abound with tench and other fish, and great quantities of salmon and shad ascend them from the sea.

The vineyards of the department, which are for the most part confined to the valleys of the Eure, the Iton, and the Seine, yield only 1,320,000 gallons of wine. The annual produce of cider is estimated at 29,700,000 gallons. The most common trees in the forests are oak, elm, beech, maple, and birch. The long rows of lofty poplars in the neighbourhood of the Seine are a characteristic feature in the scenery. Farms range from 30 to 300 acres. The farm-houses and farm-buildings are mostly built of wood and covered in with tiles or thatch. The dwellings of the poorer classes are built of wood and clay, and thatched.

Minerals and Manufactures.—The department is rich in iron-ore; building-stone, millstones, and paving-granite are quarried; fullers'-carth and potters'-clay are found. There are mineral springs at various places in the department. The manufactures consist of fine and coarse woollen cloths, linen, thread, calico, paper, printed cottons, cotton-yarn, cutlery, tape, cotton hosiery, blankets, carpets, wind-instruments, horn and boxwood combs, glue, nails, pins, hardware, &c. There are 25 furnaces and foundries for the manufacture of iron, glass-works, numerous flour and paper-mills, dye-houses, fulling-mills, marble-sawing works, sugar refineries, bleaching grounds, important copper foundries, zinc works, and a great number of tan-yards. The exports are composed of the various agricultural and industrial products named or indicated; the imports chiefly of the raw material required in the numerous manufactures, and of colonial produce. There are 698 wind and water-mills, and 727 factories of different kinds in the department.

Climate.—The climate is in general mild, moist, and changeable, but healthy, bearing a considerable resemblance to that of England. The west and north-west winds bring rain and fog; these winds, with the north and the south-west, are the most common. Between 95 and 100 days in the year are rainy. The country is better wooded than France generally is. In descending towards Pacy on the Eure, on the road from Paris to Caen, the magnificence of the prospect is very striking. The valley of the Eure, broad and perfectly level, abounds with fine trees, which are planted in the inclosures of the rich meadow-land.

Communications.—The department is crossed by 12 national, 26 departmental, and 47 parish roads. It has great facilities for communication by the Seine, and by the Paris and Rouen railroad, which has 34 miles of its length in this department, all, as far as Pont-de-l'Arche, on the left bank of the Seine. From this line two branch railroads are making, one from near the Vernon station through Evreux and Conches, the other from near Pont-de-l'Arche to Bernay, where it meets the former, and is to be continued through Lisieux to Caen.

Divisions, Towns, &c.—The department contains 1,721,218 acres. Of this surface about a million of acres are arable land, 57,354 pasture-land, 85,826 are orchards, nurseries, and gardens, 309,896 are covered with woods and forests, and 46,471 with heaths and marshes. It is divided into five arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Evreux	11	224	120,374
2. Louviers	5	111	68,959
3. Les-Andelys	6	117	64,717
4. Bernay	6	124	77,202
5. Pont-Audemer	8	127	84,625
Total	36	703	415,777

1. The first arrondissement has *Evreux* for its chief town, which is noticed in a separate article. Of the other towns we mention the following, giving with each throughout the population of the commune:—

Breteuil, a town of 2153 inhabitants, stands on the Iton, 20 miles S.S.W. from Evreux, near the Forest of Breteuil, and in a country abounding in iron-ore. A church, which dates from the 11th century, and the remains of a castle built by the Conqueror, and dismantled in 1378 by Du Guesclin, are the most remarkable objects in the town. The manufactures consist of hardware, nails, pins, copper-wire, mill-castings, &c.; there are also iron foundries and smelting furnaces. There is a cold ferruginous spring at Breteuil. *Conches* stands in a fine wheat and pasture country on the slope of a little hill above the Iton, 12 miles S.W. from Evreux, and has 2094 inhabitants, who are engaged in the manufacture of iron, hardware, shoe and glove leather, &c. It was formerly defended by a strong castle, of which the massive walls, deep moat, and four of the towers still exist. The church of Conches dates from the 16th century; it is lighted through painted windows. *St. André-la-Marche* is a small place south of Evreux, with 1234 inhabitants. It stands in an extensive plain, which suffers frequently from drought. The barony of St. André belonged to the family of Bayard, whose coat-of-arms and famous device may be seen on the walls of the church. A little east of St. André, near the Eure, is *Ivry*, with 1010 inhabitants, near which Henri IV. defeated the Duke of Mayenne, March 14, 1590. A pyramid erected by the Duke of Penthièvre to commemorate this victory was demolished by the republicans in 1793, and restored by Napoleon in 1809. Ivry belonged to Raoul, half-brother of Richard I., duke of Normandy, in whose time a strong fortress was built on the hill, at the base of which the town soon sprung up. William the Bastard gave the domain of Ivry to Roger de Beaumont, who in 1071 founded a Benedictine monastery below the castle. In A.D. 1119 Henry I. of England threw a strong garrison into the tower of Ivry, as the castle was sometimes called. Louis-le-Jeanne and Henry II. of England had an interview, in presence of the Pope's legate, near Ivry in 1176. In the 15th century an upper town existed, which was built on the hill round the castle, besides the town and monastery of Ivry, which stood in the valley. In 1418 the upper town was taken by Talbot the English general, and the castle capitulated soon after. In 1424 Ivry and its castle were again taken by the English under the Duke of Bedford. They were recovered by the French in 1449 under count Dunois, who demolished the fortress, of which there are now only extensive ruins. *Nonancourt*, on the left bank of the Avre, formerly a strong fortress and the scene of many an interview between the Norman kings of England and the kings of France, is now a small place of 1529 inhabitants. The house in which Henri IV. slept the night before the battle of Ivry is still shown. *Pacy*, in a very beautiful valley on the Eure, with the remains of ancient walls around it, has a population of 1496. The ancient castle of Pacy, the residence of Philippe Auguste and St. Louis, was dismantled by Charles V., who took the town by assault in 1378. *Rugles*, near the right bank of the Rille, is the centre of a great manufacture of pins and nails; iron-wire, hardware, calico, tape, sewing-thread, stockings, paper, &c., are also made. It has moreover iron, copper, and zinc works: population, 2050. *Verneuil*, in the south of the department, and near the left bank of the Avre, was formerly defended by a strong castle, of which the keep is still standing, and by three other fortresses, the whole surrounded by ramparts and deep ditches. The fortifications are now for the most part replaced by handsome promenades. The ancient church of La-Madeleine, which is surmounted by a tower richly decorated with sculptured work, is the great ornament of the town. Verneuil has a public library and 3956 inhabitants, who manufacture hosiery, flannels, hardware, pottery, &c., and trade in linen, canvas, wool, and dressed skins for bookbinding. The greatest onion fair in Europe is held here on the 9th of October annually. Under the walls of Verneuil the Duke of Bedford in 1424 gained his last victory over the French, after a battle which lasted two whole days. Verneuil is an ancient place; it was burnt in 1134 by lightning. Henry I., duke of Normandy, rebuilt it, and surrounded it with the strong fortifications above alluded to; and from this time till 1594, when it finally submitted to Henri IV., the town was besieged and taken at least once in a century by the French or English. *Vernon*, a station on the Paris-Rouen railroad, stands on the left bank of the Seine, which is here crossed by a bridge of 22 arches, leading to the suburb of Vernonnet. It has a college, and 7128 inhabitants, who have no manufactures of importance, but trade to some extent in corn, flour, wine, and cut stone. The town is in general ill built; the streets, formed of timber-framed houses, are narrow and crooked, but kept clean by running streams. Promenades in the form of boulevards surround the town. The parish church, and the church of the Hotel-Dieu, an hospital founded by St. Louis, and an ancient massive tower, are the most remarkable objects. A fine avenue leads from Vernon to the Château de Bizy, which belonged to the Duke of Penthièvre, who retired hither with his daughter on the breaking out of the French revolution in 1792. The duke died here March 4, 1793; through his daughter and heiress, who married the Duke of Orleans (Egalité), the château and domain of Bizy came to Louis Philippe, who occasionally resided here before his accession to the throne.

2. In the second arrondissement, the chief town, *Louviers*, formerly *Loviers*, stands in a valley skirted by extensive woods, and watered by numerous branches of the Eure, 14 miles N. from Evreux, and has tribunals of first instance and of commerce, a chamber of commerce,

a council of Prud'-Hommes, and 9998 inhabitants. The old part of the town, which consists of a few broad streets communicating with each other by a multitude of narrow lanes, is entirely built of wood; the new part is built of brick and cut-stone, and presents some pretty streets. The church of Notre-Dame, the nave and choir of which date from 1218, is a very imposing edifice; the south portal, which was completed in 1496, is particularly admired for its bold projections and florid ornaments. The painted windows of this church are distinguished for the angular drawing and quaint designs that characterise an early period of art. The house of the Templars, a most curious specimen of the domestic architecture of the 12th century, the public library, and the theatre are the other most striking objects in the town. Louviers is one of the chief seats of the cloth manufacture in France; it has upwards of 40 factories, in which from 7000 to 8000 hands are employed. It has been long famous for the finest description of cloths (for uniforms, &c.), which range from 30 to 65 francs an ell. Of late years coarser cloths, cassimeres, fancy goods for trousers, mantles, &c., are also made. There are also several woollen-yarn factories, large tan-yards, bleaching establishments, card factories, steam-engine and mill-work factories, dye-houses, brick-works, &c., and a brisk trade in corn, wood, charcoal, flax, wool, teasles, &c. Richard Cœur de Lion gave Louviers in exchange for the domain of Andelys to the archbishop of Rouen, whose successors held the seignory of the town with the title of count till the first French revolution. Louviers was taken after a vigorous resistance of twenty-six days by Henry V. in 1418. The Duke of Bedford besieged it in 1431, and after a stout defence, which lasted twenty-three weeks, the town was taken and its walls and principal buildings were demolished. *Gaillon*, 9 miles S.E. from Louviers, on the Paris-Rouen railroad, has 2596 inhabitants, who manufacture carpets, cotton-yarn, striped and checked calicoes, &c. The castle of Gaillon, which originally belonged to the dukes of Normandy, and from the time of St. Louis, to the archbishops of Rouen, was rebuilt in a magnificent style in 1515 by Cardinal Amboise. This building having been injured and in part destroyed by fire in 1703, was soon after restored. It was sold at the time of the first French revolution, and partially demolished. A beautiful portico which separated the first and second courts of the castle was removed stone by stone, and reconstructed in Paris in the court of the Palais-des-Beaux-Arts, of which it forms the grandest ornament. The castle, which now retains few features of its former magnificence, was fitted up in 1812 as a central house of detention for the convicts of the departments of Eure, Eure-et-Loir, Seine-Inférieure, Orne, and Somme. *Neubourg* stands in a fertile plain southwest of Louviers, and has 2105 inhabitants, who manufacture cotton, and trade in corn, coarse linen, wool, and cattle. There are here the remains of a fine old Norman castle, rich (as almost every spot in this part of France is) in traditions connected with English history. Henry I. of England took and burnt the castle in 1118; on Henry's death the Norman barons assembled here and resolved to support Stephen's claim to the throne of England. In the castle of Neubourg also the marriage of Marguerite of France with the eldest son of Henry II. was celebrated. The proximity of the castle brought much trouble and many a siege upon the town. The remains of the castle were fitted up during the minority of Louis XIV. by the Marquis de Sourdis, lord of Neubourg, as a theatre, in which the first attempts at French opera were made by the representation of the 'Toison d'Or,' of Pierre Corneille. In the same theatre in more recent times, all the handsome women and pretty girls of all ranks from the adjacent parts of Normandy used to assemble at a ball given on the feast of St. Paul in every year. The plain of Neubourg is entirely devoid of water-courses, it is very fertile in corn; some clumps of trees left here and there tend in some degree to relieve the monotony of its scenery. Neubourg is the birthplace of M. Dupont de l'Eure, the distinguished French legislator and politician. *Pont-de-l'Arche*, a station on the Paris-Rouen railroad, on the left bank of the Seine, which is here again crossed by a bridge of 22 arches, has 1687 inhabitants, who trade in timber, cattle, fruit-trees, &c. The tide ascends the Seine as far as this town. *Pont-de-l'Arche* owes its origin to Charles le Chauve, who erected here a palace, in which he convened councils, held assemblies of his nobles, and drew up edicts: he also built a bridge, defended by a citadel, from which the name of the place (in Latin *Pons Arcis*, 'citadel-bridge') is derived. The citadel was demolished about the beginning of the revolution. *Pont-de-l'Arche* was burned by the English under Edward III. The walls of the town yet remain flanked by circular towers. The bridge is a picturesque object, with mills in some part of its length, and a lock under one of the arches to facilitate the navigation of the river. On the bank of the river near the town are the remains of a Cistercian abbey, founded A.D. 1190, by Richard Cœur de Lion, in pursuance of a vow which he had made when nearly lost in the rapid current of the Seine. The church of *Pont-de-l'Arche*, though much dilapidated, is a fine building in the decorated gothic style; it has some rich carving, and handsome painted windows.

3. Of the third arrondissement the chief town, *Les-Andelys*, stands in the territory of the Norman Vexin, on the right bank of the Seine, and has a tribunal of first instance, and a population of 5345, who manufacture cloth, cotton hosiery, linen, pipes, sabots, woollen and cotton yarn, and leather. The town consists of two parts, *Petit-*

Andely and *Grand-Andely*. *Petit-Andelys* stands close to the Seine, which is here spanned by a fine suspension bridge of a single arch. A large hospital, which was built by the Duke of Penthièvre in 1784, surmounted by a dome, and an ancient inn built of wood, and called *Grand-Cerf*, are the most remarkable objects in this part of the town. *Grand-Andelys* is about half a mile inland; it has a very ancient gothic church and a fine specimen of the domestic architecture of the 16th century in the house called *La Grande Maison*, now used as a granary. *Grand-Andelys*, the more ancient part, sprung up round an abbey for nuns, founded here in A.D. 511 by Sainte Clotilde, the wife of Clovis, whose holy well is still an object of veneration in the neighbourhood. The abbey was burnt by the Northmen in 884, but was soon after rebuilt. The abbey church, which was early made collegiate, is remarkable for the beauty of its stained-glass windows. On an eminence above the town stand the still majestic ruins of Cœur-de-Lion's famous fortress of *Château Gaillard*. The building of the castle gave origin to *Petit-Andelys*. The *Château Gaillard* was founded by Richard in 1195, after his return from Palestine. It became one of the strongest places in France; its walls were 8 feet thick, and it was defended by 17 massive towers. Cœur de Lion died in this castle. Philippe Auguste took it in 1203 after an eight months' siege. In 1314 it became the prison of Marguerite and Blanche, the daughters-in-law of Philip the Fair, who were declared guilty of adultery; Blanche spent seven years in it; Marguerite was strangled after being imprisoned two years. David Bruce, king of Scotland, found an asylum in *Château Gaillard* in 1334, and in 1356 Charles the Bad was shut up in it. The English, after a siege of seven months, took the fortress in 1418, and held it till 1449, when they were driven out by the French. Henri IV. took it in 1589; but it was soon after recovered by the party of the League, who held it till 1591. Henri IV. had it entirely dismantled; the keep alone was spared, which however was partly demolished in 1616 by order of Louis XIII. From the Côte-des-deux-Amants, a hill which stands above the village of Amfreville, near the junction of the Audelle with the Seine, and connected with which there is an interesting local tradition, there is one of the finest views in Normandy, comprising the valleys of the Seine, the Eure, and the Andelle, the towns of Louviers and Elbeuf, with numerous bridges, old castles, forests, factories, and villages. *Villiers*, a small place near *Les-Andelys*, was the birthplace of N. Poussin. *Gisors*, in a fertile plain on the Epte, is surrounded by walls and ditches, and was formerly defended by a castle, the keep and a tower of which are still standing. The inclosure of the castle is used as a market-place; the ditch is planted with trees and forms a promenade. The church, dedicated to St. Gervais and St. Protais, dates from the 13th century, but having been often repaired it presents various styles; the portal is in the renaissance style, and the finest specimen of the kind in Normandy. The interior contains a curious monument, on which the representation of a dead body is sculptured in marble. The town has 3624 inhabitants, some cotton-spinning and bleaching establishments, tan-yards, and breweries. In the neighbourhood are copper and zinc works. *Fleury-sur-Andelle*, a mere hamlet in 1830, has now a population of 1065, cotton factories, print-works, and brick and limo kilns. *Lions-la-Forêt*, 14 miles N. from *Les-Andelys*, is built round and on the site of the ancient castle in which William Longsword died and William the Bastard spent part of his youth. There was a town here in Roman times. The population is 1524.

4. In the fourth arrondissement the chief town, *Bernay*, stands on the left bank of the Charentonne, has tribunals of first instance and of commerce, a college, savings bank, and 6871 inhabitants. Judith de Bretagne, Richard II.'s queen, had this town as part of her dowry, and founded an abbey in it. The abbey-church, the nave of which is remarkable for its severe simplicity and unadorned elegance, is now used as a corn and linen market. In the abbey-buildings the sub-prefect and the mayor reside, and the courts of justice are held. The other important buildings are the churches of *Sainte-Croix* and *De-la-Couture*, the college and the hospital. The town was fortified in the 13th century, and was then a place of importance for its market, its fairs, and its woollen manufactures. It was often taken in the wars between the French and English. The fortifications were demolished in 1589. The chief manufactures of *Bernay* are woollen-cloth; but flannels, tape, linen, leather, &c., are made. There are also dye-houses and bleaching establishments, and a good trade in corn, cider, iron, paper, hides, and cattle. One of the greatest horse-fairs in France is held here during the fifth week of Lent. *Beaumont-le-Roger*, on the right bank of the Rille, and near the fine forest of *Beaumont*, was formerly defended by a castle, which was for centuries an object of contention with the Normans, French, and English, but which is now in ruins. The town has cloth-factories, bleach-works, glass-works, and 2063 inhabitants. Of the castle, which was originally built about 1040, there are scarcely any remains; but on the summit of the rocky height on which it stood are the picturesque ruins of an ancient abbey. *Brionne*, N.E. of *Bernay*, an ancient town on the right bank of the Rille, has 3098 inhabitants, who manufacture broad-cloth, oil, and cotton-yarn. Four Roman roads met at *Brionne*: some Roman remains are seen in the adjacent forest. The Norman castle that formerly commanded the town is now in ruins. *Broglie*, S.W. of *Bernay*, is a small place of 1024 inhabitants, from which the Duc de Broglie

takes his title, and near which he has a large mansion surrounded by a fine park. Broglie was formerly called *Chambrais*.

5. Of the fifth arrondissement the chief town, *Pont-Audemer*, 40 miles N.W. from Evreux, is prettily situated on the left bank of the Rille, which here becomes navigable. It is surrounded with walls and wet ditches. The streets are regular, well built, and kept clean by running streams. The town has public baths, a small theatre, and 5497 inhabitants, who manufacture hosiery, glue, harness, and cotton-yarn; it has 40 tan-yards, 12 currieries, and 12 establishments for dressing sheep-skins and glove-leather. There is also some trade in corn, cider, flax, hides, &c. *Beuzeville*, W. of Pont Audemer, has brick-kilns, oil-mills, and 2610 inhabitants, who trade in corn, horses, cattle, and sheep, for the sale of which large fairs are held. *Cormeilles*, near the Calonne, a feeder of the Touque, on the old Roman road from Lisieux to Lillebonne, has 1373 inhabitants. *Quillebeuf*, on a promontory which juts out into the Seine, and on the extremity of which stands its massive church-tower and lighthouse, is a small place of only 1447 inhabitants. The port of Quillebeuf is important as a place of anchorage for large vessels making for Rouen, which here unload part of their cargoes; and as a station for pilots, who are indispensable to guide ships through the shifting sandbanks in this part of the river. Henri IV. threw some fortifications round Quillebeuf, granted it several privileges, and called it *Henriqueville*, intending to make it the rival of Havre. The bore at the mouth of the Seine is observed to great advantage from this place. [BORE; SEINE.] *Routot* and *St-George's-du-Vivier* are small places of a little over 1000 inhabitants each, which give name to the other cantons.

The department forms the see of the Bishop of Evreux, is comprised in the jurisdiction of the High Court of Rouen, and belongs to the 2nd Military Division, of which Rouen is head-quarters.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

EURE-ET-LOIR, a department in France, is bounded N. by the department of Eure, N.E. and E. by Seine-et-Oise, S. by Loiret and Loir-et-Cher, and W. by the departments of Sarthe and Orne. The department extends from 47° 57' to 48° 56' N. lat., and from 0° 47' to 2° E. long. Its length from north to south is 68 miles; its breadth varies from 57 to 36 miles. The area is 2208·7 square miles, and the population in 1851 was 294,892; which gives 133·51 to the square mile, being 41·20 below the average per square mile for all France.

It is formed out of portions of the old provinces of Orléanais and Maine. The districts of Orléanais included in the department are—*Beauce*, which covers all the east and part of the south of the department, and a portion of which about the city of Chartres took the name of *Chartrain*; and *Dunois* in the south-west, of which Château-Dun was the capital. The west of the department, including the arrondissement of Nogent-le-Rotrou, and a portion of that of Dreux, consists of a part of *Haut-Perche* and *Perche-Thimerais*, districts of Maine, which had Nogent-le-Rotrou and Château-Neuf for their respective capitals.

The department lies high upon the watershed between the Bay of Biscay and the English Channel. The surface is in general level, the Beauce districts (which include part of the plateau of Orléans) consist of high and extensive plains destitute of watercourses, springs, and trees; but the south and west of the department are more diversified, and present hills, well-watered valleys, and in some places ponds and marshes. The city of Chartres which stands on the plain of Beauce is 517 feet above the level of the sea, and the highest points in the department exceed this but little. The department takes its name from the two rivers that drain it—the Eure described in last article, and the Loir which rises in the department and drains its south-western districts, receiving the Thironne, the Ozanne, the Conie, and the Yèrc. [LOIR-ET-CHER.] The only other river is the Huïne, or Huine, a feeder of the Sarthe, which just enters the west of this department and passes Nogent-le-Rotrou. [ORNE.] None of these rivers is navigable in the department of Eure-et-Loir, but their water power is made to drive the machinery of a large number of corn and other mills. A canal from Pontgouin to the aqueduct of Maintenon connects the upper part of the Eure at Pontgouin with the lower part of the same river at Maintenon. The canal is about 20 miles long. The aqueduct was originally designed to convey the waters of the Eure to Versailles, but the design was given up; and the aqueduct, a vast pile, is fast going to decay.

The greater portion of the department lies on the chalk that surrounds the basin of Paris, the south-eastern district is occupied by the formations that overlie the chalk. The soil is for the most part clayey, mixed with a small quantity of sand: in some parts the clay is mixed with a calcareous earth, in others with large flints. In the west and south-west the soil is in many parts hungry sand covered with heath and furze, the ashes of which are used for manure. The land in all the eastern and southern parts is fertile, well cultivated, and admirably adapted for growing wheat. The corn produced in these districts (and especially that grown in the Chartrain) is of the best quality; it is for the most part sent for the supply of Paris, Beauce having been at all times considered the granary of that capital. The corn market of Chartres is one of the most important in France. In the Perche districts, the culture of bread-stuffs is joined to that of apples for making cider, which is more agreeable than the cider of Normandy, but not so strong. Here the fields are divided by hedge-rows, and the country having vineyards on the hill sides, and a considerable number of trees, is called the 'covered country' to distinguish

it from the bare plains of Beauce. The produce of Perche is sold in Château-Dun which has a large corn market. Besides wheat, rye, barley, oats, leguminous plants, onions, teazles, weld, flax, hemp, &c., are grown. Hops grow spontaneously in some districts of this department. Oak and birch are the prevailing trees of the forests. Horses well adapted for posting are bred by the farmers of the arrondissement of Nogent-le-Rotrou, which consists almost entirely of the highlands of Perche. Horned cattle are deficient in numbers, owing to the small extent of grass land; sheep valued for the fineness of their wool, pigs, and poultry are numerous and abundant. Of game there are hares, rabbits, red and gray partridges, plovers, lapwings, &c. The rivers contain carp, trout, pike, and crayfish.

The villages and hamlets of Beauce are built of clay and thatched, and are in general far apart. In Perche they are built of clay and stone, and covered with tiles, staves, or sometimes with heath; but in this district the hamlets are very numerous. The people of the plains are called *Beaucerons*; the people of Perche are called *Percherous*. The peasants of both districts commonly wear the blouse and the heavy sabots. The costume of the women of Percho is neat and picturesque; the women of Beauce, though clothed in more costly stuffs, are not distinguished for taste in their costume. In the Beauce district the peasant women work in the fields.

The department is essentially agricultural, with the exception of the arrondissement of Dreux, in which the manufactures are very important. The number of wind- and water-mills for the manufacture of flour is 684, and 400 of these are driven by the waters of the Eure and the Loir. Along the course of the Avre or Aure in the arrondissement of Dreux there are important paper-mills belonging to the Messrs. Firmin-Didot. There are also numerous other paper-mills, tanning- and fulling-mills, cider-mills, cotton-spinning factories, several iron blast-furnaces, forges, and foundries (which are supplied with ore partly from the mines of this department, and partly from those of Eure), and 526 factories and workshops of different kinds. Besides the articles indicated, flannel, serge, druggot, nails, blankets, linen, sieves, and woollen hosiery are manufactured and exported. A great number of caps are knitted of the fine wool of Beauce or of Spain, and sent to Orléans, where they are dyed of different colours, and form an important article of export. The imports are wine, brandy, timber, wool, cloth, colonial produce, &c. Iron mines are worked in the north-west of the department. Stone, marble, granite, and gypsum are quarried. Lime is burned. Marl is very abundant, and is used for manure. Brick-earth and potters'-clay are found. Peat is dug for fuel in the iron districts at the source of the Blaise, a feeder of the Eure, and in a few other districts. There are mineral springs near Chartres, and in the park of Ferté-Vidame.

The surface measures 1,413,575 acres. Of arable land there are 1,075,634 acres, of grass land 55,801 acres, of woods and forests 138,918 acres, of orchards, nurseries, and gardens, 14,782 acres, of vineyards 12,605 acres, and of heath and marsh land 13,900 acres. The amount of wheat exported to Paris and Orléans from the Beauce district alone in ordinary years is 412,500 quarters. The annual produce of wine is only 2,332,000 gallons; it is all of ordinary quality and consumed at home. Of cider the ordinary produce is about 3,850,000 gallons.

The department is crossed by 8 national and 7 departmental roads. The Paris-Orléans railroad runs for some miles along the south-easterly boundary. The Paris-Brest railroad crosses the centre of the department, passing through Chartres, La-Loupe, and Nogent-le-Rotrou; thus far the road is open. From Nogent the line runs south-west to Le-Maus in the department of Sarthe, whence another line running northward to Caen is met by a branch from La-Loupe between Alençon and Sees.

The climate is healthy; the temperature is not subject to sudden changes. The heat of summer is seldom oppressive; the winters are cold and dry; fogs are not unfrequent; a good deal of snow falls in the winter; and the crops often suffer from hailstorms. The prevailing winds are the east and west. The west wind blows at times with such violence as to carry sea-birds into the middle of the plains of Beauce.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Chartres	8	166	111,517
2. Château-Dun	5	80	65,185
3. Dreux	7	132	71,268
4. Nogent-le-Rotrou	4	54	46,922
Total	24	432	294,892

1. The first arrondissement has *Chartres* for its chief town, which is described in a separate article. [CHARTRES.] Among the other towns we notice briefly the following, with the remark that the population in every case is that of the commune. *Aunou* is a small place E. of Chartres, with some hosiery manufactures and 1652 inhabitants. *Bretigny*, a village 5 miles S.E. from Chartres, gave name to the treaty (1360) by which Edward III. resigned his claim to the throne of France, but obtained the independent sovereignty of all the south-west of France, from the Loir to the Pyrennes, and by virtue of

which John II., king of France, who was taken prisoner at the battle of Poitiers, obtained his liberty, and the cession of all the possessions of the Plantageuets in the north of France, with the exception of a small territory round Calais. The château in which the treaty was signed is now used as a barn. The plain on which the English army was encamped was in memory of this peace immediately exempted from tithes, and this exemption continued till the suppression of tithes at the first French revolution. *Courville*, on the slope of a hill above the Eure, 11 miles by railway W. from Chartres, has a population of 1547. Near it is the fine old castle of Villebon, in which Sully died in 1641. The château of Villebon which is built in the castellated gothic style is one of the best preserved structures of its age in France. The principal façade is broken into three divisions, three lights high, by four massive but elegant round towers, crowned by projecting crenellated parapets. On the opposite front are three similar towers. A wide wet ditch crossed by a drawbridge encircles the building, some of the apartments in which remain in the same state as when the Duke of Sully occupied them. *Gallardon*, N.E. of Chartres, has a large corn-market and a remarkably fine gothic church, which dates from the 12th century: population, 1454. Of its old fortifications (for it was strongly fortified, and occupied more than once by the English in the first half of the 15th century) there remain only a tower and a gateway. *Illiers* on the left bank of the Loir, has the remains of a fine old castle, and 2916 inhabitants, who manufacture broadcloth, blankets, hosiery, leather, tiles, and bricks. *Janville*, a small place near the Paris-Orléans railroad, has 1086 inhabitants. *Toury* on the same railway has a population of 1250. The keep of its old castle still remains. *Maintenon*, 12 miles by railway N.E. from Chartres, is a well-built town at the junction of the Voise and the Eure, and is remarkable for its castellated residence, originally built by Philippe Auguste, and afterwards rebuilt by Louis XI. and Charles VIII. The castle was the residence of Madame de Maintenon, Louis XIV.'s wife or mistress. Near it are seen the ruins of the aqueduct commenced by Louis XIV. to bring the waters of the Eure to Versailles. A great portion of the works were demolished by Louis XV., who wanted the materials to build the castle of Crecy near Dreux, for his mistress the Marchioness de Pompadour. There are a well-preserved Roman camp and several Druidical monuments near this town. The château of Maintenon belongs to the De Noailles family, and is in a state of complete repair. *Voves*, 12 miles from Chartres, has 1283 inhabitants, who manufacture caps and gloves.

2. In the second arrondissement the chief town, *Château-Dun*, stands in 48° 4' 11" N. lat., 1° 20' 20" E. long., on a hill above the Loir, which flows in two arms through a narrow valley of great beauty and fertility, shut in by hills which are covered with vines and plantations. The town was almost entirely destroyed by fire in 1723, and has been since rebuilt on a regular plan. The streets are all straight, and abut in a spacious square on the summit of the hill, from which the whole town can be seen. The castle, one of the towers of which was built in 935 by Thibault le Tricheur, is a remarkable structure; from it there is a fine view of the town and the beautiful scenery of the neighbourhood. *Château-Dun* has 6680 inhabitants, a tribunal of first instance, a college, public library, and some important manufactures of blankets and leather. *Bonneval*, a busy manufacturing town with 2671 inhabitants, stands N.E. of *Château-Dun*. A little way out of the town on the road to Chartres is seen the *Château de Condreux*, once the residence of Marshal Ney. There is a large dolmen in a prostrate condition a little east of the town. *Brou*, on the Ozanne, a feeder of the Loir, has 2444 inhabitants, who manufacture linen, serge, sieves, tiles, and weaving gear. There are deep marl-pits near Brou. *Cloyes*, south of *Château-Dun* on the Loir, has beet-root sugar manufactories, and 2324 inhabitants. Near *Cloyes* is *Courtalain*, a village in which markets are held in large covered buildings. There is here a fine château belonging to the Montmorencis, and built in the 15th century. *Oryères*, a small place 16 miles E. from *Château-Dun*, gives name to a large forest in which there is a vast quarry that furnished stone to build the cathedral of Chartres. This quarry became the retreat of a desperate band of robbers from 1797 to 1800.

3. Of the third arrondissement the chief town is *Dreux*, which has been noticed in a separate article. [*Dreux*.] *Anet*, in the north-east of the department, and in a neighbourhood rich in historical associations, stands on the right bank of the Eure, and has 1409 inhabitants. The castle and lordship of Anet, after passing through many noble and royal hands, was given by Charles VII. to Pierre de Brézé in 1449, to recompense him for his aid in driving the English out of Normandy. Louis de Brézé, Pierre's grandson, had for his second wife Diane de Poitiers, who in her widowhood exercised so great an influence over Henri II. In 1552, by Henri's orders, Philibert Delorme built at Anet a château for Diane, which for its imposing architecture, richness of decoration, for picturesqueness of site, and the elegance and varied beauty of its grounds, was unequalled in France. This castellated mansion was demolished in the wild havoc of the first French revolution. One wing has been restored; the principal façade was conveyed to Paris under the Consulate, and re-erected in the court of the Palais des Beaux Arts. The beautiful monument of Diane de Poitiers, which was of black marble and surmounted by a statue of that celebrated beauty, had been dispersed in fragments among the villagers, but was restored by M. Lenoir, and transported by the Duke

of Orléans in 1816 to Dreux, where it is now deposited in the royal chapel. *Château-Neuf*, a well-built town in the Perche district, stands near a large forest S.W. of Dreux, and has 1352 inhabitants. Near to it westward is *Digny*, with a population of 1283. *Ferté-Vidame*, a small place, deserves mention for its fine old castle and park, and for its mineral spring. *Nogent-le-Roi*, S.S.E. of Dreux, on the left bank of the Eure, has 1336 inhabitants. Philippe de Valois died here in 1350. In the abbey-church of the abbey of Coulombs, which was founded in 1028, and stood on the right bank of the river opposite Nogent-le-Roi, was formerly the monument of Jacques de Brézé and Charlotte of France, the natural daughter of Charles VII. and Agnes Sorel. *Senonches*, situated at the edge of a large forest near the source of the Blaise, has steam-engine factories, iron-foundries, and smelting furnaces. The inhabitants number 1973, and trade in timber, charcoal, and lime.

4. In the fourth arrondissement the chief town is *Nogent-le-Rotrou*, which takes its distinctive designation from Rotrou, a count of Perche. It stands in the beautiful valley on the left bank of the Huise, at the foot of a steep hill, on the summit of which is an ancient gothic castle, one of the residences of Sully. The town is in general well built; in the interior there is a square formed of good houses and lined with fine trees, which inclose a large space of greensward, and afford an agreeable promenade. It has three churches, one of which named St-Laurent dates from the 11th century, three hospitals, a tribunal of first instance, a college, a consultative chamber of manufactures, and 6929 inhabitants, who manufacture serge, druggot, sieves, cotton-yarn, and leather. There are dye-houses and fulling-mills, and at the entrance of the town several mills are driven by the waters of a cascade formed by the little river *Areise*, a feeder of the Huise. The town trades also in linen, hemp, clover-seed, hay, and straw. Sully's tomb in the chapel of the Hôtel-Dieu, on which there is a long eulogistic inscription, escaped the fury of the first revolution, but his bones were torn out of their resting-place and dispersed. In 1428 the Earl of Salisbury seized upon Nogent-le-Rotrou, but the French soon after recovered it, and threw a garrison into the castle for the purpose of annoying the English army whilst laying siege to Orléans. The Earl of Salisbury again appeared, stormed the town, hung the garrison, and burnt the castle. This castle was built in 1030; it had five towers, one of which still remains. *Authon*, S. of Nogent, has 1584 inhabitants. *La-Loupe*, 15 miles by railway N.E. from Nogent, has a population of 1161. *Champrond*, a small place E. of Nogent, has iron-mines, iron-works, and peat-beds: population about 1000.

The department forms the see of the Bishop of Chartres, is comprised in the jurisdiction of the High Court of Paris, and belongs to the 1st Military Division, of which Paris is head-quarters.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

EUROPE is one of the great divisions of the globe, forming the north-western part of the Old Continent, of which it occupies a little more than two-seventeenths; Asia contains nearly nine-seventeenths, and Africa somewhat more than six-seventeenths. The surface of Europe contains about 3,900,000 square miles.

Europe is separated from America by the wide expanse of the Northern Atlantic, which washes its western and northern shores, and from Africa by the Mediterranean Sea. The boundary-line which divides Europe from Asia is only in part indicated by nature. This line runs through the Archipelago, the Strait of the Dardanelles, the Sea of Marmara, and the Strait of Constantinople to the Black Sea, which is traversed by it. In the last century the remaining part of the line was drawn through the Strait of Yenikale and the Sea of Azof, and then along the river Don as far as the point where it approaches nearest to the river Volga, and afterwards along this river to its confluence with the Kama. It then followed the Kama to its sources in the Ural Mountains, and was continued along the crest of this range to the source of the Kara, and thence along that river to the Gulf of Kara. This boundary-line is now abandoned as being too vague, and another is substituted for it. The new line traverses the Black Sea to the western extremity of Mount Caucasus, south of Anapa; it then runs along the watershed of this range east-south-east to its eastern extremity, where it reaches the Caspian Sea at Soomgait, north of the peninsula of Absheran. Thence it runs through the Caspian Sea, which it leaves at the mouth of the river Ural, whose course it follows up to its sources in the Ural Mountains. The Ural Mountains and the river Kara constitute the remainder of this boundary-line.

The most northern point of the European continent is Cape Nord Kyn, in 71° 6' N. lat.; North Cape, in 71° 10' N. lat., is on an island called Mageröe. The most southern points are—Punta de Tarifa in Spain (36° N. lat.), and Cape Matapan (36° 17' N. lat.) in Greece. The most western points are—Cape St. Vincent (9° W. long.), Cape Roca (9° 28' W. long.), and Cape Finisterre (9° 27' W. long.). The most eastern point is in the Ural Mountains, west of Ekatarinburg (60° 20' E. long.). But some of the islands extend farther south and west than the continent. The most southern point of the island of Candia is 34° 55' N. lat. The Blacket islands on the west of Ireland lie in 10° 5' W. long. Cape Fugleberg in Iceland is near 25° W. long., and the most western of the Azores, Corvo and Flores, 31° W. long. The most northern extremity of Nowaya Szemlia is about 77° N. lat. A straight line drawn from Cape St. Vincent to the mouth of the

river Kara on the Frozen Ocean, the north-eastern extremity of Europe, does not much exceed 3000 miles; and another, drawn from Cape Matapan to Cape Nord Kyn, is 2400 miles long.

As every part of Europe is described in the ENGLISH CYCLOPEDIA under the natural or political division to which it belongs, and all the more important mountain ranges, rivers, and other great physical features have separate articles, it would be superfluous to repeat such descriptions here. All therefore that we propose to do under the present heading is, to give such a general notice as may facilitate reference to particular articles, adding any additional information that would not readily find a place under the separate headings.

Physical Geography.—Nearly two-thirds of the surface of Europe consist of an immense plain; the remainder is partly mountainous and partly hilly. The plain occupies the eastern part of the continent, and the hilly and mountainous countries extend along its western and southern shores. On the eastern boundary the plain extends across the whole continent from south to north, from the mountain range of the Caucasus and the shores of the Black Sea to those of the Arctic Ocean. In width it extends in this part of the continent from the Ural Mountains to 26° E. long. To the west of this meridian it terminates on the north on the shores of the Baltic, and in the mountain region of Scandinavia; on the south it continues along the southern shores of the Baltic, and extends even farther west to the shores of Holland opposite the British Islands. If small eminences are not taken into account, it may even be said to continue in a south-west direction through Belgium and the northern parts of France to the banks of the Seine, where it terminates between Paris and the mouth of the river. The portion of the plain west of the meridian of 26° is narrowed on the south by the Carpathian Mountains and other ranges which are connected with them. Towards the eastern part it extends over 10 degrees of latitude, but in its progress towards the west it becomes gradually narrower till its mean breadth does not exceed 3 degrees of latitude, except where the peninsula of Jutland joins it. Along the coast of the North Sea it is still narrower.

By this narrow portion of the Great European Plain and the Baltic (which may be considered as its lowest part, being covered with water), the mountain regions which constitute the western portion of the continent are divided into two separate systems. To the north lies the system of the Scandinavian Mountains, and to the south what we shall here call the South European Mountain System. The island of Great Britain may be regarded as a connecting link between these mountain systems.

The Great Plain occupies about 2,500,000 square miles; the South European Mountain region, which extends over the whole of South Europe from Cape La Roca in Portugal to the Strait of Constantinople, and presents a surface more diversified in its form than any other portion of the globe of equal extent, China perhaps excepted, occupies about 1,300,000 square miles; and the Scandinavian Mountain System, which comprehends the whole of the Scandinavian peninsula, or Sweden and Norway, about 300,000 square miles. [ALPS; APENNINES; BALKAN; CARPATHIANS; CAUCASUS; CEVENNES; JURA; PYRÉNÉES; URAL MOUNTAINS, &c.]

The coast-line of Europe is formed alternately by wide projecting promontories and deep bays, which divide them from one another. This peculiarity has led a large proportion of its inhabitants to a seafaring life, and as the winds and weather in the waters that surround this continent are not regulated by the seasons of the year, but are subject to continual changes, this circumstance has given to them that boldness in maritime enterprise which forms the most distinguishing feature in their character, and raises them above most other civilised nations of the globe.

Europe in fact, considered by itself, is only a large peninsula, which is further cut up into a great number of smaller peninsulas by the interior seas and gulfs which penetrate far inland into the main mass of the peninsula; consequently, in proportion to its surface, it presents a much greater extent of coast than any other of the great divisions of the globe, as will appear by the annexed table, which however must be considered only as a rough approximation:—

	Surface in Square Miles.	Coast-line: Miles.	Ratio of one Mile of coast-line to area in Square Miles.
Asia . .	18,000,000	35,000; or including the islands, 40,000.	500; or including the islands, 420.
Africa . .	14,000,000	16,000	900
Europe . .	3,800,000	20,000	100
America . .	15,000,000	32,000 (without the coast of the Arctic Sea).	470

The Atlantic Ocean, with which all the seas that wash the shores of Europe are connected except the Caspian (and this is rather to be considered as an immense inland lake), forms the Bay of Biscay between Cape Finisterre and the island of Ushant; the English Channel, between the northern coasts of France and the southern coasts of England; St. George's Channel, between Great Britain and Ireland; and the North Sea, which separates Great Britain from the Netherlands, Germany, Denmark, and Norway.

The close seas, which are united to the Atlantic by straits, are the White Sea, the Baltic, and the Mediterranean; with the latter the Black Sea and the Sea of Azof are connected.

Seas.	Specific Gravity of its Waters.	Extent in Square Miles.
Mediterranean	1·0293	760,000
Black Sea and Sea of Azof	1·0142	190,000
Caspian		180,000
Baltic	1·0400	160,000
White Sea	1·0190	40,000
Atlantic Sea, in the northern hemisphere	1·0283	

The basin of the Caspian Sea, though it is only drained by two large rivers, the Volga and the Ural, occupies a surface of 850,000 square miles, as far as it belongs to Europe, and runs with its northern boundary along the parallel of 60° N. lat. The basin of the Volga, the largest of the rivers of Europe, contains an area of above 750,000 square miles. The basin of the Black Sea is somewhat larger. Its area in Europe is rather more than 900,000 square miles. The countries which are comprehended in the European part of its basin are drained by the Danube, Dnieper, Dniester, Don, Kuban, and their tributaries. The basin of the Baltic is nearly equal in extent, including the Cattegat and Skagerack, being on all sides surrounded by countries which belong to Europe; their basin extends over a surface of nearly 900,000 square miles, though perhaps none of its rivers rise more than 350 miles from its mouth in a straight line. The great rivers which fall into the Baltic are the Oder, Vistula, Niémen, Düna, Newa, and the numerous rivers descending from the Scandinavian range, as the Tornea-Elf, Calix-Elf, Lulea-Elf, Pitea-Elf, Scalettea-Elf, Umea-Elf, Angerman-Elf, Indals-Elf, Liunga-Elf, Liusua-Elf, and Dal-Elf; and likewise the Götha-Elf, and Glommen, which fall into the Cattegat and Skagerack. The basin of the White Sea is drained by the Dwina, the Mezen, and Petschora, and some other smaller rivers, and occupies a surface of about 400,000 square miles. Though the coast-line of the Atlantic from Cape North Kyn to Cape Tarifa comprehends the whole of the shores of the western declivity of Europe, including the British Islands, its basin probably does not much exceed 600,000 square miles. No considerable river flows into the Atlantic between Cape North Kyn and the mouth of the Elbe. Into the North Sea there flow the Elbe, Ems, the Rhine, Schelde, and of the rivers of Great Britain the Spey, Tay, Forth, Humber, and Thames; into the English Channel only the Seine; into St. George's Channel the Severn; into the Bay of Biscay the Loire and Garonne; and immediately into the Atlantic the Clyde, the Shannon, the Duero, Tajo, Guadiana, and Guadalquivir. The basin of the Mediterranean, including the Archipelago, is by far the smallest of all those which belong to the inland seas of Europe, comprehending only about 250,000 square miles. The largest of its rivers, the Rhône, flows only 500 miles, including its bends. The other rivers, which are of a considerable length, are the Ebro in Spain; the Po and Tiber in Italy, and the rivers of Albania and the Maritza in Turkey. All the rivers which drain the basins of the Mediterranean and Atlantic Sea rise in the South European mountain region; those which fall into the Black Sea rise within the Great Plau, except the Danube and its tributaries, which drain about one-third of the mountain region. The rivers which run to the Caspian rise partly on the watershed of the Great Plain, and partly in the Ural range; and the same is the case with those that drain the basin of the White Sea. The rivers which flow from the east into the Baltic rise on the Great Plau; those which flow into it from the south rise on the edge of the mountain region; and those which fall into it from the north descend from the Scandinavian range.

Climate.—The climate of Europe presents great differences, if we compare it with that of those countries in other divisions of the globe, which lie within the same parallels. It is a well-established fact, that the eastern coast of North America is much colder than the western coast of Europe, under the same latitudes. This difference is in some places equal to 10 degrees of latitude. Thus we find that the mean annual heat of London (51° 31' N. lat.) is nearly 50° Fahr., while at Quebec (46° 48' N. lat.) it hardly exceeds 42° Fahr. At Lisbon (38° 43' N. lat.) it is 61½° Fahr., and at Williamsburg in Virginia (37° 5' N. lat.) only 56° Fahr. It is however worthy of remark, that the eastern countries of Europe, especially those north of the Black Sea, are much colder, and approach in climate those of the eastern coast of America. At Moscow (55° 47' N. lat.) the mean annual heat is not quite 38° Fahr., whilst at Edinburgh (55° 58' N. lat.) it exceeds 47° Fahr.

With respect to climate, Europe may be divided into three zones, the northern, the central, and the southern. These zones may be separated from one another by two lines, of which the northern begins near 60° N. lat. on the western coast, and terminates between 55° and 54° N. lat. on the Ural range on the east; the southern commences about 48° N. lat. on the west, and terminates on the east at the mouth of the Danube (45° N. lat.). In the northern zone only two seasons occur, summer and winter, the former lasting about three months (June, July, and August), and the latter nearly nine

months. These seasons are separated by a spring and autumn of a few days, rarely two weeks' duration. In summer the heat is very great, and the vegetation inconceivably rapid. The winter is severe and boisterous, and brings down immense quantities of snow. In the central zone the four seasons are distinct, and the passage from heat to cold, and vice versa, is very gradual. The heat is less than in the northern zone, and so is the cold during the winter; still frost prevails during two, three, or four months, and snow is common except on the coasts. In the southern zone frost is either not felt at all or only during a few days; and snow is of rare occurrence, or it does not lie on the ground for more than a few days. Vegetation accordingly is very little interrupted. But the countries within this zone have abundant rains during the last three months of the year, and are subject to great and long droughts in summer. These droughts frequently continue for four or five months, and in some places occasionally for eight or nine months.

Inhabitants and Political Divisions.—Nearly the whole population of Europe belongs to that race which is comprehended under the name of the Caucasian race; but along the Ural range, and at the most northern extremity of the continent, a few nations occur which belong to the Mongolian race; to which must be added the Magyars, who inhabit nearly the centre of Europe (Hungary).

The population of Europe amounts to nearly 265,000,000 in round numbers. The Christian religion is that which generally prevails. The Roman Catholic faith is nearly exclusively professed by the inhabitants of Portugal, Spain, and Italy, and also by the majority in France, Austria, Bavaria, Poland, Belgium, and Ireland. Roman Catholics are also numerous in some cantons of Switzerland,

and some provinces of Prussia and Russia. The whole number of the adherents of this faith it is calculated may amount to 130,000,000. To the Greek church belong the Russians and the Greeks; and a great number of the members of this church are dispersed over different parts of Turkey: they amount altogether to about 55,000,000. The inhabitants of Sweden, Norway, and Denmark are nearly exclusively Protestants; and the various sects of Protestants form the great majority in England, Scotland, Holland, Switzerland, Prussia, and the northern and western states of Germany. In France, Ireland, Belgium, and some provinces of Russia, Protestants are numerous. The whole number is about 65 millions. There are Armenians in Russia, Austria, and Turkey; about 400,000 in all.

The Turks and Tartars, with some of the small tribes of Mongol origin along the Ural Mountains, are Mohammedans. Their number is supposed not to fall much short of 6,000,000. Among the Laplanders and Samoyedes there are still some who have not embraced Christianity. The Kalmucks and the Kirghises are mostly Buddhists. At Astrakhan there are a few Hindoos. The Jews are most numerous in some parts of Russia, Poland, Austria, and Turkey. Their number cannot be accurately estimated. In the south-eastern countries of Europe there is a considerable number of gypsies: it is doubtful what their religion is.

The following is a tabular view of the sovereign states of Europe in 1854, and may serve at the same time as a list of articles to which to refer for further particulars. The areas and population are given from the latest and best authorities; wherever it could be got the population is from official documents; where round numbers are given they may be considered as approximations.

States.	Form of Government.	Area in Square miles.	Population.
Andorra (Pyrenees)	Republic, with two syndics and a council	200	10,000
Anhalt-Bernburg	Duchies; absolute sovereign prince	317	52,641
Anhalt-Köthen		307	43,677
Anhalt-Dessau		535	80,082
Austria, Empire of		255,722	36,514,466
Baden	Grand duchy; limited sovereignty, with legislature of two chambers	5,893	1,356,943
Bavaria	Limited monarchy; two chambers	29,028	4,559,452
Belgium	Limited monarchy; two chambers	11,400	4,426,202
Bremen	Republic; senate and burgher-assembly	74	79,047
Britain, Great, Ireland, and settlements, and islands in Europe	Limited monarchy; two houses of parliament	121,280	27,618,044
Brunswick	Duchy; limited sovereignty, with two chambers	1,524	270,825
Denmark, Continental	Absolute monarchy, with provincial states having limited power	21,000	2,296,597
Denmark Islands (including Iceland)		38,605	68,150
France		200,954	35,781,628
Frankfurt (on the Main)	Republic; senate and legislative body	58	77,950
Greece	Limited monarchy; senate and legislative chambers	15,234	990,373
Hamburg	Republic; two burghermasters, senate, and common council	150	188,054
Hanover	Limited monarchy; two chambers	14,830	1,810,233
Hesse-Cassel, or Electorate of Hesse	Limited sovereignty; two chambers	3,730	754,390
Hesse-Darmstadt, or Grand Duchy of Hesse	Limited sovereignty; two chambers	3,542	854,314
Hesse-Homburg	Landgraviate; absolute sovereignty	106	24,921
Ionian Islands	Free state; with council and one chamber, under British protection	1,100	228,000
Liechtenstein	Principality; limited, with one chamber	50	6,351
Lippe-Detmold	Principality; limited, with one chamber	430	108,230
Lübeck	Republic; senate and common council	126	54,166
Mecklenburg-Schwerin	Grand duchy; limited sovereignty, with two chambers	4,810	542,763
Mecklenburg-Strelitz	Grand duchy; limited sovereignty, with two chambers	763	90,028
Modena	Duchy; absolute sovereignty	2,330	580,453
Monaco	Principality; under protection of Sardinia	50	7,000
Montenegro	Principality; absolute	1,480	120,000
Nassau	Duchy; limited sovereignty, with two chambers	1,700	420,060
Netherlands (with Duchy of Luxemburg)	Limited monarchy; two chambers	13,590	3,362,625
Oldenburg	Grand duchy; limited sovereignty, with two chambers	2,440	281,923
Papal States	Absolute and elective sovereignty	15,800	2,908,115
Parma	Duchy; absolute	2,395	502,841
Portugal (including Madeira and the Azores)	Limited monarchy, with chamber of representatives	37,750	3,814,771
Prussia	Monarchy, with two chambers having limited powers	108,294	16,340,625
Russia, Principalities of	Limited sovereignty, with one chamber	600	112,175
Russia, Empire of—Russian Dominions	Absolute monarchy	2,039,055	55,504,615
Russia, Empire of—Kingdom of Poland	Absolute monarchy	49,253	4,810,735
San Marino	Republic; sovereign council	27	7,600
Sardinia	Limited monarchy, with two chambers	29,000	4,910,084
Saxony	Limited monarchy, with two chambers	5,770	1,987,832
Saxe-Altenburg	Limited monarchy, with one chamber	500	132,819
Saxe-Coburg and Gotha	Limited monarchy, with one chamber for each duchy	771	150,412
Saxe-Meiningen-Hildburghausen	Limited monarchy, with one chamber	070	160,304
Saxe-Weimar-Eisenach	Limited monarchy, with one chamber	1,401	202,524
Schauenburg-Lippe	Limited monarchy, with one chamber	200	30,226
Schwarzburg-Rudolstadt	Limited monarchy, with one chamber	330	69,038
Schwarzburg-Sondershausen	Grand duchy; limited sovereignty, with two chambers	327	60,847
Siellies, the Two	Monarchy, with a council (consulta)	43,100	8,704,472
Spain	Limited monarchy, with legislature	182,541	14,210,210
Sweden and Norway	Limited monarchy, with two chambers	203,080	4,702,274
Switzerland	Confederation of republics, with diet	15,250	2,302,740
Turkey	Absolute monarchy	190,000	15,500,000
Tuscany	Grand duchy; absolute sovereignty	8,545	1,778,021
Waldeck	Principality; limited sovereignty, with one chamber	400	59,697
Württemberg	Limited monarchy, with two chambers	7,520	1,755,265
		3,793,064	264,023,750

We add a table of the mammalia which are found in Europe similar to that given under Asia, and from the same authority.

Orders.	Whole No. of known species.	Whole No. of European species.	No. of species peculiar to Europe.	No. of species common to Europe and other Continents.
I. Quadrumana .	186	1	0	1
II. Carnivora .	731	64	20	44
III. Marsupialia .	140	0	0	0
IV. Rodentia .	604	61	21	40
V. Edentata .	34	0	0	0
VI. Pachydermata .	38	1	0	1
VII. Ruminantia .	159	14	7	7
VIII. Cetacea .	75	24	7	17
Total . . .	1967	165	55	110

EUSTA'TIUS, ST., one of the Leeward islands in the West Indies, in 17° 33' N. lat., 63° 3' W. long., is a small rocky island, about 25 miles in circumference, rising from the sea in the form of a truncated cone, terminating in a plain surrounded with woods, having a hollow in the centre, which is now a vast den for numerous wild beasts, and is perhaps the crater of an extinct volcano. The climate is in general healthy, but the island is frequently visited by dreadful thunderstorms, and hurricanes which usually occur in August and September. The extraordinary fertility of the soil, aided by the industry of the Dutch, who have cultivated the island to the very summit, have rendered it one of the most flourishing and wealthy of all the Caribbee Islands. The principal article of cultivation is tobacco, but they grow likewise sugar, indigo, and cotton. The island has great abundance of hogs, goats, rabbits, and poultry of all kinds, not only for the consumption of the inhabitants themselves, but for the supply of the neighbouring colonies. This may be one ground of the very jealous policy of the Dutch, which is far more strict than that of the other European nations who possess any of the islands. The only landing-place, naturally difficult of access, is guarded by a fort, and fortified so as to render it impregnable; nor has anything been neglected to render every part of the island equally so. This island belongs to the Dutch, who colonised it about the year 1600. The united areas of St. Eustache and Curaçoa amount to 368 square miles; and the united population of the two islands on the last day of 1852 was 26,311. The Christian population of St. Eustache included 1371 Protestants, 175 Catholics, and 360 Methodists. In Curaçoa there were 12,933 Catholics, 1833 Protestants, and 758 Jews. We know not what amount of Pagan population belongs to each. [CURAÇOA.]

- EUXINE. [BLACK SEA.]
- EVAUX. [CREUSE.]
- EVENUS. [ÆTOLIA.]
- EVERGEM. [FLANDERS, EAST.]
- EVERSHOT. [DORSETSHIRE.]
- EVERTON. [LANCASHIRE.]

EVESHAM, Worcestershire, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, is pleasantly situated on the right bank of the river Avon, in 52° 5' N. lat., 1° 56' W. long., distant 15 miles S.E. by E. from Worcester, 96 miles N.W. by W. from London by road, and 109 miles by the Great Western and Oxford and Wolverhampton railways. The population of the borough of Evesham in 1851 was 4605. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Worcester. Evesham Poor-Law Union contains 30 parishes and townships, with an area of 43,050 acres, and a population in 1851 of 14,338.

Evesham, originally Eovesham, was of some importance prior to the Norman Conquest. An abbey, dedicated to the Virgin Mary, was founded here at the beginning of the 8th century, which possessed numerous endowments and extensive privileges. Clement Lichfield, one of the last of its abbots, built the isolated tower called the Abbot's Tower, to be used as a bell tower. It was erected immediately preceding the Reformation, and is a beautiful specimen of the perpendicular style. The tower is 110 feet in height, and 28 feet square at the base.

An ancient stone bridge of eight arches crosses the river at Evesham. The two principal streets of Evesham are wide and clean; the town is lighted with gas, and paved. The guildhall, erected in the 16th century, in the market-square, was repaired by subscription in 1834. Considerable improvement has been effected in the town of late years. The parish church of All Saints is chiefly of the decorated style; the earliest portion is of the 13th century. It has a tower and spire, and a very handsome porch. St. Lawrence's church was in ruins for nearly a century till 1837, when it was restored. The style is perpendicular. St. Peter's church, Bengeworth, on the left bank of the Avon, was built in the 13th century. The Baptists, Independents, Wesleyan Methodists, Quakers, and Unitarians have places of worship, and there are National, British, and Infant schools, a literary institute, a savings

bank, a medical dispensary, and various charities. The Grammar school, founded by Abbot Lichfield, and re-founded in 1605 by Prince Henry, the eldest son of James I., is free to none; the scholars pay a small quarterage. The income from endowment is 14*l.* a year and a house: the number of scholars on the foundation in 1853 was 12. At Bengeworth is a school founded in 1729, under the will of Alderman John Deale of London, for poor children of the parish of Bengeworth, of which the founder was a native. The income from endowment is 256*l.* a year; the number of scholars in 1852 was 30. The affairs of this school are in Chancery. Petty sessions and a county court are held. The vale of Evesham is exceedingly fertile, and numerous market-gardens are in the vicinity of the town. A considerable amount of business is done in hops and seeds; there are corn-mills and a linseed-oil mill. Malting, tanning, and the making of agricultural implements are carried on. Many females are employed in sewing kid-gloves for the glove-makers of Worcester. Parchment is made to some extent. The market-day is Monday. Fairs are held on February 2nd, the Monday after Easter, Whit-Monday, and September 21st. The September fair is usually well supplied with cattle and horses. A great battle was fought near Evesham on the 4th of August, 1265, between Prince Edward (afterwards Edward I.) and Simon Montfort, earl of Leicester, in which Montfort was completely defeated, and he and his son fell in battle.

(Nash, *Worcestershire*; May, *History of Evesham*; *Communication from Evesham*.)

- EVORA. [ALEMTEJO.]
- EVIRAN. [CÔTES-DU-NORD.]

ÉVREUX, an ancient episcopal city in France, the capital of the department of Eure, stands in a pretty valley shut in by hills on the north and south, and watered by the Iton, which flows through the town in three branches, on its way to the Eure. It is situated in 49° 1' 30" N. lat., 1° 9' 14" E. long., at a distance of 60 miles W. from Paris, and has 11,706 inhabitants. The streets of Evreux are broad and neat; the houses are mostly built of wood and plaster. The cathedral, which dates from the 11th century, is a very imposing cruciform structure, though it is not uniform in style. The north transept and the portal leading to it are in the florid gothic, and are greatly admired; the west front is in the Italian style; the interior is lighted through many beautiful painted glass windows, of which those of the Lady chapel, and the rose windows of the choir and transepts are particularly admired. At the intersection of the nave and transepts rises an octagonal tower, built with cut stone, and supported on four pillars. The tower is surmounted by a pyramidal spire of open stonework of the most graceful execution. The abbey church of St. Thaurin, built by Richard II., duke of Normandy, also presents specimens of different styles, introduced in the various repairs it has undergone: it contains the shrieve of St. Thaurin, executed in the 13th century. This church was originally built in A.D. 660, over the tomb of St. Thaurin, first bishop of Evreux, the chief events of whose life are depicted on the windows of the choir. Other remarkable objects are—the clock-tower, the public library, the botanical garden, the prefect's residence, the bishop's palace, the prison, the park, and the promenades in the neighbourhood, which is prettily laid out in gardens, vineyards, and meadows. The magnificent Château-de-Navarre, near the town, built by the Duke of Bouillon on the site of a country-house of Jeanne de Navarre, was the residence of the young Pretender previous to 1745, and of the Empress Josephine for some time after her divorce from Napoleon; it was demolished in 1836, its plautations cut down, its streams turned to drive machinery, and its grounds brought into profitable cultivation. There remains however still a pavilion named the little château, which was built in 1749 on the occasion of a visit from Louis XV.

The town has tribunals of first instance and of commerce, two ecclesiastical schools, a college, primary normal school, savings bank, &c. The manufactures are ticking, hosiery, woollen stuffs, vinegar, cotton-yarn, leather, &c.; and the commerce of the town is composed of these articles and of corn, brandy, cider, perry, linseed-oil, linen hides, and groceries. The railway from Paris to Cherbourg, which leaves the Paris-Rouen line at Rosny, below Mantes, and is now in course of construction, passes through Evreux. A branch railway is also in course of construction to Evreux from the Vernon station on the Paris-Rouen line, as stated in the article on the department of Eure. [EURE.]

Evreux stands on or near the site of the ancient *Mediolanum*, the capital of the Aulerci Eburovices. The name *Eburovices* was afterwards applied to their chief city, and in the middle ages appears under the corrupted Latin forms of *Ebroica* and *Ebroas*, from which is derived *Évrex*. The town was taken from the Romans by Clovis. In 892 the Northmen under Rollo sacked and plundered it. After the settlement of the Northmen in this part of France, Evreux and its dependencies were governed by counts, from whom it passed to the house of Montfort in 1118; but Henry I., king of England and duke of Normandy, who was at enmity with that family, seized Evreux and its territory and erected it into a distinct county in favour of one of his natural sons. Montfort however, aided by the Counts of Anjou and Flanders, laid siege to Evreux, which was put into his hands by treason. On this occasion the English garrison was massacred, and the houses and churches given up to pillage. In the beginning of the 12th century

(in 1119) Évreux was burned by Henry I., king of England; and towards the close of the same century (in 1194 and 1199) it was twice taken by Philippe Auguste, king of France, who shortly afterwards acquired permanent possession of it. The county of Evreux was bestowed as an appanage on a branch of the royal family of France, which subsequently acquired the throne of Navarre; but on the death of Charles the Bad, king of Navarre, it reverted to the French crown. In the wars of the English in France, under Henry V. and Henry VI., Evreux was repeatedly taken and retaken; in 1441 it was captured, after a vigorous resistance, by the French. The town was besieged and taken by Marshal de Biron shortly before the battle of Ivry. The castle of Evreux, which stood within the town, was replaced by a residence of the dukes of Bouillon, erected in 1652, and now used as the prefect's residence. The clock-tower stands on the site of the keep of the old castle.

At *Vieil Evreux*, a village near Évreux, there are several ancient remains, including a theatre, an aqueduct, and some fortifications, which are supposed by some to mark the site of *Mediolanum*.

(*Dictionnaire de la France; Le Brasseur, Histoire du Comté d'Evreux.*)

EWELL. [SURREY.]

EX, RIVER. [DEVONSHIRE.]

EXCIDEUIL. [DORDOGNE.]

EXETER, Devonshire, the capital of the county, a city and county in itself, and a parliamentary borough, is situated on elevated ground on the left bank of the river Ex, in 50° 44' N. lat., 3° 38' W. long., distant 164 miles W.S.W. from London by road, and 193 miles by the Great Western railway. The city is governed by 12 aldermen and 36 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The population of the city and county of Exeter in 1851 was 32,818; that of the parliamentary borough 40,688. The livings are in the archdeaconry and diocese of Exeter. For Poor-Law purposes the city of Exeter is managed under a local act.

Exeter is supposed to have been a settlement of the Britons before the Roman invasion. It was then called *Caer-Isc* and *Caer-Rydh*, the former derived from its situation on the Ex or Isc, the latter from the red soil on which the castle is built. By the Romans it was called *Ieca Dumnoniorum*. Many coins, small bronze statues or penates, tessellated pavements, and other Roman antiquities have been discovered near the walls and in the neighbourhood of the city. In the reign of Alfred the town was called *Exan-Cestre* (Castle on the Ex), whence its present name. About 927 the Cornish men were dispossessed of Exeter by Athelstan, who is regarded as the founder of the existing city. William the Conqueror took possession of the city after a close siege of 18 days. It was besieged on several occasions in later periods of its history.

The city of Exeter was formerly surrounded by walls and strongly fortified. Situated on a high eminence, on the north side of the town, are the ruins of the castle, called 'Rougemout.' It was completely dismantled during the civil war. In the area of the castle-yard a sessions-house has been erected, a neat building, faced with Portland stone; it contains, in addition to two good-sized courts, a grand-jury room, magistrates' room, &c. In front is a large open space, where county, election, and other meetings are held. To the north of the castle is a delightful walk, shaded by fine old elm-trees, called 'the Northernhay.' Nearly in the centre of Exeter is the guildhall, where the assizes for the city are held, as well as the sessions, elections, and other civic business. The building contains several valuable portraits, among others those of Henrietta Maria, queen of Charles the First, of her daughter Henrietta, duchess of Orleans, who was born in Exeter, and of General Monk. Exeter cathedral, as it at present stands, was probably begun soon after the see of Devon was transferred to Exeter from Crediton, in the year 1049. It was considerably altered and enlarged by Warlewast, third bishop of Exeter, a Norman, who came over with the Conqueror. It then assumed its present cruciform shape, but underwent numberless alterations and additions during the 13th and 14th centuries. It now consists of a nave, 76 feet in width and 175 feet in length, with aisles on each side; two short transepts, formed by two Norman towers 145 feet in height; a choir of the same width as the nave, and 128 feet in length; ten chapels or oratories, and a chapter-house. The whole building from east to west (including St. Mary's Chapel) is 408 feet in length. The western front is highly decorated with a profusion of niches and elegantly-carved figures, and presents one of the richest façades of any building in England. The interior is exceedingly fine in its decorations and general appearance. The bishop's throne, which is of black oak, elaborately carved, rises in a pyramidal form to the height of 52 feet; it was erected towards the close of the 15th century. In the cathedral are numerous monuments of interest. The chapter-house is a beautiful edifice, with a handsome oak roof; in this building is contained the cathedral library, consisting of about 8000 volumes. The organ is one of the largest in Europe; the large pipes are nearly 23 feet in height, and 4 feet in circumference. In the north tower are the 'Peter' bell, one of the largest bells in the kingdom, and a large clock of exceedingly curious antique workmanship. The south tower contains a peal of 11 bells.

The city was anciently held in demesne by the crown; its earliest charter was granted by Henry I. The corporation hold a court of

quarter sessions, and the assizes are held by the judges of the western circuit twice a year for the county of the city at the guildhall, and twice a year for Devonshire at the sessions-house. A county court is held in the city. There are places of worship for Baptists, Quakers, Independents, Wesleyan and other Methodists, Unitarians, Roman Catholics, and Jews.

Exeter is on the whole a well-built and clean city. Two main lines of street intersect each other, meeting in the central part of the city; one line is called the High-street and Fore-street, the other North-street and South-street. The older streets are generally narrow, but there are handsome squares and terraces in Northcuhay, Southernhay, &c., which contain many well-built houses. Exeter is lighted with gas, and is supplied with water by water-works erected in 1794. The guildhall, in High-street, was rebuilt about the middle of the 15th century; it has a singular portico, supposed to have been added about the close of the 16th century: the portico projects into the street, and forms a prominent feature in the line of buildings. The subscription ball-room is a spacious apartment, measuring 80 feet by 40 feet, and is very handsomely fitted up. A subscription library is in Fore-street. In the cathedral yard is the Devon and Exeter Institution, founded in 1813, for the promotion of arts, &c., the library of which contains several thousand volumes. A museum is connected with the Polytechnic Institution, founded in 1847. Among other public buildings are the custom-house on the quay, the theatre, cavalry barracks, bridewell, county jail, and city prison. A handsome stone bridge of a single arch was erected over the river Ex in the year 1778, at an expense of about 20,000*l.*, a little above the site of an ancient bridge originally built in 1250. The port of Exeter extends from the coast near Lyne Regis to the Ness Point. The ship canal, by which vessels of considerable size come up to the city, was originally formed in 1544, contributions of a portion of their communiou plate having been made towards the expense by the parishes interested in the scheme. In 1827 the canal was lengthened and deepened, and a spacious wet-dock constructed at the Exeter termination of the canal. The gross amount of customs duties received at the port during 1851 was 93,184*l.* 10*s.* 1*d.* On December 31st, 1853, the vessels registered at the port were:—41 under 50 tons, tonnage 1197; and 146 above 50 tons, tonnage 19,533. During 1853 there were entered, coastwise, of sailing vessels, inwards 598, in all 57,785 tons; and outwards 216, reckoning 9,061 tons. The colonial and foreign trade included an aggregate of 226 vessels and 14,037 tons inwards, and 65 vessels and 5787 tons outwards. There are few manufactures in Exeter; the inhabitants are chiefly employed in retail trade and in handicrafts.

A considerable import and export commerce is conducted here, the dairy, orchard, and farm produce of the neighbouring districts supplying articles of exchange for commodities of foreign production. There are market-houses in Fore-street and Queen-street; the market-days are Wednesday and Friday; there is a daily market for fish, fruit, &c. Four fairs are held in the course of the year. A great horse-fair is held at Alphington, about a mile from Exeter.

The Free Grammar school was founded by the citizens in the reign of Charles I.; the sons of freemen are instructed gratuitously. There are eighteen exhibitions to the universities of Oxford or Cambridge, six of which are of 40*l.* each, the others much less. The school possesses an income from endowment of 40*l.* a year, and had 60 scholars in 1853. There are several National, British, and Charity schools. The Devon and Exeter Hospital is supported by subscription, and has a considerable income arising from funded property. There are in the city a lunatic asylum, a dispensary, an eye infirmary, an institution for the deaf and dumb, an institution for the blind, a mechanics institution, a savings bank, and several almshouses.

The diocese of Exeter is in the province of Canterbury; it extends over the counties of Devonshire and Cornwall and the Scilly Islands, and comprises 429 benefices. It is divided into four archdeaconries, Exeter, Barnstaple, Totnes, and Cornwall. The chapter consists of the dean, the archdeacons, six canons, a precentor, a chancellor, and seven-and-twenty prebendaries. The income of the bishop is fixed at 2700*l.* a year.

(Isaacke, *Exeter; Routbook of Devon; Handbook of Devon; Land We Live In*, vol. iii.)

EXETER. [NEW HAMPSHIRE.]

EXMOUTH, Devonshire, a market-town and watering-place in the parishes of Littleham and Wilycombe Raveligh, is situated at the mouth of the river Ex, on its left bank, in 50° 37' N. lat., 3° 25' W. long.; distant 10 miles S.E. by S. from Exeter, and 170 miles S.W. by W. from London by road. The population of the town of Exmouth in 1851 was 5123. The living is a curacy annexed to the vicarage of Littleham, in the archdeaconry and diocese of Exeter.

Exmouth was a place of some importance in the time of King John, when it was one of the chief ports on the coast. In 1347 it contributed 10 ships and 193 seamen as its proportion of the fleet which Edward III. sent to attack Calais. The origin of Exmouth as a watering-place dates from about the commencement of the 18th century, and till the rise of Torquay it was the first on the Devonshire coast in point of importance as well as of time.

The old town of Exmouth is built on the base, and the new town on the slope and summit of a hill. On the beach is a good bathing

place, as well as baths. The town is well supplied with hotels, lodging-houses, public walks, libraries, assembly and subscription rooms, &c. The houses and shops are well built, and there is a good market. The sea-wall, 1800 feet long, is of much service as a promenade and drive. Exmouth contains a church, chapels for Independents and other Dissenters, and a National school. From Beacon Hill are obtained some fine inland and seaward prospects. With Star Cross, on the opposite side of the Ex, where is the nearest railway station, there is communication by ferry.

(Borlase, *Devonshire; Land We Live In*, vol. iii.; *Routebook of Devon; Handbook of Devon and Cornwall*.)

EYAM. [DERBYSHIRE.]

EYE, Suffolk, a market-town and municipal and parliamentary borough, in the parish of Eye, is situated in 52° 19' N. lat., 1° 8' E. long.; distant 20 miles N. from Ipswich, and 89 miles N.E. by N. from London. Mellis station of the Ipswich, Bury, and Norwich railway, which is 2 miles from Eye, is 91 miles distant from London. The population of the parish of Eye, with which the municipal borough is co-extensive, was 2537 in 1851; that of the parliamentary borough, which includes several adjacent parishes, was 7531. The borough is governed by 4 aldermen and 12 councillors, and returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Suffolk and diocese of Norwich.

Eye is pleasantly situated on a small feeder of the Waveney. This rivulet was probably navigable at one time, and surrounding the town is supposed to have given rise to the name, which signifies in Anglo-Saxon an island. Roman coins have been found in the neighbourhood. The town was incorporated by King John, and sent two members to Parliament from the time of Elizabeth to the passing of

the Reform Act. There was formerly at Eye a castle and a small Benedictine priory. Of the monastic buildings there are some remains. The streets of the town are rather narrow and irregularly built. The public buildings are a town-hall, a freemasons hall, an assembly room (formerly a theatre), and a jail. The church is handsome and spacious, with a fine embattled tower, and an elegant gothic porch. The Baptists and Wesleyan Methodists have places of worship. The Free Grammar school, founded in the 16th century, has an endowment of 60*l.* per annum; the number of scholars on the foundation in 1853 was 30. There are also a Free school, almshouses, and a savings bank. Brewing, coach-making, and the manufacture of agricultural implements are carried on. The corn-market is held on Tuesday, and the general market for butter and vegetables on Saturday. There are two annual fairs.

EYEMOUTH. [BERWICKSHIRE.]

EYGUIÈRES. [BOUCHES-DU-RHÔNE.]

EYLAU, or PREUSSISCH-EILAU, a town in Prussia, in the government of Königsberg, is situated on the Pasmer, in 54° 25' N. lat., 20° 35' E. long., about 20 miles S. from the town of Königsberg, and has an old castle, a church, and about 2500 inhabitants, who manufacture woollen cloths, hats, leather, &c. The name it bears has been given to it in order to distinguish it from Deutsch-Eilau, a town in the Prussian administrative circle of Marienwerder. Eylau is noticed here merely because it gives name to the battle fought there, Feb. 8, 1807, in which the French under Napoleon I. defeated the allied armies of Russia and Prussia.

EYMET. [DORDOÛNE.]

EYNESFORD. [KENT.]

EYRE-COURT. [GALWAY.]

F

FAENZA, the ancient *Faventia*, an episcopal town of the Papal States, in the province of Ravenna, is situated in a well-cultivated plain watered by the Lamone, 20 miles S.W. from Ravenna, and has a population of about 20,000. The Zanelli Canal runs from the Lamone at Faenza to the southernmost arm of the Po. Faenza is a well-built modern-looking town, surrounded by walls, and further defended by a citadel. The streets are regular; there are a fine market-place surrounded by arcades, many palaces, churches rich in paintings, several convents, a fine bridge on the Lamone, a theatre, and a lyceum. The town has also a school of paintings, a college, an hospital, and lunatic and orphan asylums. There are several manufactories of glazed and coloured earthenware, which is called 'majolica' in Italy, and 'faience' in France, where it was introduced from Faenza. There are also manufactories for spinning and weaving silk, some paper-mills, and a considerable trade by the Zanelli Canal.

Faventia was anciently a town of the Boii, and afterwards a municipium under the Romans. It was near Faventia that Sulla defeated the consul Carbo and drove him out of Italy. (Livy, 'Epitome,' 88.) The town was afterwards ruined by the Goths, and restored under the Exarchs; but its walls were not raised until A.D. 1286. It was then for some time subject to the Bolognese, but was afterwards ruled by the house of Manfredi to the end of the 15th century, when it was seized by Pope Alexander VI., and has since been annexed to the States of the Church.

FAÏOUM, a province of Egypt, to the west of the Lihyan ridge, which bounds the Valley of the Nile on the west. About 12 miles N.W. from Benisouf there is a depression in the ridge six miles in length, which leads to the plain of the Faïoum. This plain is of a circular form, about 40 miles from east to west, and about 30 miles from north to south. The northern and north-western part of it is occupied by the lake called Birket-el-Keroun. A range of naked rocks bounds the lake to the north, and joins towards the east the Libyan range, which skirts the Valley of the Nile. To the west and south the plain is bounded by lower hills which divide it from the Libyan Desert. It forms in fact a basin with only one opening or outlet on the eastern side towards the Nile. The Bahr-Yussouf, or Great Canal, which runs parallel to the Nile and skirts the Lihyan ridge, on arriving at the gap above mentioned, at a village called Howarah Illahoun, turns to the west, passing under a bridge of three arches, through which the water flows and forms a fall of about three feet at low water. It then runs along the valley, and on reaching the entrance of the Faïoum, at the village of Howarah-el-Soghair, a wide cut branches off from it to the right, running first north and then north-west, and passing by Tamieh meets the north-east extremity of the lake. About two miles below Howarah-el-Soghair another deep ravine opens to the south, and then turning south-west passes by Nezeh, and enters the south-west part of the lake. Between these two branches the cultivated part of the Faïoum is contained. But these two cuts have been long dyked across at their beginning, in order to economise the water of the Nile, which owing to the rising of the head of the Bahr-Yussouf flows less copiously than formerly. Only a small part of the water finds its way to the lake by the Tamieh and Nezeh cuts. The main stream continues its course westward

towards the middle of the plain and the town of Medinet-el-Faïoum, the capital of the province. Here the water becomes distributed into a multitude of small canals for irrigation, which spread in every direction through the central part of the plain, and which are the cause of its extraordinary fertility, for the Bahr-Yussouf contains water all the year round. But that fertility exists only within the range of the canals. All the part west of Nezeh is arid and sandy, and only inhabited by a few nomad Arabs, though it bears the traces of former cultivation. The strip of land which borders the Lake Keroun is low and marshy, marking the original basin of the lake, which is separated from the cultivated lands by a considerable riso all along. The lake is described under BIRKET-EL-KEROUN. It is calculated that the land susceptible of cultivation in the Faïoum is about 450 square miles, of which hardly one-half is now cultivated. The villages, which are said to have been at one time above 300, are now reduced to less than 70. Still the cultivated part is superior in fertility to every other province of Egypt, from which it differs in the greater variety of its products and the better appearance of its villages. In addition to corn, cotton, and the other cultivated plants, it produces an abundance of apricots, figs, grapes, olives, and other fruit-trees, which thrive here better than in the Valley of the Nile. A vast quantity of roses also grow in the Faïoum, and this district is celebrated for the manufacture of rose-water, which is sold at Cairo and all over Egypt for the use of the wealthy.

The province is the ancient Arsinoite Nome. The remains of antiquities in the Faïoum are few. Two pyramids of baked bricks about 70 feet high stand at the entrance of the valley, one near Howarah Illahoun, and the other near Howarah-el-Soghair. There is an obelisk of red granite 43 feet high, with a circular top, and sculptured with numerous hieroglyphics, near the village of Bijige, a few miles south of Medinet-el-Faïoum. Near Medinet-el-Faïoum are also some remains of the ancient Arsinoë or Crocodiopolis, consisting of fragments of granite columns and statues. At Kasr-Keroun, near the south-west extremity of the lake, is a temple 94 feet by 63 and about 40 feet high, which contains 14 chambers, and appears to be of the Roman period. On the north-west bank of the lake, at a place called Deuay, a raised pavement or dromos, about 1300 feet in length, leads to a building, partly of stone and partly of brick, 109 feet by 67, divided into several apartments and surrounded by an outer wall of crude brick, 370 feet by 270. This is supposed to be the site of the ancient Dionysias. Further to the east, but on the same bank of the lake, at a place called Kom-Waseem-el-Hogar, are the ruins of Paccchis. The direction of the principal streets and the plans of many of the houses may be distinctly traced. The site of the ancient labyrinth has not yet been ascertained. At Fedmin-el-Kunofs, or 'the place of churches' in Coptic, near the south-east bank of the lake, are some remains of early Christian monuments.

The mountains along the north bank of the Lake Keroun, on which the rains fall annually, are said to contain salt, and to this circumstance the saltiness of the waters of the lake is attributed by some. [BIRKET-EL-KEROUN.]

South of the Faïoum there is an opening through the ridge of low hills leading into a smaller circular plain or hasin, with a small lake

called Birket-el-Garaq, which has one or two hamlets on its banks. A small stream from the Bahr-Yusseuf runs into it. The road-track of the caravans to the smaller oasis passes through this place.

(*Description de l'Égypte*; Belzoni; Wilkinson, *Topography of Thebes*; *Handbook of Egypt*.)

FAIRFORD. [GLOUCESTERSHIRE.]

FAITH, ST., HORSHAM, Norfolk, a village, and the seat of a Poor-Law Union, in the parish of Horsham St. Faith, and hundred of Taverham, is situated 52° 42' N. lat., 1° 17' W. long., distant 4 miles N. from Norwich, and 112 miles N.E. by N. from London. The population of the consolidated parish of Horsham St. Faith and Newton St. Faith in 1851 was 1211, inclusive of 123 inmates of the Union workhouse. The living is a perpetual curacy in the arch-deaconry and diocese of Norwich. St. Faith Poor-Law Union contains 30 parishes, with an area of 47,851 acres, and a population in 1851 of 11,891.

FAKENHAM. [NORFOLK.]

FALAISE. [CALVADOS.]

FALKINGHAM. [LINCOLNSHIRE.]

FALKIRK, Stirlingshire, Scotland, a market-town and parliamentary burgh, in the parish of Falkirk, is situated on rising ground, near the right bank of the river Forth, in 56° 1' N. lat., 3° 4' W. long., distant 12 miles S. by E. from Stirling, 24 miles W. by N. from Edinburgh by road, and 25½ miles by the Edinburgh and Glasgow railway. The population of the burgh in 1851 was 8752. It is governed by a provost and 11 councillors, three of whom are bailies; and jointly with Airdrie, Hamilton, Lanark, and Linlithgow, returns one member to the Imperial Parliament.

Falkirk is in a wealthy and populous district, in the midst of collieries and manufactories, and is the chief town in the eastern part of Stirlingshire. The town consists chiefly of one street, called the High-street, which is upwards of half a mile long. The town-house is situated in the middle of this street. The parish church, a recently erected building, has a fine steeple 130 feet in height. Besides the parish church, there are chapels for Free Church and United Presbyterians, Independents, and Roman Catholics. On each side of the High-street narrow streets of old houses branch off, one of which extends upwards of a mile towards Carron, passing through the villages of Bainsford and Grahamstown. Falkirk is lighted with gas.

The iron-works at Carron, 2 miles N. from Falkirk, are the largest in Scotland. The Falkirk iron-works are also extensive, and besides these, there is a small foundry on the banks of the Forth and Clyde Canal. There are manufactories of pyroligneous acid, of naphtha, and of potash and alum. Coal is extensively wrought in the neighbourhood. There are three tanneries. The ordinary market-days are Thursday and Saturday. The Falkirk 'trysts,' or cattle fairs, are held three times a year, when black cattle, principally for the English markets, sheep and horses, are sold in very large numbers. These have long been the largest cattle-markets in Scotland. Two excellent school-houses and residences for teachers were erected a few years since. There are a savings bank, a school of arts, and a horticultural society.

Falkirk was formerly a burgh of barony, held of the family of Livingstone till the attainder, in 1715, of the earl of Linlithgow and Callander, by whose forfeiture his superiority vested in the crown. A part of the Roman wall, known by the name of 'Graham's Dyke,' still exists in the neighbourhood.

(*New Statistical Account of Scotland*; *Communication from Falkirk*.)

FALKLAND ISLANDS, a colonial settlement belonging to Great Britain, situated between 51° and 53° S. lat., 57° and 62° W. long., about 300 miles E. from the entrance to the Strait of Magalhães. They form a group of islands in the Southern Atlantic, consisting of two principal islands, East Falkland and West Falkland, with a considerable number of smaller islands clustered around them and in the strait between them. East Falkland is about 90 miles long, and on average 40 miles wide; West Falkland is about 80 miles long, with a mean width of about 25 miles. They are separated from each other by Falkland Sound. The smaller islands, about 200 in number, vary considerably, from 16 miles in length and 8 miles in width, to mere islets of half a mile in diameter. East Falkland is computed to contain 3000 square miles; West Falkland is estimated at 2000 square miles. If the adjacent islands are added, the whole group may be estimated to contain about 6000 square miles.

Coasts.—The coast-line is very irregular, and the whole group is deeply indented by sounds, bays, harbours, creeks, and inlets. On West Falkland and some small islands near it, there are high precipitous cliffs in a few places exposed to the western seas; but other places are low, especially the southern portions of East Falkland.

Surface and Soil.—Very little is known of West Falkland, and it is entirely uninhabited. It is said to possess a finer climate than East Falkland; and it has several excellent harbours. At certain seasons it is visited by whalers and sealers (chiefly Americans), and by vessels in quest of guano. The average height of it appears to be greater than that of East Falkland, though the highest hills seem to be in the last-mentioned island. A chain of high hills, called the Wickham Heights, runs across East Falkland in a due east and west direction from Port William to Port Sussex on Falkland Sound. Mount Osborne, near Port Sussex, is 2300 feet above the sea; the

other hills vary in height from 800 to 2000 feet. They consist chiefly of quartz rock, which is extremely rugged at the summits, where it sometimes assumes the most wild and fantastic forms. The country north of the Wickham Heights has a hilly surface, and at several places these hills rise to some hundred feet above the general level. That portion of the island which lies south of the Wickham Hills may be considered as a level plain, gently declining towards the southern shores. In some parts of the island the bottoms of the valleys are covered by great angular fragments of quartz rock. The blocks vary in size from that of a man's chest to ten or twenty times as large. They do not occur in irregular masses, but are spread out in level sheets or great streams. These streams of stones vary from 100 feet to a mile in width.

A view of the country from one of the heights is extremely dismal. Moorland and black bog extend as far as eye can discern, intersected by numerous streams and pools of yellowish-brown water. The soil is generally peat, from 1 foot to 10 feet in depth, and below it is a stiff clay. In some parts however there are considerable tracts of dry gravelly land, without peat. The peaty land produces the heaviest growth of grass, but the cattle seem to prefer feeding on the shorter grass of the gravelly soils.

In all cases where the peaty soil has become mingled with the sub-soil, as in the bottoms of many of the valleys, by the sides of the streams, and almost always at the mouths of the streams, the soil is of the richest quality, and the grasses are remarkably thick and verdant. This kind of soil abounds south of the Wickham Heights.

Rivers and Lakes.—There are few rivers. The San Carlos is the largest. It winds very much, and is only about 30 miles in length, and navigable for boats about 8 miles from its mouth. There are however numerous springs and rivulets, and also many fresh-water lakes or ponds, varying in size from 30 yards to 3 or 4 miles in circumference.

Climate.—The climate resembles that of England, but is more equable; the summers are not so hot and the winters not so cold. The mean temperature of the year is about 47° Fahr. The summer temperature ranges between 45° and 70° Fahr.; the winter between 30° and 50° Fahr. The ice in winter seldom exceeds half an inch in thickness, and the snow is rarely more than ankle deep, and remains a very short time upon the lower lands. Occasionally snow-storms of great severity are experienced, in which many cattle are destroyed. Light passing showers are frequent, but a day of constant rain seldom occurs. The prevalent direction of the wind is west, shifting between north-west and south-west. Easterly winds are very rare. Northerly winds are more frequent, and they bring gloomy damp weather. The westerly winds commonly commence at nine o'clock, blow with a force frequently bordering on a gale through the day, and die away about four or five o'clock in the afternoon. The nights are generally calm, and the contrast of the bright and still mornings and calm evenings with the stormy mid-day is very striking.

Productions.—There are no trees in these islands; but there are three or four different kinds of bushes. The grasses, which at present are the most important production, are generally long and coarse, but they possess very nourishing qualities. One of them, called Tussac, has especially attracted the attention of naturalists and graziers. It is a gigantic edgy grass of the genus *Carex*, and covers the great mosses. It is becoming scarce, in consequence of the great numbers of cattle which have fed upon it. Another grass of very nutritious quality, the *Arundo alopecurus*, is distributed over the country, and the wild cattle freely use it. Turnips and the common vegetables grown in England grow exceedingly well in sheltered situations. In 1850 there were 10 acres of ground laid out in garden cultivation; in 1851 there were 18 acres so laid out. Barley and oats have been cultivated successfully. The soil is not favourable to the production of wheat.

There are few indigenous animals. The only quadruped is the warrah, or wolf-fox, a peculiar species confined to this archipelago. It is about the size of an English hound, but slender, with long legs. The other animals which are found in a wild state have been brought there with the intention of being left, or remained when the European settlements were broken up. The most important are the wild cattle, the number of which in East Falkland is estimated at from 35,000 to 40,000. A small breed of wild horses is found on East Falkland, north of Wickham Heights. Mr. Lafone landed a large number of tame horses from Patagonia. Some were subsequently imported from Rio Negro; these are serviceable, sure-footed beasts, said to be worth from 8*l.* to 12*l.* each. Sheep thrive, but the quantity of pasture suitable for them is not large, and their number does not exceed 3000. Within the last two or three years a considerable extent of land has been inclosed for the grazing and domestication of sheep and cattle. Wild hogs abound on one of the islands. Rabbits are found in large numbers on the island generally. The peat, which occurs almost everywhere in the low grounds, affords excellent fuel. Hair-seals and fur-seals were formerly abundant about these islands, but they have decreased in number. Black whales are numerous in the sea west of West Falkland, where many American and French vessels are employed in taking them. The supply of fish is abundant, and there are plenty of swans, geese, ducks, and other wild fowl.

Commerce.—The commerce is small. The imports consist of timber,

lime, bricks, flour, sugar, coffee, and British manufactured goods; the exports consist of hides, tallow, salted beef, seal-skins, and a few barrels of fish-oil. Governor Rennie estimated the total imports in 1851 at 17,000*l.*, and the total exports at 8000*l.* The fisheries have been of late attracting the attention of the colonists. Guano is expected to form a small article of export. It is obtained in considerable quantities on West Falkland Island.

Government.—The chief objects of the British government in maintaining an establishment on the Falkland Islands are the advantages which they offer in affording water, fresh meat, and refreshment to the crews of vessels passing and repassing them in their voyages round Cape Horn; but though the number of vessels passing annually is about 1000, and there are no harbour-dues or any other similar charges, yet in 1849 only 12, and in 1850 only 23 English merchant vessels availed themselves of the opportunity. The number appears however to be on the increase. The aggregate tonnage of vessels resorting to the settlement in 1849 was 9200; in 1850 it was 13,672; in 1851 it was 17,533; in 1852 it amounted to 22,024 tons. Vessels frequently call for repairs and refitting. The government establishment consists of a governor, two clerks, a surveyor, surgeon, harbour-master, stipendiary magistrate, and chaplain. The entire annual expense of the establishment is about 1775*l.* The total expenditure, including buildings, &c., has hitherto been about 8000*l.*; the sum voted by the House of Commons for the year 1851-2 was 5000*l.* The fixed revenue of the settlement, which was 184*l.* 10*s.* in 1849, had increased to 442*l.* 14*s.* 2*d.* in 1850, and has probably increased in amount since that time.

History and Settlement.—With respect to the discovery of the Falkland Islands, all that is known with certainty is that they were seen in 1592 by Dr. John Davis, who accompanied Cavendish in his second voyage; and Hawkins, who sailed along them in 1594, called them Hawkins's Maiden Land. In 1690 Strong sailed through the channel which separates East and West Falkland, and called it Falkland Sound, whence the islands were afterwards named the Falkland Islands. Several vessels from St. Malo passed near the islands between 1706 and 1714, and from these they were named by the French *Les Iles Malouines*. In 1764 the French established a colony on one of the harbours of Berkeley Sound on East Falkland, and called it St. Louis; and two years later the British formed a settlement on West Falkland, on the inlet called Port Egmont. Soon afterwards the French, in 1767, ceded their settlement to the Spaniards, who in 1770 attacked the English colony and took it. After some negotiations Port Egmont was restored to the English. The British afterwards abandoned the colony, but did not give up the rights of possession. The Spaniards also withdrew their garrison from Port Louis.

In the beginning of the present century the whale fishery in the Southern Atlantic began to be prosecuted on an extensive scale by some European nations and the North Americans. Many of the whaling vessels visited the Falkland Islands, especially to kill wild cattle and refresh their crews. It was also discovered that the islands were visited by a great number of seals, and these animals attracted numerous other adventurers. Thus Berkeley Sound was seldom without the presence of some visitors. This induced the government of the newly-established republic of Buenos Ayres to take possession of East Falkland in 1820, and in 1823 they formed a settlement at Port Louis. England protested against these proceedings in 1829, and in 1833 the colony was given up to the English. For some years only a lieutenant of the navy with a boat's crew resided at Port Louis, but the British government resolved in 1840 to colonise the islands, and to send there a governor and a small establishment. They settled at Port Louis; but on examining the country in its vicinity, it was found that Port William, south of Berkeley Sound, offered greater advantages as a naval station and port of refuge, and in 1844 Governor Moody laid out a town on the southern shores of Stanley Harbour, a land-locked inlet, sheltered from every wind. The population of the colony in March 1847 was 270, including 106 in the employment of Mr. Lafone, a wealthy merchant of Moute Video, to whom the British government, in consideration of a payment of 60,000*l.* by instalments, granted an extensive tract of land and the possession of all the wild cattle and other wild stock for six years, dating from January 1st, 1848. Mr. Lafone's interests were recently purchased by a joint-stock company, possessed of a large capital. The company has obtained extensive privileges from government in respect of property in land and cattle, and is carrying out its operations on a comprehensive plan. From a despatch of Governor Rennie, dated January 8th, 1853, it appears that the general trade of the colony was then in a healthy state, and that its prospects were favourable. Unskilled labourers were receiving from 3*s.* to 5*s.* a day, and skilled labourers 6*s.* to 10*s.* A few garden allotments of one acre each, which had been put up for sale, realised 12*l.* an acre, being six times the usual government price, and double the amount realised in 1849. Several enrolled pensioners who had been settled in the colony had manifested some dissatisfaction with the manner in which they had been treated, but the secretary-at-war having intimated to them that they were at liberty to return to England if they preferred doing so, none of them had accepted the permission. The opening of the ship canal connecting the Atlantic and Pacific oceans, if accomplished, would of course do away with the necessity for vessels calling at the

Falkland Islands for refit or refreshment: and this being their chief use, the settlement might probably be abandoned.

(Weddell, *Voyage towards the South Pole*; Fitz-Roy and Darwin, *Narrative of the Surveying Voyages of the Adventure and Beagle*; *Parliamentary Papers*.)

FALMOUTH, Cornwall, a municipal and parliamentary borough and market-town, and the seat of a Poor-Law Union, is situated at the mouth of the river Fal, in 50° 9' N. lat., 5° 3' W. long.; distant 30 miles S.W. by S. from Bodmin, and 269 miles W.S.W. from London. The population of the municipal borough in 1851 was 4953. The borough is governed by 4 aldermen and 12 councillors, of whom one is mayor; and conjointly with Penryn returns two members to the Imperial Parliament. The population of the parliamentary borough of Penryn and Falmouth was 13,656 in 1851. The living is a rectory in the archdeaconry of Cornwall and diocese of Exeter. Falmouth Poor-Law Union contains 10 parishes and townships, with an area of 25,850 acres, and a population in 1851 of 21,049.

The port of Falmouth is first spoken of in the reign of Henry IV., when the duchess dowager of Bretagne landed here, in progress to celebrate her nuptials with that king. Until 1613 the site of the present town was occupied merely by the huts of fishermen. Shortly after this period Sir John Killegrew, having obtained permission from James I., constructed a new quay and laid the foundation of the present town. The subsequent establishment, about 1688, of the post-office packets to the West Indies, Lishon, &c., contributed much to the prosperity of the place.

The town consists chiefly of one narrow street, which extends along the south-western shore of the harbour for about a mile. The public buildings are the town-hall, the market-house, the jail, the Public Rooms, a handsome building situated in the centre of the town, and the Polytechnic hall. In the Polytechnic hall are held the meetings of the Royal Cornwall Polytechnic Society. This society, which was founded in 1833, on a plan somewhat similar to that of the Society of Arts, London, has been very successful; the society publishes its transactions. Falmouth is a neat and tolerably well-huilt town. It is lighted with gas, and is abundantly supplied with water. The suburbs are adorned with terraces and villas, which, with the harbour, when seen from the surrounding hills, present a very beautiful appearance. The parish church, dedicated to Charles the Martyr, was built in the time of Charles II. The Baptists, Wesleyan Methodists, Quakers, Roman Catholics, Jews, and Unitarians have places of worship in Falmouth. There are National, British, and Infant schools; a public library; two church libraries; an Athenæum and mechanics institute; a savings bank, a dispensary, and coal and clothing societies. A county court is held in Falmouth. The market-days are Tuesday, Thursday, and Saturday; fairs are held on August 7th and October 10th.

The quay is convenient, and there is sufficient depth of water to allow vessels of considerable burden to discharge their cargoes on the wharf. The harbour is extensive, conveniently situated, and well protected. It is defended on the west by Pendennis Castle, and on the east by St. Mawes Castle. These castles were built by Henry VIII., and subsequently improved and strengthened by Queen Elizabeth. Pendennis long resisted the attacks of Oliver Cromwell, whose lines of encampment may yet be seen. It now contains commodious barracks, storehouses, and magazines. A lighthouse has been erected at St. Anthony's Point, at the east side of the harbour. The Trinity Board have erected an obelisk on the height of the Black Rock, between Pendennis and St. Mawes, for the assistance of mariners in making Falmouth harbour. There is an extensive fishery of pilchards on the coast.

The number of vessels registered as belonging to the port of Falmouth on December 31st, 1853, was as follows:—Under 50 tons, 50, tonnage 1393; above 50 tons, 73, tonnage 7364; one steam vessel, 14 tons. The number of vessels entered and cleared at the port during 1853 was as follows:—Coasting trade, inwards, sailing vessels, 710, tonnage 40,271; steam vessels, 141, tonnage 29,447; outwards, sailing vessels, 215, tonnage 9195; steam vessels, 75, tonnage 7151. Colonial and foreign trade: sailing vessels, inwards, 161, tonnage 13,379; outwards, 147, tonnage 17,934. The exports from Falmouth consist chiefly of the produce of the tin and copper mines: there is a considerable trade with the island of Jersey in fruit and cider.

Borlase, in his 'Antiquities of the County of Cornwall,' mentions the finding of a large quantity of Roman coins on a branch of Falmouth harbour, nearly the whole of which were of the coinage of the emperors Gallienus, Carinus, and Numerian, who reigned A.D. 259-284. At the western extremity of the town stands Arwinnick House, the ancient seat of the Killegrew family.

(Borlase, *Antiquities of Cornwall*; Carew, *Survey of Cornwall*; *Handbook of Cornwall and Devon*; *Parliamentary Papers*; *Communication from Falmouth*.)

FALMOUTH. [ANTIGUA; JAMAICA.]

FALSTER, a Danish island in the Baltic, due south of Seeland, and east of Laaland, between 54° 30' and 54° 58' N. lat., 11° 45' and 12° 11' E. long. The strait called the Gaahensund separates it from Seeland, and the Giddborgsund from Laaland; on the north-east the Gröusund divides it from the Island of Moen. Its greatest length from north to south is about 25 miles, from east to west about

16 miles at its widest part. The area is about 177 square miles, and the population in 1850 was 23,240. The surface is flat but it lies higher than Laaland, has better water, and a healthier atmosphere, and is accounted one of the best cultivated and most productive parts of the Danish dominions. In the south the island terminates in two long narrow tongues of land, formed by an arm of the sea called the Norst. The western tongue of land has a lighthouse upon it, beyond which a reef of rocks extends far into the sea. The corn produce is more than adequate to the consumption, so that between 30,000 to 35,000 quarters are annually exported. Flax and hemp, hops, potatoes, and other vegetables are grown. Large quantities of fruit are raised, and apples in particular are a considerable article of exportation. The woodlands occupy about one-sixth of the whole surface. Horned-cattle and sheep are bred, and the forests afford food for a great number of swine. Much wax and honey are obtained; poultry and geese are abundant. There are no rivers but the Aar, an inconsiderable stream, and the short river through which the Mariboersee, a large lake, has an outlet into the sea. There are no manufactories on the island; but the people make their own clothing, stockings, and spirits. The principal imports are colonial produce, salt, and tobacco; and the exports are grain, salt meat, butter, fruit, live cattle, potatoes, &c. There is some ship-building.

Falster is divided into two districts, the North and South Harges. *Nykieobing*, the chief town, is situated on the western side of the island upon the Giddborgsund; it is a pleasant well-built place, has some traces of former fortifications, contains a cathedral and church, several schools, a town-hall, an hospital, and a population of about 1600. There is an ancient castle, in which several dowager queens of Denmark have resided, called *Norre Ladegaard*. The town has a good corn trade. *Stubekieobing*, the other town, is an inconsiderable place on the Grönsund in the north-east, opposite the island of Baagoe; it is surrounded by walls, and has eight streets, a church, a school, a poor-house, and about 1000 inhabitants.

The islands of Falster and Laaland with the islets of *Famö* and *Fayö*, to the north of the latter, and some other small islets round the coasts, form a stift or province of Deumark called Falster-Laaland, which has an area of 639 square miles with a total population (in 1850) of 79,017.

FALUN, or FÄHLUN, a town in Sweden, the capital of Dalecarlia, which now constitutes the Falun Län, is situated near the west shore of Lake Runn, in about 60° 35' N. lat., 15° 35' E. long., and has a population of 4500. The town is built chiefly of timber, and contains a mining school, geological and mineralogical collections, a model room, and a technical library; it is celebrated for its great copper-mine, which is situated to the west of the town. Unlike all other mines, the Falun mine presents a large pit, about 1200 feet long and as many wide, into which people descend by a staircase to a depth of several hundred feet; the ore was formerly detached by the miners from the bottom of this hole, so that they were not obliged to use candle-light, but the mine is now worked by numerous shafts and galleries, and with admirable machinery. Gustavus Vasa worked in the copper-mines of Falun. The vapours which continually rise from the mine, or to speak more correctly, from the smelting-works about it, have destroyed every trace of vegetation in the neighbourhood, and even wild animals and birds are rarely seen. To the fumes of the copper, it is said, the town owes its exemption from the visitation of cholera. Besides copper this mine yields some gold, silver, lead, vitriol, ochre, and brimstone. There are a few manufactories of linen, cotton, and wool, but all on a small scale.

The *Falun Län* coincides nearly with the old popular division of Dalecarlia or Dalarne, so-called from its comprising the basins of the Dal and its principal head-streams the Oster and Väster Dal, which unite a little west of the town of Falun and south of Lake Siljar. It comprises part of the southern mountain region of Sweden and a part of the region of mines. Its area is 12,210 square miles, and its population in 1845 was 145,333. The surface and products are noticed in the articles DALECARLIA and SWEDEN.

FAMAGOSTA. [CYPRUS.]

FANÓ. [JUTLAND.]

FANO, a sea-port and episcopal town of the States of the Church in the legation of Urbino-e-Pesaro, is situated in 43° 51' 16" N. lat., 13° 1' 19" E. long., on the shore of the Adriatic, at a short distance from the mouth of the Metauro, and has about 10,000 inhabitants. The town which stands in a rich, fertile, and salubrious plain, is well-built and adorned with many handsome edifices. There is no town of the same size on the east coast of Italy so rich in churches and pictures. The scenery of the neighbourhood is very beautiful, and numerous good roads facilitate communication with the other towns in this part of Italy. The high road along the Adriatic shore runs outside the walls which still gird the town, and are strengthened towards the sea by bastions.

Fano occupies the site of the ancient *Fanum Fortuna*, so called from the Temple of Fortune built here by the Romans to commemorate the defeat of Asdrubal on the Metaurus. Narnes here defeated the Goths. Totila destroyed Fanum, which was rebuilt by Belisarius. A modern statue of Fortune which probably replaces an ancient one, is erected on the principal fountain. Under the Romans the city was embellished with baths and a basilica. A triumphal arch of white marble was

erected in honour of Augustus, which still remains, with part of the addition of an attic with columns built upon it by Constantine. On an adjoining chapel is a carved representation of the arch as it originally stood. The walls were erected by Augustus, and repaired by the sons of Constantine.

Fano has a cathedral and thirteen other large churches, most of which, besides being fine buildings, are rich in marbles and frescoes, and contain several masterpieces of the great Italian painters. In the cathedral are, amongst other treasures of art, sixteen frescoes by Domenichino, representing the principal events in the life of the Blessed Virgin. In the church of Santa Maria Nuova are the Annunciation, and the Madonna with the Infant Saviour of Perugino. In the church of San Paterniano, named after the first bishop of Fano, who was elected A.D. 360, is the Spozalizio, or Espousals of the Virgin by Guercino. The church of San Pietro is enriched by a picture of the Annunciation—which is considered to be the masterpiece of Guido—and by the frescoes of Viviani. The Guardian Angel of Guercino is preserved in the church of Sant Agostino, and in the Folli College is the celebrated picture of David with Goliath's Head, by Domenichino. Many of these churches are rich also in specimens of monumental architecture.

Fano contains also several religious houses, a public library, a college, several schools, and one of the finest theatres in Italy, which was built by Torelli, a native artist, and ornamented with paintings and scenery by Bibioux. The port of Fano, formerly the resort of the traders of the Adriatic, was repaired by Pope Paul V., from whom it was called Port Borghese. It is now nearly choked up with sand, and the commerce of the town has declined; only small coasting-vessels can enter, which are engaged in the corn trade. The town has some important silk manufactures. Pope Clement VIII. was a native of Fano. The first printing-press known in Europe with Arabic types was established here by Pope Julius II. in 1514.

FANTEES, or FANTINS, a nation inhabiting a part of the Gold Coast in Western Africa. Since the commencement of the present century the country of the Fantees has been overrun by the Ashantees, and its recent history will be found in the article on that people. [ASHANTEE.]

FARALIONI ISLANDS. [ÆTNA.]

FAREHAM, Hampshire, a market-town, and the seat of a Poor-Law Union in the parish of Fareham, is situated at the head of the north-west branch of Portsmouth harbour, in 50° 50' N. lat., 1° 10' W. long.; distant 12 miles S.E. from Southampton, 73 miles S.W. by S. from London by road, and 85 miles by the South-Western railway. The population of the town in 1851 was 3451. The parish is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry and diocese of Winchester. Fareham Poor-Law Union contains nine parishes, with an area of 31,394 acres, and a population in 1851 of 13,925.

Fareham is situated at the intersection of the road from London to Gosport with that from Chichester to Southampton. A bridge at the town crosses the head of Portsmouth harbour, which is here narrowed to the dimensions of a small river. The prosperity of Fareham is chiefly dependent upon its proximity to Portsmouth. The town is lighted with gas, and is well supplied with water. The chief buildings are a handsome assembly-room, and a market-hall. The parish church is of various dates and styles; the chancel, which is early English, was rebuilt about 40 years ago. The Independents and Wesleyan Methodists have places of worship, and there are a Free school, National, British, and Infant schools, a literary institute, a savings bank, and a lunatic asylum. Coach-building and ship-building are carried on; cordage, saeking, and coarse pottery are made. Vessels of 300 tons can get up to the port. The trade is chiefly in corn, coal, and timber. The market is held on Monday, and there is a yearly fair for cattle and cheese on June 29th and 30th. Fareham is much resorted to in summer for sea-bathing.

(Warner, *Hampshire; Communication from Fareham.*)

FARINGDON, or FARRINGDON, Berkshire, a market-town and the seat of a Poor-Law Union, in the parish of Great Faringdon, is situated in 51° 40' N. lat., 1° 33' W. long.; distant 36 miles N.W. by W. from Reading, and 69½ miles W. by N. from London. The population of the parish of Great Faringdon in 1851 was 2456. The living is a vicarage in the archdeaconry of Berks and diocese of Oxford. Faringdon Poor-Law Union contains 31 parishes and townships, with an area of 65,880 acres, and a population in 1851 of 15,465.

The Saxon kings had a palace at Faringdon, wherein Edward the Elder died in 925. In 1202 Stephen founded at Faringdon a priory of Cistercian monks. During the civil war Cromwell made an attack upon the town, which was successfully resisted. King Charles was at Faringdon after the second battle of Newbury. The town of Faringdon is pleasantly situated; it is lighted with gas, and is neat and clean. The streets diverge from the centre of the town, where is situated the town hall. The parish church is a large and handsome gothic structure, with a low square tower. The Independents, Baptists, and Wesleyan Methodists have chapels. There are National and charity schools, and a savings bank. The market-day is Thursday. There are three annual fairs besides a statute fair on the 18th October for hiring servants. A great cattle market is held on the first Tuesday

of each month, and an annual horse fair on the 13th of February. Petty sessions and a county court are held in the town.

FARNBOROUGH, Hampshire, a village and the seat of a Gilbert Poor-Law Incorporation, in the parish of Farnborough, is situated in 51° 17' N. lat., 0° 44' W. long.; distant 40 miles N.E. by N. from Southampton, 32 miles S.W. from London by road, and 33 miles by the South-Western railway. The population of the parish in 1851 was 477, inclusive of 46 inmates of the workhouse. The living is a rectory in the archdeaconry and diocese of Winchester. Farnborough Gilbert Incorporation contains four parishes, with an area of 12,222 acres, and a population in 1851 of 2336. Farnborough is a small agricultural village, close to the Surrey border. It has stations of the South-Western and the Reading, Guildford and Reigate railways. The parish church is an ancient structure in the decorated style: the doorways north and south are Norman. Schools in the village are supported by two of the neighbouring proprietors.

(Warner, *Hampshire; Communication from Farnborough.*)

FARNBOROUGH. [KENT.]

FARNE ISLAND. [NORTHUMBERLAND.]

FARNHAM, Surrey, a market-town and the seat of a Poor-Law Union, in the parish of Farnham, is situated near the right bank of the river Wey, in 51° 13' N. lat., 0° 48' W. long.; distant 10 miles W. by S. from Guildford, 33 miles S.W. by W. from London by road, and 4½ miles by the South-Western railway. The population of the town of Farnham in 1851 was 3515. The living is a vicarage in the archdeaconry of Surrey and diocese of Winchester. Farnham Poor-Law Union contains five parishes and one chapelry with an area of 29,824 acres, and a population in 1851 of 11,804.

Farnham was a place of some importance at a very early period, and at one time returned members to Parliament. The manor of Farnham was given by Ethelbald, king of the West Saxons, to the see of Winchester, to which it has ever since belonged. On the north side of the principal street, and on the summit of a hill, formerly stood a castle, built by Henry de Blois, brother of King Stephen, and bishop of Winchester. After the Restoration Dr. Morley, bishop of Winchester, expended a considerable sum in erecting the present castle, which is of brick, covered with stucco, embattled, and of a quadrangular form. Adjoining the castle is an extensive park, through which the river Loddon flows. On the borders of the park is Waverley Abbey, a neat modern mansion, which derives its name from a monastery of Cistercian monks, the ruins of which are in the vicinity.

Farnham consists chiefly of one street, running east and west. It is lighted with gas. The parish church was formerly a chapel of ease to Waverley Abbey. Some portions of the building are of the 12th century; other portions are of the 15th and 16th centuries. The Independents have a chapel, and there are National and Infant schools, and a savings bank. The Grammar school, founded about 1611, had fallen into decay, but was recently revived as a Commercial school. The income from endowment in 1837 was 22*l.* a year. The number of scholars in 1853 was 25. A county court is held in the town. Farnham is noted for its hop plantations. The great mart for the Farnham hops is Weyhill fair. The market-day is Thursday. Three fairs in the year, for horses, cattle, sheep, and hogs, are held.

(Stevenson, *Survey of Surrey*; Manning and Bray, *History of Surrey*; Brayley, *Surrey; Communication from Farnham.*)

FARNINGHAM. [KENT.]

FARNWORTH. [LANCASHIRE.]

FARO in Italian and Spanish, *pharus* in Latin, *phare* in French, is the name given to lighthouses in the Mediterranean. The first lighthouse is said to have been that raised by Sostratus of Cnidus B.C. 293, on the island of Pharos at the entrance of the new harbour of Alexandria. [ALEXANDRIA.] The name *pharos* became afterwards an appellation for lighthouses, and in some instances it has been given to the towns near which a lighthouse was built. Such, for instance, is the town of Faro in Algarve. Torre di Faro, a lighthouse on Cape Pelorus, in Sicily, has given its name to the Strait of Messina at the entrance of which it is placed, between Calabria and Sicily, and which the Italians call Faro di Messina. The Kingdom of the Two Sicilies is divided, with regard to its administration, into *Dominj di qua del Faro*, or 'dominions on this side of the Faro' (speaking as from Naples) meaning the continental part, and *Dominj di la del Faro*, or 'dominions on the further side of the Faro,' that is to say, the island of Sicily.

FARO. [ALGARVE.]

FAROE, FEROE, or FAROERNE ISLANDS, a group of islands twenty-two in number, seventeen of which are inhabited; they are about 300 miles W. of the coast of Norway, and about 200 miles N.W. of the Shetland Isles, between 61° and 63° N. lat., and 8° and 6° W. long. They were discovered between the years 858 and 868 by some Norwegians, in the time of Harold Harfager, king of Norway, and at present belong to Denmark. Their whole area is estimated at about 495 square miles. The population in 1850 was 8150.

These islands mostly consist of steep rocks, some of them rising gradually from the sea, by two or more sloping terraces, covered with a thin stratum of earth, which produces grass. Close to the sea the land consists in general of perpendicular cliffs, from 1200 to 1800 feet in height. The most westerly island is Myggenæs, the most southerly

is Suderoe, the most easterly are Svine and Fugloe, and the most northerly are Kalsoe and Videroe. The interior is composed of hills, usually separated only by narrow ravines, in which there are brooks or rivulets which are in general so swollen in the rainy season as to become impassable: there are no valleys of any extent. The greatest elevations in these islands are the basalt mountain Skaellingfield, 2430 feet high, in the south part of the largest of them, Stromoe, which is nearly the central island of the group, and divided by narrow straits from Vaagoo and Osteroe; and the Skattaretin in Osteroe, which is said to attain an elevation of 2364 feet. There are several lakes, among which the largest are the Soorvagsvatn in Vaagoo, which is three miles long, and the Sandsvatn in Sandoe; and there are some falls of water, the most considerable of which is the Fosaa in Stromoe, which has a double fall, nearly 200 feet in height. Among the mineral springs the most esteemed is that of Varmakiele in Osteroe. The climate is bleak, and the summer lasts only through the months of July and August: yet it seldom freezes more than one month in the year, nor are the harbours ice-locked except in very severe winters. Violent storms prevail at all seasons, which prevent the growth of any large trees, and compel the inhabitants to fix their dwellings between the hills. The soil is stony, and in many parts covered with earth only four inches deep. In some islands there are majestic groups of basalt formation, similar to the caves of Staffa. Neither the soil nor climate admits of any extended tillage; and the sudden variations in the temperature induce the cultivator frequently to gather in his crops in a half-ripe state, and dry them by artificial heat. They consist principally of barley and rye, the growth of which is scarcely adequate to the consumption; potatoes, parsnips, turnips, and carrots are also raised; but it is extremely difficult to raise any other vegetable. Landt states the proportion of the cultivated to the uncultivated land to be about 1 to 60, and that the corn-fields are not more than from 8 to 12 feet in breadth. The pasture-lands are luxuriant, and the chief wealth of the islanders consists in their flocks, often containing from 300 to 500 sheep, which graze in the open air the whole year round, and yield wool of good quality. Horses of small stature, but strong, swift, and sure-footed, are bred in considerable numbers: the horned cattle are also diminutive, yet become exceedingly fat. Few swine are fed. Seal-catching, and the whale, cod, herring, and other fisheries are another main resource of the people. Independently of domestic animals, the islands contain only rats and mice. There is an immense number of wild-fowl, such as eider-ducks, swans, geese, pigeons, solan-geese, puffins, cormorants, plovers, &c. The feathers of the wild-fowl are among the articles exported.

There is no timber on the islands. Turf is used for fuel. Beds of coal were discovered in the island of Suderoe in 1709, and some mines have been opened from time to time; but the coal is of inferior quality. Copper is found in the island of Nolsoe. Jasper and opal are met with here and there.

The inhabitants are of Norman (or Norwegian) descent, and speak the Norwegian language with a Danish accent. Their food consists of milk, fish, mutton, poultry, wild-fowl, and barley groats; bread and salt are considered luxuries. Their clothing is of coarse woollen, woven by their own hands. They are either hereditary proprietors of the soil which they cultivate, or farm lands under grant from the crown, from which circumstances they have the respective appellations of *Odelsbonde* or *Kongsbonde*. They profess the Lutheran faith. The *amtman*, or bailiff, is at the head of civil affairs: in judicial matters the *landvoigt*, or judge, is assisted by sidesmen from each parish.

Ship-building is carried on with success. Woollen-yarns, cloths, and stockings are manufactured; and there are a few tanneries. The exports consist of hose and trowsersings, fish, feathers, skins and hides, butter, tallow, train-oil, &c.: the imports, of grain, bread, malt, brandy, salt, hemp, iron, timber and deals, linen, &c.

The larger islands are Stromoe, 27 miles long and about 7 miles in breadth, population about 2000: its capital Thorshavn, on the south-east side of the island, is the seat of government, and has a neat wooden church, a Latin school, a fort, and about 750 inhabitants. The streets are exceedingly narrow. Osteroe, to the east of Stromoe, is in length about 20 miles, and in its greatest breadth about 10 miles: population, 1700. It has two fresh-water lakes, and several deep fjords, or inlets of the sea, on the eastern side. A curious basaltic hill about 420 feet high, consists of pentagonal and octagonal columns, on a foundation of trap 300 feet in height. At the north-north-west point of the island there are two rocks, with the appearance of colossal statues, which are called *Risin* and *Kiedlingen*, and are 240 feet high. On the south-west side is a safe harbour, the *Kongshavn*. Sandoe, to the south of Stromoe, is about 13 miles long and one and a half mile broad: population, 500. It has a large lake called *Sandsvath* which abounds in trout, five villages, three churches, and is the residence of the *Amtspost*, who is the head ecclesiastical authority. Suderoe, lying south of the preceding, is about 17 miles in length and 5½ miles in its greatest breadth, and contains ten villages, six churches, and upwards of 1000 inhabitants. It is full of rocks and precipices. Punthavn, its port, is almost the only spot where there is a safe landing. Vaagoe, to the west of Stromoe, is nearly 13 miles long and about 5 miles broad: population, 600. Its principal lake, *Soorvaag*, is the

largest in the Faroe islands, and is full of trout. It has four churches, the parochial one being at Midvaag, a village and sea-port. Myggenaes, to the west of Vaagoe, is an inconsiderable island about 3 miles broad. The remainder of the seventeen inhabited islands are Fugloe, Srinoe, Videroe, Bordoie, Konoe, Kalsoe, Kolter, Hestoe, Nolsoe, Sknoe, and the greater Dimon.

FARS, or FARSISTAN. [PERSIA.]

FASANO. [BARI, TERRA DL.]

FAVERSHAM, Kent, a market-town, a municipal borough, a member of the cinque port of Dover, and the seat of a Poor-Law Union, in the parish of Faversham, is situated in 51° 18' N. lat., 0° 53' E. long., distant 8 miles W. by N. from Canterbury, and 47 miles E.S.E. from London. The population of the town of Faversham in 1851 was 4595. The town is governed by 4 aldermen, or jurats, and 12 counsellors, one of whom is mayor. The living is a vicarage in the archdeaconry and diocese of Canterbury. Faversham Poor-Law Union contains 25 parishes and townships, with an area of 44,052 acres, and a population in 1851 of 16,513.

Faversham is situated on a stream running into the East Swale, to the left of the road from London to Dover. King Stephen founded here an abbey for Clunice monks, in which himself, his queen Matilda, and his eldest son, Eustace of Boulogne, were buried. Portions of the outer walls still exist. The town consists chiefly of four streets, forming an irregular cross, and having the guildhall and market-place in the centre. The streets are well paved. The church is a commodious cruciform building, constructed of flint; it has some portions in the decorated style, the remainder is of later date. At the west end is a light pinnacled tower surmounted with an octagonal spire. The Independents, Baptists, and Wesleyan Methodists have places of worship. The Grammar school, founded in 1575, has an income from endowment of about 160*l.* a year, and had 50 scholars in 1853. There is a National school. Faversham Creek is navigable up to the town for vessels of 150 tons. On December 31st, 1853, the number and tonnage of vessels belonging to the port were—225 under 50 tons, with an aggregate of 4936 tons; 82 vessels above 50 tons, aggregate tonnage, 10,355; and 1 steam-vessel of 9 tons burden. The vessels which entered and cleared at the port during 1853 were as follows:—Inwards, 1532 vessels, 116,381 tons; outwards, 1478 vessels, 44,983 tons.

The oyster fishery employs between 200 and 300 persons. There is a considerable import and export trade; much agricultural produce is sent to London by hoyas. The market-days are Wednesday and Saturday: fairs are held on February 14th and August 1st.

FAYAL. [AZORES.]

FAYETTEVILLE. [CAROLINA, NORTH.]

FEAR, CAPE. [CAROLINA, NORTH.]

FÉCAMP. [SEINE INFÉRIEURE.]

FECKENHAM. [WORCESTERSHIRE.]

FELDSBURG. [ENS.]

FELEGYHAZA. [CUMANIA, LITTLE.]

FELIPE, SAN. [VENEZUELA.]

FELIZZANO. [ALESSANDRIA.]

FELLETTIN. [CREUSE.]

FELSTEAD. [ESSEX.]

FELTRE. [BELLUNO.]

FEMERN. [SCHLESWIG.]

FENNY STRATFORD. [BUCKINGHAMSHIRE.]

FENWICK. [AYRSHIRE.]

FEODOSIA. [KAPPA.]

FERE. [AISNE.]

FERE, LA. [AIN.]

FERMANAGH, an inland county of the province of Ulster, in Ireland, lies between 54° 7' and 54° 37' N. lat., 7° 8' and 8° 10' W. long., and is bounded N. by the counties of Donegal and Tyrone, E. by the county of Monaghan, S. by Cavan, and W. by Leitrim and Donegal. Its greatest length from east to west is 45 miles, from north to south 29 miles. The area comprises 457,195 acres, of which 289,228 are arable, 114,847 uncultivated, 6155 in plantations, 210 in towns, and 46,755 under water. The population in 1851 was 116,007.

Surface, Hydrography, and Communications.—Fermanagh county belongs almost entirely to the basin of Lough Erne. The drainage of a small district in the extreme west falls into Lough Melvin, the superfluous waters of which are carried to the Atlantic by the Drowes River. Lough Erne, which extends from south-east to north-west for above forty miles, divides the county into two nearly equal parts, and is itself divided into the Upper and Lower Lakes, the former stretching from Wattle Bridge, on the borders of Cavan, to the neighbourhood of Enniskillen; the latter from Enniskillen to Belleek, on the borders of Donegal. The Upper Lake is about 18 miles in length, and has an extreme width of about 4 miles; it is thickly studded with hilly islands, some of which are of considerable size, and all are clothed with wood or with rich pastures. Within two or three miles of Enniskillen the lake becomes narrow, and assumes a river character, which it retains for a mile below the town, where, opposite the grounds of the royal school of Portora, the Lower Lake commences, expanding into a magnificent sheet of water, much less incumbered with islands than the Upper Lake, and having opposite the town of Kesh a width of not less than six miles. The singularly varied and beautiful scenery of these lakes is said by Inglis and other tourists

not to be surpassed in Europe. On approaching Belleek the lake again contracts, and flows as a deep rapid river through a rather swampy tract, crossed near the village by a rocky ledge, over which the stream rushes impetuously, forming a fine cataract. From Belleek the river flows with rapid course west by north, forming another fine fall of about sixteen feet at Ballyshannon, a little below which it enters the Bay of Donegal. Vast numbers of salmon ascend to Lough Erne and its feeders to spawn; and the ascent of the fish up the falls of Ballyshannon and Belleek is eagerly watched as a very gratifying spectacle. Lough Erne also abounds in trout, pike, perch, and bream; it is frequented by large flocks of wild ducks, wild geese, and other water-fowl. The outlet of Lough Erne is navigable for vessels drawing 12 feet water up to Ballyshannon; between the town and Belleek the rapidity of the stream renders it useless for purposes of navigation. The depth of the Upper Lake varies from a few feet to 75 feet; the Lower Lake is said in some places to have a depth of 200 feet. Formerly some of the connecting reaches of the Upper Lake were in parts so shallow that only flat-bottomed boats, called 'eots,' could navigate them. These channels have recently been deepened, and the lakes are now navigated by small steamers, which convey goods of various kinds between Belleek, Enniskillen, Lisnakea, Belturbet, and the Ulster Canal, which enters the Upper Lake near Wattle Bridge, connecting Lough Erne with Lough Neagh, and completing the water communication between Enniskillen, Newry, and Belfast. The chief articles of traffic on the lake are timber, coals, butter, eggs, corn, and other agricultural produce.

The most southern part of the county, extending from the Woodford River [CAVAN], which forms part of the boundary between Fermanagh and Cavan, to a few miles below Enniskillen, presents a belt of rich land of considerable but varying width, gently undulating in parts, but level along the lake-shore, and the whole backed by high mountains. Between the Woodford and the Claddagh (a feeder of Lough Erne, which rises near the head-waters of the Shannon in the county Cavan), the back-ground is formed by the northern slopes of the Legavrega Mountains. Between the Claddagh and the Arney, at about four miles from the lake, runs the main ridge of the Dowbally Mountains, which form part of the watershed between Lough Erne and the Shannon. This range, the highest in the county, reaches in its culminating point, Cuilcagh, the height of 2188 feet above the sea; its slope towards the lake is in general rapid, in some places precipitous. At its northern base is the fine mansion and extensive domain of Florence Court, the seat of the Earl of Enniskillen. Westward from the Cuilcagh Mountains, on the confines of the counties of Leitrim, Cavan, and Fermanagh, is Lough Macnean, of which the eastern part, called Lough Nitty, is connected by a strait with the western and larger part, properly called Macnean. The outlet of Lough Macnean is the Arney, which flows eastward to Lough Erne, through a beautiful well-wooded country. A little north of Lough Nitty is Belmore Mountain, which attains a height of 1312 feet, and forms a striking feature in the scenery of Lough Erne on the approach to Enniskillen. [ENNISKILLEN.] The approaches to this town on both sides of the lake are adorned with many pretty residences. About two miles south-east of Enniskillen, situated in a very extensive and beautiful demesne, is Castle Coole, the most splendid mansion in the north of Ireland, and the seat of Earl Belmore. The structure is built of Portland stone.

All the rest of the southern part of the county, between Lough Macnean and Lower Lough Erne, is with little exception mountainous. The mass of the Shean-North runs along the Lower Lake in many places close to the shore, towards which it descends with a very rapid slope. The highest part of the range, called Phoul-a-Phonca, rises to the height of above 1150 feet, and sinks down almost precipitously within a few rods of the shore. South of these masses, but separated from them by the undulating basin of the Sillies River (which enters Lough Erne about a mile above Enniskillen), are the Glenalong Mountains, which have an altitude of about 900 feet. The greater part of this region is wild in the extreme, consisting of irreclaimable mountain, brown bog, and coarse pasture. In the basin of the Sillies however, particularly in the neighbourhood of Church-Hill and Derrygomelly, there is some good arable and pasture land.

West of the Lower Lake, as far as Pettigoe, a small village partly in Fermanagh and partly in Donegal, the surface is hilly, with only a narrow level margin along the shore. In this district, and near the western extremity of the lake, is the beautiful demesne and seat of Castle Caldwell. South of Pettigoe is Boa Island, the largest in the Lower Lake, containing 1400 acres of fine land; it is however almost treeless. Occupying a beautiful situation on one of the larger islands near the west shore of the lake stands Ely Lodge, the fine seat of the Marquis of Ely. Eastward from Pettigoe to Kesh and Lisnarrick the land slopes down gradually from the mountains on the confines of Tyrone to the lake-shore, and presents some of the finest soil and most picturesque scenery in the county. The views between Kesh and Castle Archdall, a splendid mansion and demesne near Lisnarrick, are particularly fine. The mountain ridge to the north of this district forms part of the watershed between Lough Foyle and Lough Erne; most of the streams thence run into the lake by the Kesh River. From Lisnarrick to Ballinamallard and the eastern side of the valley of the Ballicassidy River (on which there are large flour-mills), the

surface is undulating, and generally the land is very fertile, with tracts of bog however in the low grounds. The mansions and demesnes of Necarne, near Irvinestown, and Jamestown and Crocknacreeve, near Ballinamallard, are the most worthy of remark in this region. From a short distance east of Enniskillen a range of round-backed hills, called the Toppit Mountains, stretches in a general northern direction, and joins the Tattymoyle mountains in Tyrone, a few miles south of Fintona. On the western slope these hills are generally cultivated; the eastern side is in many places very steep, and overgrown with heath. This range forms the western limit of the basin of the Drummany, the largest river-hasin in the county, the eastern limit being formed by the Slieve-Beagh (commonly pronounced Slabag) Mountains, which have a width of 7 miles and a length of about 13 miles. This mountain mass extends in a northern direction from Lisnaskea, and the small hamlet of Donough along the eastern border of Fermanagh into Tyrone. The summits of Carnmore and Brochderg in this range reach 1080 feet in height. The eastern side slopes down in general gradually to the high plain of the county Monaghan, being skirted on that side by a gently undulating country, containing several small lakes, bogs, and marshes, and drained by the Finn River, which carries all the waters of the eastern slope into Lough Erne. The broad round summits of these mountains and a great portion of the eastern slope are bleak and barren, quite unsheltered and treeless; the surface presents only coarse hungry mountain pasture, bare rocks, or undrained bogs, resting on clay, and covered with stunted heath. The descent on the western side is by a series of rapid slopes, each succeeded by its level district of irregular shape and varying width, so as to present a succession of natural terraces. On this side cultivation is more extended.

The basin of the Drummany River stretches out to westward from the base of these mountains for about five miles, and extends in a direction north and south of about ten miles. It may be characterised as a plain inclosed by a ring-fence of mountains except to the southward, where it opens on Lough Erne, fine views of which are commanded from several points. There are however several low hills and round outlying eminences in this plain. The land is generally good, but varies considerably. In the north-west of this basin is the small village of Tempo, near which is Tempo House, formerly the seat of a branch of the noble Irish family of Maguire, and now belonging to Sir E. Tennent. Four miles south-east from Tempo, the pretty village of Brookborough stands on a slight elevation at the western foot of the Lisnalore Hills, an offshoot of the Brochderg Mountain. About two miles north of Brookborough is Colebrooke House, situated in an extensive well-wooded demesne. Colebrooke House, the finest mansion in this part of the county, was erected by the late Sir Henry Brooke, and is built of a beautiful white freestone found in the southern part of the Slieve-Beagh Mountains. The main branch of the Drummany River rises in the northern part of these mountains, and runs with rapid winding course towards the west till it enters the Colebrooke demesne, whence it runs southward, and about a mile to the west of Brookborough and through Maguire's Bridge: about four miles below this place the river falls into Lough Erne. This river, as well as all the streams in the county and the lake itself, is subject to floods. To the west of this river, between Brookborough and Lisbellaw, there is a very extensive tract of bog, containing Lough Eyes and some smaller lakes.

The immediate neighbourhood of Lough Erne, all the way from Enniskillen along the north shore of Upper Lough Erne to the confines of Cavan, presents a flat district of great fertility, with here and there small tracts of bog and sedgy swamps, backed by a country of hills and dales, which contains some of the best corn and grass land in the county. Of the islands on the lake mention must be made of the large island of Belleisle, which is joined to the north shore by a causeway and bridge. The first Earl of Rosse built a fine mansion on this island, portions of which still remain in the residence of the present proprietor, who is a descendant of Dr. Porter, formerly bishop of Clogher. This island is situated nearly opposite the mouth of the Arney, and commands fine views of lake and mountain scenery; the beautiful green and lofty hill of Knockninny, on the south shore of Lough Erne, forms a much-admired feature of the landscape. Crum Castle, a mansion of the Earl of Erne, situated on a peninsula of Lough Erne, about 4 miles S. from Newtownbutler, near the south-eastern extremity of the lake, and near it the remains of old Crum Castle, are worthy of remark for the extent and beauty of the well-wooded demesne in which they stand, and which includes several islands. Further south-east, on the borders of Cavan, there is the handsome residence and grounds of Castle Sanderson, a short way from which, on the road to Lisnaskea, is a large district of barren bog. The interior of the county, from the hamlet of Donough to Newtownbutler and Clones, presents an undulating surface of pasture and arable ground.

The county is traversed by excellent roads. Along the north and south shores of the Upper Lake run two mail-coach roads, which diverge from Butler's Bridge in the county of Cavan, and unite in Enniskillen, whence a fine road runs to Ballyshannon and the west coast of Ireland. Opening on these three lines of road are numerous others connecting Enniskillen with all parts of the county. The Armagh, Belfast, and Enniskillen mail-coach travels by the main

road along the north shore as far as the neighbourhood of Newtownbutler, whence a road runs to the eastward, leading to Clones and Monaghan. Even the mountain roads of the county are good, but many of them are impracticable for carriages. A railroad to connect Enniskillen with Londonderry is in course of formation, and is open between Londonderry and Dromore: other lines are in progress or projected to join Enniskillen with Newry, Dundalk, and Dublin.

Geology, &c.—Upper Lough Erne lies on a bed of blue clay, and is surrounded on all sides by limestone strata. The Dowbally Mountains, and the mountains south of the lower lake, are composed chiefly of sandstone and limestone. Where the limestone prevails in the south and south-west of the county, there occur numerous cavities and subterraneous water channels. The Roogagh River, which brings down the waters of several small lakes and tributary streams to Lough Melvin, is absorbed in the rock, and emerges, after running a distance of about 30 perches underground. In like manner the Claddagh and several brooks which run into Lough Erne from the Shean North, dip underground in their course. A natural bridge of rock crosses a stream which forms part of the boundary of the district on the south; and throughout the central parts, caves (as near Ballicassidy) and deep holes in the rock are of very frequent occurrence. The Toppit Mountains consist of yellow sandstone and conglomerate, but limestone lies along the lower slopes, and in most parts of the county the isolated hills adjacent to the higher ranges contain limestone, sand, and gravel. The Slieve-Beagh Mountains are famous towards their southern extremity for a beautiful white sandstone, said to be superior to Portland stone; but these mountains consist chiefly of millstone grit, which is found of superior quality at Carnmore, and yellow and old red-sandstone: the limestone strata however lie close upon the range on the eastern and western sides. On the western slopes of the Slieve-Beagh, traces of coal and iron have been found, and also a slaty-blue clay resembling rotten limestone, which becomes readily pulverisable on exposure to the air, and forms good manure for moory soils. Marl and potter's-clay are found in several places.

Climate, Soil, Agriculture, &c.—The climate is very moist, but mild and healthy, except in the neighbourhood of Upper Lough Erne, where, in low districts, marsh fever sometimes prevails in the summer and autumn. The prevailing winds are the west, south-west, and south; the west winds blow at times with tremendous violence, uprooting trees, and sweeping away the roofs off the houses. The soil in the low grounds is a rich deep loam, in some places peat, resting on a subsoil of clay; the sandstone districts have mostly a cold thin soil; in the limestone tracts the soil is generally good, and easily worked. Improved methods of industry have been to some extent introduced. The chief crops are oats, wheat, potatoes, turnips, flax, and hay. The number of acres under crop in 1851 was 107,735, namely:—Wheat, 2643; oats, 43,845; barley, bere, and rye, 5584; beans and peas, 1010; potatoes, 13,059; turnips, 5724; mangel wurzel, roots, and cabbage, 2074; vetches and other green crops, 498; flax, 2800; rape, 30; and meadow and clover, 30,468. On 15,566 holdings in 1851 there were 6518 horses, 4749 mules and asses, 88,651 cattle, 11,371 sheep, 17,843 pigs, 443 deer, 3055 goats, and 195,674 head of poultry. The county exports oats, butter, eggs, and some other articles of agricultural produce; the principal markets for wheat and other descriptions of corn are Enniskillen and Lisnaskea. The fields are inclosed by hedges in the low country, on the mountains by walls of loose stone. The farm-buildings, which are generally erected by the tenant, are pretty good; but the mud hut and the cabin of peat sods, the residences of the poorer classes, meet the eye in all directions. Except in the neighbourhood of Lough Erne, and to some distance round Enniskillen, the county has a bare, cold appearance, in consequence of the paucity of timber-trees, which are grown chiefly on the demesnes of large proprietors. The county is entirely agricultural: the only manufactures worth naming are confined to Enniskillen; linen is woven for domestic use.

Divisions, Towns, &c.—Fermanagh county is comprised in the diocese of Clogher, with the exception of the district which extends eastward from the Arney and Lough Macnean; this belongs to the diocese of Kilmore. The county is divided into 8 baronies:—1. Clanawley, which lies between the Sillies River on one side and the Arney and Lough Macnean on the other; 2. Magheraboy, which includes the rest of the western division of the county from the left bank of the Sillies and the south shore of the lower lake; 3. Knockninny, which extends between the Arney and the Woodford rivers; 4. Coole, embracing the south-eastern district; 5. Clankilly, which includes the district between the ridge of the Slieve-Beagh Mountains, in the county of Monaghan; 6. Magherastephana, which is generally coincident with the basin of the Drummany River; 7. Tyrkeunedy, which extends from Enniskillen northward to Tyrone, including both slopes of the Toppit Mountains; 8. Lurg, which comprises the north-west of the county.

There are few towns of consequence in Fermanagh: ENNISKILLEN, the county town, LISNASKEA, and LOWTHERSTOWN, are described in separate articles: the following places we notice here:—

Belleek, population of the village 228 in 1851, is situated on the right bank of the river Erne, about 2½ miles below the point where the lower lake narrows to the dimensions of a river. The remarkable

cataract formed by the river Erne near this village has been already noticed. A bridge spans the river at this place. The stream runs here with a very rapid current. Fairs are held at Belleek on February 3rd, May 17th, June 19th, and October 10th. *Derrygonnelly*, population 319, is situated in a wild and picturesque district, about 7 miles W.N.W. from Enniskillen, and about 3 miles S. from the shore of Lough Erne. There are here a small church and chapels for Roman Catholics and Wesleyan Methodists. Fairs are held on the 24th of each month. *Kesh*, population 257, situated on the small stream called Kesh, near its entrance into Lough Erne, about 11 miles N. by W. from Enniskillen, contains stations of the constabulary and revenue police. Petty sessions are held, and there are fairs on March 28th, April 28th, June 1st, October 2nd, and November 20th. *Lisbellaw*, population 331, about 4 miles S.E. from Enniskillen, possesses a chapel of ease, and chapels for Roman Catholics, Presbyterians, and Wesleyan Methodists. There is here a small spade manufactory. Seven fairs are held in the course of the year. Petty sessions are held monthly. *Maguire's Bridge*, population 773, situated on the Drummany River, about 7 miles S.E. from Enniskillen, has received its name from a bridge which crosses the river at this place. It contains chapels for Roman Catholics, Presbyterians, and Wesleyan Methodists, and a dispensary. Fairs are held monthly. *Newtownbutler*, population 477, situated near the head of Upper Lough Erne, contains a church, two chapels for Methodists, one chapel for Roman Catholics, a constabulary barracks, a bridewell, and a dispensary. Quarter and petty sessions are held. Fairs are held once a month. *Pettigoe*, population 466, situated on the river Termon, near the northern extremity of Lough Erne, is a great thoroughfare of the pilgrims to Lough Derg. There are here a church, a chapel for Presbyterians, and one for Roman Catholics. *Roslea*, population 326, situated on the river Finn, near the eastern border of the county, contains a chapel for Roman Catholics and a dispensary. Petty sessions and a monthly fair are held here. *Tempo*, population 407, about 6 miles E.N.E. from Enniskillen, is picturesquely situated, and has a neat appearance. The village contains a church, a chapel for Roman Catholics, and a dispensary. A fair is held monthly.

Assizes are held at ENNISKILLEN, which is the only large town in the county; here are the county prison and the county infirmary. There are fever hospitals at Enniskillen, Lisbellaw, and Lisnaskea. The county is entitled to send 21 patients to the Armagh Lunatic Asylum. Quarter sessions are held in Enniskillen and Newtownbutler, and petty sessions in twelve places. The Poor-Law Union workhouses are at Enniskillen, Lisnaskea, and Lowtherstown. The county is in the military district of Belfast, and there are barrack stations at Enniskillen and Belleek. For purposes of police the county is divided into five districts—Enniskillen, Arney, Derrygonnelly, Kesh, and Lisnaskea. The number of police, including officers, is 191: Enniskillen is the head-quarters. Revenue police are stationed at Brookborough, Kesh, and Belcoo, a small village situated between Upper and Lower Lough Macnean.

At the end of 1851 there were 130 National schools in operation, attended by 4918 male and 3315 female children. Besides these there are several other rudimentary and classical schools. Of superior schools the principal is the royal school of Portora, the buildings of which are situated in beautiful grounds on a gentle eminence above Lower Lough Erne, a short distance west of Enniskillen. This school was founded by Charles I., and is richly endowed. Fermanagh returns three members to the Imperial Parliament, two for the county and one for the borough of Enniskillen. In 1851 there was one savings bank in the county, at Enniskillen. The total amount owing to depositors on November 20th, 1851, was 37,034*l.* 7*s.* 1*d.*

History and Antiquities.—Fermanagh was first erected into a county by statute of the 11th of Elizabeth; but it was not till the time of the plantation of Ulster that it was finally brought under civil government. Having fallen to the crown by the attainder of Maguire, it was divided in like manner with the other five sequestered counties among Scotch and English undertakers and native Irish. The chief proprietors under the new settlement were the families of Cole, Blennerhassett, Butler, Hume, and Dunbar. The subsequent forfeitures of 1641 affected a large portion of Fermanagh, and considerably increased the possessions of those from whom many of the present proprietors are descended. The forfeitures consequent on the war of the revolution affected only 1945 acres in this county.

The principal antiquities are the beautiful round tower and some ruins of ecclesiastical buildings on the island of Devenish, about a mile below Enniskillen; the remains of Lisgoole Abbey, on the south side of Lough Erne, about a mile and a half above the same town; the ruins of Aughalurcher church, about two miles above Lisnaskea, on the northern shore of the upper lake; and numerous raths, or rude hill forts, of unknown antiquity.

FERMO, a division of the Papal State, is bounded E. by the Adriatic, along which it extends from the mouth of the Chienti to the mouth of the Tronto; N. by the province of Macerata; W. by that of Spoleto, and S. by the Abruzzi. It forms part of the old province of the Marches, the ancient Picenum, which is subdivided into three provinces, Ancona, Macerata, and Fermo. The province of Fermo is hilly, being occupied by various offsets of the Apennines, which, detaching themselves from the central ridge, extend to the coast

of the Adriatic, and form numerous valleys watered by rivers or rather torrents, the principal of which are, from north to south, the Chienti, the Tenna, the Aso, the Tesino, and the Tronto. The length of the province along the Adriatic coast is 30 miles, and its breadth from the sea to the central Apennines is about the same. The chief products of the country are wheat, maize, silk, cattle, wine, honey, liquorice, and oil. The fisheries along the coast are valuable. The division is now formed into two delegazioni, or provinces—Fermo, north of the river Aso, and Ascoli, south of the Aso. Their area and population are as follows:—

Delegazioni.	Area in Square Miles.	Population in 1853.
Fermo	317	104,116
Ascoli	460	54,217
Total	777	188,333

The principal towns are *Ascoli*, the capital of the southern province, which has been already described [*ASCOLI*], and *Fermo*, the capital of the northern province, which is a pleasant archiepiscopal town, built on high ground, about 4 miles from the sea, and surrounded by old walls and ditches. It has a cathedral, several other churches and convents, and about 7000 inhabitants, who carry on some trade by means of a small harbour on the Adriatic, called Porto Fermo. The exports are chiefly corn, silk, and wool. The ancient *Firmum*, a town of the Piceni, afterwards a Roman municipium, was destroyed in the 5th century by Alaric, and the present town was rebuilt near its ruins. *Sant'Elpidio*, near the mouth of the river Tenna, has 3000 inhabitants. *Ripatransone*, a walled town about 5 miles from the coast and near the Tesino, has 2000 inhabitants. *Grottamare*, a thriving town on the coast, at the mouth of the Tesino, near the site of Cupra Maritima, an ancient Etruscan colony, carries on some trade by sea, has sugar refineries, and about 4000 inhabitants. Pope Sixtus V. was born in this place. *Offida*, on a hill south of the Tesino, has a handsome collegiate church, some manufactories of lace, and about 3000 inhabitants. *Montalto*, a walled but decayed town, has about 1000 inhabitants.

FERMOY, East Riding of the county of Cork, in Ireland, in the parish of Fermoy, a military station, post and market-town, and the seat of a Poor-Law Union, is situated on the Blackwater River, in 52° 8' N. lat., 8° 18' W. long., distant 13 miles N.E. from Cork, and 133 miles S.W. from Dublin. The population of the town in 1851 was 5825, exclusive of 2682 persons in the workhouse, and 19 in the bridewell. Fermoy Poor-Law Union comprises 24 electoral divisions, with an area of 143,268 acres, and a population in 1851 of 44,657.

Fermoy was a miserable hamlet in 1796; it owes its origin as a town to Mr. Anderson, the introducer of mail-coach travelling into Munster, who became proprietor of the Fermoy estate, and began to build the town about the commencement of the present century. The importance of the site in a military point of view, commanding as it does an important pass of the Blackwater and one of the principal northern approaches to Cork, induced the government to erect here infantry and cavalry barracks. A coach-factory, a brewery, a paper-mill, and a bolting-mill, erected by Mr. Anderson, caused an increase of employment in the town. The principal part of the town, which is regularly laid out and contains several good streets, stands on the right bank of the river, and is connected by a stone bridge of 13 arches, erected in 1689, with a smaller portion on the left bank, the brow of the hill above which is occupied by the barracks. The infantry barracks consist of two distinct quadrangles, of which the smaller one is now used as the Union workhouse. The other public buildings are a handsome church, a large Roman Catholic chapel, a court-house, and a bridewell. A Roman Catholic college, a nunnery, and schools, are situated on a hill above the town. There are in Fermoy several large flour-mills, a brewery, a tanyard, a savings bank, loan fund, and several schools. The staff of the North Cork militia is stationed in the town, which is also the head-quarters of the Fermoy district police. The view from the bridge is much admired; it takes in the town and the rich valley of the Blackwater, which is here shut in by fertile hills adorned with handsome villas. Fermoy has still a good share of business, and at the weekly markets much agricultural produce is disposed of.

FERNANDEZ, JUAN. [*JUAN FERNANDEZ.*]

FERNANDINA DE XAGUA. [*CUBA.*]

FERNANDO PO, an island situated on the western coast of Africa, about 25 miles from Cameroon's Point, on the mainland, in theight of Benin, 3° 25' N. lat., 8° 50' E. long., is about 44 miles long and 20 miles wide. It rises in bold precipitous cliffs from the sea, and the surface, which is very uneven, towards the centre of the island forms a lofty mountain ridge, some of the peaks of which attain a great altitude; Clarence Peak, near the northern end of the island, is 10,650 feet above the sea. The rocks are wholly of primitive or volcanic formation; no alluvial deposit having, according to Mr. Thompson, been found in the island. The surface is mostly covered with wood, and is everywhere well watered and fertile. Yams, palms, and other tropical plants are grown abundantly; and turtles and fish are plentiful. The climate is considered healthy, though the rainy

season lasts from May to December, and is succeeded by dense fogs. There are several small harbours; the largest is Port Clarence, on the northern shore, which is formed by a headland called Point William, rising 150 feet above the sea, on which stood the English settlement of Clarence Town. The natives are of a lighter complexion than the inhabitants of the neighbouring mainland, and have less of the characteristic marks of the negro physiognomy, the face being rounder, the cheek-bones less high, the nose not so flat, the lips thinner, and the hair longer and softer. The language of the natives of West Bay and the southern parts of the island is unintelligible to those of Clarence Cove and the northern parts. There are said to be in the island from 10,000 to 12,000 native inhabitants, who occupy 15 villages. This island was discovered in 1471 by the Portuguese, who in 1778 ceded it to Spain. The Spanish government tried to settle it, but the inhabitants destroyed the colony. In 1827 the English, with the permission of Spain, formed a settlement on the island, but abandoned it in 1834, and in 1844 the Spaniards again took possession of it, and gave it the name of Puerto de Isabel.

FERNEY. [AIN.]

FERNS, a bishop's see in the archdiocese of Dublin, in Ireland, comprehends the county of Wexford and a small part of Wicklow. The diocese was founded in 598; it was united to the see of Leighlin in 1600. In compliance with the Church Temporalities Act, the sees of Leighlin and Ferns have been consolidated with the see of Ossory. The chapter consists of a dean, precentor, chancellor, treasurer, archdeacon, 10 prebendaries, and a vicar-general. The number of benefices is 61. The income of the united bishopric is 3850l.

The town of Ferns is a place of considerable antiquity, but much decayed. In 1851 Ferns contained 637 inhabitants. The cathedral, which is also the parish church, is a mean building; but the palace, built by Dr. Cope, is handsome and commodious. There are some remains of an abbey founded by Dermot Mac Murrough, king of Leinster, and a ruined castle, said to have been his residence at the time of the English invasion.

(Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

FERRANDINA. [BASILICATA.]

FERRARA, the most northern province of the Papal State, situated for the greater part within the Delta of the Po, is bounded N. by the main branch of that river called Po d'Ariano, which divides it from Austrian Lombardy, E. by the Adriatic, W. by the duchy of Modena (from which it is separated partly by the Panaro), and S. by the provinces of Ravenna and Bologna. Its greatest length from east to west is about 50 miles, from north to south between the Po d'Ariano and the Po Primaro on the Ravenese frontier 30 miles, but the province becomes much narrower towards its western extremity, where the breadth from the point at which the Reno enters the Ferrarese above Cento to the Po, at the mouth of the Panaro, is only about 16 miles. Its area is 1053 square miles, and the population in 1843 was 218,786, distributed among 5 cities, or walled towns, 17 terre, or small towns, having a communal council, and 153 ville, or villages and hamlets. The soil is naturally rich, but the greater part of it is swampy, and a considerable portion of the surface in the east part of the province is constantly under water. The chief productions are rice, corn, pulse, hemp, grass, hay, wine, and a vast quantity of fish. The province is traversed in several directions by canals.

The principal towns, exclusive of the capital, *Ferrara*, which is noticed in the next article, are the following:—

Bagnacavallo, a small walled town, with 3500 inhabitants, stands a few miles E. from Lugo, on the road to Ravenna. It has a cathedral, and a circus for the game of 'pallone.' Roman inscriptions and other antiquities have been found on this site. In some maps Lugo and Bagnacavallo are set down in the territory of Ravenna.

Cento, a pretty town, 18 miles W. by S. from Ferrara, with 4600 inhabitants, was formerly celebrated for its college of San-Diagio, which was suppressed by the French. Cento is peculiarly interesting to the art-student as being the birthplace of Guercino, the interior of whose house (still preserved) is covered with his paintings. The church of the Rosary, the principal church in the town, is called the gallery (Galea), from the number and arrangement of Guercino's works upon its walls. Cento was formerly famous for its fair, which, though still held on September 7th, has greatly fallen off. A short distance from Cento on the right bank of the Reno is *Pieve di Cento*, a walled village of 4000 souls, in the church of which is the Assumption of the Blessed Virgin by Guido. The villagers rose in arms against the French, who wished to remove this picture in 1797, and they succeeded in preventing the robbery.

Comacchio, 23 miles E.S.E. from Ferrara, is a walled town, with 5400 inhabitants, situated on an island in the midst of extensive swamps which communicate with the Adriatic, and receive its water. These swamps, called Le Valli di Comacchio, are divided into estates or tenements for the purpose of fishing. Immense quantities of fish of various sorts, and especially large eels, are caught here and pickled at Comacchio for exportation. The fishery in these marshes is celebrated by Tasso and Ariosto. It is needless to add that the neighbourhood is very unhealthy.

Lugo, 30 miles S.S.E. from Ferrara, on the Senio, has a population of about 10,000 including the commune. It has a handsome square,

the porticoes of which are formed into shops during the September fair, which lasts from the 1st to the 19th of the month. It stands in the southern part of the province, near the borders of Ravenna: this town was plundered and nearly destroyed in 1796, for having revolted against the French.

The air in general throughout the greater part of the province of Ferrara, especially in the vicinity of the great swamps, is more or less unwholesome, particularly in summer, though the malaria is not so bad as in the Pomptine marshes. The country is flat, and in many parts much below the level of the Po, the water of which is kept in by strong dykes; but the river sometimes breaks through and produces dreadful inundations. The cost of keeping the dykes in repair is one of the heaviest charges on the province, and watching the rising of the river during the floods is a constant care of the peasantry. The Po, in the territory of Ferrara, divides itself into three principal branches—the main one, or Po d'Ariano, the Po di Volano, and the Po di Primaro or southernmost branch, which last receives the Reno, the Santerno, the Senio, and other numerous streams which flow from the Apennines of Bologna. These various branches of the Po communicate with one another by canals. The Naviglio of Bologna communicates between that city and Ferrara, and the Canal di Cento between this town and the Po.

The province of Ferrara is governed by a Papal legate, and is hence called a Legation (*Legazione*). The Legate resides in Ferrara, the capital of the province. It formerly constituted the greater part of the duchy of Ferrara, which was long governed by the house of Este. Alfonso II., the last duke, having died without legitimate male issue, the duchy was annexed to the Holy See in 1598. The French seized the Ferrarese in 1796, and included it in the department of the Lower Po in the kingdom of Italy. In 1814 it was restored to the States of the Church, with the exception of a portion that lies between the Po di Goro and the Po della Maestra, which was annexed to Austrian Italy.

FERRARA, an archiepiscopal city in the States of the Church, capital of the Legation or province of Ferrara, is situated in the midst of a flat unhealthy country, not more than 7 feet above the level of the sea, on the left bank of an arm of the Po, in 44° 49' 56" N. lat., 11° 36' 33" E. long, about 4 miles S. from the main channel of the Po, which forms the boundary between the Papal and the Austrian states, 26 miles N.N.E. from Bologna, and 38 miles N.W. from Ravenna. It is a large and well-built town, with streets wide and straight, the principal of which, called San-Benedetto, is about 2000 yards in length. But the city, though it retains many features of former grandeur, wears a deserted look; grass grows on its once well-trodden pavements: its magnificent palaces are untenanted and falling into decay; and its walls, which once inclosed a population of 100,000, now hardly contain a fourth of that number. Of the 25,000 inhabitants about 2000 are Jews, who reside in a separate quarter called Il Ghetto. Besides being inclosed with walls, Ferrara is defended on the west side by a citadel regularly fortified, which, agreeably to a stipulation of the Congress of Vienna, is garrisoned by Austrian soldiers, as well as the neighbouring town of Comacchio. The Austrians, dreading the liberalism that manifested itself in central Italy after the election of Pope Pius IX., took military possession of the city also in August 1847—a step which led to lively remonstrances from the Holy See. The troops were withdrawn from the city in December following. But since the miserable termination of the insurrectionary movements in Italy in 1849, the Austrians have military occupation not only of Ferrara but of all the cities and strongholds in the legation.

In the middle of the town is a castle, flanked with towers and surrounded by wet ditches, which was once the residence of the dukes of Ferrara, and is now that of the legate. The population is collected together chiefly round this castle, and but thinly scattered over the remainder of the site. Ferrara has a cathedral and numerous other churches, most of them rich in paintings by the great masters of the schools of Bologna and Ferrara. The finest churches are—the cathedral of St. Paul, consecrated in A.D. 1135, adorned with sculptures, bronze statues, and frescoes; San-Benedetto, in which Ariosto was buried: his monument however has been transferred to the University: in the hall of the refectory of the adjoining convent is the painting of Paradise, by Garofalo, the friend of Ariosto, who introduced in it the likeness of the poet; San Domenico, which has several valuable paintings and the monument of Celio Calcagnini, one of the restorers of learning in the 16th century; Santa-Maria-del-Vado, the oldest church of Ferrara, which is celebrated for its magnificent paintings by Carlo Bonone and other masters of the school of Ferrara, and contains the tombs of Bonone, Garofalo, Bastiaucino, Ortolano, and other native painters; the church of San-Francesco, which is rich in the works of Garofalo, and is famous for its echo, which has sixteen reverberations; i Teatini, &c. Most of these churches, and more especially that of the Campo-Santo, which occupies the site of the old Certosa convent, contain many finely-sculptured monuments of historical or otherwise eminent personages. Among the palaces of Ferrara, the finest are those of Villa and Bevilacqua. The theatre is one of the largest and finest in Italy. The house of Ariosto, which he purchased himself, is shown to strangers, but his favourite garden has disappeared; the old house of his family

in which he had been brought up still exists, and is called Casa degli Ariosti. The Casa Guarini, still inhabited by the marquises of Guarini, recalls the name of the author of 'Il Pastor Fido.' The great square (Piazza Grande) was named after Napoleon till 1814, when it got the name of Piazza d'Ariosto, which it retains. The University of Ferrara (Studio Publico), which is attended by about 300 students, enjoys a high reputation as a school of medicine and jurisprudence. It contains collections of medals and of Greek and Roman antiquities, and a valuable library of 80,000 printed volumes and 900 manuscripts, among which are autographs of Ariosto, Tasso, Guarini, and many editions of the 15th and 16th centuries, when the presses of Ferrara were amongst the most active in Europe. In one of the apartments of the library is the tomb of Ariosto, which was removed hither by the French from the church of San-Benedetto in 1801, when they occupied that fine convent as barracks. In the hospital of Santa-Anna is still shown a small room on the ground floor in which Tasso was confined for seven years and two months by Alfonso d'Este, duke of Ferrara.

Ferrara is one of the most interesting and handsome of the modern towns of Italy, for it has no claims to classical antiquity, having risen after the fall of the empire. It was walled round by the Exarchs in the 6th century. The bishopric of Ferrara dates from 601, the archbishopric from 1735. From the 10th century the city was connected with the family of D'Este, first as magistrates and after 1240 as hereditary princes, generally holding their power from the Pope, but sometimes asserting their independence. Ferrara remained under the sway of the house of D'Este until the extinction of the legitimate branch in 1597, when it was finally attached to the States of the Church. During the last century of its existence Ferrara was the most distinguished city in Europe for literature and refinement; the names of Ariosto, Tasso, and Guarini throw an inextinguishable glory around its little court during this period. The Ferrarese school of art was founded and fostered by the house of D'Este. Under Duke Ercole, Calvin and other French reformers found an asylum in Ferrara when driven from France in the early part of the 16th century. It lost part of its population in the 17th century in consequence of having lost its sovereigns, and become a provincial town. It carries on a considerable trade in corn and other produce of the soil by means of large canals and the Po, which connect it with the large towns of Northern Italy. A good deal of caviare is made from the roes of sturgeon taken in the Po.

(*Guida al Forestiero per la Città di Ferrara*; De Rossi, Barotti, Lanzi, &c.; *Handbook of Central Italy*.)

FERRO. [CANARIES.]

FERROL. [GALICIA.]

FERRY-PORT-ON-CRAIG. [FIFESHIRE.]

FERTÉ-MILON, LA. [AISNE.]

FESTINIOG, or FFESTINIOG, Merionethshire, a village and the seat of a Poor-Law Union, in the parish of Festiniog, is situated on a lofty hill at the head of the beautiful vale of Festiniog, in 52° 59' N. lat., 3° 55' W. long.; distant 16 miles W. by N. from Bala, and 210 miles N.W. by W. from London. The population of the parish of Festiniog in 1851 was 3460. The living is a rectory with thecuracy of Maentwrog annexed, in the archdeaconry of Merioneth and diocese of Bangor. Festiniog Poor-Law Union contains 15 parishes, with a population in 1851 of 16,158.

The town has considerably increased during the last 30 years in consequence of the opening of several slate quarries. Copper has recently been discovered. The parish church is an elegant structure erected in 1846, in the Norman style. Wesleyan and Calvinistic Methodists and Independents have places of worship, and there are National and British schools, an hospital, and a savings bank. The market is held weekly on Saturday. The scenery of the vale of Festiniog is rich, varied, and picturesque. The two waterfalls of Cynfael are situated in a beautiful glen about half a mile from the village.

(Parry, *Cambrian Mirror*; Cliffe, *Book of North Wales*; *Land & Life In*, vol. iii.; *Communication from Festiniog*.)

FEVERSHAM. [FAVERSHAM.]

FEZ. [MAROCCO.]

FEZZAN, the *Phazania* of the ancients, a country in northern Africa, between 24° and 31° N. lat., 12° and 17° 30' E. long., may be considered as the greatest oasis of the Sahara, by which it is inclosed on the west and east, and partly also on the south. On the north it borders on a less desert region belonging to Tripoli. Its length from north to south is about 300 miles, its breadth is 200 miles; but where it borders on the desert, its boundary of course is not exactly fixed. On all sides it is surrounded by nomadic nations; on the north and east by Arabs, and on the south and west by the Tibboos and Tuaricks.

Fezzan, according to Richardson, consists of a "great central tableland, not quite clearly marked to the eye on some of its northern approaches, but dropping sheer to the plain at other parts." Its northern part is traversed by two ridges of stony and sandy hills; which in places attain an elevation above their base of 1200 feet. They are called in the eastern district El Harush, but in the western they take the name of Ghurian Mountains and Soudah Mountains. The country south of these ridges contains large plains, covered

with sand, or pebbles and small stones, and without any traces of vegetation; but some ridges of hills from 300 to 600 feet high, rise above the plains, and inclose valleys between them, which are the only parts capable of cultivation. The cultivable portion of the country hardly exceeds one-tenth of its surface. The hills have rugged, irregular, and peaked summits, and are composed of thick beds of blue clay, alternating with sandstone, beds of alum-slate, and thick strata of porphyritic clay-stone (Denham); the tops consist of sandstone. The soil in the valleys is a stratum of sand, lying on chalk or clay, which is rendered fit for agricultural purposes by irrigation. As there are no rivers or brooks, and only very few natural springs, the irrigation is effected by wells, water being commonly found at a depth of about 100 feet. The heat in summer is very great, but in winter, during the northern winds, the cold is unpleasant even to Europeans. Rain is very rare; and it rains very little at a time. Violent gales are rather frequent, especially from the north and south, which fill the air with clouds of sand.

Date-trees, which constitute the principal wealth of the country, grow plentifully near the towns and on some plains, where the soil is impregnated with saline matter. Some patches of wheat, barley, durra, maize, and other grains are cultivated, but not enough for this consumption, though two crops are obtained yearly; flax is cultivated at Mourzuk, as are also figs, water-melons, vines, pomegranates, &c. in orchards; onions, parsley, and other vegetables are likewise grown. Cultivation is carried on without much skill or industry, but a rudely managed irrigation is practised. Goats and asses are reared in great numbers; cows, sheep, horses, and camels are not so numerous. All these animals feed on dates or their kernels.

Fezzan is very thinly peopled: from the most recent estimates founded on the tribute returns of the Turkish authorities, it does not appear to contain more than 26,000 inhabitants, who occupy the little oases scattered over this wide tract of half-desert country. Richardson says that the inhabitants of Fezzan consist of the "three varieties of the human race which overspread all Central Africa, namely, the Arabs and Moors, the Tuaricks, and the Negroes—and these all mixed and blended together of all shades of colour, stature, and configuration. The Arabs and Moors abound this side [north of] Mourzuk. Sebhah, and Zeghen are all Arabs and Moors. The Tuaricks are found in the Wadi Gharbi, and are occupied chiefly in a pastoral life leading their flocks through open desert. . . . The Negroes begin at Mourzuk and extend south in all the districts of Fezzan as far as the Tibboos." They are all Mohammedans, and commonly use the Arabic language, except in the most southern districts where the Tibboo and Bernou languages are spoken. Until recently they were governed by a native chief who assumed the title of Sultan, and exercised despotic power, though nominally dependent on the Bey of Tripoli. In 1842 the Turks taking advantage of a dispute respecting the succession, demanded the acknowledgment of Turkish supremacy. This being refused, they sent an army to take possession of the country. The sultan of Fezzan, Abd-el-Geleel, being defeated and forced to surrender, was put to death, and Fezzan has since remained a Turkish pashalic.

The inhabitants formerly depended to a great extent on the caravans which passed through the country, but this trade has almost wholly lost, and Fezzan has in consequence become greatly impoverished and depopulated. The oases are capable of yielding an ample supply of the necessaries of life, but cultivation is neglected, and several oases have been altogether abandoned. The manufacturing industry of the inhabitants is limited to the making of coarse blankets, which form the principal dress of the lower classes.

Fezzan is divided into ten districts: El Hofrah, the principal and most fertile, is nearly in the centre; it contains the capital, Mourzuk, and several smaller towns; on the north are Wadi Ghudwah, containing only the town of the same name; Sebhah containing two towns with a good population; Bouanees, containing three towns, a considerable population, and an immense number of date palms; Shâti, consisting of small oases, each having its little village and plantations of date palms; El Jofrah, the most northern district, containing Soekna, the town next in importance to Mourzuk, and nine or ten smaller towns; on the east Sharkeah, containing the ancient capital Zuilah, and some villages; on the west, Wadi Gharbi very similar in character to Shâti; on the south are Ghartroun and Tujerhy, containing three small towns, the inhabitants of which districts are all black. In native phraseology Fezzan contains 101 towns and villages. There are really not more than six or eight places which deserve to be called towns, and the villages, though numerous, have for the most part very few—many of them less than fifty—inhabitants.

Mourzuk, the capital and the residence of the pasha, is much the most important town. It is a walled town, about 3 miles in circumference, occupying a slight depression, in 25° 54' N. lat., 14° 12' E. long., and 420 miles in a direct line S. from Tripoli, with a population of about 3500. The houses are built of sun-dried bricks, and for the most part mere hovels. The castle has a ruinous appearance; connected with it are rather extensive barracks. Since the Turkish occupation, Mourzuk has however been much improved, a new mosque has been erected, as well as a guard-house, and a colonnade to the principal street, while the town has been rendered more healthy. Mourzuk was

formerly a somewhat important commercial town, Fezzan being the most frequented road by which Soodan communicated with the countries along the Mediterranean. From October to January or February numerous cafilas used to arrive at Mourzuk from Cairo, Bengazi in Barca, Tripoli, Gadames, Twat, Borou, and Soodan; and the neighbouring Tibboos, Tuaricks, and Arabs then visited its market. The traders were accustomed to dispose of part of the produce of their respective countries at Mourzuk, and carry the rest farther on. This commerce has however greatly declined, owing to the preference now given by the caravans to the route through Ghat, though many caravans still follow the Mourzuk route, and others trade to Mourzuk from Cairo without visiting Tripoli. Mourzuk is also the mart of many British goods from the Levant; a British consul is maintained here. The principal articles of traffic from the interior are slaves, senna, and ivory; according to Mr. Richardson the value of the merchandise which changes hands here during the great mart is from 40,000 to 60,000 Spanish dollars. The town is surrounded by gardens and orchards.

Sokna, the next most important town, is situated midway between Mourzuk and Tripoli; it is a tolerably built place, the houses being of stone, and contains about 2000 inhabitants, who are nearly all Moors. A good deal of commerce is carried on, the merchants having the reputation of being richer than those of Mourzuk. Sokna is celebrated for its dates; much grain is grown around the town. *Houn*, in the same district, is said to be nearly as large as Sokna. *Tuelah*, formerly the capital of Fezzan, and the site of a Roman colony, is now chiefly remarkable for its antiquities.

(Hornemann, *Journey from Egypt to Fezzan*; Denham and Clapperton, *Narrative of Travels*; Richardson, *Travels in the Great Sahara*; and *Narrative of a Mission to Central Africa*.)

FICHELGEBIRGE is a mountain-mass in Germany, situated between 50° and 50° 15' N. lat., 11° 45' and 12° E. long. Its greatest length from north-east to south-west, between the towns of Asch and Baireuth, does not exceed 35 miles; and its average width is about 23 miles.

The whole mountain-mass is furrowed on all sides by narrow valleys and glens; its most elevated parts extend in plains, on which a few summits rise in the form of domes. These summits form a series arranged along the axis of the mass from south-west to north-east. Those which attain the greatest elevation are the Kösseine, which rises to 3024 feet; the Ochsenkopf, to 3323 feet; and the Schneberg, to 3424 feet above the level of the sea. The base on which the whole mass rests is about 1700 feet above the sea-level towards the south and west, and towards the east and north about 1800 feet.

The Fichtelgebirge is the centre, in which three extensive mountain ranges unite, and from which they may be considered to issue. The Erzgebirge begins at its northern extremity near Asch, and runs off in an east-north-east direction, dividing Saxony from Bohemia. From its north-western extremity branches off another range, which is first called the Frankenwald (or Forest of Franconia), and farther on takes the name of the Thüringwald (or Forest of Thuringia); the Harz itself may be considered as the most northern branch of this range. The third range, which is immediately connected with the Fichtelgebirge, is the Böhmerwald (or Forest of Bohemia), which runs off in a south-eastern direction. [BOHEMIA; BAVARIA; ERZGEBIRGE.]

In consequence of this disposition of the mountain ranges which issue from the Fichtelgebirge, the waters collected on its slopes run off to the four cardinal points. On its southern declivity rises the Naab, which joins the Danube, by which its waters are carried to the Black Sea; the Main, rising on the western declivity, mingles its waters with the Rhine; and the Eger, which carries off the waters from the eastern slopes, falls into the Elbe, as does also the Saale, which rises near the northern extremity and runs northward.

The nucleus of the mass is composed of granite, gneiss, and mica-slate; but on the north-western side it is surrounded by extensive beds of clay-slate and grauwacke. Its mineral wealth is not great. It contains extensive beds of iron ore, which is the only metal that is worked on an extensive scale. Copper ore occurs frequently, but always in such small quantities that it cannot be worked. Gold was formerly obtained by washing the sand of some rivulets. Alum, serpentine, and coal occur in some places in rather large quantities. In other places there are some precious stones, as garnets, tourmalins, &c.

FIESOLE. [ETRURIA; FLORENCE.]

FIFESHIRE, a maritime county in the east of Scotland, comprising the peninsula between the Frith of Forth on the south, the German Ocean on the east, and the Frith of Tay on the north, and bounded on the west by the counties of Perth, Kinross, and Clackmannan. It lies between 56° and 56° 26' N. lat., 2° 35' and 3° 40' W. long. The outline is very irregular. The length of the county from east to west is about 44 miles, and from north to south 18 miles. Its area is 503 square miles, or 322,031 statute acres, of which more than four-fifths are arable and pasture, while one-fifth consists of hills, moss, moors, roads, and woods. The population in 1851 was 153,546. Fifeshire returns one member to the Imperial Parliament.

Coast-line.—The northern boundary of the county forms the southern bank of the Frith of Tay, along which from Newburgh to Ferry-port-on-Craig it extends about 18 miles. On the edge of the

Frith the ground is nearly level; farther inland there is a billy range, a continuation of the Ochils, but none of the eminences attain any great height. In Forgan parish however where the estuary is narrowed, the coast is bold and rocky. On this part of the coast is the village of Woodbaven, with a harbour capable of accommodating vessels of from 100 to 150 tons. The ferry to Dundee, which was formerly at Woodhaven, is now at the village of Newport, opposite Dundee and about one mile and a half distant from it. There is here a ferry pier 350 feet long and 60 feet wide. Eastward of Newport the coast continues bold and rocky, as far as the village of Ferry-port-on-Craig, where is a small pier and a regular ferry to Broughty, on the opposite coast of Forfarshire. Eastward of this village, the shore is flat and sandy, and continues so along the north coast of the Bay of St. Andrews to the estuary of the river Eden, which is navigable as far as the Guard bridge, a little way from its mouth, where there is a small harbour, which vessels of considerable burden can enter, but at spring tides only, there being a bar at the mouth of the river. Beyond St. Andrews the coast is again rocky, the sandstone in this extreme eastern part of the county running out to the sea in long ridges. Fife Ness, the most eastern point, is situated in 56° 17' N. lat., 2° 35' W. long. The shore is composed of cliffs much worn by the action of the waves. Westward of Crail to St. Monans the shore still presents sandstone cliffs to the Frith of Forth. Here are the burghs of Easter and Wester Anstruther, westward of which are the small harbours of Pittenweem and St. Monans. Off the coast here is the island of May, with its lighthouse, which are noticed in the article CRAIL. The population of the isle (in 1851) is returned with the parish of Anstruther Wester. The isle is claimed by the parish of Crail, but it is considered by the Commissioners of Northern Lights not to be part of any parish. The Bay of Elie, a small but very convenient harbour, is formed by two promontories in the Frith, composed of basalt greenstone and trap. The shore on each side of these promontories is low and sandy; as is the coast generally along the Bay of Largo to the mouth of the river Leven, after which, turning southward, the coast again, in Wemyss parish, presents a line of rocks which extend occasionally a good way into the Frith. On this part of the coast is the small harbour of Buckhaven, and farther south are the more important towns of Dysart, Kirkealdy, and Kinghorn. Turning Kinghorn-ness, opposite which is the island and lighthouse of Inchkeith, about 3 miles westward is the town of Burntisland, and farther west are Aberdour and Inverkeithing. The coast in the neighbourhood of Aberdour is rocky and steep. Wood has been planted close to the shore, which continues rocky and occasionally sandy westward to Inverkeithing and along the tongue of land at the extremity of which is North Queensferry. The remaining part of the coast to the westward is generally low. Some of the strata of the great carboniferous formation on which this part of the county rests, crop out at one or two places on the shore.

Surface, Hydrography, Communications.—In the northern part of the county is a continuation of the Ochils, gradually diminishing in height as the range approaches the east. The Lomonds, or Lomond Hills, a small range about 4 miles long, run nearly parallel to this northern range, in the middle of the county. The Eden traverses the valley, or Strath of Eden between these ranges, and the Leven and Orr rivers water the valley south of the Lomonds, formed by the eminences on the shore of the Forth. The Ochils are composed of trap rock. In the north-eastern part of the county, their elevation does not exceed 400 feet, but in the extreme west of the county they reach a much greater height. The Lomonds have three peaks called respectively East, Mid, and West Lomond hills. They slope to the south, and to the north are generally steep or precipitous, in some places presenting regular columns of trap rock to the view. The West Lomond is said to be 1720 feet above the sea. The other eminences of the county are generally single hills, such as the Largo Law, which is above 900 feet high, and the Brinnarty Hills between Loch Leven in Kinross-shire and Loch Orr in this county.

Fifeshire is watered by numerous streams, of which the Eden and the Leven are the chief. The Eden, which rises in the Lomond Hills, flows about 20 miles east and north-east through the central vale, or Howe of Fife, sometimes called Stratheden, past the town of Cupar into the German Ocean. The stream is slow, and of little force; art however has made it available for the movement of mills and of powerful manufacturing machinery. [CUPAR.] Red and white trout, pike, and eels are abundant in the deeper parts, and salmon are taken near its mouth. The Leven issues from Loch Leven in Kinross-shire, and taking an easterly direction, receives the Orr Water from Loch Fitty, and flows into the Frith of Forth at the village of Leven. In its course of 12 miles it turns a great many mills for cotton, flax, paper, corn, &c. The water being very clear and soft is well adapted for bleaching. Before the establishment of bleaching-fields along its banks, it was the best trout stream in the county. Fine salmon were taken in the loch, and thousands of eels in their passage thence to the sea. There is still a salmon fishery at the mouth. Many of the numerous small lochs of this county have been drained, and their sites have become cultivated fields. Several of those which remain greatly enhance the picturesque beauty of the scenery. The Loch of Lindores in the north-west is a beautiful sheet of water, covering 70 acres, with a depth of 20 feet. Loch Fitty, near Dunfermline, is

the next in magnitude. There are mineral springs in various parts, particularly two chalybeates of great repute, near the town of Dysart.

About three-fourths of the county boundary are formed by the ocean and the great estuaries or Friths of the Forth and the Tay. Along this extensive line of coast are many commodious harbours. Steam-boats ply regularly between the principal ports of Fifeshire and those of the adjacent counties, especially with Leith on the south and Dundee and Perth on the north. The principal roads in the county are those which, commencing at Burntisland and Kinghorn opposite Leith, lead to Perth, Cupar, St. Andrews, and Dundee.

The Edinburgh and Northern railway runs through the county from Burntisland on the Frith of Forth to Ferry-port-on-Craig on the Frith of Tay—passing on its route through the towns of Kirkcaldy, Dysart, Cupar, &c. The ferries on the Friths of Forth and Tay are worked by means of the railway company's steamers.

Geology, Mineralogy, &c.—Coal and limestone are found in abundance in almost every part of the county south of the Eden; but they are not found in the upper division, north of that river. Along the shore of the Forth, from Torryburn in the west to Pittenweem in the east, the strata of coal are generally regular, dipping to the east and south-east. They terminate on the one hand at the distance of 2 or 3 miles from the water's edge, and on the other they are continued beneath it. Another tract of coal, to the north of this, extends through the higher ground, nearly parallel, from the north of Dunfermline to Leslie, and thence to the parish of Denino, a little to the south of St. Andrews. The dip of these strata is almost invariably north and north-east. In the irregular hills along the right bank of the Eden the strata are found in every variety of position. The collieries are numerous, and employ a large number of hands. The working of coal at Dysart is said to have commenced upwards of 350 years ago.

Limestone quarries are numerous in the southern district. The lime-works, 3 miles east of Torryburn, are perhaps the most extensive in Scotland; in the parish of Burntisland, and in many other places, quarries are constantly worked. Ironstone is plentiful, especially near Dysart, and in the parish of Balgonie. It yields from 40 to 60 per cent. of metal, and several thousand tons are annually conveyed to the great foundry of the Carron Company. Lead mines have been worked in the Lomond Hills. Freestone of a superior quality is found in great abundance south of the Eden, particularly in Burntisland. Freestone, well adapted for paving, is quarried in Strathmiglo, and near Dunfermline and north of the Lomond Hills are vast rocks of white freestone, susceptible of a fine polish. Along the sides and summits of the northern hills are boulders of the primitive rocks—granite, gneiss, quartz, mica-slate, with garnets and primitive greenstone, many of very large dimensions. Whin or greenstone is abundant, especially in the north; it is hard, firm, and durable; and is well adapted for building. On the shore near Burntisland, and in some other places, are found beds of a hard dark-coloured stone, which endures exposure to the most intense heat for several years without injury; it is therefore much used for grates and ovens. Marl is found, but it is not much used by the farmers for manure. Clay is abundant for making bricks, not only of the common kind, but also fire-bricks, of an excellent quality. Peat in some parts is plentiful. Agates and very beautiful crystals of carbonate of lime and sulphate of barytes are imbedded in the whinstone rocks of Monimail and Newburgh; and agates, carnelians, jaspers, and rubies have been found in the bed of the Eden and at Earl's Ferry. In the parish of Dysart fossil trees and other remains have been found.

Climate, Soil, Agriculture, &c.—The air in general is dry, healthy, and exhilarating. Agues are almost unknown, and fevers have a comparatively mild character. Along the coast of the Frith of Forth the air is mild and salubrious; but in the west and north-west districts, which have greater elevation, with a soil more moist and less cultivated, the air is comparatively damp and cold. In consequence of the hills of Fifeshire lying generally from north-east to south-west, the valleys are much exposed to severe easterly and north-easterly winds. But the greatest inconvenience experienced in this county, as in every part of Scotland, is occasioned by the frequent sudden changes in the weather.

The soil is of various kinds. In the most fertile districts it consists principally of a rich loam; in the poorer tracts it is mostly a wet clay, resting on a cold bed of till. A level tract of deep, rich, and very fertile loam extends from east to west along the whole southern side, varying in width from 3 miles to 1 mile from the shore of the Frith of Forth. It produces luxuriant crops of all the common kinds of grain and vegetables. A wide strip of land extending from the town of St. Andrews to the extremity of the county north-west of Dunfermline, consists of wet clay, with moss, moor, and rocky hills. The western and north-western parts are also of little agricultural value, being partially covered with barren moor, and heathy mountain land. The valley drained by the Eden commences at the mouth of that river and extends to the borders of Perthshire. From Cupar westward its width is from 3 to 4 miles. Its soil varies in different parts from a light friable and sandy mould to a strong and heavy loam, but the whole is generally well cultivated and very productive. The northern side of the county along the Frith of Tay exhibits a

series of rocky hills partially covered with furze, but intersected by numerous fertile valleys and carefully cultivated slopes.

Fifeshire is well cultivated, has an unusual proportion of gentlemen's seats and plantations, and its coast is thickly studded with villages and towns. There is little natural wood. The plantations are numerous; and the timber, which is mostly aged and valuable, consists of ash, elm, beech, fir of different kinds, limes, chestnut, sycamore, and oak. Many hundred acres of waste land have been planted with forest-trees. Owing to the number of opulent proprietors who reside on their estates in Fifeshire, gardens are numerous, extensive, and well managed.

Four-fifths of the county are arable. Farms vary in extent from 50 to 500 acres: the average may be about 120 acres. Property in land is perhaps more equally divided, and distributed among a greater number of proprietors than in any other county of Scotland. The rural dwellings and farmsteads were in the end of the last century of the most wretched description. The farmers lived in low, smoky, badly-lighted cottages, without any interior divisions except those made by the furniture. These have been replaced by neat and commodious houses; and the farm-offices, which formerly were awkward and filthy, have given place to greatly-improved structures. By far the greater portion of the county is inclosed, and the fences consist either of stone dykes or thorn hedges. Drainage having been very extensively and effectually executed on tracts of flat and swampy lands, has greatly improved both the productiveness and the health of the county. The sites of several considerable lakes now bear fine crops of graiu.

The principal crops are of oats, wheat, and barley. As oats are more generally adapted to the soil and climate, the cultivation is more extensive than that of any other kind of grain; and though the poorest families now eat wheaten bread, oatmeal is still much used as an important article of food. Barley is raised to some extent; the meal of this grain is used for bread among some of the poorer class of labourers, who sometimes mix it for this purpose with pea and oatmeal. Wheat being adapted only to some parts of the soil, and requiring more care and expense than oats and barley, is not extensively raised; the crops however are generally very good. The exportation of oats, wheat, and barley is carried on chiefly at the port of Kirkcaldy. Peas and beans thrive best in the northern and southern districts. Of potatoes a sufficient quantity is planted on every farm for the tenant and his cottagers, and abundant supplies are raised in the vicinity of every town and village. Some cargoes of potatoes are exported to the London and other markets. Turnips are extensively used for fattening cattle and feeding milch cows and young stock in sheds. Flax is an important crop in Fifeshire; the produce is consumed in the large linen manufactures of the county, principally at Dunfermline. Rye, cabbage, colewort, kail, tares, and carrots are cultivated to a small extent.

The county has been long distinguished for the excellence of its breed of cattle. The prevailing colour is black, though in the true county breed every variety of colour is found. They are hardy, fleet, travel well, are tunc, and fatten quickly. The cows are of high repute in the dairy. Sheep are not numerous. The flocks are chiefly of the Cheviot breed. Hogs are kept by all the farmers and cottagers. The breed of horses has been greatly improved. Poultry and pigeons are abundant. Modern improvements in agricultural implements are adopted throughout the county. Thrashing-machines, some of which are driven by steam, iron ploughs, &c., are in common use. Leases are generally for 19 years. There are several active agricultural societies in the county. Most of the indigenous and other animals of Britain, wild and tame, are found. Game-birds are abundant, and the lochs are visited by wild geese, ducks, teal, and occasionally by wild swans. Among the rarer birds are the Bohemian and silken chatters, the siskin, kingfisher, and passenger-pigeon.

Industry, &c.—Small breweries and distilleries for the manufacture of malt liquor and malt spirits are numerous. The manufacture of sea-salt has been established in Fifeshire for several centuries, chiefly at Dysart, Kirkcaldy, and other places on the coast. The produce of the coal-fields in the western parishes of Aberdour, Dalgety, Iverkeithing, and Dunfermline is very considerable. Ox and cow-hides, calf-skins, and some seal-skins are tanned and dressed at Kirkcaldy, Cupar, Auchtermuchty, and Falkland. The manufacture of linen employs a much larger number of hands than any other manufacture in the county.

Besides considerable salmon-fisheries in the rivers Leven and Eden, and at Newburgh, the herring-fisheries along the north-eastern, eastern, and southern coasts are extensive, and large exportations of the produce are made. Cod, turbot, haddock, and the other common species of sea-fish are taken off the eastern coast and conveyed to the market of Edinburgh.

The shipping belonging to the small ports of Fifeshire consists chiefly of brigs and sloops for the coasting trade, as the contiguity of the great ports of Leith and Dundee affords the convenience of steam conveyance to London and other distant places. Numerous vessels, principally belonging to Kirkcaldy, are engaged in the Baltic, American, and Australian trade, and a few are employed in the Greenland whale fishery.

Divisions, Towns, &c.—The county is divided into 61 parishes. For

ecclesiastical purposes it is divided into four presbyteries, namely, St. Andrews, Cupar, Kirkcaldy, and Dunfermline, forming the provincial synod of Fife. According to the 'Census of Religious Worship and Education,' taken in 1851, it appears that, so far as was ascertained, there were then in the county 219 places of worship, of which 77 belonged to the Established Church, 49 to the Free Church, 45 to the United Presbyterian Church, 12 to Independents, 9 to Baptists, 7 to Episcopalians, 3 to Roman Catholics, 3 to Mormons, and 14 to other bodies. The number of sittings provided in 199 of these places of worship is stated to be 91,377. The number of day-schools in the county for which returns were received, was 285, of which 173 were public schools with 17,208 scholars, and 112 were private schools with 5937 scholars. Of evening schools for adults there were 19, attended by 203 males and 176 females: of Sabbath schools there were 183, with 14,753 scholars. Of these schools 53 belonged to the Established Church, 47 to the Free Church, and 37 to the United Presbyterian Church. Of literary and scientific institutions the county possessed 7, of which 5 were returned as having an aggregate of 483 members.

The county town, CUPAR, and the other principal towns, DUNFERMLINE, ST. ANDREWS, and KIRKCALDY, EAST and WEST ANSTRUTHER, BURNTISLAND, CRAIL, and DYSART, are noticed under their respective titles. Besides these, the royal burghs which are also sea-ports are Inverkeithing, Kilrenny, Kinghorn, and Pittenweem; but they have greatly declined from their ancient prosperity, owing partly to the loss of their original exclusive privileges of trading, partly also to the union with England, after which all the towns on the coast of Fife experienced more or less depression and loss of trade. AUCHTERMUCHTY, Earlsferry, Falkland, and Newburgh are also royal burghs.

Earlsferry, population 436 in 1851, a royal burgh from time immemorial, is situated on the shore of the Frith of Forth, about 9 miles S.E. from Cupar. There are a town-house and a jail, but the place is generally regarded as a part of Elie. The burgh is governed by 2 bailies and 7 councillors.

Elie, a burgh of barony, population 732, is agreeably situated on the shore of the Frith of Forth, and is resorted to in summer by the inhabitants of Edinburgh for sea-bathing.

Falkland, population of the burgh 1330, about 8 miles S.W. from Cupar, was made a royal burgh by James II. in 1458. It is now governed by 2 bailies and 10 councillors, of whom one is provost. The town still possesses several old houses which were occupied by the household of James VI. The palace will be noticed later in the article. Two streets in the town are named Parliament-square and College-close. The inhabitants are chiefly hand-loom weavers.

Inverkeithing, population 1852, a small market-town and sea-port about 4 miles S.E. from Dunfermline, is situated at the bottom of a bay which affords an asylum for large vessels lying in Leith Roads. The town consists chiefly of one street. William the Lion granted a charter to Inverkeithing as a royal burgh. James I. resided here. The burgh is governed by 2 bailies and 10 councillors, one of whom is provost; and, in conjunction with Culross, Queensferry, and Stirling, returns one member to the Imperial Parliament. There are exports of coal and stone from the interior, and of whisky, firebricks, and magnesia manufactured in the town. There is here a ferry across the Forth, and steam-vessels regularly call at the port in passing up and down the river. The provost of Inverkeithing was in ancient times entitled to ride next after the provost of Edinburgh at the opening of the Scottish Parliament.

Kilrenny, population 1862, situated a short distance E. from Anstruther, was at one time a royal burgh, sending a representative to Parliament, but since 1672 it has been a burgh of regality. By the Act 15 & 16 Vict. cap. 32, the burgh is placed under the government of 2 bailies and 7 councillors, one of whom is provost. About 100 fishing-boats, of from 10 to 20 tons burden, belong to the harbour. Kilrenny unites with St. Andrews, the two Anstruthers, Crail, Cupar, and Pittenweem in returning a member to the Imperial Parliament.

Kinghorn, population 1568, a royal and parliamentary burgh, is situated on the shore of the Frith of Forth, opposite Leith. The burgh is governed by 2 bailies and 7 councillors, of whom one is provost; and unites with Kirkcaldy, Burntisland, and Dysart in returning one member to the Imperial Parliament. The harbour is small. Some fishing-boats belong to the place, and steam-vessels and coasters call when the tide permits. The town-house and the burgh school are handsome buildings. Besides the parish church there are a Free church and a chapel for United Presbyterians. There are here extensive flax-spinning mills. The houses are well-built, and the streets are clean and well-paved. Near the town is a precipitous rock, over which Alexander III. was thrown from his horse and killed.

Newburgh, population of the burgh 2638, a royal burgh and market-town, is situated on the northern shore of the county, near the junction of the rivers Tay and Earn, which form the Frith of Tay. The inhabitants are chiefly engaged in the weaving of dowlas sheetings. The corn-market is well attended. Several vessels engaged in the coal-trade belong to the port. The harbour is formed by several piers running into the Tay. The town is well-built, and it is lighted with gas. The church and the town-house are handsome structures. There are two chapels for United Presbyterians. The town was made

a royal burgh by Charles I. Near the town are fragments of an ancient cross in honour of St. Magridd.

Pathhead, population 3977, a burgh of barony, forms part of the parliamentary burgh of DYSART.

Pittenweem, population 1450, a royal burgh and port on the north shore of the Frith of Forth, adjoins Anstruther, from which it is about a mile westward. It is a member of the St. Andrews district of parliamentary burghs, and is governed by 2 bailies and 10 councillors, of whom one is provost. The town consists of two principal streets and several cross streets. The parish church is an ancient structure. The town is clean, and the houses are neat and substantial. Fishing and fish-curing are the chief occupations of the inhabitants.

The following villages and small towns may here be briefly noticed:—*Abbotshall*, population of the town 4342, forms part of the parliamentary burgh of KIRKCALDY. *Abdie*, population of the parish 1486, is situated near an inland lake called the Loch of Liudores. A stream from the loch is used to drive saw-mills, boue-mills, and other mills. Near the village is a hill called Norman's Law, 850 feet in height, which has on its top a curious fortification of three concentric circles of stoue. The stone-circles have been attributed to the Danes. *Aberdour*, population 1945, a short distance W. from Burntisland, possesses a small harbour. The inhabitants are chiefly engaged in handloom-weaving. The village is resorted to in summer for sea-bathing. *Balgonie*, population returned with Markinch parish, is noticeable for its ancient castle, to which reference is made elsewhere. The inhabitants are chiefly employed in the extensive flax-spinning mills in the neighbourhood. *Balmerino*, population of the parish 945, is believed to have been a seat of the Culdees, who were succeeded by a body of Cistercians. Of the Cistercian abbey, which was an extensive building, a few ruins still remain. Some of the inhabitants are engaged in weaving for Dundee manufacturers and others in salmon-fishing. *Buckhaven*, population 1769, situated on the shore of the Frith of Forth, about 8 miles N.E. from Kirkcaldy, is inhabited chiefly by fishermen. For the improvement of the pier and harbour, constructed originally by their own contributions, the fishermen have collected among themselves about 3000l.—an effort which the Board of Fisheries rewarded by making a grant of public money in aid of the work. There is here a chapel for United Presbyterians. *Charlestown*, or *Charleston*, population included in Dunfermline parish, is situated on the shore of the Frith of Forth, and has a small harbour, at which the produce of the neighbouring limeworks is shipped. Numerous fossils have been found in the limestone. *Colinsburgh*, population returned in Kilconquhar parish, situated about 3 miles N. from Elie, possesses a weekly market well attended by the neighbouring farmers, and two annual fairs for cattle. There is a large establishment for currying leather. *Dairsie*, population of the parish 708, contains the ruins, which are still well preserved, of Dairsie Castle, where a parliament was held in 1335. The parish church was built by Archbishop Spottiswoode in 1615. The inhabitants are chiefly occupied in flax-spinning. *Dalgety*, population of the parish 1513, contains extensive coal-mines and salt-works. The old village of Dalgety has been removed, and the site included within the inclosures of the Earl of Moray. The produce of the mines is shipped at St. David's, which is within the parish. Donibristle Castle, the scene of the murder by the Earl of Huntly of the Earl of Moray, son-in-law of the Regent Murray, is in the parish of Dalgety. *David's, St.*, a convenient harbour, situated a mile and a half N. by W. from North Queensferry, with 17 feet depth of water, admits vessels of 500 tons. Coal is shipped in great quantities, the collieries in the neighbourhood being very extensive. There are also large salt-works. *Ferry-port-on-Craig*, population 2051, is a neatly-built village on the south shore of the Frith of Tay. The inhabitants are chiefly engaged in handloom-weaving for Dundee manufacturers. It contains a Free church and a chapel for United Presbyterians. *Gallatown*, or *Gallowtown*, population 1436, is a village situated about 2 miles N.W. from Dysart, and forming a part of Dysart parish. *Largo*, population of the parish 2800, is situated in Largo Bay, and is much frequented for sea-bathing. There are flax-works and a salmon-fishing station. The steamers of the river call here, and there are a few small trading vessels belonging to the village. It contains several partly-endowed schools, the parish church, chapels of the Free Church and the United Presbyterian Church, a small hospital, a savings bank, and a library. *Leslie*, population 1342, situated about 11 miles S.W. from Cupar, is inhabited chiefly by weavers and persons employed in agriculture. Besides the parish church there are two chapels for United Presbyterians, and a Free church. *Leven*, a burgh of barony and port, situated at the mouth of the river Leven, at the western extremity of Largo Bay, consists of two parallel streets and several lanes: population of the village 2083, chiefly employed in linen-weaving. The harbour is a natural one, but is being gradually improved. It admits at high tide vessels of between 300 and 400 tons. One or two vessels in the American trade and several coasters belong to it. The town is cleaned and lighted by the police board: the parish contains a foundry, and several flax and other mills. *Limekilns*, population included in the parish of Dunfermline, is a small port from which the produce of the neighbouring lime-quarries is exported in considerable quantities. Several vessels belong to the port. The United Presbyterians have a chapel here. *Markinch*: population of the parish, 5343. Besides the village of Markinch the

parish contains the villages of *Milton* and *Thornton*, each of which has a chapel of ease. Besides the parish church there are chapels of the Free Church and the United Presbyterians. Coal is extensively wrought, and there are several paper mills, woollen, linen and flax mills; also several bleach-fields. The *Loven* and *Orr* rivers, which traverse the parish, supply water for the various manufactories. *Markinch* was a seat of the *Culdees*. *Monans, St.*, a burgh of barony in the parish of *Abercrombie* (formerly called *St. Monans*), on the north shore of the *Frith of Forth*: population of the village 1241, who are chiefly employed in fishing and fish-curing. One or two coasting vessels belong to the harbour, which has a long pier and 20 feet depth of water at high tides. The burgh has a handsome church erected not many years ago, the former one, said to have been built by *David II.*, having become ruinous. There is also a prison. The spot occupied by *St. Monan's* cell is still pointed out. *Pettycur*, a village situated on the coast a short distance S. from *Kinghorn*, possesses a harbour and a small shipping trade. *Strathmiglo*, population of the parish 2509, about 10 miles W. by S. from *Cupar*, is a large village, the inhabitants of which are chiefly occupied in linen-weaving. *East Wemyss*, a village with a population of 802, and *West Wemyss*, a burgh of barony, population 1013, are situated about a mile apart, on the shore of the *Frith of Forth*, about 3 miles N.E. from *Dysart*.

History, Antiquities, &c.—In ancient times Fife was one of the most cultivated and improved, and at the same time the most warlike of the Scottish counties. It was frequently styled the 'Kingdom of Fife.' *Falkland* and *Dunfermline* were royal residences. But the county does not appear to have been the scene of any events of national importance except those which occurred during the earlier part of the Scottish Reformation, and which are more properly referred to in treating of the different localities in which they occurred. The county contains a great number of ancient edifices now either fallen or falling into decay. Some of these ruins are striking monuments of the taste and opulence of the feudal and monkish builders. [ST. ANDREWS; DUNFERMLINE.] Near *Newburgh*, in the middle of a large and fertile field, rising gently from the *Tay*, stand the ruins of the abbey of *Lindores*, founded by *David*, earl of *Huntington*, in 1178, in commemoration of his taking *Ptolemais*, in the *Holy Land*. It was one of the most richly endowed monasteries in Scotland. Stately fruit-trees rise from the floors of its halls and lofty aisles, interspersed with ivy, hazel, and wild flowers of various and brilliant hues, which cling to the mouldering fragments of the walls. The whole produces a very picturesque effect. In the same neighbourhood are the remains of two very curious ancient crosses. One, called the *Cross of Mugdrum* or *Magdrin*, consists of a pediment or plinth, with an upright shaft adorned with singular sculptures of animals and scrolls. Many similar crosses, found in this and the adjoining counties, are traditionally assigned to the age of *King Arthur*. The other is the famous cross of *Macduff*, on the *Ochil Hills*, overlooking the beautiful valley of *Strathearn*. It now consists only of one large block of freestone, forming the base of a sculptured shaft, which, in 1559, was destroyed by the Reformers on their way from *Perth* to the abbey of *Lindores*. It forms the subject of a well-known poem by *Sir Walter Scott*. Besides that of *Lindores* there are remains of the abbeys of *Inchcolm* and *Balmerino*, the priory of *Pittweem*, and other ecclesiastical buildings. The large palace of *Falkland* deserves notice as one of the seats of the *Macduffs*, thanes of *Fife*. *James V.* greatly enlarged it, and made it a royal residence. The south front is yet entire and partly inhabited. In the parish of *Monimail* stands an old tower, known as *Bethune's* or *Beaton's Tower*. It formed part of the palace of the archbishops of *St. Andrews*, and in 1560 was the residence of *Cardinal Beaton*. The castle of *Rosyth*, near *Inverkeithing*, stands on a rock surrounded by the sea. It consists of a large square tower in the midst of the ruins of an extensive pile of buildings. Sculptures and inscriptions remain on some of the interior walls. The castle of *Loch Orr* stands in the middle of the loch, in the parish of *Balngry*. It was built in the time of *Malcolm Canmore*, and consists of a tower and other buildings surrounded by a strong wall. The ruins formed a beautiful object in the lake before it was drained. *Seafish Tower* is an old ruin on a rock by the shore, in the parish of *Kinghorn*. The castle of *Ravensraig* stands also on a precipitous crag projecting into the sea in the parish of *Dysart*. It was inhabited in the time of *Oliver Cromwell*. *Macduff's Castle* at *East Wemyss* stands on a high cliff overlooking the sea. Two square towers and a portion of the surrounding wall still remain. *Craig Inall*, in the parish of *Ceres*, is an extensive ruin on the bank of a beautiful glen filled with luxuriant trees. In the same parish is *Tarvet Tower*, an old fabric of hewn stone, 24 feet square and 50 feet high. It stands on elevated ground, and is seen at a great distance. It appears to have been a place of refuge and defence. *Balgonie Castle*, in the parish of *Markinch*, is a fabric of great antiquity and strength. It stands on the right bank of the river *Leven*, about 40 feet above the water. The ruins of the tower of *Balwearie*, in the parish of *Abbotshall*, are interesting, as having been the residence of the famous *Sir Michael Scott*. The walls are nearly seven feet thick. Numerous other remains of the feudal times will be found described in the 'New Statistical Account of Scotland.'

In this county are also found a remarkable number and variety of the vestiges of the *Caledonian* and *Pictish* inhabitants, and of their

Roman and Danish invaders, ancient military forts and mounds of encampment, stone circles, cairns, tumuli, barrows, stone coffins, Celtic sepulchral urns, spear and arrow heads of flint, swords and battle-axes of brass and bell-metal, Roman and other coins, weapons, &c. A cairn opened a few years ago in the parish of *Scoonie*, contained, besides a large quantity of loose human bones, 20 stone coffins, formed with rough alabs cemented with clay. They held some mouldering skeletons and small urns filled with calcined bones. In the parish of *Leuchars* an urn, containing about 100 perfectly preserved silver coins of the Roman emperors, was turned up by the plough. Part of the church in this parish was built about the year 1100, and exhibits the most interesting specimen in Scotland of Norman architecture.

In 1852 the county possessed four savings banks, at *St. Andrews*, *Cupar*, *Dunfermline*, and *Kirkcaldy*; the total amount due to depositors on 20th November 1852 was 69,521*l.* 4*s.* 4*d.*

FIGEAC. [LOT.]

FIGUEIRA. [BEIRA.]

FIGUERAS. [CATALUÑA.]

FINALE. [ALBENGA; MODENA.]

FINCHILEY. [MIDDLESEX.]

FINISTÈRE, or FINISTERRE, the most western department in France, comprehending a part of the former duchy of *Bretagne*, lies between 47° 44' and 48° 47' N. lat., 3° 22' and 4° 50' W. long.; and is washed on the northern, western, and southern sides by the Atlantic Ocean; on the east it touches the departments of *Côtes-du-Nord* and *Morbihan*. The greatest length from north to south is 73 miles; from east to west 63 miles; but the average width does not exceed 44 miles. The area of the department is 2593.8 square miles; the population in 1851 was 617,710, which gives 238.14 to the square mile, being 63.43 below the average per square mile for the whole of France. The department is named from its comprising within it the extreme point (*Finis terre*) of France towards the west. This point is the *Cape St. Mathieu*, on which there is a small chapel called *Notre-Dame fin de terre*.

A number of islands and rocky islets lie off the coast. The most important of these are the isles of *Bas* and *Ouessant*. *Bas* has been already noticed under its proper head. [BAS.] *Ouessant*, known to the Romans by the name of *Uvantis*, and called by the English *Ushant*, is 13 miles from the mainland, from which it is separated by the *Passage du Four*. It is about 18 miles in circuit, and fertile; but the coasts are rocky, precipitous, and very difficult of access. Horses and sheep are reared. The population, which is of unmixed Celtic descent, amounts to about 2300, many of whom are pilots and fishermen. They speak the purest Breton, which is a dialect of Celtic. Besides the village of *St. Michel*, there are on the island several hamlets, a strong castle, some druidical structures, and a lighthouse of the first class. The French and English fleets, under *Count d'Orvillers* and *Admiral Keppel*, respectively fought a bloody and undecided battle off *Ouessant* in 1778. The group of the *Balances* and the isle of *Beniguet* lie between *Ouessant* and *Cape St. Mathieu*, at the entrance to *Brest Harbour*. *Scin*, a low, barren, and rocky island, nearly 2 miles W. from *Cape Raz*, is inhabited by fishermen. The *Olenans* is a group of nine islets on the south coast, opposite *Cape Trevignon*.

The department presents to the sea a bold barrier of granite rocks, at the foot of which there are here and there extensive sands and benches. The coast line measures above 360 miles, reckoning all its windings: it is indented by a great number of bays and inlets, corresponding to an equal number of valleys or depressions in the land, out of which flow as many rivers or brooks. The largest of these inlets are those on the west coast, forming the harbour and roads of *Brest*; the *Bay of Douarnenez*, famous for its pilchard fishery; the *Bay of Audierne*, south of *Raz Point*; *Benodet Bay*, south of *Quimper*; and farther east the *Bay of Forêt*. On the northern coast there are many small bays and inlets: the largest is the roadstead of *Morlaix*, which is admirably sheltered, but is difficult of access in consequence of islets, rocks, and ledges with which the approaches are incommoded. The coast is dangerous to mariners, and exposed to great storms from the south-west. Lighthouses are built on all the principal headlands. The interior of the department is hilly; two offshoots of the *Armoric range* [CÔTES-DU-NORD] cover a great part of the surface, namely, the *Arré Mountains* in the north, and the *Montagnes Noires* in the south; but they nowhere exceed 900 feet in height.

The rivers are very numerous, but their course is short. The most important are—the *Aulne*, which flows from *Côtes-du-Nord* westward, past *Châteauneuf* and *Châteaulin*; from this last town to its entrance into *Brest Roads* it is a tide river and navigable; its principal feeders are the *Elzèze*, the *Doufine*, on the right bank, and the *Hière* on the left: the *Elorn*, which also enters the *Brest Roads*, and forms the harbour of *Landerneau*; the *Odet*, which passes *Quimper*, where it receives the *Benodet*, and becomes navigable to its mouth in the *Bay of Benodet*; and the *Ellé*, which enters the south-eastern angle of this department from that of *Morbihan*, receives the *Isok*, or *Issole*, at *Quimperlé*, whence, to its entrance into the *Bay of Biscay*, it separates *Morbihan* from *Finistère*. The *Ellé* below *Quimperlé* is sometimes called the river of *Quimperlé*. The scenery along these rivers is exceedingly beautiful, and in most of them there is good trout-fishing.

The department contains 1,660,032 acres. Of this surface 675,141 acres are arable, 101,094 are natural pasturage, 84,524 are covered with woods and forests, 24,797 are laid out in orchards, nurseries, and gardens, and 658,681 consist of heath and moorland. The best soils are near the coast or in the neighbourhood of the rivers. The old district of Léon, which forms the western part of the *arrondissement* of Morlaix, is the best soil in all Bretagne; but the eastern part of the *arrondissement*, which is called Tréguier, is poor and ill-cultivated. The *arrondissement* of Brest comprises some very fertile lands; a remarkable breadth of land is appropriated here to the growth of strawberries. With the exception of the canton of Pont-l'Abbé, which consists of excellent well-tilled soil, the *arrondissement* of Quimper has but little good land. The *arrondissement* of Quimperlé is a pretty and well-wooded country, but the soil is in general light. The most unproductive part is the *arrondissement* of Châteaulin, which consists almost entirely of vast moors and heaths. Here, the people being for the most part shepherds and cattle-breeders, sheep, horses, oxen, and cows, all of the Breton breed and small, form their chief wealth. Almost the only crop raised in this district for the sustenance of man is black oats; and whenever this fails the district is visited by famine.

It is not unfrequently said that the state of agriculture in this department is backward; but this is not exactly correct, the land under crops is in almost every instance well tilled, however unscientific the method may be. More of the land might be cultivated if it is true; but the cause of this apparent neglect is want of capital. Notwithstanding this drawback, and that more than a third of the surface consists of nothing but barren heath and hungry moor, the department is made to yield more wheat and rye than are required for consumption for a tolerably dense population. Barley, oats, huckwheat, great quantities of peas and beans (which form a large part of the food of the peasantry), and kitchen vegetables, are also grown. Other objects of cultivation are flax, hemp, tobacco, and cider fruits, yielding annually about 1,540,000 gallons of cider. The fields are generally divided by hedge-rows, in which oak, ash, white-thorn, and broom flourish. Besides the animals before mentioned, great numbers of excellent pigs are bred. Bees and game (deer, wild boars, partridges, &c.) are abundant. Eels, trout, salmon, lobsters, and oysters are plentiful; but the pilchard fisheries along the coast afford the most profitable occupation to the Breton fishermen. In this pursuit more than 1000 vessels of small size, and about 4000 men are employed, and a gross annual value of 2,000,000 francs is obtained. This includes the value of the enormous quantities of the common pilchard (4,400,000 lbs.), the anchovy pilchard, caught off Comcarneau in Forêt Bay (1,100,000 lbs.), and a large quantity of oil pressed from fish which are not cured. These fisheries form an excellent nursery for the French navy, which draws its best seamen from Bretagne.

Iron, coal, lead, bismuth, and zinc-mines are worked. An excellent stone, easily worked, and capable of resisting the action of the weather, is found at Daoulas and one or two other places near the Brest Roads: it is of a light green colour, and when worked presents the appearance of bronze. It is called 'Kersanton' stone, and of it several of the churches in the department are built. Granite, marble, building stone, and slates are quarried; potters'-clay, kaolin, and whetstones are found. There are cold mineral springs at various places in the department. The manufactures consist of sailcloth, linen, soda, soap, seed oil, candles, ropes, pottery, paper, leather, refined sugar, litharge, and tobacco. Ship-building is carried on at Brest and in most of the towns on the coast. The commerce of the department is composed of the various products already named, and of wine, brandy, beer, Dutch cheese, hutter, salt, and colonial produce. About 450 fairs are held. Roadway accommodation is afforded by ten royal and five departmental roads. A railway is in course of construction from Paris to Brest through Chartres and Rennes, which is now (June 1854) open as far as Le-Mans. A section of the canal from Nantes to Brest traverses the *arrondissement* of Châteaulin.

The climate is damp and foggy; the average number of days on which rain falls is 220; sometimes the rain falls almost without cessation for weeks together. Frost and snow are rare. Fine days are few even in summer; and in the same day one may experience the climate of the four seasons, so great is the variation of temperature. Storms are very frequent along the coasts; and nowhere in the world are the terrible sublimities of a raging sea seen to greater advantage than near the village and promontory of Penmarck, at the junction of the Atlantic with the Bay of Biscay; the sound of the waves dashing against the rocks is often heard to a distance of 12 and 18 miles inland. The prevailing winds are the west, south-west, and north-west.

The Bretons are an interesting people, strongly attached to the Catholic religion, to their old customs, and to their language, which is a dialect of the Celtic; hospitable, humane, and courageous enough, but easily excited to anger and to quarrel. Many of them understand French, but few of them speak it. They are imaginative and superstitious, the air and all the other elements are peopled by millions of genii, every field has its fairy, every buried treasure its guarding giant, every well its sprite and healing qualities. The song of birds, the howling of dogs, the distant roar of the ocean, are each

invested by the imaginative peasant with a power of communicating future good or ill, according to circumstances. All the members of a Breton family (we here speak of the mass of the peasant class) eat at the same table, the master of the house commencing first, next his male children and men-servants, then the wife, daughters, and female servants. In everything the men take precedence of the women. The labourer's food is porridge, or stirabout, a sort of thick soup made of oatmeal, barley-bread, or bread made of barley and wheat meal mixed; meat they seldom get. The habitations of the peasantry are mostly long, narrow, smoky huts, with a single window, and divided by a frail partition into two apartments, one of which is occupied by the man of the house, his wife, children, and it may be his grandchildren; the other contains the cows, calves, pigs, and other animals of the farm. Two large cupboards without doors, consisting of two stories, and separated into several small apartments or berths, which are strewn with hay or straw, form the sleeping places of the whole establishment. Feather-bed or mattress is equally unknown; a blanket is rare, the most usual night cover being a cloth made of coarse tow-yarn, or sometimes a piece of haircloth. The men, who in general wear their hair long, are dressed in broad-brimmed hats, short waistcoats, breeches of vast size, gaiters, and sabots; in some districts they are wrapped up in goat-skins. The costume of the women is in general neat and attractive. In connection with the Breton churches, many of which are fine structures, there are 'reliquaires,' or hone-houses, into which the hones of the dead are gathered after a certain number of years by the surviving relatives, and in which the skulls, each marked with the name or initials of its former owner, are arranged on shelves open to view. The department contains many druidical remains.

The department is divided into five *arrondissements*, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Quimper . . .	9	62	117,489
2. Brest . . .	10	85	204,765
3. Châteaulin . . .	7	59	105,658
4. Morlaix . . .	10	58	142,863
5. Quimperlé . . .	5	20	46,935
Total . . .	41	284	617,710

1. In the first *arrondissement* the chief town, *Quimper*, which is also the capital of the department, is built in a pretty situation on the slope of a hill at the junction of the Eir with the Odet, 330 miles W. from Paris, and has 9664 inhabitants in the commune. The town is in general ill built; but the more modern part of it contains some good houses. The principal public buildings are—the cathedral, which dates from 1424, and is the largest of the cathedrals of Basse-Bretagne; the church of St. Matthieu, an ugly edifice; the church of the priory of Locmaria, which stands at the end of a long and beautiful promenade on the left bank of the Odet, and part of which has stood since the 10th century; the manor-house of Poulquinan, which stands on a height near the last-mentioned church, and is said to have been the residence of the Breton king Grallon. The other remarkable objects are—the military hospital, the theatre, the public baths, the residence of the prefect, and behind it a fine promenade, cut out in zigzag avenues up a wooded hill above 650 feet high, from which there is a very extensive view. The town has tribunals of first instance and of commerce, an ecclesiastical school, and a communal college, held in a large building which formerly belonged to the Jesuits. Vessels of 300 tons come up to the town. The chief industrial establishments are potteries, tan-yards, breweries, nurseries, and ship-building yards. The pilchard fishery is actively carried on, and there is a good trade in corn, wine, brandy, honey, butter, dry and salt fish, iron, wool, hemp, flax, linen, and cattle. Steamers ply regularly from this town to Nantes. *Quimper* is sometimes called *Quimper-Corentin*, in honour of its first bishop. It was in the 5th century the capital of the Armoric Cornwall (Cornouailles), whose first king was the famous Grallon. It was first inclosed with walls in A.D. 1209, but these were soon demolished by the advice of the then bishop of *Quimper*. Pierre de Dreux caused it to be surrounded with a terraced-wall faced with cut stone, and flanked with massive towers, which, as well as the ramparts, were surmounted by projecting parapets with machicolations. A great part of these fortifications still exist. In 1344 Charles of Blois took the town by assault. During the wars of the League *Quimper* took part with Henri IV., but it was besieged and taken by Marshal d'Amont. In revolutionary nomenclature *Quimper* was styled *Montagne-sur-Odet*. Among the other towns of the *arrondissement* we give the following, with the remark that the population throughout is that of the commune:—*Briec*, 9 miles N.N.E. from *Quimper*, population 5149. *Comcarneau*, partly on an island in the Bay of Forêt and partly on the mainland, is a small fortress with 1984 inhabitants, who are almost all engaged in the fisheries along the coast, and take from 12,000 to 15,000 barrels of pilchards and anchovies every year. *Douarnenez*, at the head and on the north shore of the Bay of Douarnenez, has 3646 inhabitants engaged in the profitable fishery of

the bay, the yearly produce of which is about 35,000 barrels of pilchards and 15,000 to 16,000 barrels of oil. The islet of *Tristan*, which contains storehouses for the fish, stands near the town, and is defended by a battery of twelve guns. *Fouesnant*, a village S. of Quimper, and near the sea, has 3172 inhabitants. *Pont-Croix*, 18 miles W. from Quimper, has an ecclesiastical school and 2175 inhabitants; it stands on the top of a high hill, and consists of ill-built houses and steep streets; there is a splendid view of the storms of the Bay of Biscay and the Atlantic from this place. *Pont-Abbé* stands at the head of an inlet from Benodet Bay, and has a good harbour and 3325 inhabitants, who manufacture linen, and trade in wine and agricultural produce.

2. In the second arrondissement the chief town is *Brest*, which is the largest and most important town in the department; and is noticed in a separate article. [BREST.] Among the other towns are the following:—*Landerneau*, a small seaport 15 miles E. from Brest, has 4906 inhabitants. It stands at the mouth of the Elorn, which here forms a harbour surrounded by hills, high and steep on the left bank of the river, but sloping gradually on the right bank into a plain on which the chief part of the town is built. The upper town contains some very ancient structures; a house on the bridge over the Elorn bears the date 1518. The town has a very agreeable appearance; clear streams run from the hills through all the streets into the harbour, which is lined with extensive quays. The principal buildings are the church of St.-Houardon, the marine hospital, and barracks. A promenade, nearly a mile in length and well planted, leads from the town to a vast building occupied as a nunnery. The chief manufactures are leather, linen, and glazed hats. There are also bleaching establishments, and a good trade in canvass, linen-yarn, pitch and tar, Dutch cheeses, corn, horses, &c. *Lannilis* stands 15 miles N. from Brest, in a picturesque country watered by the Aber-Benouhie, and has 3124 inhabitants. *Lesvenec* stands on a height that rises from the middle of a fertile plain, 9 miles N.N.W. from Landerneau, and has an hospital and 2832 inhabitants. Near this place is the church of Notre-Dame-de-Folgoat, which is built of Kersanton stone, and for the delicacy of its sculptured and carved work, its beautiful pendants and windows, but especially for its magnificent rood-loft, is acknowledged to be without a parallel in this part of France; it was founded by John de Moutfert, and finished under his son John V., duke of Bretagne in 1423. *Plabennec* stands on a hill 9 miles N.E. from Brest, and has 3555 inhabitants. *Plouarzel*, N. of Brest, has 2214 inhabitants; on a hill close to it is a 'menhir' or druidical granite monolith, which is 43 feet high. *Ploudalmézeau*, 12 miles N. from Brest, contains some ancient houses of remarkable construction, and has 3209 inhabitants.

3. In the third arrondissement the chief town, *Châteaulin*, an ill-built place, with a population of 2758, stands in a very pretty country, on the Aulne, which divides it into two parts, and forms a small harbour to which barks of 80 tons go up. On a hill above the river are seen the ruins of the ancient castle of the lords of Châteaulin, which was built in A.D. 1000 by Budic, count of Cornouailles. The trade of the place consists in cattle, fish, butter, iron, lead, slates, &c. *Le-Faou* is a small place at the head of the Bay of Brest, with some remarkably built timber-framed old houses, and a population of 975. *Carhaix*, an ill-built town, stands on a high hill above the little river Iliers, nearly in the centre of Basse-Bretagne, and has a population of 2021. It is considered important in a military point of view; six great roads lead from it to Brest, Quimper, Châteaulin, Vannes, St.-Brieuc, and Morlaix. *Châteauneuf-du-faou*, beautifully situated on the southern slope of a hill above the Aulne, which here winds its way through rich meadows and turns several corn-mills, has a population of 2536. *Crozon* is situated on the peninsula, between the Bay of Douarenez and Brest roads; there are caverns near it inhabited by vast numbers of sea-birds. The population of the commune is 885. *Huelgoat*, a small place, with 1156 inhabitants, and *Poullaouen* near it, with 3700 inhabitants, have rich lead mines and smelting furnaces, which yield 10,000 cwt. of lead and 1500 lbs. of silver annually. *Pleyben* E. of Châteaulin, has a fine gothic church and 4672 inhabitants.

4. In the fourth arrondissement the chief town *Morlaix*, a sea-port with 11,698 inhabitants, is very prettily situated at the foot of two hills, and at the junction of the Jarleau and the Kevlout, which throw their waters into a creek from the English Channel that forms the harbour. Vessels of 300 to 400 tons come up to the quays at low tides, which rise from 13 to 23 feet; the entrance however is very intricate and dangerous, from the number of rocks and islets. The river and the harbour divide the town into two quarters, the side of Léon to the west, and the side of Tréguier to the east. In the latter the houses are almost all ancient and the streets irregular. The side of Léon is more regular; it has a large square, surrounded by handsome modern houses, and in the centre of it, on the site of the old town-house, which was demolished in 1836, stands an elegant structure occupied by the tribunals of first instance and of commerce, the mayor's offices, and by the linen and corn markets. Modern structures have replaced many of the curious timber-framed houses of the old town; but in parts of it are still seen façades ornamented with sculptures, and also some very remarkable interiors. The St.-Martin quarter, built on high ground, which is ascended by a great number

of steps, is the finest part of the town; it has a pretty modern church surrounded by fine gardens, from which there is an extensive view. The other remarkable objects are—the churches St.-Matthieu, St.-Mélaine, the tobacco manufactory on the hill of Léon, and the Cours Baumont, a beautiful promenade which extends above a mile along the harbour. The town has tribunals of first instance and of commerce, a college, a school of navigation, manufactures of linen, oil, and candles, besides a considerable trade in butter, corn, seeds, hides, pigs, cattle, sheep, horses, linen, linen-thread, paper, flax, hemp, wine, and brandy. It is an entrepôt for foreign produce. The winding channel between the town is navigated by steamers, and affords much delightful scenery. Mary, queen of Scots, landed here in 1548 on her way to Paris to espouse the Dauphin. Morlaix was formerly surrounded with walls and defended by a strong castle. Its defences were demolished under Henri IV. *Landrisiau*, a well-built town, stands on a high hill 12 miles W. from Morlaix on the road to Brest, and has 3217 inhabitants; it is remarkable for its church, which has a lofty bell-tower, supported on slender columns; these under certain aspects are lost to the view of the approaching traveller, so that the tower seems suspended in the air. *Lanmeur*, an ancient place, with 2750 inhabitants and two very ancient churches, one dedicated to Notre-Dame-de-Kernitrou, which was built about the middle of the 12th century and is perfectly preserved, and the church of St.-Mélair, which dates from the early part of the 11th century, and is built over a crypt which belongs to a much earlier period. In the crypt there is a fine fountain, for which the Bretons have great reverence. *Plouescat*, near the coast, has 3314 inhabitants; near it are seen some Druidical stones of great size. *Roscoff*, a small town on the coast opposite the isle of Batz or Bas, has a pretty good harbour sheltered by a jetty: the population, which consists chiefly of smugglers and sailors, amounts to 3640. *Sizun*, S.W. from Morlaix, has 3758 inhabitants, who are engaged in agriculture and the linen manufacture. *St.-Pol-de-Léon*, on a hill above the sea, 10 miles N.N.W. from Morlaix, is a clean but ill-built town. It possesses two noble churches—the former cathedral, which is remarkable for its delicate wood-carving and sculptured ornaments, and contains the tomb of St. Léon; and the church of Kreizker (middle of the town) built towards the end of the 14th century by John IV., duke of Bretagne. The square bell-tower of this church, surmounted by a cornice and an elegant balustrade, from which springs a lofty spire flanked by four turrets, the whole built of granite, is the finest work of the kind in France. The summit of the spire is 404 feet above the ground, being the highest spire in France, except that of Strasbourg. A suburb called Penpoull is built on the sea-shore, and forms the port; it contains several houses of remarkable construction; some of them are fortified. The population amounts to 6655. This town, formerly the seat of a bishop, is now going to decay. *St.-Thégonnec*, S.W. of Morlaix, is the centre of a considerable linen manufacture, and has 3929 inhabitants, and a fine church built of granite. *Toulé*, N. of Morlaix, has paper-mills, and 2905 inhabitants.

5. In the fifth arrondissement the chief town *Quimperlé*, a small sea-port situated at the junction of the Isole and the Ellé, and surrounded by high hills, has a communal college, and 5261 inhabitants, who manufacture leather, paper, and sabots. Vessels of 50 tons come up to the town, and unload their cargoes at a large quay lined with stores and handsome houses. The Benedictine convent, now the residence of the mayor, is an imposing building; behind it is the interesting round church of Sainte-Croix, which dates from the 11th century. On one of the hills above the town stands the gothic church of St.-Michel, the Capuchin and Ursuline convents, which with several pretty houses, gardens, and orchards, render this a very agreeable part of the town. *Bannalec*, N.W. of Quimperlé, famous for the wrestling-matches held near it every September, at which every variety and oddity of Breton costume may be seen among the numbers drawn together to witness and take part in the national game, has a population of 4264. *Pont-aven*, a small place near the mouth of a little river with the pure Celtic name of Aven, and 11 miles W. from Quimperlé, has a small harbour for vessels of 60 or 70 tons: population, 334. *Scæur*, N.W. of Quimperlé, stands on an eminence on the right bank of the Isole, and has 4005 inhabitants. From the tower of the church of Scæur is one of the most extensive views in Bretagne. Near the town is the beautiful well of Sainte-Candide, the basin of which is 76 feet long, 16½ feet wide, and 7½ feet deep.

The department forms the see of the Bishop of Quimper, is comprised in the jurisdiction of the High Court of Rennes, and belongs to the 16th Military Division, of which Rennes is head-quarters.

(*Dictionnaire de la France; Statistique de la France; Annuaire pour l'An 1853.*)

FINLAND, the Grand-duchy of, forms a Russian government composed of Finland, the two Lapmarks of Kemi and Tornea, and the province of Wiborg. It lies between 59° 43' and 70° 6' N. lat., 35° 10' and 50° 25' E. long.; and is bounded N. by Norwegian Finmark; N.E. by the governments of Archangel, Olonetz, and St. Petersburg; S. by the Gulf of Finland; and W. by the Gulf of Bothnia and Sweden. Its present name was given to it by the Swedes; but the natives call it *Suomenna*, the 'Region of Lakes or Swamps.' Its area is estimated at 145,432 square miles; and the population, according to the census of 1852, amounted to 1,636,915. The Lapmarks of Kemi

and Tornea, which constitute Russian Lapland, are included in Uleaborg län. They occupy the whole northern districts of the principality of Finland, and lie almost entirely within the polar circle, and are extremely sterile and thinly peopled; frequently not a single dwelling is met with for 80 or 100 miles together.

The surface of Finland is very uneven. In the eastern and central parts it is intersected by lakes, rivers, and swamps, between which there are flats of sand overgrown with moss and studded with low hills. In the northern parts it is covered with mountains belonging to the great Scandinavian chain, the highest points in which are the Poldoivi and the Unastunturi, on the borders of Norway, which are said to have an elevation of 2000 feet. The Maanselkä Mountains stretch from Norway southward all through Russian Lapland, whence they send out branches in all directions; the main range running parallel with, and at some distance from, the eastern coast of the Gulf of Bothnia, until it gradually subsides, and at last disappears to the north of Björneborg. The loftiest summits in this range are Naran-gavaara and Livaara, from which the sun may be seen during the whole twenty-four hours at Midsummer. It is said however that the highest point is not more than 3500 feet above the surface of the sea. In the more southern latitudes of the principality the valleys between these mountains contain good arable and rich meadow land. The west coast is generally flat, but very rocky near the Quarcken; indeed, the coasts both of the Gulf of Bothnia and Finland are lined with precipices, reefs, and rocky islands, which render navigation very hazardous. Many of these islets, as those of Sweaborg, which command the entrance to the harbour of Helsingfors, are strongly fortified. The most numerous group of islands is the Åland group, which lies between the Gulf of Bothnia and the Baltic, and gives name to the Åland Archipelago. [ÅLAND.]

The centre of Finland is an elevated plateau from 400 to 600 feet above the sea, full of lakes, and covered with low rocky elevations, mostly composed of red granite. The Maanselkä Mountains, which terminate above Björneborg (61° 27' N. lat., 21° 40' E. long.), chiefly consist of primitive rocks. In some parts of the lowlands the surface is overspread with enormous blocks and houlders of granite. Many of the lakes in the interior of Finland have their outlet in the Gulf of Bothnia or Finland. Independently of Lake Ladoga [LADOGA], which occupies a considerable portion of the south-eastern part of Finland, the largest of these waters is Lake Saima, or Saima Vési, a little to the north of Wiborg, which is more than 300 feet above the level of the sea, nearly 180 miles in length, and from 20 to 25 miles in breadth. It is full of islands, the basis of which is granite, and it flows through the Vouoxa, or Voxa, into Lake Ladoga. Next to this is Lake Enare, in the northernmost part of Lapland, which covers above 1000 square miles, receives several small rivers, and discharges its superfluous waters into the Frozen Ocean by the Palsyoki, or Pasvig, which falls into Varanger Fjord. In the south-west of Finland the lakes are very numerous; they are almost all united together by rivers and waterfalls round the central lake of Pyhäjärvi.

There are no rivers of any considerable length. The Voxa, which originates in the collected waters of numerous smaller rivers and lakes, in the northern part of the district of Kuopio, flows southward into Lake Saima, and thence eastward into Lake Ladoga. It is so full of granite rocks and falls as to be of little use for navigation. The Kymene is a broad stream, issuing from Lake Pemena to the west of Lake Saima, seldom less than 250 to 300 feet in width, and varying from 50 to 150 feet in depth; it falls into the Gulf of Finland near Kymmenegård, hut, owing to the frequent falls, is not navigable. The Kemiyoki flows from a lake still more to the west, and falls into the Gulf of Bothnia near Björneborg. The Yananus, an outlet of Lake Yänisyärvi, flows into Lake Ladoga. The Sestra is the boundary between the governments of Finland and St. Petersburg. The Tornea and Muonio, tributaries of the Gulf of Finland, separate Finland from Sweden, and the Tana divides it from Norway. The line of the Tana is first from south-west to north-east at Palmayäwry, where it quits the Finland border and flows through Norwegian Finmark north by east into the Tana Fjord, an inlet of the Frozen Ocean. Among the other rivers are the Wanda, or Helsing River, the Kyro, and the Ulea.

The waters of Finland and its numberless swamps and moors occupy more than a third of its surface; but the climate is on the whole salubrious, and there are many cases of great longevity. The average duration of the summer, which is accompanied by great heat, is not more than three months; the winter, which lasts from eight to nine months, is exceedingly severe, particularly in the north. During the latter season there is a direct road across the frozen Gulf of Bothnia to Sweden. In the northern parts of Russian Lapland the sun disappears entirely from the end of November to the close of January; hut during this period the moon and stars frequently shine with exceeding splendour throughout the twenty-four hours. In the southern and central parts the climate is less severe; winter lasts five or six months. Improved drainage and the extension of agriculture have rendered the climate milder, but night frosts frequently injure the crops in the open season, and thick cold fogs are common. Violent storms which are not infrequent in the winter sometimes devastate the forests; uprooted trees and snapped trunks of pines marking the course of the irresistible tornado.

There are extensive forests of firs and pines in the south, inter-

persed with oaks, elms, &c. both on the mainland and the islands; they are of peculiarly luxuriant growth on the soils which receive the exhalation from the lakes and swamps. In northern Lapland these trees are replaced by the hirsch, until, in the coldest districts, trees cease altogether. The mountains and hills are in general naked; but even where they are wooded, the wood is low and stunted.

The greater portion of the soil is either stony or sandy. Rich vegetable earth is of rare occurrence, and scarcely ever unmixed with sand. In order to manure his land, the agriculturist is in the habit of setting fire to his forest of underwood. By this means he is enabled to grow his rye or oats for two or three years in succession, after which he plants the ground afresh and lets it lie for twenty or thirty years, until the wood is sufficient for another burning. Barley and rye are chiefly cultivated; oats are often sown the year after the land has borne rye; a little wheat is raised; and some gray peas and beans. The frost however sets in so soon and the weather is so uncertain, that it is common for the farmer to use the precaution of gathering in his crops while they are green, in the early part of August, and afterwards to dry them. Hemp and flax, hops, and a little tobacco are also cultivated. Potatoes are extensively cultivated, the annual yield being estimated at 6,000,000 bushels. Carrots, coleworts, parsnips, and onions are also partially raised; but wild berries are the only fruit, except perhaps in the vicinity of Aho. The crab apple grows wild, but none beyond 60° N. lat. The oak does not thrive beyond 61°, nor the ash beyond 62°. The cereal crops cease to the north of 67° N. lat. The forests have suffered greatly, particularly near the sea-coast, from wasteful use and firing; hut large quantities of timber are still exported in the shape of deals, masts, &c.; and much tar, pitch, and potash, as well as fire-wood, are sent abroad. The pasture-lands and meadows though ill-managed are good and afford sufficient food for horses, cattle, sheep, goats, and reindeer of Finland. Butter is made to the amount of 2,000,000 stones yearly. Moss, in the bleaker regions, is the only food for domestic animals, for which the reindeer is an inestimable substitute. The horse of Finland is small, but strong and active. Fowl and other wild game are plentiful. Bears, elks, wolves, foxes, martens, &c., afford a large supply of furs and skins. Reindeers abound in Uleaborg län, in which the tame reindeer number 30,000. These animals constitute, in fact, the wealth of the Laplander; they supply him with food, clothing, and other necessaries, as well as the means of barter for his principal luxuries, brandy and tobacco; nor is he accounted affluent unless he be owner of 200 or 300 of them.

Finland is divided into eight läus, or provinces, of which the area, with the population, and an estimate in hushels of the chief agricultural products, in 1852, are given in the following table:—

Läus.	Area in sq. miles.	Population in 1852.	Rye.	Barley.	Oats.
Uleaborg .	63,734	157,000	440,000	840,000	20,000
Wasa . .	18,018	257,854	1,440,000	1,200,000	180,000
Abo . . .	10,326	292,098	1,680,000	1,200,000	400,000
Nylands .	4,951	160,252	1,000,000	640,000	260,000
Wiborg . .	18,484	273,011	800,000	320,000	800,000
Kuopio . .	18,928	190,155	1,200,000	1,200,000	360,000
St. Michel .	9,120	148,039	1,000,000	480,000	800,000
Tavastehus .	7,258	152,526	1,040,000	240,000	260,000
Total . .	144,819	1,636,935	8,600,000	6,120,000	3,080,000

Wheat is grown only in the districts of Abo and Nylands, which yield respectively 44,000 and 24,000 bushels a year. In Wiborg, 48,000 hushels of buckwheat are annually grown, and in Tavastehus about 64,000 bushels of peas.

The following table is an estimate in round numbers of the different kinds of stock in each of the provinces in 1852:—

Läus.	Cattle.	Horses.	Sheep.	Swine.	Goats.
Uleaborg .	95,000	18,000	98,000	5,000	640
Wasa . .	139,000	32,000	178,000	23,000	1,400
Abo . . .	150,000	38,000	182,000	28,000	14,000
Nylands .	95,000	25,000	90,000	20,000	6,000
Wiborg . .	117,000	34,000	78,000	37,000	1,000
Kuopio . .	80,000	38,000	79,000	35,000	1,000
St. Michel .	102,000	23,000	50,000	32,000	1,000
Tavastehus .	89,000	27,000	78,000	24,000	8,000
Total . .	867,000	235,000	833,000	204,000	33,040

Fish is the chief food of the Laplander, whose streams, such as the Tornea and Tana, are well provided with salmon, pike, eels, red-eyes, &c. The pearl musc is found in some of the lakes and rivulets of the westeru parts.

Finland has few mineral products. There are tin and copper mines, which yield to the amount of 800,000 silver rubles annually; these mines are in West Nylands and Karelia, the richest are at Pitkarenta, on the north-easteru shore of Lake Ladoga. Bog iron is obtained in some parts; lead is also found. Marble is quarried in the district of Ruskeala and the island of Arasati in Lake Ladoga. Slate is

plentiful, and chalk abounds in some places. The want of salt is severely felt.

Population.—The majority of the population is of Finnish extraction. The *Fins* call themselves 'Suomalans' or 'Suomes', but they are denominated 'Tschudes' by the Russians. They are divided into two branches, the Tavasts, who inhabit the south-west of Finland; and the Karelians, who dwell in the north-eastern part. They are slow, grave, and self-willed, but peaceable, brave, and hospitable, temperate and industrious: their complexion is dark, their countenance and manner are serious, and they are of robust make. They are all free, and many of them are landholders. The Baltic Fins are distinguished for their trading propensities, and the seamen are by far the best among all the subjects of Russia. The dwellings of the peasantry are built of wood, and are low, dark, and unclean. The Laplander is of the same extraction as the Finlander, and calls himself a 'Sameladz', or 'Same.' They resemble the Finlanders in all respects except that the upper jaw projects more, and their hair is of a deeper tint. There are about 1000 of them in this government; they lead a wandering life, and are divided into two classes, the reindeer Laplanders and the fishing Laplanders. From 7000 to 8000 Russians have settled in the districts of Wiborg and Koxholm, especially in the trading towns. Aland, the coast of Nyland, the south of Wasa län, and the adjacent islands are inhabited by about 125,000 Swedes.

Education.—Of the inhabitants about 1,500,000 profess to be Lutherans, who are under the Archbishop of Abo. The rest of the population belong chiefly to the Greek Church. Finland is divided into two dioceses, Abo and Borgo. The followers of the Greek ritual are under the archimandrite of St. Petersburg. The official language of the country is Swedish. The university of Abo was transferred to Helsingfors in 1828 by the emperor Nicholas, and is styled the Alexander University. There are also five academies and twelve superior elementary schools. The emperor has done a great deal for public education in Finland, and has especially promoted the knowledge of Finnish which had been neglected by Sweden. A professor of the Finnish language was appointed to the university in 1850. There are inferior schools in the majority of the parishes.

Agriculture, the breeding of cattle, and in some parts the fisheries, constitute the principal occupations of the people. There are few manufactures, although the Russian government gives very liberal support to enterprise of this kind in Finland. The cotton-mills and glass manufactures are the most important. In 1851, 148 factories employed 3364 persons, and gave a gross revenue of 1,295,621 silver rubles. In the larger towns, iron-ware, sail-cloth, and stockings are made. The peasantry make what coarse woollen and linen they require under their own roofs; they also prepare tar, potash, and charcoal, make articles of wood for their own use and for exportation, and in some of the ports vessels are constructed.

Navigation is much impeded by the severity of the winter, which shuts the harbours from six to seven months in the year. The internal trade, which is unimportant, is facilitated by the Saima Canal, completed in 1844. The foreign trade is considerable, the exports consisting of planks, potash, tar, cattle, butter, meat, hides, tallow, and fish, amounting in value to 3,000,000 silver rubles annually; and the imports—salt, colonial produce, cotton, and woollen stuffs—to about the same amount. In 1852, 467 vessels of 107,000 tons were engaged in the export trade. The coasting-trade was carried on by 900 small vessels with an aggregate tonnage of 50,000. The exports are sent chiefly to St. Petersburg, Sweden, and England.

Government, &c.—There is a distinct secretary of state at St. Petersburg for the government of this vast province. The governor-general and imperial senate reside at Helsingfors, the new capital, and are at the head of the administration. Each län has its governor. Three high courts of law are held in Abo, Wasa, and Wiborg. Though Finland has a constitution of its own, by which the inhabitants are classed in four orders,—nobles, clergy, burghers, and peasantry—the land-dags, or diets, have not been convoked since 1812. The senate in fact has superseded them. The Russian revenue from the government is estimated at only about 60,000*l.* sterling a year.

Before its annexation to Russia in 1809 Finland was subject to Sweden for about six centuries. The Russians have accorded every sort of favour to the Finns, and treated the Swedish element of the population with great severity. Amongst the Finns themselves there is a small party, including some influential men, who desire a reunion with Sweden; a second party, belonging to the nobility and including the higher class of public functionaries, but not very numerous or powerful, are attached to Russia; whilst a third party, including the large majority of the race, desire to have Finland for the Finns, and to form a nation independent of both Sweden and Russia, towards both of which however they are said to be animated by friendly feelings. A strict censorship of the press is exerted against foreign and especially Swedish books. The national literature is treated in a more liberal spirit.

Towns.—The län of Wiborg, has the town of the same name for its capital, which was the ancient capital of Carolia; it stands on a bay of the Gulf of Finland, is well fortified, and has about 3000 inhabitants, exclusive of a large garrison. [WIBORG.] In this circle is

Frederikshamn, on a peninsula on the Bay of Finland, a strong fortress, containing about 1400 inhabitants: it was here that the treaty of September 1809 was concluded, by which Sweden made over Finland with part of Lapland and the Aland Islands to Russia.

The län of St. Michel, which is north-west of the preceding, contains *St. Michel*, a small town, and *Nyslott*, another small town with a strong castle.

In Nyland län, west of Wiborg, is *Helsingfors* (60° 9' 42" N. lat., 24° 57' 30" E. long.) the capital, on a tongue of land in the Gulf of Finland, with about 16,000 inhabitants, and the strong fortress of *Suoborg*, at the entrance of the harbour. [HELSINGFORS.] East of Helsingfors lies *Borgo*, a small episcopal town on the river of the same name, with a cathedral, a church, gymnasium, manufactures of linen, sailcloth, refined sugar, and tobacco, and about 3000 inhabitants. West of Helsingfors is *Ekenäs*, or *Ekenes*, a small fortified sea-port town of about 2000 inhabitants, situated on the east shore and near the head of an inlet of the Gulf of Finland. To the west of Ekenäs lies the peninsula of Hango-Udd at the extreme point of which is the fortress of *Gustafsvörn*, lately destroyed by the fleet of Sir Charles Napier. *Lowisa*, north-east of Borgo, is a very pretty sea-port, with two churches, and about 3600 inhabitants.

The län of Tavastehus, north of Nyland, has for its capital *Tavastehus*, lying on a lake, with a strong castle, a church, and about 2000 inhabitants.

Abo, the westernmost län of Finland, includes the islands of Aland in the Gulf of Bothnia [ALAND]; its capital is *Abo*, on the south-western coast of Finland. [ABO.] In this circle are also *Björneborg*, near the mouth of the Kumoyoki, a maritime town of about 4600 inhabitants, well built, with a church, grammar school, boat-building yards, and some trade. *Raumo*, a town with 1700 inhabitants; and *Nystad*, a sea-port of about 2000 inhabitants, where the treaty by which Sweden relinquished the Baltic provinces and part of Finland to Russia in August 1721 was concluded.

North of this län is that of Wasa, on the Gulf of Bothnia. Its capital is *Wasa*, on the Gulf of Bothnia, a regularly built town, with a handsome stone church, a school, an infirmary, and 4000 inhabitants. South of Wasa lies *Christinastadt*, a good sea-port on a peninsula, with a church, and about 1200 inhabitants.

Kuopio län lies east of the preceding, and contains the town of *Kuopio* on a promontory of Lake Kallavesi, with a church, school, well-frequented fairs, and about 1500 inhabitants.

The län of Uleaborg, in the most northern part of the principality, contains *Uleaborg*, its capital, on the Ulea, a well-built town, with a tow-hall, two market-places, a church, hospital, and a population of about 4500, who carry on some trade: *Brahestad*, a sea-port, with a church, and about 1200 inhabitants: *Padasjärvis-Kousoma*, an inland town of about 1500 inhabitants: *Kemi*, a sea-port: and *Tornea*, on the river of that name at the northern extremity of the Gulf of Bothnia, a neat town, with two churches, one on an island, and about 700 inhabitants; this place is the centre of the Lapland trade in deals, salt fish, reindeer-skins, butter, &c. Steamers ply from Abo and Helsingfors along the coast towns and to St. Petersburg and Stockholm. The principal road is one that runs along the coast from Abo through Helsingfors, Borgo, Lowisa, Frederikshamn to Wiborg, and thence to St. Petersburg; but except the section between Wiborg and St. Petersburg no public conveyance runs along it. Another road runs northward from Abo along the coast of the Gulf of Bothnia to Tornea. Travelling is effected along these roads by posting for the most part in carriages without springs.

FINLAND, GULF OF. [BAL TIC SEA.]

FINMARK. [NORWAY.]

FIRENZE, one of the five provinces into which Tuscany is divided, is bounded N. by the duchy of Modena and the Papal province of Bologna, N.E. by the Papal province of Ravenna, E. by the Tuscan province of Arezzo, S. by that of Siena, and W. by that of Pisa and by the duchy of Lucca. Its greatest length from east to west is about 70 miles, and its breadth about 60 miles; its area is 2252 square miles, and its population in 1852 was 700,015. The surface of the country is in great measure mountainous, being intersected from north-west to south-east by the central Apennine range. That part of the province which lies on the north slope of the Apennines is called Romagna Grandncale, and consists of highlands and narrow valleys, which form the upper basins of numerous rivers that flow towards the Adriatic. The greater and by far the finest part of the province of Firenze lies south or rather south-west of the Apennine chain, and consists of the great valley of the Arno, which crosses it from east to west, and of numerous lateral valleys which follow the course of the rivers that flow into the Arno. The principal of these valleys on the left bank of the Arno are—the Val di Greve, below Florence; Val di Pesa; Val d'Elsa; Val d'Era, on the borders of the province of Pisa; on the right bank of the Arno are—the Val di Sieve, called also Mugello, north of Florence; Val di Biseuzio, or of Prato; Val d'Ombrone, or of Pistoja; and Val di Nievole. To the north-west, near the borders of Lucca, the Firenze territory includes part of the Val di Lima, which belongs to the basin of the Serchio; and at its southern extremity it extends over part of the valley of the Cecina, a river that flows into the Mediterranean through the Maremma of Pisa. The valleys produce corn, wine, oil, silk, and

abundance of fruit. The mountains are planted with chestnut and timber trees, and afford abundant pasture. The farms are generally very small, and are mostly let to tenants-at-will on the metayer system. A great resource of the country people is the manufacture of straw-hats, the straw for which is that of a peculiar description of wheat cultivated for the purpose, very thickly sown, and cut down before it is ripe. The country girls and men employ themselves in plating this straw, and the profit they derive from it forms a considerable addition to their means of support. The appearance of the peasantry, especially in the Val d'Arno, is pleasing; there is an air of health, comfort, and cheerfulness, a smartness of dress and a cleanliness of the person, superior to what is seen in most other parts of Italy. Many of the women wear round beaver-hats like the men. The other manufactures in this country are pottery and china ware, cloth, paper, leather, &c., mostly for internal consumption. The silk manufacture, once very flourishing at Florence, has greatly declined during this present century. The manners of this country people are simple, sober, and decent. The church-festivals, which recur at various epochs of the year, are days of mixed devotion and rejoicing to which the people are much attached. There are elementary schools in every commune. There are besides grammar schools in the towns kept by the Brothers of the Pious Schools, the Oratorians, and other religious congregations. Lancasterian schools, holiday schools, and infant schools were established through the exertions chiefly of the Abate Lanbruschini. The Italian language is spoken with nearly equal purity by all classes.

The climate of the province is generally healthy; the winters are colder than in the plains of Pisa, near the sea. The highlands of the Apennines are bleak and barren; the lowlands are pleasant and very fertile, but in some parts subject to inundations of the Arno or its feeders.

For administrative purposes the province is divided into 28 districts called cancellerie, which contain altogether 82 communes, having each a gonfaloniere and a communal council. The districts have each a political governor called cancelliere, and they are named from their chief towns. Florence, the capital of the province, is connected by railways with Pistoja, Pisa, Leghorn, and Siena. It is noticed in a separate article. [FLORENCE.] We here briefly notice the more important of the other towns. There are few towns of any importance in this part of the province north of the Apennines, although the valleys are pretty thickly inhabited. In this part are—*Firenzuola*, situated in a deep valley, 27 miles N.E. from Florence, on the left bank of the Santerno, population 1500; *Modigliana*, on the Marzen, a feeder of the Lamone, a walled town 40 miles E. N.E. from Florence, has several churches, a college, and 2500 inhabitants; and *Terra-del-Sole*, which stands on a hill above the left bank of the Montone, 45 miles from Florence, and has about 3500 inhabitants.

On the south side of the mountains are—*Borgo San Lorenzo*, on the left bank of the Sieve, or Mugello, 14 miles N.E. from Florence, population 3300; *Castel Franco di Sotto*, on the Arno, population 3280; *Castel Fiorentino*, on the Elsa, with 2700 inhabitants; and *Scarperia*, in the valley of the Upper Sieve, or Mugello, containing 5 communes and 22,870 inhabitants.

Empoli, situated in a very fertile country, on the Florence-Leghorn railway, is a thriving well-built town on the left bank of the Lower Arno, with several manufactories of cotton, leather, straw-hats, glass, and 5500 inhabitants.

Fiesole, situated on a steep hill above the valley of the Arno, 3 miles N. by E. from Florence, occupies the site of the ancient *Fesula*, one of the twelve confederate cities of Etruria. It is a small place of about 2500 inhabitants, but interesting on account of its ancient remains, which include polygonal walls, an amphitheatre, &c. The town gives title to a bishop, and has a cathedral built in the 11th century, a diocesan school, and a commercial hall. Many of the Florentines have country houses in and about Fiesole: in the neighbourhood are large quarries of sandstone. *Figline*, 16 miles S.E. from Florence, near the left bank of the Arno, has a population of about 4000. *Fucecchio*, near the Lake of Fucecchio, 20 miles W. from Florence, near the right bank of the Lower Arno, population 4200. *Monte-Catini*, a village of 2600 inhabitants, near the western border of the province, is celebrated for its warm springs.

Pescia, a walled town, W.N.W. from Florence, on the Pescia, a feeder of Lake Fucecchio, is the seat of a bishop, and has about 4700 inhabitants, who manufacture paper, broadcloth, and silk. The vicinity of the town is planted with olive and mulberry trees. *Pistoja*, 21 miles by railway through Prato from Florence, is an ancient and still considerable town with about 13,000 inhabitants. It forms the subject of a separate article. [PISTOJA.]

Prato, in the valley of the Bisenzio, 11 miles by railway N.W. from Florence, at the foot of the Apennines, is a bishop's see, has a handsome cathedral, a college, besides a seminary for ecclesiastical students, a public library, a printing-press, an hospital, a monte di pietà, copper smelting works and foundries, several manufactories of woollens, strawplait, leather, hats, soap, silk-twist, &c., and about 12,000 inhabitants. The road from Florence to Prato crosses a fine level country, highly cultivated, and thickest with gardens and villas. *Prato Vecchio*, in the upper Val d'Arno, is a walled village with about 3500 inhabitants. *San Miniato*, an episcopal town of 2000 inhabitants, is situated

on a hill at a little distance from the railway between Empoli and Pontedera. It has a cathedral, and is said to be the cradle of the Bouaparte family.

FIRMIN, ST. [ALPES, HAUTES.]

FISHGUARD. [PEMBROKESHIRE.]

FIU'ME (formerly St. Veit am Flaum, in Illyria Reka), the chief town of the palatinates of Fiume in the Austrian crownland of Croatia, is situated in a narrow valley at the efflux of the Fiumara into the Gulf of Quarnaro in the Adriatic, at a distance of 36 miles S.E. from Trieste by the road across Istria, and has about 11,000 inhabitants. The approach to the town by the Luisen Strasse, which connects Fiume with Carlstadt on the Kulpa in the interior of Croatia, presents scenery of a very wild character. The road passes down the defile called the Porta Hungarica, along the left wall of which the road is carried by terraces and shelves, excavated from the solid rock, so high above the Fiumara that the roar of its waters struggling over its rocky bed at the bottom of the chasm is scarcely heard. The view of the town, with the castle of Tersat above it, and the green islands in the Adriatic in front, from the extremity of the defile, are most charming by contrast with the wild savagery of the rocky pass. Fiume is composed of the old and new towns. The new town lies next the sea, has a cheerful aspect, broad, handsome, and well-paved streets, and a number of fine buildings, private as well as public: among the latter are the flesh, fish, and bread markets, ranges of shops with colonnades; and the casino, a spacious structure, containing coffee-rooms, a casino, &c. The old castle of Tersat is situated on an adjacent height, and behind the new town is a steep rock on which the old town is built. The latter is a gloomy spot, laid out in steep narrow streets, and almost entirely inhabited by the lower classes. In this part of the town are an ancient Roman arch; the elegant cathedral church of St. Veit, built in imitation of the church of Santa Maria della Salute in Venice; and a column which marks the spot where, according to the legend of the Santa Casa of Loretto, the holy House of the Virgin stopped on its way from Nazareth. The other buildings of note in Fiume are—a large building formerly used as a sugar-refinery, a nunnery, a gymnasium, a lazaretto, the government offices, and an hospital. Fiume has manufactories of linens, leather, woollens, rosoglio, sugar, wax, tobacco, paper, &c. A handsome promenade with avenues of plantain-trees and public gardens are at one end of this new town; several stone-jetties and a fine quay of freestone also embellish it. It has been a free port ever since the year 1722, but the harbour admits only small vessels; large ships come to anchor in the bay at a distance of three miles from the shore. The trade of Fiume is greatly fallen off. The chief exports are rags, staves, and timber. Fiume was formerly the port of Hungary, and traded extensively in timber, wheat, oil, tobacco, wigs, seeds, &c.; but steam-navigation on the Danube, the introduction of railways, and the superior advantages of Trieste as a commercial harbour, have operated powerfully against the trade of Fiume. The territory of Fiume used to belong to Hungary, and was called the *Littorale*, from its position along the shore of the Adriatic. It now forms the palatinate of Fiume in Croatia, which has been severed from Hungary since 1849. [CROATIA.]

FLAMBOROUGH. [YORKSHIRE.]

FLANDERS (*Vlanderen*), formerly an extensive county in the Low Countries, extending along the southern shore of the North Sea, between the mouths of the Aa and the Schelde. It was bounded W. by Artois, which howsoever was long united to it, S. by Hainault, and E. by Brabant. The country thus indicated was, in Roman times, included in Gallia Belgica, and comprised portions of the territories of the Morini, the Menapii, and the Nervii, who were amongst the most savage and warlike tribes of Gaul, and the last to submit to the yoke of Cæsar. About the end of the 3rd century after Christ the Franks obtained settlements in the eastern part of the territories of the Nervii, whence, issuing under Clovis, they extended their sway over a great part of Gaul. From the time of Clothaire II. Flanders was governed by an officer of the royal household, who was styled Grand Forestier, or High Ranger, and whose office was hereditary. The country was then covered chiefly with forests and marshes.

In the time of Charlemagne, who settled many of the Saxons among the Flemish, the high ranger was named Lideric, whose great-grandson, Baudouin d'Ardenne, surnamed Bras-de-Fer, or Iron-Arm, succeeded his father as third Count of Flanders in A.D. 864. Baudouin, by his union with Judith, daughter of Charles the Bald, king of France, obtained Artois, which was held by his successors until its reunion to France by Philippe Augustus. He died in Arras, his capital, in 879, after a turbulent life, during which however he laid the foundation of the greatness of Flanders by establishing the order of weavers, and attracting workmen skilled in woollen and other manufactures to settle in his states. The country continued for centuries to be governed by counts, under whom the Flemish towns-people early obtained charters of freedom conferring upon them the rights of electing their own magistrates, of managing their own civil and commercial affairs, and defending their walls against invaders by manning them with a militia consisting of the stout burghers themselves. By means of these privileges, for which they paid a fixed revenue to the count, the Flemish towns worked out for themselves an amount of freedom, and attained a degree of prosperity, without

a parallel in the north of Europe. The country became the centre of the greatest commercial and manufacturing operations in Europe; the Flemish towns were up to the 16th century more populous, as they continue to this day to be better built, than those of any neighbouring country.

After several wars and revolutions, which rendered it independent or subject to the crown of France, Flanders was united to the duchy of Bourgogne, as the result of the marriage of Marguerite, only child of Count Louis II., to Philippe le Hardi, duke of Burgundy. By the marriage of Mary of Burgundy Flanders passed to the house of Austria.

About the beginning of the 18th century it was divided into three parts:—French Flanders, which now forms the department of Nord in France, and is described in the article **NORD**; Austrian or Imperial Flanders, which under the French empire formed the department of Lys, and is now distinguished by the name of West Flanders; and Dutch Flanders, now East Flanders, which during the French empire formed the department of Escaut. East and West Flanders, at the peace of 1814, were included in the kingdom of the Netherlands. Since the revolution of 1830 they form part of the kingdom of Belgium, with the exception of a narrow strip to the north of East Flanders, along the south shore of the estuary of the Schelde, which is still retained by the Dutch, and forms part of the province of Zeeland. In the remainder of this article the Belgian provinces alone are described.

East Flanders, a province of the kingdom of Belgium, is bounded N. by the Dutch province of Zeeland, E. by South Brabant and Antwerp, S. by Hainault, and W. by West Flanders. It extends from 50° 42' to 51° 22' N. lat., 3° 25' to 4° 26' E. long. The area is 1232 square miles. The population in 1849 was 781,143.

The principal rivers that traverse this province are the Schelde, the Lys, and the Dender. It is further watered by several smaller streams and brooks, all of which are tributaries to the Schelde; and the trade of the province is facilitated by numerous canals. The *Schelde* enters the province on the south-west, and flows north-north-east past Oudenarde to Ghent, where it receives the Lys. Thence it runs eastward to Termonde, where it receives the Dender on its right bank, and soon after takes a north-eastern course down to Antwerp. [**SCHDELDE.**] The *Lys* rises in the French department of Pas-de Calais, and flows first north and then east, past Therouenne and Aire, and entering the department of Nord passes the towns of Estaire and Armentières. Hence running north-east along the Belgian boundary, past Menin, it enters Flanders and joins the Schelde on the left bank at Ghent. The *Dender* rises in Hainault, to the north of Mons, and flows north-west to Ath, and thence north-north-east, past Grammont and Alost, in this province, to Termonde, where it falls into the Schelde on the right bank. All these rivers are navigable.

East Flanders is low and level. In many parts of the province there are beds of peat. The chief productions of the earth are wheat, rye, barley, oil-seeds, oats, potatoes, flax, hemp, hops, madder, and tobacco. There is but little wood of large growth in the province. Coal, turf, and potters'-clay are found. The chief manufactures are lace, damasks, fine linen and woollen cloths, bobbin-net, silk, cordage, bricks, hats, and soap; and there are also cotton-factories, potteries, sugar-refineries, distilleries, and breweries.

The trade of Flanders is greatly facilitated by means of good common roads, numerous canals, and railroads. There are railways from Ghent to Antwerp, Malines, Ostend, and Courtrai. From Courtrai a line runs westward to Ypres; and another curves north and east through Thourout to Bruges. A branch from the Ghent-Malines line stretches to Alost; and another branch from the Ghent-Lille line, which it leaves at Deynze, is in course of construction to Furnes.

The draught horses bred in the neighbourhood of Ghent and Alost are large, well-formed, and powerful animals. Many of them are sent to London, where they are used for drawing the brewers' drays. Oxen are seldom used in Flanders for purposes of labour.

The capital of the province is Ghent, which is described in a separate article. [**GHEENT.**] Alost and Dendermonde are noticed under their proper heads. [**ALOST; DENDERMONDE.**] Of the other towns of the province we give the following:—*Basseelede*, a market-town, with about 3800 inhabitants, including the whole commune, is situated about 10 miles N. from Ghent. *Deynze*, 11 miles by railway S.W. from Ghent, is a very ancient town, and is celebrated for the fine quality of the gin distilled there: the population is about 3600. *Eecloo* is situated on the high road between Ghent and Bruges. It has manufactures of woollens and cottons, soap, tobacco, chocolate, and hats; and there are distilleries, tanneries, salt-refineries, and oil-mills. It has a large weekly market for grain: population, 9200. *Grammont* is situated on both sides of the river Dender, 18 miles S.S.E. from Ghent. It contains two churches, four chapels, a town-hall, a college, and an hospital. Cotton-spinning, dyeing, bleaching, tanning, soap-boiling, distilling, brewing, and oil-crushing are the chief branches of industry; lace, fine linen and damask, and woollen stuffs also are manufactured: population about 7500. *Lokeren*, 11 miles by railway N.E. from Ghent, stands on the Durme, a feeder of the Schelde. It has several well-built streets, a large market-place, a town-hall, parish church, three chapels, an hospital, and a prison.

The parish church is surmounted by a lofty tower, and is famous for its magnificently-carved pulpit, which represents Our Saviour among the Doctors. Among the fabrics produced are cotton, linen, and woollen cloths, hosiery, lace, hats, and sail-cloth; and there are extensive bleaching-grounds, breweries, dye-houses, tobacco factories, and tanneries: population, 16,500. *St. Nicholas*, 20 miles by railway N.E. from Ghent, is said to have one of the largest markets for flax in the world. It is the seat of a tribunal of commerce, and has a town-hall, a college, prison, and a large square surrounded by handsome houses. Its industrial products comprise cotton and woollen stuffs, tobacco, soap, and hats; and there are tanneries, dye-houses, breweries, salt-refineries, and potteries: population, 20,500. *Ninove*, 20 miles S.E. from Ghent, is situated on the north-west bank of the Dender. It is a well-built town, and has two churches, a fine abbey, a town-hall, and an hospital. Among its industrial establishments are several flax-mills, some potteries, tobacco manufactories, and oil-mills: population about 5000. *Oudenarde* (Oudenaarden, called by the French Audenarde), 15 miles S. by W. from Ghent, is situated on the right bank of the Schelde. It is a place of great trade, being the centre of a district in which the linen manufacture is carried on, and is the market in which its products are sold. The town-hall of Oudenarde, built in 1525 in the florid gothic style, is small, but one of the handsomest structures of the kind in Belgium. Among the other public buildings may be named the elegant gothic churches of St. Walburga and Notre-Dame (the latter dates from 1239), an old tower called Het-Sacksen, and the bridge of the Porte d'Eyne. Margaret, duchess of Parma, natural daughter of Charles V., who governed the Low Countries under Philip II., was a native of Oudenarde. The town has given name to the victory gained by Prince Eugene and the English over the French, July 11, 1708. The town is well built, and has large breweries and tanneries; there are also salt-refineries, cotton-mills and oil-mills, an hospital, and two orphan-houses: population, 5670. *Renaix* is 20 miles S. by W. from Ghent. It is a flourishing place, and has extensive manufactures of fine linen and damask, woollen stuffs and hats, tobacco, chicory, beer, &c. The town has three churches, an hospital and an old castle: population, 13,000.

The civil government of the province is administered by a governor, who resides at Ghent. Courts of assize are held at Ghent, Oudenarde, and Termonde. A court of appeal, which has jurisdiction likewise over the adjoining province of West Flanders, is established at Ghent. That city is also the seat of a bishop. It has also a Normal school supported by the government. Education is very generally diffused by parish schools and by the religious houses, most of which take boarders or keep schools for the poor.

West Flanders, a province of Belgium, is bounded N.W. by the North Sea, N.E. by the Dutch province of Zeeland, E. by East Flanders, S.E. by Hainault, and S.S.W. and W. by France. The area is 1512 square miles. It lies between 50° 41' and 51° 23' N. lat., and between 2° 33' and 3° 30' E. long. The population in 1849 was 626,847.

The principal rivers of the province are the Lys, which is noticed above, the Schelde, which forms part of the south-eastern boundary towards Hainault, the Yser, and the Yperlee. The *Yser* rises in the department of Nord, in France, and entering West Flanders near Rousbrugge, it flows north-east to its junction with the *Yperlee*, which flows northward from Ypres. The united stream then runs under the name of the *Yperlee* to Dixmude, whence its course is north-west to Nieuport, where it falls into the North Sea. There are several other inconsiderable streams in the province, and the communications between different places are facilitated by means of navigable canals: the most important of these are the canals between Ghent and Bruges, Bruges and Ostend, Duikirk, Furnes, and Nieuport.

The surface is flat, with the exception of a few low hills in the south-west and south-east of the province, and the sand-hills which line the coast. The soil is for the most part sandy. The sand is in some parts covered with a stratum of vegetable mould, but in most other parts the soil is very light and poor. In some places the surface is marshy. Wheat, oats, flax, rape, trefoil, turnips, carrots, potatoes, and tobacco are all cultivated. The quality of the tobacco raised in the neighbourhood of Werwick is much esteemed. Brick and pipe clays and peat are dug.

There are considerable woods in the arrondissements of Bruges, Ypres, and Courtrai, the greatest part of which belong to the state. The principal trees are the birch, oak, ash, hornbeam, elm, beech, poplar, pine, plane, lime, larch, chestnut, and elder. Willows are frequently seen, but always as pollards.

The horses of the province are large and heavy, fit only for draught. Horned cattle are numerous, and of good breed. Many oxen are fattened and sold, and a considerable quantity of butter is made for exportation. There are also many sheep.

A great proportion of the inhabitants of the province are employed in spinning flax and weaving and bleaching linen. The manufacture is chiefly a domestic one, and is carried on in the farm-houses during winter, and at other times when the operations of the field are necessarily interrupted. Damask and table-linen are made in the towns of Courtrai and Bruges. Much lace is made at Bruges, Ypres, Courtrai, and Menin, the thread for which is spun at Courtrai. There are in

the province a great number of dyeing establishments; the largest are at Courtrai, Bruges, Poperinghe, and Roulers. Woollen cloths are made at Bruges, Ypres, and some other parts of the province. The principal articles imported are groceries, dye-stuffs, metals, timber, wine, and salt: the exports consist chiefly of linens, lace, linseed-oil, rape-oil, gin, horned cattle, and grain.

Towns.—The capital of the province is *Bruges*, which is described under its proper head. [BRUGES.] Of the other large towns, COURTRAI and OSTENDE are given in separate articles. *Commines*, or *Comines*, a town on the left bank of the Lys, which separates it from the French town of the same name, has a population of about 3000, who manufacture ribands, thread, cotton handkerchiefs, and tobacco. The town is 10 miles S.S.E. from Ypres. *Dixmude* is 16 miles S.W. from Bruges, on the right bank of the Yser. It contains a large gothic church, in which is a stone rood-screen of beautiful workmanship, and an altar-piece by Jordaens, representing the Adoration of the Magi: population about 3000. *Furnes* is situated about 3 miles from the coast of the North Sea, between Nieuport and Dunkerque. The town is well built, but is unhealthily situated among marshes, and has 4600 inhabitants. The town-hall is a profusely ornamented gothic building. There are some interesting remains of the abbey of St. Willebrod, which escaped destruction in the French revolution. The town has a cathedral, two churches, an hospital, a college, and several convents. A very important linen market is held in Furnes, and there is also a brisk trade in agricultural produce. It was formerly fortified, but the fortifications were demolished after the peace of 1815. Four great lines of canal meet at Furnes, whence one extends through Dunkerque to Calais, another through Bergues to St-Omer, another through Nieuport to Bruges and Ghent, and another to Dixmude and Ypres. *Iseghem*, 8 miles by railway N. by W. from Courtrai, has manufactures of linen, cotton and woollen stuffs, tape, and hats: population about 2000. *Menin*, or *Meenen*, a fortified frontier town, is situated on the left bank of the Lys, by which it is separated from France, and is 30 miles S. from Bruges. It has a considerable trade in agricultural produce, and there are manufactures of linen, lace, woollen goods, tobacco, and soap, besides oil-mills, breweries, and salt-refineries: population about 8000. *Nieuport*, or *Nieuwport*, a fortified port, little frequented except by fishermen, is 6 miles N.W. from Furnes. The chief public buildings are—a town-hall, a handsome church, two hospitals, and an orphan asylum. The population, numbering about 3400, are engaged chiefly in fishing, ropemaking, and building small coasting vessels. *Poperingen*, or *Poperinghe*, a flourishing town, is 26 miles S. by W. from Ostend. The town has two parish churches, and five other churches which belong to convents. Coarse woollens, lace, and linen are manufactured, and there are several oil-mills. A large trade is carried on in hops, which are grown in the neighbourhood of fine quality and in great abundance: population about 10,500. *Roulers*, or *Rousselaer*, is situated on the Mandel, a small affluent of the Lys, 18 miles S. from Bruges. The inhabitants are chiefly occupied in the manufacture and bleaching of linen. Flax is largely cultivated in the neighbourhood. The pasture land in the vicinity is also very rich, and many fine cattle are reared: population above 10,000. *Thielt* is 15 miles S. by E. from Bruges, on the road from Dixmude to Bruges. It is a well-built town, with many good modern houses, two handsome churches, establishments for bleaching linen and flax, several breweries, and flourishing manufactures of woollens and linens, gloves, starch, tobacco, &c. It has an important flax and linen market: population about 12,600. *Thourout* is situated on the railroad from Bruges to Courtrai, and distant 11 miles from the former. It is a well-built town, with a population of about 8500, who have a considerable trade in linen, flax, and linseed. *Warneton*, or *Waerton*, is situated on the left bank of the Lys, 6 miles S.S.E. from Ypres, and has a population of about 6000, who manufacture beer, starch, chocolate, and salt. *Werwick* (pronounced and sometimes written *Vervick*), is also situated on the left bank of the Lys, 10 miles by railway S.W. from Courtrai, and has a population of about 5700. *Ypres*, or *Yperen*, is a strongly fortified town, situated in a fertile plain on the banks of the Yperlee, in 50° 50' N. lat., 2° 53' E. long., at a distance of about 20 miles by railway W. from Courtrai, and has a population of above 16,000. The situation is somewhat unhealthy on account of the surrounding marshes, but less so than formerly, as these have been partially drained. It is however a flourishing town, and has manufactures of lace, linen, serges, and other woollens, cotton, thread, and silk, and there are many tanneries, oil-mills, dye-houses, and bleaching-grounds. Thread is a staple manufacture of the town. The kind of linen called 'diaper' was formerly made here, and the name is said to be a corruption or mispronunciation of *d'Yperen*. The town-house is a gothic building of large size, with a tower in the centre, and there is a large gothic cathedral, an exchange, and a royal college. Jansen, the founder of the sect called from him Jansenists, was bishop of Ypres; he died in 1638, and was buried in the choir: population, 15,750. In the 14th century Ypres had a population of 200,000, and was an important manufacturing town. At that period there were 4000 looms constantly at work in the town. The town originally sprung up about a fortress built by Baudouin III., count of Flanders, in A.D. 960. In 1388, Philippe the Bold, duke of Burgundy, enlarged the town and surrounded it with walls. The French in the time of

Louis XIV. held it for a long time, and greatly strengthened the fortifications. Under the French empire Ypres was the capital of the department of Lys, which coincided with West Flanders. The history of the town presents a long series of sieges.

Agriculture.—Flanders was remarkable for the cultivation of its soil long before any other country north of the Alps or Pyrenees. This was the natural consequence of its commercial prosperity; and although very little change has taken place, and very few improvements have been introduced for more than a century, it still ranks very high amongst agricultural countries.

It is not the richness of the soil which is the cause of the abundant harvests which the Flemish peasants reap, but their indefatigable industry. The greater part of the land in Flanders is naturally poor; and in extensive districts, which now have the appearance of the greatest richness at harvest-time, the original soil was once little better than the blowing sands which are met with in the neighbourhood of the sea. Neither is it a genial climate which brings forward the fruits of the earth in abundance; for the climate is inferior to that of France or the southern parts of Germany; and if there are not so many or such sudden changes of weather as in Great Britain or Ireland, the winters are longer and more severe. The average temperature in summer may be somewhat higher than in the counties which lie in the same parallels in England, and the time of harvest somewhat earlier; but this does not make a difference of more than a week in the maturity of every kind of grain. The winters are more severe in ordinary years, and the snow lies longer on the ground.

The soil may be divided into two classes: the first consists of the alluvial clay-loams near the coast; the second, of various sands and light loams which are found in the interior. The most fertile is that of the low lands which have been reclaimed from the sea by embankments: it is chiefly composed of a muddy deposit mixed with fragments of marine shells and fine sea-sand. These lands are called 'polders;' and their great natural fertility causes them to be cultivated with less art and industry than those lands which are much inferior.

The cultivation in the polders has nothing remarkable to entitle it to much notice. Barley seems peculiarly suited to the soil, and very heavy crops of this grain are obtained; especially in those polders which, having been more lately embanked, are not much exhausted. Eight and even ten quarters per acre have been obtained with little or no manure; and the second crop of barley sown in succession has often been the best. Oats are also very productive and of good quality, from ten to twelve quarters per acre. But these heavy crops soon reduce the natural fertility, and after a few years the produce is greatly diminished, and the land requires to be recruited by manure and cleaved by fallows. The extent of the farms in the polders is from 100 to 250 acres. The farmers in general are in good circumstances, and the buildings substantial. The air of the polders is unhealthy, and all those who are not inured to the climate are subject to fevers and agues. On this account land lets at a lower rate, and the wages of labour are higher in the polders than in more healthy districts.

In the interior of East and West Flanders the soil varies considerably, but the principal part is of a sandy nature. The sand and a heavier loam are found much intermixed. These layers are not of great thickness; and the accidental circumstance of the washing away of the sand in some places, and the depositions from the rivers in others, easily accounts for this variety. Some of the elevations, which are nowhere considerable, consist of a very poor sand, and suggest the idea of their having once been the sands of the sea blown into hills, as is observable on the coast. These hills have gradually been cultivated and improved, and only a few remain covered with heath or wood.

At a distance from large towns it would be impossible to obtain the requisite quantity of manure, and accordingly it is made on the farm. The cattle are the principal source of the supply; but every expedient is resorted to in order to increase the quantity and improve the quality. Every kind of vegetable or animal matter is carefully collected, and made to undergo the putrefactive fermentation by being mixed with others already partially decomposed. Nothing excites heat and putrefaction more than urine when it is poured over substances subject to decomposition. In every farm-yard there is a vaulted cistern or pit into which the objects to be acted upon can be thrown, and into which the urine or drainings of the dunghill can be made to flow: by frequently moving and stirring the mass, the decomposition goes on rapidly, heat is evolved, and the fibres and dried juices of vegetables are decomposed, and become soluble in water, in which state their effect on vegetation is greatest. This manure is generally ploughed into land in an active state of fermentation.

In the tillage of the land the Flemings use few and very simple instruments. The common plough for light lands is a small light plough without wheels, and drawn by one or two horses. It is the most perfect plough for light sands, acting like a shovel at the fore part of the turn-furrow, which is concave, and completely turns over the soil. In the stiffer soils the turn-wrest plough, with two wheels, is sometimes used, made much smaller and lighter than the heavy Walloon plough.

An instrument peculiarly Flemish is the 'traiteau.' This is a

wooden frame of a triangular shape, covered with boards, which is drawn over the ground to smooth the surface and press in the seed. The harrows in common use are also triangular, and made entirely of wood; the pins are driven obliquely and point forwards, so as readily to enter into the ground when the harrows are drawn by the angle.

The most important instrument in Flemish agriculture is the spade, which is used to a much greater extent than in England; and in some instances is the only instrument of tillage. The trenching spade is made light and long, and is well adapted to the loose sandy soils. The first step to improvement is generally a complete and deep trenching; and in the Waes district a sixth part of the whole farm is trenched every year; and where this is not done, the intervals between the stitches in which the land has been ploughed are dug out with the spade a foot or 16 inches deep, and the earth thrown evenly over the beds in which the seed has been sown. By shifting these intervals a foot every year, the whole of the land which lies in stitches 6 feet wide is dug, and the upper and under soil mixed regularly. This process is extremely useful in producing an even crop, especially of flax, the roots of which strike deep.

Flax is everywhere a most important crop, for it much exceeds all other crops in value. Where it can be raised of a tolerable quality, every other crop has a reference to this; and the rotation of crops (which system of farming is very generally adopted) is arranged accordingly. There is no country where more attention is paid to flax than in Flanders, especially in the neighbourhood of Courtrai. The land is brought into the highest state of richness and cleanness before flax is sown in it; and the most abundant manuring with refuse oil-cake and urine is thought essential to raise this crop in perfection.

On the heavier loams colza, or rape, is an important crop for the seed from which the oil is expressed. Potatoes and betroot are raised in considerable quantities, but the farmers prefer to beet-root turnips and carrots, a crop of which can be raised on the same land that has borne another valuable crop the same year. In the heavier loams, which are chiefly to be met with in West Flanders and about Alost, the following rotation is adopted:—flax, clover, barley or oats, beans, wheat, rye and turnips, potatoes, colza and carrots, flax; or flax, colza, wheat, rye and turnips, oats, clover, wheat, rye.

There are some very rich pastures in Flanders about Furnes and Dixmude, where excellent butter is made. A great many heasts are fed in summer. The best cows and oxen are of the Dutch breed; those which are bred in Flanders are inferior. The breed of horses in Flanders is large and heavy, but deficient in activity and clumsy in form. The mares were once in repute for heavy carriages, but at present an equipage drawn by Flanders mares would be an object of wonder, if not of ridicule. Many horses have been imported into England from Flanders as cart-horses. The Flemish sheep are coarse in the wool, and inferior in carcass. The pigs too are as badly shaped, but a better breed has been recently introduced.

The farm buildings are very good and convenient in general. The farms are small, compared with those in other countries; 120 acres is considered a very considerable occupation. In the Waes country, which lies in the north of East Flanders near Antwerp, and is cultivated like a garden; the farms are very small, 50 acres being amongst the largest, and the average is not above 15 acres. A farm of this description requires only one horse to cart the manure and plough the land; four or five cows are the usual complement, with two or three pigs.

FLÈCHE, LA. [SARTHE.]

FLEETWOOD. [LANCASHIRE.]

FLEGG, EAST and WEST, two hundreds in the eastern division of the county of Norfolk, which have been constituted a Poor-Law Union. The incorporated hundreds of East and West Flegg are bounded N. by the river North, separating West Flegg from the hundred of Happing; E. by the North Sea; S. by the river Bure, separating East Flegg from the hundred of Walsham, and W. by the hundred of Walsham. East and West Flegg hundreds comprise an area of 29,057 acres, and a population in 1851 of 8497. East and West Flegg Poor-Law Union contains 20 parishes, with an area of 25,035 acres, and a population in 1851 of 8499.

FLENSBORG, a town at the southern extremity of the Flensborg Fjord, an inlet of the Baltic, and in the centre of the duchy of Schleswig, stands in about 54° 47' N. lat., 9° 27' E. long., and has about 16,000 inhabitants including the suburbs. The town is encircled by hills on the three sides facing the fjord. It is a pleasant well-built town, inclosed by an old wall and ditch, outside of which there are three suburbs. The streets are well paved and lighted. Flensborg has three German churches and one Danish, three market-places, a town-hall, an orphan asylum, an hospital and school of midwifery, a public library, a grammar school, an exchange, a theatre, and a house of correction. It has several large manufactories, particularly of spirits, refined sugar, tobacco, sailcloth, soap, paper, &c. There are shipbuilding yards, and the people of the town are owners of between 200 and 300 vessels. There is a good harbour, deep enough for large ships, but the entrance is difficult. The trade is considerable: there are large imports of linseed, timber, coals, and raw materials; the exports are spirits, corn, hides and skins, oil, soap, tallow, fish, &c. A railway, 43 miles in length, connects the town with Tønning near the mouth of the Byder. Flensborg is the capital of a balliwick of the same name, which has an area of about 336 square miles.

FLINT, Flintshire, a market-town, sea-port, and parliamentary borough, is situated on the left side of the estuary of the Dee, in 53° 15' N. lat., 3° 6' W. long.; distant 197 miles N.W. from London by road, and 191 miles by the North-Western, and Chester and Holyhead railways. The borough of Flint is governed by four aldermen and twelve councillors, one of whom is mayor; and with St. Asaph, Holywell, Mold, and four other places, returns one member to the Imperial Parliament. The living is a perpetual curacy in the arch-deaconry and diocese of St. Asaph. The population of the borough of Flint in 1851 was 3296.

Flint, from which the county derives its name, was formerly the county town, but for some time past the assizes have been held at Mold. Flint was probably a Roman station; many Roman remains have been dug up in the neighbourhood. Traces exist of Roman works for smelting lead ore. The castle appears to have been built by Henry II., and strengthened by Edward I. It was taken by the Welsh in 1282. In the civil war of Charles I. it was garrisoned for the king, but taken by the Parliamentarians. It shortly after fell again into the hands of the Royalists; but was finally taken by General Mytton, and with other Welsh castles was dismantled in 1647 by order of the Parliament. The remains of the castle stand to the north-east of the town, on the summit of a rock of freestone. It was a square building with a round tower at each of the four corners. One of these towers, of much larger dimensions than the others, was used as a keep, and was separated by a deep moat from the rest of the building, with which it communicated by a drawbridge.

The public buildings are a handsome gothic church of recent erection, a county jail built in 1785, a neat town-hall recently built, a national school-house, almshouses for 12 poor burgesses, and a chapel for Dissenters. The trade of the port is small. The estuary of the Dee is many miles wide, but the low water channel is narrow and shallow. The shifting sands in the channel of the Dee render Flint harbour inaccessible to any but small vessels. The neighbouring lead and coal mines, and the works for smelting the lead give extensive employment, and furnish the principal articles of export. A portion of the miners drawn from the inland part of Wales speak Welsh only, but the great majority of the inhabitants speak English. The market has fallen into disuse. There are three yearly fairs. The town is resorted to in summer for bathing; there are several hot and cold baths. Some pleasant walks are in the vicinity. There is a ferry boat to the Cheshire side of the estuary. Small boats for the conveyance of passengers ply between Chester and Flint.

(Parry, *Cambrian Mirror*; *Land We Live In*, vol. iii.; Cliffe, *Book of North Wales*.)

FLINTSHIRE, a county in North Wales, in the north-eastern part of the principality. The main portion of the county extends along the estuary of the Dee, between 53° 4' and 53° 22' N. lat., 2° 53' and 3° 29' W. long.; and there are two outlying portions. The principal outlying portion is bounded N.N.E. by the county of Chester, E.S.E. and S.S.W. by Shropshire, and W.N.W. by Denbighshire, from which it is separated by the Dee. The smaller outlying portion is situated between the main portion of the county and the larger outlying portion; it is bounded on every side by Denbighshire, and is very small. Flint is the smallest county in Wales; its area is only 289 square miles, or 184,905 statute acres; the population in 1851 was 68,156.

Coast, Surface, Hydrography, and Communications.—The only promontory on the coast is the Point of Air. The coast is low, and is skirted in almost every part by sands. On the north-west coast are several pools, called Trewyn pools, forming a line along the shore of about two miles.

Flintshire has no hills of great elevation: the south-west boundary lies along the hills which skirt the valleys of the Upper Alen and the Clwyd; and a range of hills connected with these extends through the county from north-west to south-east, separating the Alen and the lower part of the Clwyd from the estuary of the Dee. Garreg Mountain, towards the north-west extremity of this range, is 835 feet high, and Gwaunyagor Down, still farther to the north-west, is 732 feet high. From the slopes of this range of hills a number of small streams flow, on one side into the Dee, and on the other into the Clwyd and Alen. These rivers, though they have part of their course on or within the border of Flintshire, rather belong to other counties. [CLWYD; DEE; CHESHIRE; DENBIGHSHIRE.] The new channel of the Dee below Chester is indeed for the most part within the county, and constitutes the only inland navigation which it possesses.

Two main lines of road run through the county in a north-western direction. One of them enters Flintshire from Chester near Shepherd's House on the Dee, and passes through Broughton, Hlwarden, and Holywell, where it divides, one of the branches running through St. Asaph, the other through Rhuddlan. The other main road enters Flintshire near Caerwrie, from Wrexham in Denbighshire, and passes through Mold to Bodfarris and thence to Deuligh. Cross roads connect these main lines with each other, and with the villages in the interior of the county. The Chester and Holyhead railway passes along the whole of the estuary of the Dee and the coast-line of this county. The Mold branch quits the main line near the Saltney station, and runs first south-west and then north-west to

Mold, about 11 miles. There is a small railroad from the coal-pits near Mold to the Dee.

Geology, Mineralogy, &c.—The new red-sandstone or red marl, the uppermost of the rocks of this county, occupies the two outlying portions; and is found on the north-west coast, in the lower part of the vale of Clwyd, and in that part of the county which is on the north-east side of the new channel of the Dee. The coal-measures occupy the coast of the æstuary of the Dee, and the coal-field forms a belt extending from the Point of Air to the south-east side of the county, gradually increasing in width inland. The seams of coal vary in thickness from three-quarters of a yard to five yards, and the dip varies from one yard in four to two yards in three. Common, cannel, and peacock coal are found. Beds of shale and sandstone, answering in position and character to the shale and millstone grit of Derbyshire, underlie the coal-measures, and crop out from beneath them on the south-west side of the coal-field, forming a belt more inland than the coal-field, but parallel to it and to the shore of the Dee, and separating the coal-field from the district occupied by the carboniferous or mountain limestone. The mountain limestone occupies all the remainder of the county, except a small tract occupied by the old red-sandstone. Lead-mines are worked in the limestone near Holywell, and between Holywell and Hawarden. Silver is extracted from the lead-ore. Ironstone is abundant in the coal seam; and in the mountain limestone rich hematitic iron-ore is found. Copper, zinc, and calamine are also found.

Divisions, Towns, &c.—The present division is into five hundreds. Prestatyn, in the north, along the coast; Rhuddlan, in the west, towards Denbighshire; Mold, in the east and south, towards Cheshire and Denbighshire; Coleshill, in the north-east, along the æstuary of the Dee; and Maylor, comprehending the larger detached portion of the county, and one or two parishes in the south-east of the main part. The smaller outlying portion is in the hundred of Mold. Flintshire contains one city and contributory borough, ST. ASAPH, on the Elwy; one principal borough and ex-county town, FLINT, on the æstuary of the Dee; six other contributory boroughs, HOLYWELL, near the æstuary of the Dee, MOLD, the present county town, CAERGWRLE or CAERGWYLE with Hope, on the Alen, Overton, in the larger outlying portion of the county near the Dee, Rhyddlan or Rhuddlan on the Clwyd, and Caerwis, or Caerwys, not far from Holywell on the road to Denbigh. Of those printed in small capitals an account is given under their respective titles. The other places in the county requiring notice we mention here, with the population of each in 1851.—

Bagillt, on the left side of the æstuary of the Dee, population of the ecclesiastical district 3303, is situated 10 miles N. by W. from Mold. Bagillt has acquired some importance from the establishment of lead-works and collieries. Lead-smelting is carried on; there are also establishments for manufacturing the lead into various articles for sale, and for making red-lead. There are in Bagillt a district church, several Dissenting chapels, and a National school. At this place is a station of the Chester and Holyhead railway.

Caerwyle, or Caergwyle, in the parish of Hope, or Queen Hope, is on the right bank of the Alen, about 7 miles S.E. by S. from Mold: population of the borough, 719. The name Caergwyle has been derived from Caer Gawr Lle, 'the camp of the giant legion,' from the 20th Roman legion, which was named 'Victrix,' and had its headquarters at Deva (Chester). The legion probably had an outpost at Flint; on the tiles of a Roman bath found here was the inscription 'Legio XX.' Some vestiges of Roman roads and other works were formerly visible in the neighbourhood. The castle appears to have been known by the English under the name of Hope Castle, giving name to the district of Hopedale. The castle is now a mere ruin. The hill on which the castle stood is precipitous on one side and of steep ascent on the other: on the accessible parts it was protected by deep ditches cut in the rock. This rock, which is a breccia of small pebbles lodged in grit, was formerly quarried for millstones. The neighbouring hill, called Caergwro Hill, affords limestone, of which a great quantity is burned into lime. In the parish are part of the ancient Wat's Dyke, and an ancient British post, called Caer Estyn. About a mile distant from Caergwyle is the village of Hope, on the left bank of the river Alen. Fairs are held at Caergwro on Shrove Tuesday, May 10th, August 12th, and October 27th.

Caerwys is in Rhuddlan hundred, near a small stream which runs into the Clwyd, 12 miles N.W. from Mold: population of the parish, 685. The assizes for Flintshire were held here till the year 1672, when they were removed to Flint. Caerwys is believed to have been a Roman station. In the middle ages the Eisteddfod, or general meeting of the Welsh bards, was held here. The last legally called meeting of this kind was held at Caerwys by summons from Queen Elizabeth. The first modern revival of the Eisteddfod took place here in 1798. Caerwys is now a mere village. It possesses a neat church, with chapels for Wesleyan and Calvinistic Methodists, and a National school-house. A little woollen-cloth is made, and there is a small wire-mill. Caerwys is now chiefly important for its cattle fairs, which are the largest in the county, and attract numerous purchasers from England. Eight fairs are held in the course of the year.

Hawarden is a mile and a half from the left bank of the Dee, on

the road from Chester to Holywell, 6 miles E.N.E. from Mold, population of the township 586, a considerable decrease having taken place in consequence of the discontinuance of the Hawarden iron-works. There was a castle here at a very early date: it was the residence of the barons of Mont-Alt or Mold, stewards to the powerful earls of Chester. It was rebuilt before 1280. On the night of Palm Sunday, 1282, during a tempest which favoured the design, it was stormed by David, brother of Llewelyn, prince of North Wales, in the last struggle of the Welsh with the English. At the close of the civil war of Charles I. it was dismantled. The remains are a fine circular tower or keep on the summit of a mound, a few walls, and part of the foundations. The town is well built, and consists principally of one street nearly a mile long. The church is a plain building. There are chapels for Wesleyan and Calvinistic Methodists. Several extensive coal-pits, brick and tile-works, and potteries are in the parish, and railroads convey the produce of the works to the river. The market is on Saturday, and there are two yearly fairs. Hawarden Castle is a modern castellated mansion; the ruins of the old castle are within the park. About 2 miles N.W. from Hawarden are the remains of Ewloe, or Owloe Castle, an ancient keep or stronghold, picturesquely situated on the margin of a wooded glen.

Overton is pleasantly situated near the right bank of the Dee, 18 miles S.S.E. from Mold: population of the borough, 1479. Edward I. granted Overton a weekly market, but it has been for some time discontinued. The church is a handsome building, and the churchyard is remarkable for some fine yew-trees. A Wesleyan chapel, a National school, and a house of correction are in Overton.

Rhuddlan, or Rhyddlan, is on the right bank of the Clwyd, rather more than 2 miles above its mouth: population of the borough, 1472. Llewelyn ap Sitsylt, prince of Wales, built a castle here in the early part of the 11th century. In 1063 it was surprised and burnt by the Saxons under Harold. It was soon restored, but shortly afterwards re-conquered by Robert, nephew of Hugh Lupus, earl of Chester. In 1282 it was attacked by Llewelyn, the last prince of Wales, and his brother David, but without success. Edward I., sensible of the importance of the place, built a new castle a little to the northward of the former one. In this castle Edward's queen, Eleanor, gave birth to a princess. Edward made the town a free borough, and bestowed upon the inhabitants many immunities. He also assembled here, in 1283, a parliament or council, in which Wales was divided into counties, ancient laws and customs which appeared detrimental were abolished, new ones introduced, and many important regulations established, by what was called the 'Statute of Rhuddlan.' An old building near the centre of the town has an inscription on its wall, placed there by Dr. Shipley, late dean of St. Asaph, intimating that in that house Edward held the council referred to. Rhuddlan Castle was in the great civil war garrisoned for the king, but was taken by General Mytton in 1646. The Parliament gave orders that it should be dismantled. The village of Rhuddlan consists of a main street running down to the Clwyd, and some smaller streets. The principal buildings are the castle, the church, the ancient priory, and places of worship for Wesleyan and Calvinistic Methodists, Independents, and Baptists. There is a bridge over the Clwyd of two arches, rebuilt or repaired about 1595. The castle erected by Edward I. was built of red-sandstone from the neighbouring rocks, and formed a square externally, having at two opposite angles double round towers, and single ones at the other angles; the court-yard was an irregular octagon. Some of the towers are tolerably entire. About half a mile south of the castle stood the priory of Black Friars, founded some time before 1268, and which continued till the dissolution. The Toot-hill and the ruins of the priory are comprehended in an extensive area surrounded by a fosse which communicates with the castle ditch. The river Clwyd is navigable up to the bridge at sprug-tides for vessels of 60 tons. Lead-mines give employment to many of the inhabitants. There is a large export of corn. A steam-packet plies between Rhuddlan and Liverpool. There are four fairs in the year; the weekly market has been discontinued for several years.

Dyserth, 20 miles N.W. from Mold, population of the parish 1030, is on the road from Holywell to Rhuddlan, about 3 miles from the sea. The church, which is situated in a hollow, was erected in 1603; the east window contains some painted glass. In the burying-ground are some curious tombstones, two ancient crosses, and some old yew-trees. The ruins of Dyserth Castle stand on a lofty eminence commanding a fine view of the Vale of Clwyd. Near the castle are the valuable lead-mines of Talargoch. *Greenfield*, on the left bank of the æstuary of the Dee, 13 miles N.N.E. from Mold: the population is returned with Holywell parish. At Greenfield are extensive copper, zinc, and paper works, which afford employment to many of the inhabitants. South-east of the village are the remains of Basingwerk Abbey. Of the abbey buildings but a few fragments are left. *Halkin*, 7 miles N.N.W. from Mold: population of the parish, 1777. Porcelain clay of superior quality has been found in Halkin Mountain, though not much worked of late. *Newmarket*, 18 miles N.W. from Mold, population of the parish 642, was formerly a market-town, with a town-hall in which quarter sessions were held. The place is now a mere village. Horse-races were once held near the village. The Endowed Free Grammar school has fallen into abeyance. In the churchyard are an ancient stone cross, curiously carved, and some

elaborately wrought tombstones. Numerous objects of interest are in the neighbourhood. On the summit of a hill called Cop'r Leni is an extensive tumulus formed of limestone, and covering a space nearly an acre in extent. From the hill is obtained a fine view of the estuaries of the Dee and the Mersey, as well as inland. On the top of Axtou Mountain stood formerly a fortress called Castell Edwii. *Northop*, 4 miles N. from Mold, population of the township 719, occupies a pleasant site in a fertile district, and has in its vicinity many good family mansions. The church is in the perpendicular style, with a lofty tower. Northop is the mother church of Flint, from which it is about 4 miles distant. *Rhyl*, on the shore of the Atlantic, near the mouth of the river Clwyd, 22 miles N.W. from Mold: population of the ecclesiastical district, 1563. Rhyl has risen into some importance as a watering-place; and the usual conveniences have been provided for summer visitors. There are numerous lodging-houses, bathing-machines, hot and cold baths supplied with sea-water, news-rooms, bowling-green, &c., at Rhyl. There are here a new district church, and chapels for Independents and other Dissenters. Steamers ply regularly between Rhyl and Liverpool, and occasionally to Bangor and Beaumaris. The Chester and Holyhead railway has a station at Rhyl.

Divisions for Ecclesiastical and Legal Purposes.—The county of Flint is in the diocese and archdeaconry of St. Asaph, and in the ecclesiastical province of Canterbury. It contains 32 parishes or parochial chapels. According to the 'Census of Religious Worship,' taken in 1851, it appears that in the two registration districts of Holywell and St. Asaph (population, 66,335), there were then 215 places of worship, of which 110 belonged to various sections of Methodists, 41 to the Episcopal Church, 34 to Independents, 21 to Baptists, and 9 to minor bodies. The total number of sittings provided was 53,865. The county is divided by the Poor-Law Commissioners into three unions: St. Asaph, Hawarden, and Holywell, which include 43 parishes and townships, with an area of 187,971 acres, and a population in 1851 of 76,529; but the boundaries of the unions extend beyond those of the county. Flintshire is included in the North Wales and Chester circuit; the assizes and quarter sessions are held at Mold; but the county jail is at Flint, the former county town. County courts are held at Holywell, Mold, and St. Asaph. To the Imperial Parliament two members are returned from Flintshire, namely, one for the county, and one for Flint and the contributory boroughs.

History and Antiquities.—Flintshire, with the rest of North Wales, was comprehended in the territory of the Ordovices, except those parts eastward of the Dee, which may be considered as having belonged to the Cornavii, who occupied the present county of Chester and much of the midland part of England. In the Roman division of Britain the Ordovices were comprehended in the district of *Britannia Secunda*; the Cornavii in that of *Flavia Caesariensis*. Two Roman stations are by antiquaries fixed in or closely upon the borders of this county, *Vare* or *Varis*, at or near *Bodfari* (in the latter part of which name the Roman designation may be traced), and *Bovium*, at or near *Bangor* on the Dee. There seems reason to suppose that the Romans had posts at or near Flint, Mold, Caergwrle, and Caerwys. It is probable that they worked the lead-mines of the neighbourhood, and that the posts were established with the view of protecting or carrying on that branch of industry.

In the Saxon invasion Flintshire suffered. At *Banchor*, or *BANGOR* (the Roman *Bovium*) was a vast monastery. The great dyke which Offa, king of Mercia, carried along the frontier of his own dominion and that of the Welsh, may yet be traced to the hills which skirt the valley of the Clwyd, running across the south-western part of Flintshire. The greater part of the county was on the Mercian side of the dyke. *Wat's Dyke*, another ancient rampart, is also to be traced running through a considerable part of the county. The territory between the two is said to have been neutral. About a year after Offa's death (795), a fierce battle was fought within the border of the county in the marshes between Rhuddlan and the sea, between the Britons, or Welsh, and the Saxons: the Welsh were defeated with dreadful slaughter, and lost their king, *Caradoc*: a plaintive Welsh air, '*Morfa Rhuddlan*,' preserves the memory of this disastrous day. Immediately after the capture of Chester by Egbert of Wessex, Flintshire was overrun by the Saxons, who gave new names to the towns, villages, and hamlets, and many Saxons settled in the county. It appears however to have come again under the power of the Welsh princes, and was ravaged in the reign of Edward the Confessor by the Saxons under Harold: it was re-conquered from the Welsh by Robert de Rotheland (Rhuddlan), nephew of Hugh Lupus, earl of Chester, who re-fortified Rhuddlan Castle. Many contests took place before the Welsh were subdued: Flintshire especially continued to be debatable ground, and was the frequent scene of petty hostilities. In 1277 Edward I., who had determined on the final subjugation of Wales, rebuilt Flint Castle, and strengthened that of Rhuddlan, and prepared, by making good roads, for the advance of his troops. In 1282 the Welsh princes, Llewelyn and his brother David, rose in arms. David stormed Hawarden Castle, and, in conjunction with his brother, invested Flint and Rhuddlan, the only places left to the English in the county: the former surrendered, and the latter was hard pressed. The advance of the English under Edward changed the face of affairs; Caergwrle was taken by them, the siege of Rhuddlan raised, and the

war carried westward into Caernarvonshire. Flintshire appears to have been constituted a county in the time of Edward I.; it was part of the earldom of Chester, and long continued to be under the jurisdiction of the chief justice of Chester. The county and the borough of Flint, with its contributories, received the privilege of sending representatives to Parliament in the reign of Henry VIII. In the civil war of Charles I. this county was the scene of contest. Hawarden Castle, Flint Castle, and Rhuddlan Castle were taken and retaken by the Parliamentarians and Royalists. All these castles were ordered by the Parliament to be dismantled.

Among the remains of past ages the castles are the principal: those of Flint, Mold, Caergwrle, Rhuddlan, and Hawarden are noticed elsewhere; the others are *Ewloe* and *Basingwerk*. *Ewloe* consists of two parts, an ohlong tower, rounded at the side and guarded on the accessible places by a strong wall at some distance from it; and an ohlong yard, at one end of which are the remains of a circular tower. The only vestiges of *Basingwerk* Castle appear to be the foundation of a wall on the verge of *Offa's Dyke*, in the parish of *Holywell*.

Of the ancient religious edifices the principal are the cathedral of *St. Asaph*; the churches of *Mold* and *Northop*, near *Flint*; the *Cistercian* abbey of *Basingwerk*, and the chapel over the celebrated spring at *HOLYWELL*. *Basingwerk* Abbey is of uncertain foundation. *Henry II.* established here a house of *Knights Templars*. The remains consist of the refectory, the chapel of the *Knights Templars*, and some remains of offices. The refectory is almost entire; the *Templars'* chapel is spacious, with long narrow and pointed windows, and slender and elegant pilasters between them on the inside. The architecture is generally in the early English style.

In 1852 the county possessed four savings banks, at *St. Asaph*, *Holywell*, *Maylor*, and *Mold*. The amount owing to depositors on 20th November 1852 was 98,507*l.* 10*s.* 10*d.*

FLORENCE, Department of. [FIRENZE.]

FLORENCE (*Firenze, Fiorenza*), the capital of the grand duchy of Tuscany, and an archbishop's see, is situated in the valley of the Arno, which river divides it into two unequal parts, the larger or original city being on the right or northern bank. Its shape is a pentagon about six miles in circuit; it is inclosed by walls and has eight gates, six of which open to high roads leading to *Arezzo*, *Sienna*, *Pisa*, *Pistoja*, *Bologna*, and to the *Vallombrosa* and the *Casentino*. On the north and north-west a fine plain a few miles in breadth is interposed between the town and the *Apennines*, which rise to the height of more than 3000 feet above the plain, and the upper ridge of which has a naked and barren appearance. To the north-east the hill of *Fiesole*, covered with gardens and country-houses, almost touches the city walls. That part of the town which is south of the Arno runs up the declivity of a rather steep hill, which is partly inclosed within the walls; the gardens of *Boboli* and the fort of *Belvedere* crown the higher grounds within the inclosure. Five bridges over the Arno (one a suspension-bridge, erected in 1844) connect the two parts of the city; the handsomest of the other four is the *Ponte Santa Trinita*, which is adorned with marble statues, and the middle arch of which is 90 feet in span. In the central or most ancient part of Florence (for the town has been repeatedly enlarged, the actual line of walls dating from the 14th century), which lies chiefly between the cathedral, the old market, the town palace, and the river, the streets are mostly narrow and irregular, and many of the houses have a mean or dilapidated appearance, though here and there are fine churches and massive square stone palaces which look like fortresses, and were partly intended as such during the civil contentions of the commonwealth. But the streets which lead from this central part to the present gates, and which from their more recent date are still called *Borghe*, or *suhurhs*, are laid out on a regular plan; the outer part of the town also is handsomely built, the houses being interspersed with gardens, especially in the neighbourhood of the city walls. The most remarkable structures in Florence are:—1. The *Duomo*, or Cathedral of *Santa-Maria-del-Fiore*, which was begun at the end of the 13th century by *Arnolfo di Lapo*, was continued by *Giotto* and other successive architects, until *Brunelleschi* completed it in the 15th century by raising the noble cupola (384 feet high), which excited the admiration of *Michel Angelo*. This magnificent building is surrounded by an open place; on one side of it rises a detached square tower or belfry 266 feet high, and in front of it is the baptistery of *St. John*, an octagon chapel rich with sculptures and mosaics. The whole group of buildings is faced in marble, partly-coloured black and white. 2. *Il Palazzo Vecchio*, or town-house, which was the seat of the government of the *Florcutius* republic, a square massive-looking structure surmounted by a tower 260 feet high, from which the great bell used to toll to assemble the citizens or call them to arms. The square in front is adorned with a noble fountain and with marble and bronze statues. 3. Between the *Palazzo Vecchio* and the Arno is the handsome building called *Gli Ufficii*, with arcades forming three sides of an ohlong court 400 feet in length, raised by the *Grand Duke Cosmo I.* The first story is occupied by the archives, the treasury, other public offices, and the *Magliabecchi* library, which contains 150,000 printed volumes and 12,000 manuscripts. The second story contains the celebrated gallery, or museum, formed by the *Medici*, which is one of the richest existing collections in sculptures, medals, cameos, bronzes, paintings, and other works of

art. 4. The church of San Lorenzo, built by Brunelleschi, the numerous altars of which are adorned with the paintings of Florentine masters. In the body of the church is the modest tomb of the elder Cosmo, called Pater Patriæ; in the old sacristy is that of his father, Giovanni, the princely merchant, the head of his family and the founder of this church; and in the new sacristy are the celebrated monument of Giuliano de' Medici, and of Lorenzo, duke of Urbino, by Michel Angelo. Behind the choir of the church is the sepulchral chapel of the grand dukes of the house of Medici, rich in marble, jasper, agates, lapis lazuli, and other valuable stones, on which account it has received the name of 'Cappella delle Pietre dure.' Annexed to the church is the building begun by Michael Angelo and finished by Vasari, containing the valuable library of manuscripts called Laurentiana, collected in great part by Cosmo, Lorenzo, and the other members of the first house of Medici, but considerably increased since. 5. The church of Santa Croce is remarkable chiefly for the sepulchral monuments of Machiavelli, Michel Angelo, Galileo, and Alfieri. 6. The Pitti palace, the residence of the grand duke, begun by Brunelleschi and finished by the Grand Duke Cosmo I., has a splendid gallery of paintings, and a library of 70,000 printed volumes and 1500 manuscripts, chiefly Italian, among others the correspondence of Machiavelli and that of Galileo. The adjoining gardens of Boboli are extensive, and afford a pleasant promenade to the public, but they are laid out and the trees are cut in the old formal style; the fountains are remarkably fine.

Besides the above, which are the most remarkable edifices in Florence, there are numerous other structures which would be considered as an ornament to any city, such as the Riccardi palace, with its valuable library, now the property of the community; the Strozzi palace, one of the most remarkable specimens of the old massive and stern Florentine architecture; the modern palaces Corsini, Borghese, and many others; the churches of San Marco, Santa Maria Novella, L'Annunziata, Ognissanti, &c.; the two principal theatres (there are seven others); the academy of the fine arts; the hospitals; and the public walks outside the gates.

Florence contains many charitable and other useful institutions. There are several elementary schools for boys and girls, besides the schools kept by religious congregations; the Istituto della Santissima Annunziata, in which 800 girls are boarded and instructed and provided for when they leave the house; besides asylums for the orphan, the blind, the deaf and dumb, and other unfortunate persons; and 'confraternité,' or associations of charitable persons for attending the infirm and burying the poor dead. The medical and surgical college attached to the hospital of Santa Maria Nuova is one of the best medical schools in Italy. The principal academies are that of La Crusca, to which is united the University of Florence, founded in 1438; that of the fine arts; and the Academy dei Georgofili, which encourages agriculture, and publishes a quarterly journal. Connected with the astronomical observatory, which is a magnificent establishment, are a museum of natural history, a botanic garden, &c.

The people of Florence are civil, industrious, sober, steady, economical even to parsimony, loquacious and satirical, but docile and quietly disposed. Among the wealthy and fashionable class great outward decorum is maintained. Fortunes are moderate, and mostly derived from landed property. Among the Tuscan nobility are many individuals distinguished for their learning, and for the liberality with which they exert themselves in promoting useful and charitable institutions, such as schools, savings banks, and works of public utility.

Florence is upon the whole the most pleasant place of residence in all Italy. Strangers have also the advantage of the best reading-rooms in the whole peninsula, which are supplied with foreign journals and literary novelties.

The price of provisions is moderate, the country very fine, and the climate generally healthy, though at times foggy in the autumn and cold in the winter. The whole neighbourhood of Florence is studded with villas, country-houses, and gardens, which made Ariosto say, that if they could be all collected within the inclosure of a wall and joined to the actual city, Florence would be more than equal to two Romes. Florence is situated in 43° 46' 41" N. lat., 11° 15' 55" E. long., 43 miles E. from Pisa, 51 miles S. by W. from Bologna, and 145 miles N.N.W. from Rome. It is joined by railways to Pisa, Leghorn, and Siena. The population of the city in 1852 was 110,714. The manufactures comprise chiefly silks, carpets, straw-hats, mosaics, porcelain, and jewellery.

Florence owes its origin to a colony of Roman soldiers sent by Octavianus after the victory of Perugia, to whom he allotted part of the territory of the colony of Fæsulæ, established about forty years before by Sulla. In the reign of Tiberius we find the Florentines mentioned by Tacitus ('Annal.' i. 79) as having sent a deputation to Rome to deprecate the intended diversion of the course of the Clavis into the Arno, by which their fields would have been exposed to inundation. Little else is known of Florence under the empire, and hardly any remains exist of that period except some relics of an amphitheatre and a few inscriptions. Christianity seems to have been established at Florence in the 3rd century, and several martyrs are recorded there under Decius. In the year 313 Felix, bishop of Florence, attended a council at Rome. About 405 the town was

threatened by the Goths under Radagaisus, but was saved by Stilicho, who defeated the barbarians in its neighbourhood. In 542, being again attacked by the Goths under Totila, it was successfully defended by the garrison which Belisarius had left in it. The Longobards occupied Florence apparently without violence, and Tuscany became one of the duchies of their kingdom. Charlemagne having conquered the Longobards, organised the various provinces of their kingdom: he appointed at Florence a political chief called duke, and afterwards count, under whom were various officers, who were to be chosen by the count and the people together. Thus a municipal government was early given to Florence. In the 12th century, when Italy began to be involved in the long quarrel between the church and the empire, Florence with the greater part of Tuscany was under the jurisdiction of the Countess Matilda, who dying about 1115 left her inheritance to the Roman see. From that time the towns of Tuscany began to govern themselves as independent commonwealths, and the popes favoured this state of things. Florence had then a very limited territory, extending only a few miles round its walls; but the industry and speculative spirit of its citizens wonderfully enriched them. They had commercial establishments in the Levant, in France, and in other parts; they were money-changers, money-lenders, jewellers, and goldsmiths. In 1078 they first enlarged the circuit of their town. In 1113, while the Countess Matilda was still living, the citizens of Florence took up arms to repel a new delegate sent by the emperor, and accompanied by a troop of armed men. They met him at Monte Cascioli, then an estate of the counts Cadolingi, about six miles west of Florence: Robert the imperial vicar was killed in the conflict, and his men were routed. This was the first military exploit of the Florentine community, and from that time Florence was numbered among the towns attached to the popes and opposed to the emperors, or, as they were afterwards called in the following century, the Guelph party, although many of the neighbouring feudatories were of the opposite or imperial party; and as several of them at various epochs became citizens of Florence, or became connected by marriage or otherwise with Florentine families, the seeds of internal discord were thus sown within its walls. For above two centuries after the city was torn with dissensions, first between the Guelph and Ghibeline factions, and subsequently by the Neri and Bianchi, each of which as it got the upper hand oppressed or exiled the leaders of the losing faction. Nevertheless Florence went on increasing in territory and wealth.

In 1252, upon the death of the emperor Frederick II., the head of the Ghibelines as the Pope was of the Guelphs, the Guelphs, who had gained the ascendancy in Florence, defeated the Pisans and subdued the Ghibelines in the valley of Mugello and in the Valdarno; so that this year was thenceforth remembered by the Florentines as the 'year of victories.' In 1254 they took Volterra; and it was then that they first coined their golden florin, which were considered the finest coins in all Europe.

The Ghibelines, supported by Manfred, king of Naples, and led on by Farinata degli Uberti, surprised the Florentines and other Guelphs of Tuscany at Montecatini, on the banks of the Arbia, a few miles from Siena, on the 4th of September, 1260, and completely defeated them, with the loss of 10,000 killed and a number of prisoners. The Ghibelines entered Florence in triumph, the principal Guelphs who survived fled to Lucca, their property was confiscated, their houses were razed, and a new magistracy was formed from among the Ghibeline party, who took the oath of allegiance to Manfred. At a general diet of the Ghibeline cities, held soon after at Empoli, it was proposed to raze Florence to the ground, and distribute the inhabitants among other towns, as the bulk of the population was too much Guelph to be trusted; but Farinata indignantly resisted the proposal, saying he would rather join the Guelphs than see his native town destroyed: this threat had its effect, and Florence was saved. Dante has justly praised Farinata for this patriotic act, in which the feelings of the citizen rose above the passions of the partisan.

In 1265 the defeat and death of Manfred at Benevento turned the scale against the Ghibelines. The Florentines in the following year drove away the garrison left by Manfred, and offered their allegiance for ten years to Charles of Anjou, king of Naples, who sent them 800 French horsemen under Gui de Montfort as his vicar.

In 1268 the expedition of Conradin gave a momentary preponderance to the Ghibelines, but they were soon expelled again from Florence. In 1273, by the mediation of the Pope, peace was made between the two parties, and the Ghibelines were recalled; but this harmony did not last long. In 1280 Cardinal Latini Orsini, legate of Pope Nicholas III., made a new peace: the more violent Ghibelines were banished for a time, but their property was restored to them, and the rest of their party were allowed to return, and to participate in the offices of the state. But the Guelphs, being stronger, did not keep their promises towards them. For the next thirty years internal feuds prevailed, in which Dino Compagni, the chronicler of the time, and the poet Dante acted a part; and the names of Guelphs and Ghibelines gave way, or rather were replaced, by those of Neri and Bianchi. Blood was openly shed in the streets with impunity.

After the feuds of the Bianchi and the Neri, and the banishment of the former, the Florentines besieged and took Pistoja by famine in the year 1306. In August 1315 Ugucione della Faggiuola, at the

head of the Ghibelines of Pisa, completely defeated the Florontines, joined by the other Guelphs of Tuscany, at Monte Catini, in the Val di Nievola. Uguccione was succeeded in the command of the Ghibelines of Tuscany by Castruccio Castracani, lord of Lucca, who took Pistoja, and defeated the Florentines in a pitched battle at Altopascio, near the marshes of Bientina, in September, 1325. Castruccio advanced to within a mile of Florence, but the Florentines received timely assistance from the Anjou king of Naples; while the emperor Ludovic V. came into Italy to support Castruccio and the Ghibelines, whose cause however met soon after with an irreparable loss by the death of Castruccio in September, 1323. Charles, duke of Calabria, on whom the Florentines in their distress had conferred the signoria or lordship of their city, died about the same time, and his death perhaps saved them from having a master. While they were threatened by Castruccio, one of their principal merchant houses failed for the sum of 400,000 golden florins, which added greatly to their distress. In 1333 a great flood of the Arno carried away three bridges, part of the walls, laid most of the streets of Florence under water, and caused heavy damage. Some years afterwards two more commercial companies, Peruzzi and Bardi, failed in consequence of the loss of 1,365,000 golden florins, being capital and interest of sums which they had advanced to Edward III. of England, and which he was unable to repay.

These facts give an insight into the sources of the extraordinary wealth and resources of the Florentines. These sources were twofold, the numerous manufactures at home and the trade and banking speculations carried on by Florentine merchants abroad. Among the manufactures the most important were those of woollens, silks, and jewellery. The citizens of Florence were classed from 1266 into 12 arti, or companies of trades or professions, seven of which were called *arti maggiori*, namely—1, lawyers and attorneys; 2, dealers in foreign stuffs; 3, bankers and money-changers; 4, woollen manufacturers and drapers; 5, physicians and apothecaries; 6, silk manufacturers and mercers; 7, furriers. The *arti minori*, or lower trades, were originally five—smiths, shoemakers, butchers, carpenters, and masons; but they were afterwards increased to 14. Every citizen who wished to be eligible to office was required to inscribe his name on the rolls of one of the trades. Dante had his name inscribed on the roll of the apothecaries, although he never exercised that profession. Of the importance of their foreign trade, and the influence which the Florentine merchants or bankers had attained in foreign countries, we have a proof in the fact, that when Pope Boniface VIII., after his election, received the congratulatory addresses of foreign states, it was observed that no less than twelve envoys accredited to him on the occasion were citizens of Florence.

Their armies were chiefly composed of mercenaries and auxiliaries, and commanded by a foreign captain, or condottiere. The towns and districts subject to Florence retained their local statutes, and elected their own magistrates, but they had no share in the central government of the republic.

Fresh dissensions among themselves and an unfortunate campaign against Pisa made the Florentines look out again for a foreign protector. Weary of feuds they elected Gaultier de Brienne, of French extraction, but born in Greece, who bore the title of Duke of Athens, but was an officer in the service of Robert, king of Naples, lord of Florence for life, in 1342. He began by putting to death or sending into exile a number of citizens of the wealthier popular families who had till now kept the government in their own hands, and who were obnoxious both to the nobles who were excluded from office and to the inferior orders who attributed to him all their troubles. Having a foreign force of Frenchmen and Neapolitans at his disposal, his sentences were summarily executed. In the course of ten months he contrived to draw 400,000 golden florins, which he transmitted to Naples. He soon incurred the hatred of all parties, and having convoked for the 26th July, 1343, a number of distinguished citizens to consult with them on the affairs of state, but really for the purpose of putting them to death, the people, who were already prepared, rushed to the palace at the cry of 'popolo, popolo,' dispersed the duke's cavalry, and obliged him to capitulate on the 3rd of August, when the bishop of Florence had him conveyed safely with his men outside of the territory of the republic. Thus Florence recovered its independence, and the memory of that deliverance, called 'la Cacciata del Duca d'Atene,' is still solemnised at Florence by the display of the flags of the various trades on the 26th of July.

It was now agreed that the *grandi*, or ancient nobles, should have a share of the offices of the state, but as they soon assumed too much, they were driven away again from the town-hall. Upon this they took up arms, and a battle ensued in the streets of Florence, in which the *grandi* were defeated and their houses plundered and burnt. This was the last struggle of the nobles at Florence. (Machiavelli, lib. 11.) But a few years after a new quarrel broke out between two wealthy citizen families, the Albizzi and the Ricci, which divided the city into two parties again. The Albizzi at length preponderated, and after exiling a number of citizens of the opposite party, they formed a government composed entirely of *popolani grassi*, or wealthy citizens. The lower trades, instigated by the Ricci and the Medici, who began at that time to court notice and popularity, broke out into insurrection in 1378, forced the town-hall, burnt the archives, and after three

days of anarchy, elected a woolcomber, Michele Lando, as chief magistrate. Lando, who was a man of natural good sense, succeeded in re-establishing order and checking the rioters. After several years of troubles, the *popolani grassi*, with the Albizzi at their head, resumed power in 1382, and formed a new aristocracy, which succeeded in retaining the reins of government for 52 years, not however without occasional tumults, conspiracies, and insurrections, until the year 1400. From that year, Machiavelli says, the city remained internally quiet till 1433, the longest period of tranquillity which Florence had ever known. The Florentines acquired possession, partly by force and partly by purchase, of Cortona, Arezzo, Livorno (Leghorn), part of the Romagna, and lastly of Pisa, which they took through famine and treachery in September 1406.

The administration of the Albizzi was overthrown by Cosmo de' Medici, a popular citizen and a princely merchant, in 1434.

The first house of Medici respected the republican form, and were contented with exercising the chief influence in the state without emerging from the class of citizens. But the foreign wars which desolated Italy in the 16th century effected the fall of that republic, when a member of a lateral branch of the Medici, the line of Cosmo having become extinct, was placed by Charles V. as Duke of Florence. The ducal dynasty of the Medici continued to rule till the year 1737, when, becoming extinct, they were succeeded by Francis of Lorraine, afterwards emperor of Germany, and husband of Maria Theresa of Austria. From this period the history of Florence merges in the history of Tuscany. [TUSCANY.]

FLORENCE. [ALABAMA.]

FLORENT, ST. [CORSIKA.]

FLORES. [AZORES.]

FLORIANA. [MALTA.]

FLORIDA, the most southern of the United States of North America, comprehends a narrow tract of land extending along the northern shore of the Gulf of Mexico, between 83° and 87° 45' W. long., and the peninsula, 320 miles long, and in its broadest part 120 miles wide, which forms the north-eastern boundary of the Gulf of Mexico: the peninsula and adjacent country as far west as the Appalachian River were formerly called East Florida, and the tract west of that river West Florida, but these names are now only employed as local designations. Florida lies between 25° and 31° N. lat., and 80° and 87° 45' W. long. It is bounded N. by the states of Alabama and Georgia, E. by the Atlantic Ocean, and S. and W. by the Gulf of Mexico. Its area is estimated at 59,268 square miles, or about 3000 square miles more than that of England. The following table shows the population and the proportion of free coloured persons and slaves in this state according to the decennial returns, from the first state census in 1830. The total population in—

1830 was	34,730,	including 844	free coloured persons	and 15,501	slaves.
1840	54,477,	"	817	"	25,717
1850	87,445,	"	932	"	39,310

The federal representative population given by this census is 71,720, in which number three-fifths of the slaves are included. This entitles the state to send one representative to Congress. To the Senate, like each of the other United States, Florida sends two members.

Coast-line, Surface.—Florida has a coast-line considerably more than 1000 miles in length, but so obstructed by shallows and sand-banks as to afford few available harbours. The whole of the eastern coast is flat, and skirted by low narrow islands of sand, which lie parallel to the mainland, and are separated from it by narrow and shallow lagunes, which cannot be navigated even by vessels of small burden. This coast has no harbours, except those formed by rivers and inlets at the northern extremity, where that of St. Augustine has 10 feet, St. John 15 feet, and St. Mary 20 feet water at high tides.

Opposite the southern extremity of the peninsula there is a series of small rocky islands called keys (a corruption of 'cayos') mostly covered with wood. They begin on the west with a cluster of rocks and sand-banks called the Tortugas, and continue for some distance eastward, but afterwards turn to the north-east and north, and terminate at Cape Florida, 25° 47' N. lat. These islands, which are called the Florida Keys, are skirted towards the south and east by a long narrow coral reef, called the Florida Reef, and both the Florida Keys and the Florida Reef may be considered as constituting in this place the left bank of the Gulf Stream, the beginning of which may be fixed between the Tortugas and the coast of Cuba, near the Havana. The Gulf Stream rapidly increases in velocity, and between Cape Florida and the Bemini Islands sometimes runs five miles per hour. It continues with nearly the same velocity along the eastern shores of Florida up to the mouth of St. Mary's River. The chief of the keys, Key West (a corruption of Cayo Hueso), is about six miles long and two miles broad, with a spacious harbour which affords shelter to vessels of the largest size. Key West, long the haunt of pirates and smugglers, is now an important state naval station, and bands of 'wreckers' are placed here for the assistance of vessels in distress, this part of the coast being extremely dangerous. Thirty vessels in distress put into Key West in 1850 which had been ashore on the reef. The island, which commands the Florida Channel entrance into the Gulf of Mexico, is strongly fortified; Fort Taylor at the north-west angle of the island, about 1000 feet long by 250 feet deep has been constructed in the most substantial manner at a cost

of about 1,500,000 dollars. In this key are salt-ponds which yield annually upwards of 30,000 bushels of salt. The Tortugas received their name from the immense number of turtles which frequent them, as well as the neighbouring keys and mainland, in order to deposit their eggs. These turtles form a considerable article of traffic.

The western coast of the peninsula is also flat, and as well as that of Florida, west of the peninsula, is like the part already noticed encompassed by elongated narrow sandy islands, though they do not form such a continuous barrier as along the eastern coast, some parts being quite free from them. But this coast also has shoals stretching off from it, and affords few harbours. Carlos Bay, or Charlotte Harbour (between 26° and 27° N. lat.) has no great depth of water. Tampa Bay is spacious, and admits vessels of considerable burden. Appalachee, or Appalachicola Bay is a much more important one, affording anchorage for large vessels, though its mouth has only three feet of water at low tide. West of Appalachee Bay the coast is bolder than elsewhere in this state, and there are two or three harbours, but only one is of much importance, Pensacola, which has 21 feet water on the bar, and from 23 to 36 feet in the interior, which is spacious and convenient. It admits vessels drawing 20 feet, and is the deepest port on the northern coast of the Gulf of Mexico.

On the eastern coast there are lighthouses on Amelia Island at the entrance to St. Mary's River; at the mouth of St. John's River; on the island at the entrance to St. Augustine; and on Cape Canaveral; on Cape Florida; off the southern end of the peninsula, on Key West, on Sandy Key, and on the Bush Islands, the westernmost islands of the Florida Reef; on the coast of West Florida, on Cape St. George, and Cape Blas at the entrance to Appalachee Bay; on Dog Island and Egmont Key at the entrance to Tampa Bay; at the entrance to St. Mark's Harbour in Appalachee Bay; and at the entrance to Pensacola Bay. There are also floating lights off Key West, and Carysfoot Reef.

The southern districts of the peninsula nearly as far north as 29° N. lat., are low and flat, being mostly covered with swamps called everglades, and containing only moderate tracts of dry land intermixed with the marshy ground. During the rainy months, from June to October, it is impossible to make a land journey across this part of the peninsula. The river swamps, or those formed by the overflow of the rivers, are generally covered with a heavy growth of timber of various kinds; the pine-harren swamps, or those resulting from the drainage of the surrounding country, are overgrown with pine and eypress. The country north of 29° N. lat. has a more uneven surface, but the higher grounds in the interior rarely rise to the elevation of hills. This division contains heter water, and is better drained; the swamps are not numerous, and are only of moderate extent. It is besides better wooded: this part of the peninsula, consisting chiefly of pine forests, interspersed with savannahs, marshes, and low sandy hillocks, or as they are called here as well as in Georgia, hammocks, or hummocks. The savannahs afford good natural pastures; the hummocks when cleared of the wood, which generally covers them in their natural state, yield excellent arable land, and the harrens are mostly overgrown with pine forests. The soil in this northern part of the peninsula, though generally sandy, is more fertile than in the southern part. West of the peninsula is the most uneven part of the state, but it contains no elevations of any consequence. In the northern part limestone is the prevailing rock, and some of the rivers run in different places for some distance under ground.

Hydrography and Communications.—The peninsula is drained by the St. John's and by several smaller rivers. The main branch of the *St. John's River*, the *Ocklawaha*, rises nearly midway between both seas, and runs north for about 80 miles, whence it turns east, and joins the other branch, or proper *St. John*. Both rivers in their upper course form several shallow lakes, and after their union, the channel of the river is more like an inlet of the sea than that of a river, being very wide and nearly without current for the remainder of its course, which exceeds 80 miles, and is directed to the north. It is navigable for vessels drawing 8 feet of water to Lake George, 20 miles above the place where both branches unite. *Indian River*, which falls into the Atlantic about 27° 30' N. lat., forms for a considerable distance a lagune, divided from the sea by a narrow sandhank. The other rivers which belong to the eastern side of the peninsula are all small, except the *St. Mary's River*, which, for the greater part of its course, forms the boundary-line between Florida and Georgia. It rises in the latter state near 31° N. lat., and flowing first southward about 40 miles, then turns with a hold sweep northward, in which direction it continues about 30 miles. The remainder of its course lies to the east: where it falls into the Atlantic it forms *St. Mary's Harbour*, the deepest port in the United States south of the Chesapeake Bay, on the Atlantic coast. The whole course of this river is about 110 miles; and it is for a considerable distance a fine navigable stream. The rivers belonging to the western side of the peninsula are more numerous than those belonging to the eastern side. They are however all small; the principal are the *Amazura*, the *Hillsborough*, the *Asternal*, and the *Charlotte*.

The rivers which fall into the Gulf of Mexico, west of the peninsula, rise either in Georgia or in Alabama. The most eastern is

the *Suwanee River*, which rises in Georgia with two branches, the *Alapaha* and *Suwanee*, which unite in Florida and fall into the Gulf of Mexico at the northern extremity of the peninsula of Florida, after a course of upwards of 200 miles. The bar at the mouth of the *Suwanee* has only 6 feet of water at high tide. Farther west is the *Ocklockonnee*, which also rises in Georgia: it falls into *Ocklockonnee Bay* at the head of *Appalachee Bay* after a course of about 125 miles. Farther west is the *Appalachicola*, the largest river of Florida. Its principal branch, the *Chatahoochee*, rises near 35° N. lat., on the southern declivity of the high table-land of the *Appalachian system*, and runs first south-west and then south, in which direction it enters Florida, receiving on its boundary the *Flint River*, which rises between 33° and 34° N. lat., and flows 210 miles before it joins the *Chatahoochee*. The united river is called *Appalachicola*, which flows nearly due south about 75 miles, and is navigable for vessels of considerable burden in all its extent. The basin drained by the *Appalachicola* and its tributaries is estimated at nearly 20,000 square miles. West of the *Appalachicola* are the *Choctawhatchee*, the *Escambia*, and several smaller streams, all of which have their source in Alabama, and flow in a generally southern course through Florida to their outlet in *Choctawhatchee*, and *Pensacola* bays. The *Perdido* is a small river, and only remarkable as the western boundary between Florida and Alabama.

Florida has a considerable number of lakes, the largest of which are in the swampy districts of the peninsula. Some of these lakes are of great depth, and appear to receive perennial supplies from subterranean springs. The *Lake of Macaco* (between 26° and 27° N. lat.) is the most southern, and also the most extensive; in the dry season it is 25 miles long and 18 miles wide, but after the rains have set in, it is greatly increased in size. The *Eustace* and *Simmons* lakes are also in the southern part of the peninsula. *Lake George*, which is an expansion of the *St. John's River*, is 18 miles long and 12 miles wide; the depth of its water is on an average 12 feet. In the west are the *Mickasuckee*, which is 12 miles long, the *Wakulla*, the *Jackson*, and the *Imouia*. In the districts where the limestone formation prevails there are also numerous lakes; but they are generally of small extent.

Florida is not well provided with roads. In the south the military roads are almost the only means of land communication. In the north several good coach roads have been constructed. The only railways yet completed are the *St. Joseph's*, 23 miles, and the *St. Mark's* and *Tallahassee*, 26 miles long. Several others of greater magnitude have however been projected, as well as a ship canal, or, according to another plan, a railway across the neck of the peninsula; and there is little doubt but some of these projects will be carried into execution.

Climate, Soil, and Productions.—The climate of Florida is very mild, and in the southern districts hot. The average mean temperature of the state is about 73° and the difference between the summer and winter is said nowhere to exceed 25°. South of 23° N. lat. snow is unknown, and frost, though occasional, is rare. The temperature of this tract approaches that of the West Indies. In summer the thermometer generally rises to between 84° and 88°, and in July and August even to 94° Fahr. The east side of the peninsula is warmer than the west, which is probably to be attributed to the high temperature of the Gulf Stream. At the equinoxes, especially in autumn, rain falls abundantly every day from 11 to 4 o'clock for several weeks. At this period strong gales are frequent. The climate of Key West and some of the other large keys is said to be as equable as that of Cuba, and equally grateful to the invalid; the difference of the mean temperature of summer and winter is only 11 degrees.

The entire peninsula is of alluvial formation. The whole of the southern and eastern part is of sand and clay resting on calcareous rocks, which crop out in the north and west, mostly in the shape of a crumbling limestone. This limestone is in many places cut through by springs and subterranean streams, which form cavities from a few yards to several acres in extent, locally designated 'sinks.' The soil over by far the larger part of the state is naturally indifferent, or poor and stubhorn. The most fertile portions are in the central districts by the banks of the lakes and ponds, and along the water-courses. Westward it becomes poorer; but the strip of land along the northern shore of the Gulf of Mexico is more productive. Yet, though so much of the soil is thus naturally indifferent, the warmth and humidity in a great measure compensate, and the labours of the agriculturist are rewarded by rich and varied crops.

The vegetation, both natural and cultivated, is chiefly, though not exclusively, that of a tropical climate. Over the northern part of the peninsula extend vast forests of pine with little underwood; the hummocks are covered with red, live, and water oaks, mahogany, palmetto, dogwood, magnolia, &c.; and in many parts the swamps and harrens abound with majestic cedars, chestnuts, and cypresses. The exportation of timber is one of the chief sources of the wealth of Florida.

Among the cultivated plants, increasing importance is being attached to the growth of cotton, the Sea-Island or long-staple cotton being, it is said, now produced in Florida equal to that of South Carolina. The sugar-cane succeeds well in all the maritime parts: the quantity

raised in 1850 (2,732,000 lbs.) was nearly ten times as great as in 1840 (275,317 lbs.); the increase in the cotton raised in the same year was not quite 50 per cent. Tobacco, coffee, rice, ludigo, Siam hemp, New Zealand flax, maize and other grains, and a great variety of vegetables are successfully cultivated. The cocobineal cactus is indigenous. The fruits are exceedingly numerous, and form valuable articles of export: among those most raised are oranges, which flourish excellently and are of fine flavour, lemons, shaddockes, limes, olives, grapes, pine-apples, and all kinds of melons.

Over the extensive grassy prairies, or savannahs, immense herds of cattle constantly roam, requiring and receiving no care from their owners either in summer or winter. Swine likewise, throughout the larger part of the state, find for themselves abundant food in the roots and mast of the country. Game is said to be more abundant than in any other portion of the United States. Besides deer, wild turkeys, geese, ducks, and curlews are abundant. Alligators and snakes are numerous. Turtle and a great variety of fish are extremely plentiful all round the coast, and about the keys; and an equally plentiful supply of fresh-water fish, and the delicious soft-shelled turtle, is found in the lakes, rivers, and creeks of the interior. Sponges abound on many parts of the coast, and form a profitable branch of trade.

Agriculture and commerce are the principal occupations of the inhabitants. Sugar, cotton, tobacco, and rice, with timber, are the staple exports. In 1850 the number of farms under cultivation in the state was 4304. The extent of improved lands was 349,049 acres, of unimproved lands, 1,246,240 acres, which together were valued at 6,923,109 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 1027 bushels; rye, 1152 bushels; maize, 1,996,809 bushels; oats, 66,586 bushels; potatoes, 7823 bushels; sweet potatoes, 757,226 bushels; rice, 1,075,090 lbs.; sugar, 2,750,000 lbs., and molasses, 352,893 gallons; tobacco, 993,614 lbs.; ginned cotton, 18,052,400 lbs.; peas and beans, 135,359 bushels; hay, 2510 tons. The value of orchard products was 1280 dollars; and of market-garden products, 8721 dollars. Very little wine is made.

The number of horses in the state in 1850 was 10,848; asses and mules, 5002; milch-cows, 72,876; working oxen, 5794; other cattle, 182,415; sheep, 23,311; swine, 209,453. The products of animals were thus returned:—Wool, 23,247 lbs. (in 1840, 7285 lbs.); butter, 371,498 lbs.; cheese, 13,015 lbs.; value of animals slaughtered during the year, 514,635 dollars; silk-cocoons, 6 lbs.; bees'-wax and honey, 18,971 lbs.

Manufactures, Commerce, &c.—Florida is an agricultural and commercial state; the manufactures are small in value, being merely of such articles as the immediate requirements of the population render indispensable. None of the staple manufactures of the United States have been introduced here, the manufactured goods required being brought from the manufacturing states and exchanged for agricultural produce. Even ship-building, though this is a commercial state, is hardly to be considered as a branch of its industry; the only vessel built in Florida in 1852 being one schooner of 30 tons burden. In 1850 the number of manufacturing establishments producing to the value of 500 dollars and upwards was 121. The total capital invested in manufactures was 1,209,107 dollars; the value of raw material used, fuel consumed, &c., was 412,030 dollars; value of products, 962,114 dollars; the average number of hands employed was 1112 males and 80 females. The 'home-made manufactures' were valued at 75,582 dollars.

Florida has a very considerable foreign export trade, but its coasting trade is much larger: of the cotton exported in 1851, 70,547 bales were sent direct to foreign ports, while 111,532 bales were sent coast-wise; and the other staples are said to bear a like proportion. The foreign exports however appear to be steadily increasing in value: in 1852 the value of the exports of domestic produce to foreign ports was 2,511,976 dollars; in 1845 it was 1,514,745 dollars. The direct foreign imports, on the other hand, are regularly decreasing: in 1842 they were 176,980 dollars, while in 1852 they were only 30,713 dollars. The greater part of the exports of the state are cleared from Appalachicola, which is likewise the outlet for eastern Alabama and the south-west of Georgia, their produce being brought down the river in steamers. The shipping entered at all the ports in the state in 1850 amounted to 17,980 tons, of which 10,462 tons were foreign. The amount of shipping cleared amounted to 22,156 tons, of which 12,134 tons were foreign. The total shipping owned in the state amounted to 11,272 tons, of which 2185 tons were navigated by steam.

Divisions, Towns, &c.—Florida is divided into 23 counties. Tallahassee is the capital of the state, but Key West and Pensacola are the largest and most commercial towns, and St. Augustine is the oldest. There are few other places of sufficient importance to require notice here: the population is that of 1850:—

Tallahassee, the capital of Florida, stands on elevated ground, some distance from the left bank of the Ocklockoonce, in 30° 23' N. lat., 84° 36' W. long., distant 896 miles S.W. by S. from Washington in a direct line: population, 1391. The city was founded and settled in 1824 on its site being selected as that of the capital of the state. The streets are regularly laid out at right angles, and there are several public squares. Its public buildings are the state-house, court-house, market-house, United States land-office, jail, three churches, and an

academy. Two newspapers are published here weekly. In winter it is a place of considerable resort on account of the warmth of its climate. It is connected with St. Mark's, its port in Ocklockoonce Bay, by a railway 26 miles long. A good mill-stream runs close by the town.

Key West, stands on the key of the same name, in 24° 32' N. lat., 81° 48' W. long., 480 miles in a direct line from Tallahassee: population, exclusive of slaves, 1943. The town has grown up entirely within the last 25 years, but is now the largest in the state. It contains the usual county buildings, a district-court which has cognisance of all cases of wrecks and other shipping disasters, a spacious marine hospital, four churches, and a county orphan school. As already mentioned, in speaking of the island, the inhabitants are chiefly dependent on wrecking, but there is a good deal of general trade, and sponge collecting and salt-making are considerable sources of profit. Steamers to the Havannah call here. The shipping belonging to Key West in 1850 amounted to 6760 tons, of which 27 vessels of 1539 tons belonged to wreckers. The climate of Key West is considered to be singularly adapted to invalids.

Pensacola, the capital of Escambia, stands on the west bank of Pensacola Bay, 10 miles from the Gulf of Mexico, and 176 miles W. from Tallahassee: population, 2164. The city is built on a slightly elevated sandy plain, and is regularly laid out. The streets are wide, and there are two public squares. It contains two churches and the usual county buildings. Pensacola is the principal port of the state, and carries on a considerable trade. The shipping belonging to the district in 1850 amounted to 1794 tons. Convenient wharfs have been constructed for the shipping. About midway between the city and the entrance to the harbour is the United States navy-yard, containing a dry-dock and various workshops and officers' buildings, and occupying altogether an area of nearly 80 acres. About a mile below are the naval hospital, and the Barrancas barracks. On two small islands at the entrance to the harbour are two forts and a lighthouse.

St. Augustine, situated on an inlet on the east coast, about 2 miles from the Atlantic, and 170 miles E. by S. from Tallahassee, population, 1934, is the oldest settlement in the Union, having been founded by the Spaniards in 1564. It has an appearance of antiquity unusual in the towns of the United States, and its inhabitants like to call it the 'ancient city.' The streets are narrow and the houses, irregularly placed, are mostly of two stories, the upper story being of wood and projecting over the lower which is of stone. The principal feature of the town is the large public square which fronts the sound, and around which are the chief public buildings. Many of the inhabitants are the descendants of the former Spanish and French population. The Roman Catholic church is a very handsome edifice; there are three other churches, the usual county buildings, barracks, and a fort. St. Augustine is much frequented by invalids from the northern states.

Appalachicola occupies a plot of ground one mile square, on the right bank of the Appalachian River, at the entrance to Apalachee Bay, 62 miles S.W. from Tallahassee. It is a port town with a considerable coasting trade; and in 1850 possessed steamers amounting to 2050 tons burden, all engaged in navigating the Appalachian River. In the foreign trade there cleared in the same year 17,132 tons, and entered 12,196 tons. *Jacksonville*, the capital of Duval county, on the left bank and about 20 miles from the mouth of the St. John's River, 162 miles E. by S. from Tallahassee: population, 1045. The town contains the usual county buildings, and carries on a good trade with the interior, whence large quantities of cotton are brought to Jacksonville for shipment. The river is here above a mile wide. The town is much frequented by invalids from the north. *Miami*, on Key Biscayne Bay, is another flourishing village, the resort of persons of delicate health. *Pitaka*, on the left bank of the St. John's River, 178 miles E.S.E. from Tallahassee, is a port of delivery, and the place for the re-shipment of goods from the Upper St. John's and Ocklawaha rivers. It has regular steam-boat communication with Savannah and Charleston. As the chief port for the export of the cotton, sugar, and rice of the St. John's cane-brake marshes, it is a place of considerable trade.

Government, Judicature, &c.—The right of voting belongs to all free white male citizens, 21 years of age, who have resided for two years in the state, and six months in the county where they offer to vote. The legislative body, styled the General Assembly, consists of a senate of 19 members, and a house of representatives consisting of 40 members, who are elected biennially. The governor, who has a qualified veto on all votes of the legislature, is elected for four years; his salary is 1500 dollars. No officer in a banking company, while he is serving in the bank or for twelve months afterwards, is eligible for the office of governor, senator, or representative: nor can a duellist, or second in a duel, hold any office under the state.

The revenue from all sources amounts to about 60,000 dollars, the expenditure is somewhat less. Florida, according to the 'State Returns,' under 'public debt' has 'absolute debt none; contingent debt, none.' But it is to be remembered that in these governmental returns the repudiating states, of which Florida is one, altogether omit the repudiated debt. Before its admission into the Union as a state, Florida had contracted a very considerable public debt; but it

now not only refuses to pay either debt or interest, but even to admit its liability to pay either, on the ground that the debt is not recognised in the state constitution. The assessed value of all real and personal property in the state in 1850 was 22,784,837 dollars. The state militia is composed of 12,122 men, of whom 620 are commissioned officers.

The judiciary consists of a supreme court, presided over by a chief justice and two associate justices, and of circuit-courts presided over by four judges; all the justices and judges have salaries of 2000 dollars a year each. By a law passed in the last General Assembly, the election of the justices of the supreme court and the judges of the circuit-courts is to be given to the people.

Florida is but badly provided with schools, though the state possesses ample school-funds. There is no college or professional school. The total number of public schools in 1850 was 69, the number of scholars 1878: the whole number of children in the state attending school in the year was 4746. Among religious sects the Methodists are the most numerous, and next to them the Baptists: in 1850 the Methodists had 87 churches, affording accommodation for 20,015 persons; the Baptists 56 churches, with accommodation for 11,985; Presbyterians 16 churches, with accommodation for 5900; Episcopalians 10 churches, with accommodation for 3810; Roman Catholics 5 churches, with accommodation for 1850; other sects 3 churches, with accommodation for 1400 persons. Ten newspapers, circulating 319,800 copies annually, are published in the state.

History.—Florida was discovered by the Spaniards in 1512; the first Spanish settlement was formed in 1564 at St. Augustine, which town therefore may be considered as the oldest European settlement on the North American continent, except those on the Mexican isthmus. The Spaniards kept possession of Florida till 1763, when it was ceded to England. It was retaken by the Spaniards in 1761, and remained in their hands at the peace of 1763. In 1819 the United States entered into a negotiation with Spain for the cession of Florida, and a treaty to that effect was ratified by Spain in 1821. The Spanish government however was not inclined to cede the country; but the feebleness to which it was then reduced rendered it incapable of any resistance, and in 1821 Florida was taken possession of by General Jackson, by order of the government of the United States. The Spanish population nearly all left the country upon its cession. Since its possession by the United States the most important event in the history of Florida was the war which in 1835 broke out between the Seminole Indians, who occupied the central portion of the peninsula, and the American settlers. This war was protracted until 1842, when the Indians were forced to succumb, and were nearly all transferred beyond the Mississippi. The few Indians then permitted to remain have been lately removed westward beyond the limits of the white settlements. Florida was admitted into the Union as an independent state in 1845.

FLORIS, an island in the Indian Archipelago, lying between 8° and 9° S. lat., 120° and 123° E. long. Its length is about 200 miles from east to west, and its average breadth about 35 miles. The surface of the island is hilly, particularly on the south side, where there are several high volcanic mountains, from one of which there was an eruption in 1810. Cotton is one of the products. Sandal-wood, bees'-wax, horses, and slaves are exported to Singapore. The principal port, Endé, is on the south side of the island: it has an excellent harbour. Lantuka, a town on the east side, on the straits of Lantuka, in 8° 45' S. lat., 123° E. long., is in the possession of the Portuguese, who have succeeded in bringing many of the natives to the profession of the Catholic faith. This is the only part of the island in possession of Europeans. Endé was formerly subordinate to the Dutch presidency at Coopang in the island of Timor; but in 1812 the Bugis inhabitants succeeded in expelling all Europeans. The coast is mostly colonised by Bugis and Malays, but the interior is inhabited by aborigines, a dark curly-headed race, who resemble the Papuas of New Guinea. The island gives name to the Strait of Floris, which separates it from the islands of Solor and Adenar on the east.

FLOTTA. [ORKNEY ISLANDS.]

FLOUR, ST. [CANTAL.]

FLUSHING (*Vlissingen*), the birthplace of Admiral de Ruyter, a fortified sea-port on the south coast of the island of Walcheren, in the Dutch province of Zeeland, is situated on the north shore of the estuary of the West Schelde, the passage of which it defends. The port is formed by two moles, which break the force of the sea, and beyond these are two canals which enter the town, in the interior of which they form two perfectly secure basins; one of them is of considerable size, and has sufficient depth of water to receive the largest ships of war. The town has extensive dockyards and a handsome town-hall. Flushing came into possession of the French in 1795, and was much used by them as a place of rendezvous for their fleets. The batteries by which the port is defended command to a great extent the south entrance to the Schelde. The town is well built, and the population is about 8000. It was besieged in 1809 by the English expedition under Lord Chatham, well known as the 'Walcheren expedition,' and was taken, but evacuated very shortly after, the port and town having been much damaged by the English. Flushing is the seat of an admiralty board. It carries on a considerable foreign trade.

FOCHABERS. [ELGINSHIRE.]

FOGGIA. [CAPITANATA.]

FOGO. [CAPE VERDE ISLANDS.]

FÖHL, a Danish island off the northern coast of the western part of Schleswig, about 25 miles in area. It is divided into Osterland-föhr, which forms part of Schleswig, and contains the port of Wyk, 54° 43' N. lat., 8° 40' E. long., 500 feet long, 112 feet broad, and 10 feet deep, which has a bathing establishment; and Westerland-föhr, which forms part of North Jütland. The islanders are engaged in navigation, fishery, and woolen-stocking manufactures. Oysters are exported to Hamburg. The Schleswig part of the island has a population of 2650, and the part belonging to Jütland 2100 inhabitants.

FOIX, the name of a town and former county of France. The town is noticed under **ARIÈGE**, of which department it is the capital. The county was in ancient times partly in the territory of the Volce Tectosages, and partly perhaps in the territory of the Consoranni. It afterwards belonged to the counts of Carcassonne, but upon the death of Roger I., count of Carcassonne, who divided his estates between his family, it became, about the beginning of the 11th century, a separate jurisdiction, which fell to Bernard, second surviving son of Roger. The separate jurisdiction was afterwards erected into the county of Foix. Gaston IV., count of Foix, came into possession (by inheritance from his father-in-law) of the kingdom of Navarre; and the county of Foix, thus united to the other possessions of the house of Navarre, fell to the crown of France upon the accession of Henri IV. in 1582.

The county of Foix was small: its greatest extent was from north-by-east to south-by-east about 50 miles; its greatest breadth about 35 miles. It was bounded E. N., and N.E. by Languedoc; W. by the district of Couserans; and S. by the crests of the Pyrenees. The territory thus described is watered by the Ariège, which runs through it in the direction of its greatest length. The chief towns were Foix and Pamiers. The county is now included in the department of Ariège, under which head the nature and products of the county are described. [ARIÈGE.]

FOKIEN. [CHINA.]

FOKZAN. [MOLDAVIA.]

FÖLDVAR. [HUNGARY.]

FOLEMERAY. [AISNE.]

FOLESHILL, anciently termed **FOLKESHUL**, Warwickshire, a small manufacturing town, and the seat of a Poor-Law Union, in the parish of Foleshill, is situated in 52° 26' N. lat., 1° 28' W. long.; distant 13 miles N.N.E. from Warwick, and 94 miles N.W. from London. The population of the parish of Foleshill in 1851 was 7810. The living is a vicarage in the archdeaconry of Coventry and diocese of Worcester. Foleshill Poor-Law Union contains 12 parishes and townships, with an area of 17,667 acres, and a population in 1851 of 18,528. The inhabitants are chiefly engaged in weaving ribands for manufacturers in Coventry. Besides the parish church and a chapel of ease, there are chapels for Independents, Wesleyan Methodists, and other Dissenters.

FOLKESTONE, Kent, a market-town, member of the Cinque Port of Dover, bathing-place, and sea-port, in the parish of Folkestone, is situated on the south-eastern coast, in 51° 5' N. lat., 1° 11' E. long.; distant 15 miles S. by E. from Canterbury, 70 miles S.E. by E. from London by road, and 83 miles by the South-Eastern railway. The population of the town of Folkestone in 1851 was 6726. The town is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a vicarage in the archdeaconry and diocese of Canterbury.

Folkestone was at an early period a place of importance. There are still some remains of entrenchments on a high hill in the neighbourhood where the Romans had a tower. A monastery which anciently stood here was destroyed by the Danes. A castle erected by the Saxon kings of Kent, and rebuilt by the Normans, has been almost wholly swept away, with the cliff on which it stood, by the gradual encroachment of the sea. The public buildings of Folkestone include the market-house and guildhall, which were rebuilt a few years since. The parish church is a cruciform structure of early English date, with a tower rising from the intersection. Christ church, built and endowed by the Earl of Radnor, was consecrated in 1850. The Independents, Baptists, Wesleyan Methodists, and Quakers have places of worship. There are a Public Grammar school, British and Infant schools, a dispensary, and the Harveian Literary and Scientific Institution. A county court is held in the town.

The opening of the South-Eastern railway, the establishment of the steam-packet service between Folkestone and Boulogne on the French coast, and the erection of Folkestone into a custom-house station, have contributed to the rapid and extensive improvement of this port. In custom-house receipts alone the increase has been from 4008% in the year 1847 to 101,856% in the year 1851. On 31st December 1853 there were registered as belonging to the port of Folkestone, 7 vessels of the aggregate burden of 137 tons, and 7 vessels of 900 tons aggregate burden. During 1853 there entered the port 305 sailing vessels of 30,350 tons, and 431 steam-vessels of 64,781 tons aggregate burden; and there cleared 9 sailing vessels of 719 tons, and 429 steam-vessels of 64,638 tons. Folkestone Harbour has received considerable extension within the last few years, and a fine pier has been

constructed; a battery protects the town. The works of the South-Eastern railway along the coast are of considerable magnitude, including at Folkestone a magnificent viaduct across the valley in which the town stands. The sands are well adapted for bathing, and the place is resorted to by numerous visitors. Many of the inhabitants are engaged in the fishing on the coast. The market-day is Saturday; a fair is held on June 28th. Folkestone forms part of the parliamentary borough of Hythe. Harvey, the discoverer of the circulation of the blood, was a native of Folkestone.

(Hasted, *Kent*; Stock, *Folkestone Guide*; *Communication from Folkestone*.)

FONDI. [LAVORO, TERRA DL.]

FONTAINEBLEAU, a town in France, the capital of an arrondissement in the department of Seine-et-Marne, is situated in 48° 24' 23" N. lat., 2° 42' 15" E. long., on the high road and railway from Paris to Lyon, 37 miles S. by E. from the former city, and has 8278 inhabitants in the commune. There was a palace or royal residence in the forest of Fontainebleau in the time of Louis VII., who had erected in 1169, for the use of the royal house, a chapel, which was dedicated by Thomas à Becket, archbishop of Canterbury, during his stay in France. The spot was a favourite one both with Philippe Auguste and with St. Louis, who founded here an hospital and two chapels. François I. caused a magnificent château to be erected here by the architect and painter Primaticcio; and this structure has been further embellished by the taste or extravagance of succeeding princes. The kings Philippe the Fair, Henri III., and Louis XIII. were born here, and the first of the three died here. It was the favourite residence of Henri IV., who made great improvements in the palace and the park; and here his daughter, Henriette, widow of Charles I. of England, made her abode. Louis XIII., son and successor of Henri IV., was born in Fontainebleau, where also Louis XIV. spent part of his youth. The building was completed in this last monarch's reign. Christiana, queen of Sweden, after her abdication, resided here, and has imparted to the place a sad celebrity by the death of her secretary, Monaldeschi, whom she ordered to be executed in a gallery of the château. Here, in 1685, the Revocation of the Edict of Nantes was signed; and here, in the following year, the great Condé died. Louis XV. was married to Maria Leczinski at Fontainebleau in 1724; and his son, the dauphin, died in the same chamber in which the great Condé ended his glorious career. After the first French revolution the palace was occupied by the military school, afterwards transferred to St.-Cyr, and continued in a state of neglect and disrepair till it was completely restored by Napoleon I. to its original splendour and destination as a royal residence. In this palace Pope Pius VII. lived for eighteen months a prisoner during the reign of Napoleon I.; and here Napoleon himself took final leave of his guards and signed his act of abdication of the throne of France in 1814. From the downfall of Napoleon I. the palace was again neglected and almost forgotten, till 1830, when it was put into a state of complete repair by King Louis Philippe. The present emperor of the French, Napoleon III., occasionally resides at Fontainebleau.

The town is situated in the midst of the forest of Fontainebleau, and is well built, with handsome, wide, and straight streets. The town has a college, two fine cavalry barracks, several other remarkable edifices, a Château d'Eau, or ornamental waterworks, containing a reservoir fed by a spring, the waters of which supply the different fountains and basins of the royal palace; the hospitals founded by Anne of Austria and Madame de Montespan; and the public baths and library. Near the south entrance to the town there is an obelisk, erected in 1786 to commemorate the birth of the children of Queen Marie Antoinette. The palace has six court-yards, each of which is nearly or quite surrounded with buildings. There are three principal entrances to it.

The park and gardens are in a style of magnificence corresponding to that of the palace: they are adorned with a canal and cascade (nearly three-quarters of a mile long, and above 120 feet wide), with several smaller canals, a variety of jets d'eau, and with statues in bronze and marble. An attempt to assassinate Louis Philippe, king of the French, was made in this park by Lecomte on the 16th of April 1846.

The forest of Fontainebleau contains 40,620 acres, or nearly 64 square miles; it surrounds on nearly every side the plain on which the town stands: its surface is unequal and its soil sandy, interspersed with blocks of granite, which are quarried for the pavement of Paris. It is pierced by a great number of fine avenues, and presents much picturesque beauty and many extensive and charming views. The forest contains a great quantity of game: wild boars are numerous.

(*Dictionnaire de la France*.)

FONTAINE L'ÉVÊQUE. [HAINAULT.]

FONTENAY. [VENDEZ.]

FONTENOY. [HAINAULT.]

FONTERABIA. [BASQUE PROVINCES.]

FONTEVRAULT. [MAINE-ET-LOIRE.]

FORCALQUIER. [ALPES, BASSES.]

FORD. [NORTHUMBERLAND.]

FORD AND HILTON. [DURHAM.]

FORDHAM, GREAT. [ESSEX.]

FORDINGBRIDGE, Hampshire, a market-town and the seat of a Poor-Law Union, in the parish of Fordingbridge, is situated on the

right bank of the river Avon, in 50° 56' N. lat., 1° 47' W. long.; distant 18 miles W. by N. from Southampton, and 89 miles S.W. from London by road. The population of the parish of Fordingbridge in 1851 was 3178. The living is a vicarage, with the parochial chapelry of Ibsley annexed, in the archdeaconry and diocese of Wulchester. Fordingbridge Poor-Law Union contains 9 parishes, with an area of 23,907 acres, and a population in 1851 of 6143.

At Fordingbridge the Avon is crossed by a stone bridge. The town was once of greater extent than at present. Besides the parish church, which is a fine building, restored a few years back, there are chapels for Wesleyan Methodists, Independents, and Quakers; National and British schools, a literary and scientific institution, and a savings bank. A county court is held. There are manufactures of sail-cloth and of bed-ticking. The market is held on Friday, and there is a yearly fair.

(Warner, *Hampshire*; *Communication from Fordingbridge*.)

FORDWICH. [KENT.]

FOREHOE, a hundred in the eastern division of the county of Norfolk, which has been constituted a Poor-Law Union. Forehoe hundred is bounded N. by the hundreds of Taverham and Eynsford; E. by the hundred of Humbleyard; S. by the hundreds of Shropham and Depwade; and W. by the hundreds of Mitford and Wayland. It comprises 24 parishes, with an area of 40,397 acres, and a population in 1851 of 13,897. Forehoe Union contains 23 parishes, with an area of 36,403 acres, and a population in 1851 of 13,562.

FORENZA. [BASILICATA.]

FOREZ, a county in France, the largest of the three subdivisions of the old province of Lyonnais. It was for the most part comprehended in the territory of the Segusiani; and Feur, or Feurs, one of its chief towns, was the Forum Segusianorum of the ancients—a town of some importance, and probably a Roman colony. From this town the district derived the designation of Pagus Forensis, whence Forez. It was comprehended, in the division under Honorius, in the province of Lugdunensis Prima, and afterwards formed part of the kingdom of the Burgundians, from whose dominion it passed to that of the Franks. It was bounded N. by Bourgogne, N.E. by Beaujolais, E. by Lyonnais Proper, S. by Velay and Vivarais, W. by Auvergne, and N.W. by Bourbonnais. The territory thus defined consists for the most part of a portion of the valley of the Loire, and of the slope of the hills which separate that valley on the east from Lyonnais and on the west from Auvergne. It comprehends a coal-field of the best quality in France: produces iron and lead, and is the chief seat of the hardware manufacture; St.-Etienne, the Birmingham of France, is within its limits. It produces also abundance of fir-timber and excellent turpentine; and corn, wine of good quality, and excellent hemp. It is watered by the Loire and several of its tributaries, and extends in one part across the hills on the east side down to the river Rhône.

The district of Forez was subdivided into Haut-Forez, capital Feurs; Bas-Forez, capital Montbrison; and Roannais, capital Roanne. It is now comprehended almost entirely in the department of Loire; a small portion is included in that of Haute-Loire.

Forez, Beaujolais, and Lyonnais constituted in the middle ages a county which was rendered hereditary by Guillaume, one of the officers of Charles the Bald, in the 9th century. In the course of time Beaujolais and Lyonnais became separate lordships; and in the middle ages the county of Forez came into the hands of the Dukes of Bourbon, and was, together with their duchy, united to the crown.

FORFAR, Forfarshire, Scotland, a royal and parliamentary burgh and market-town, and the chief town of the county, is situated in 56° 40' N. lat., 2° 50' W. long., in a hollow at the east end of the valley of Strathmore and near a small lake, which formerly inclosed the town on the north and north-west sides. It is 54 miles N. by E. from Edinburgh by road, and 76 miles by railway. The population of the burgh in 1851 was 9311. The town is governed by a provost, two bailies, a treasurer, and 11 councillors, and unites with Montrose, Arbroath, Brechin, and Bervie in returning one member to the Imperial Parliament.

The town consists chiefly of one irregular line of street called the High-street, about a mile and a half in length, which is crossed by Castle-street near its centre. The houses are generally well built and roofed with gray slates. In the centre of the town are the county buildings, containing the court-house and town-hall. Besides the parish church there are a chapel of ease, a Free church, and chapels for United Presbyterians, Independents, and Episcopalians. Forfar academy, the parish school, and other schools amply supply the educational demands of the burgh. There are a mechanics institute, a public library, and a news-room. The county jail is situated in the outskirts of the town.

Forfar was made a royal burgh in the reign of David I. Anciently the staple trade of the burgh was the manufacture of 'bregues', or coarse shoes. At present the manufacture of Osaburga and coarse sheetings is carried on in workshops in the dwellings of the weavers. About 2500 hand-looms are thus employed.

The castle of Forfar was a residence of several of the ancient kings of Scotland, and the seat of their courts and parliaments. The castle stood on a mound of about 50 feet in height, on the east side of Castle-street. The summit of the mound is now occupied by an

ancient market-cross. On a peninsula (at one time an island in the lake) a nunnery anciently stood, said to have been the residence of Margaret, queen of Malcolm III., and still called Margaret's Inch. From the Inch a causeway runs westward a considerable distance into the loch. The Loch of Forfar abounds with perch and pike, and has a few trout. It also affords cover for wild fowl. In a moor about a mile and a half north-east from the town, are the remains of a trench, believed to have been a portion of a Roman encampment. Some ruins of the priory of Restennet are within the parish. Eight annual fairs for sheep, cattle, and horses are held in the town.

(*New Statistical Account of Scotland; Communication from Forfar.*)

FORFARSHIRE, a maritime county in the east of Scotland, bounded E. by the German Ocean, S. by the Frith of Tay and Perthshire, W. by Perthshire, N. by Aberdeenshire, and N.E. by Kincardineshire. It lies between 56° 27' and 56° 59' N. lat., 2° 25' and 3° 23' W. long. The extreme length of the county from south to north in a straight line is 33 miles, and its breadth from east to west 26 miles. Its area is 889 square miles, or 568,750 statute acres, of which a great part is moor and mountain. The population of the county in 1851 was 191,264. The county returns one member to the Imperial Parliament.

Coast-line.—The chief towns and harbours on the coast are Dundee, Arbroath, and Montrose, the former situated on the estuary of the Tay, and the latter on a sandy peninsula at the mouth of the South Esk River. Between the Buddon Ness and Montrose, which embraces nearly the whole line of sea-coast, the most remarkable feature is the line of sandstone cliffs extending from the neighbourhood of Arbroath to the Redhead, and containing several curious marine caves, the most of which open only to the sea, while a few are accessible from the beach. The shore of the Frith of Tay and the sea-coast from Buddon Ness to Arbroath is for the most part a tract of sand, though many parts of it are of considerable fertility. The Basin of Montrose, a shallow pool through which the Esk empties itself into the sea, contains an area of 4 square miles. It is flooded only at high water. Broughty Ferry and Carnoustie, two thriving villages on the coast, are much frequented for sea-bathing: the fishing villages of East and West Haven, Auchmithie, Usan, and Ferryden are inhabited almost solely by fishermen. Auchmithie is picturesquely situated among the cliffs, about 5 miles E. from Arbroath. Seaward, about 13½ miles E. from the Buddon Ness is the Bell Rock lighthouse. [BELL ROCK.] The other lighthouses on the coast are the two at Buddon Ness, which with the two lighthouses at Ferry-port-on-Craig on the Fife side of the Frith of Tay, guide ships in navigating the river.

Surface.—There are four natural divisions of the surface of the county:—1. The Grampian district, comprising the greater part of the north-western half of the county, exhibits a tract of irregular mountain-ridges, for the most part having a shallow moorish soil, covered with short heath and large tracts of peat-moss; but the many valleys by which they are intersected are fertile and picturesque. The Grampians are here called the 'Braes of Angus': they rise in several places to an elevation of 3400 feet, and exhibit much of the scenery of an alpine country. The principal valleys are Glen Isla, Glen Prosen, Glen Clova, Glen Lethnot, and Glen Esk. 2. The great valley of Strathmore, which extends across the centre of the county from south-west to north-east. In it are the towns of Cupar, Forfar, and Brechin. Its length is 33 miles, the width from 4 to 6 miles. The surface is undulating, diversified with streams, plantations, and villages. 3. The Sidlaw Hills, which run parallel with the Grampians, from the south-west extremity of the county, and terminate in the promontory on the coast called Redhead, which rises to about 1500 feet above the sea. Some of these hills are upwards of 1400 feet high, in many parts covered with short heath, and in others cultivated up to their summits: they contain several fertile valleys. The length of this district is about 30 miles, its width from 3 to 6 miles. 4. The maritime district is included between the Sidlaws and the Tay and the ocean, and extends from the boundary west of Dundee to the hills about 7 miles S. from Montrose, varying in width from 3 to 8 miles, and sloping gently towards the shore to the east and the south. This tract is generally fertile, under high cultivation, and adorned with numerous villages, plantations, farms, and villas. Near the shore of the Tay are mounds of loose sand, containing extensive beds of sea-shells, at least 60 feet higher than the present level of the sea.

Numerous large trees found in the mosses and marshy ground indicate that formerly the lower part of the county was covered with forests. Some of the Grampian glens are partially clothed with oak and hazel coppices and natural birches; others are covered with thriving plantations, but trees do not grow on the higher parts of the mountains. Plantations are confined chiefly to thin moorish soils resting on clay or gravel. On the declivities of the Sidlaw Hills extensive tracts have been planted with forest-trees, chiefly larch, oak, ash, elm, plane, beech, and poplar.

Geology, Mineralogy, &c.—The Grampians are composed of—1. Granite of various qualities, formed of crystallised rhomboidal felspars, commonly intermixed with laminated talc or mica. In the cavities and fissures are found yellow and smoke-coloured topazes: when they are white they are named rock-crystals. Their usual form is that of pentagonal prisms, sometimes 12 or 14 inches in length. 2. Next to the granite a very large proportion of the Grampians is composed of fine-grained, hard, and grayish gneiss, and mica-schist. This is always

stratified; the beds lie at various angles, and are often perpendicular. The rock is of a lead colour, but is occasionally brilliant with the mica, which covers the surface of its plates. Among the schistose rocks are veins and detached masses of quartz, frequently of a red colour from the presence of iron. It is thickly studded with small garnets, varying in colour from a faint to a deep crimson. Porcelain-stone is abundant on some of the Grampian heights. Its colour is generally white, inclining to gray, or reddish, owing to the presence of iron. Lead-mines were wrought in the Grampian range above a century ago, and the ore is said to have yielded 1-64th part of silver. Limestone is plentiful in various parts of this mountainous district. At Glenesk on the banks of the North Esk, and at Cortachie on the South Esk, large masses of jasper are imbedded in schistose and micaceous rocks. 3. The third component of the Grampian rocks is porphyry. It occurs in broad veins contiguous to the schistose rocks, and forms numerous hills, is generally of a brown, yellowish, or whitish colour, and is interspersed with grains of quartz and rounded felspars. The transition rocks, lying between the granite and flötz, appear on the declivities of the Grampians towards the valley of Strathmore. They consist of schistose-grauwacke slate, in which occur beds of slate, spar, and elliptical masses of jasper, measuring 30 feet by 10 feet. Greestone, basalt, and dark-coloured limestone are also prevalent, with compact felspar in extensive beds of a reddish-brown colour. The flötz rocks of this lower district, which rest upon the transition rocks, present much variety of composition, but may all be referred to the red-sandstone formation. This sandstone is often fine-grained, and valuable for architectural purposes. It is traversed by extensive beds of conglomerate limestone, greenstone, basalt, amygdaloid, clinkstone, felspar, and porphyry, and contains veins of heavy spar, and traces of copper ores. Pearls have been found in the bed of the North Esk.

In descending from the Grampians to Strathmore the first rock that occurs after the porphyry is a coarse pudding-stone, gravel-stone, or breccia. It is sometimes called 'yolky stone,' from being composed of numerous rounded pebbles resembling yolks of eggs, which are held together by a ferruginous cement of great hardness. This rock has evidently been formed from fragments detached from the rocks above described, which, in their progress towards their present position had been rounded by the action of water. As we descend along the beds of the streams which form the rivers South and North Esk, the pudding-stone graduates into rubble-stone, which is of a brown or red colour, and consists of particles of sand united by the cement which combines the pebbles in the pudding-stone. Lower down, this first species of sandstone graduates into one which is softer, of a deep red colour, and has beds of red clay interposed between its strata. It consists of particles of siliceous cemented by ferruginous clay. It often occurs in laminae, or slates, fit for roofing, and is easily cut with the chisel. Its beds frequently contain detached yolks or rounded pebbles, and pudding-stone is often found with it in alternate beds. Shell-marl, formed from the exuviae of several kinds of fresh-water shell-fish, abounds in the lakes in various parts of Strathmore.

The mountain ridges of the Sidlaw Hills are composed chiefly of sandstone, the strata of which lie almost horizontally towards the south, and decline towards the north at an angle of 45°. It is of various colours—red, brown, gray, white, and greenish. Interposed between these strata of sandstone are large beds of the yolky-stone, varying from 50 to 100 feet in thickness. The rounded stones imbedded in this species of rock consist of white and red quartz, jasper, whinstone, porphyry, and gray and red granite, all combined with a ferruginous sandy cement. The superficial stratum of this range of hills is formed of several varieties of whinstone, which appears in the various forms of basalt, greenstone, porphyry, and a cellular stone by some believed to be volcanic lava. The colour varies also from red, brown, and gray, to green, dark blue, and black. All the kinds of agate and onyx enumerated by mineralogists are found on these hills. Limestone of a peculiar structure is extensively wrought. It is composed of rounded fragments of various colours cemented together in a crystallised spar, and is, in fact, a species of mottled marble. Large beds of clay marl occur in several parts of this district along the ravines and alluvial bottoms. On the south-east declivities of the Sidlaw Hills are large quarries of sandstone flags of superior quality for pavements, steps, tomb-stones, &c. Those which split off from half an inch to an inch in thickness are much used for roofing. The slabs from these quarries are exported from Arbroath to Leith, London, and other places. Their strata form a broad continued zone from the south-west to the north-east side of the county. Lead has been discovered in small quantities, also some copper ore.

In the maritime district beds of red-sandstone, including rounded fragments as before, occur frequently to the south and east of the zone of sandstone flags. Veins of whin and porphyry intersect the sandstone, and form numerous hills. Near Montrose limestone is extensively wrought. The stratum lies deep, and is 25 feet in thickness. The stone is hard, white, and of a fine grain. Rock and clay marl are abundant in the district round Montrose. Numerous large boulder stones of Grampian granite lie scattered in the lower parts of the county, and shapeless detached masses several tons in weight, evidently of the same origin, are found in the Strathmore and

maritime districts. Very little coal is found. Peat, brushwood, broom, and furze are used for fuel by the poor.

Hydrography, Communications, &c.—Formerly there were few parishes in this county in which there was not a lake. The number is now much reduced. Some have been drained to gain arable land, but many more have been wholly or partially drained than the marl found in the beds of the lakes might be used as manure. The principal which remain are Loch Lee, in the Grampians, the source of the North Esk River, a mile in length, embosomed among groups of lofty mountains; Lentrathen Loch, a beautiful sheet of water at the base of the Grampian range, nearly circular, and a mile in diameter: it is inclosed by magnificent mountain scenery, and its banks present some rare botanical plants; and the Loch of Forfar. Eastward from Forfar is the Loch of Rescobie, of about a mile in length, and in connection with it is the Loch of Balgavies abounding in waterfowl. All these lakes abound in pike, perch, and eels, and the highland lakes also contain abundance of trout.

The following are the principal rivers, or, as they are provincially called, waters:—the *North Esk* (Gaelic *Uing Water*) issues from Loch Lee, which is fed by mountain streams from the west. Descending in a winding course to the east and south-east it receives almost innumerable mountain torrents until at Burn it becomes the northern boundary line of the county, when, after receiving the West Water and the Water of Cruick, it flows south-easterly through a fertile district, and falls into the sea about three miles north of Montrose. No part of this stream is navigable. The *South Esk* issues from the north-west summits of the Grampians, and having received numerous mountain streams descends into the valley of Strathmore, where it is further augmented by several brooks: continuing easterly by the town of Brechin it passes through the Basin of Montrose into the sea. On several of its falls are erected flax-spinning-mills, and other machinery. The *Teta* rises from numerous torrents among the Grampian summits on the north-west side of the county. Its course is south-west to near Ruthven, where it turns off to join the Tay, in Perthshire. Like the North Esk at Burn in escaping from the Grampians it has worn a chasm in the granite rocks more than a hundred feet perpendicular; and it forms cascades of the greatest beauty. One has a clear precipitous fall of at least 35 feet. The banks are very steep and richly wooded for several miles, and the scenery, at the junction of the Melgam Water is rendered highly romantic by the extensive ruins of the ancient fortified castle of Airlie. The Dean, Lunan, Dighty, and other smaller streams are not of sufficient magnitude to require particular notice.

The principal roads branch off from Dundee—1, to Arbroath, Montrose, and thence to Aberdeen; 2, to Forfar and Brechin; 3, to Cupar Angus and westward. These, and other lines of internal communication, are kept in good order. There are numerous stone and wooden bridges across the small streams. The principal one is over the North Esk, on the road from Montrose to KluCARDIUE. The railways in the county are the Scottish Midland Junction railway, which enters Forfarshire at Cupar Angus and joins the Aberdeen railway through the Arbroath and Forfar railway at Forfar; the Arbroath and Forfar railway is connected with the Aberdeen railway and also with the Dundee and Arbroath railway, a line which runs along the coast from Arbroath to Dundee, where it communicates with the Dundee and Perth railway by means of a line of rails carried along the Docks of Dundee. This line is used only for horse haulage. The Edinburgh and Northern line, from Dundee to Edinburgh through Fife, is connected with the Dundee and Arbroath line at Broughty Ferry. A communication between Dundee and the Scottish Midland Junction railway is effected by the Dundee and Newtyle railway, which joins the Midland line at Meikle in Strathmore.

Climate, Soil, Agriculture.—The great variety of elevation causes a corresponding variety of climate. On the highlands among the Grampians, where the snow lies on the summits during the greater part of the year, the air is generally cold and piercing. In the great inland valley, and in the sheltered parts of the maritime district, the climate is comparatively mild and genial. On the coast the easterly and south-west winds are occasionally very severe. The heaviest rains are from the east and south-east, and the deepest falls of snow from the north and north-east.

On the Grampians the soil is a thin stratum of moorish earth, through which the rock often juts from a subsoil of whitish clay. In the glens the alluvial soil is loose and friable, having a predominance of sand. In the lower parts of the county the primary soils are generally thin, mossy, and encumbered with loose stones. The primary soils on the sandstone rocks are chiefly tenacious clay, naturally unproductive, though when properly wrought producing excellent crops of wheat. In the valley of Strathmore the soils are all alluvial, but seldom fertile. Some parts of this valley are gravelly, others exhibit a soil of barren sand. Fine tracts of rich black and brown vegetable mould occur at the western extremity of the basin or lake of Montrose, and in some other places. On the whole, the Grampian district and the declivities of the Sidlaw Hills may be said to be generally covered with coarse clay and moor pasture; and all the lower lands have partly retentive subsoils, and partly alluvial soils. Along the coast, north of Montrose, between Arbroath and Dundee, around the latter place and in the inland district between

Brechin and Forfar, are downs of loose sand partially covered with stunted grass, and useful only as burrowing ground for rabbits. The principal bed of peat is called the Dilly Moas, on a ridge of the Sidlaw Hills. On the Grampians the best peat-beds occupy the hollows on the highest summits, which renders it difficult to obtain this fuel in the populous lowland districts.

About a century ago a great proportion of this county was in the hands of a few ancient families; but since the introduction of trade and manufactures landed property has changed hands frequently, and has become much more divided. Farms vary much in size, some consisting only of 20 or 30 acres, others of 500 acres. They are generally from 100 to 250 acres, but many are less than 100 acres. The county is well farmed, and the farms are generally held by enterprising tenants on improving leases. Almost every useful improvement has been adopted in the modes and implements of agriculture. Draining of various kinds is practised extensively. Inclosures are made chiefly by stone-dykes in the highlands, and by stone-dykes and quick-thorn hedges in the plains of Strathmore and towards the sea. Breeds of stock have been much improved, and several active agricultural societies exercise a great influence in the introduction of superior modes of culture and breeding. The chief crops are of oats, barley, and wheat, and the rotation of crops is varied according to different soils. Wheat is now successfully cultivated at all elevations less than 1000 feet above the level of the sea. Considerable quantities of wheat are annually exported to Loudon and other ports, and American, Danzig, and other foreign wheats are largely imported to mix with that produced in the county. Barley is extensively cultivated. Peas, beans, vetches, and turnips are grown. The Swedish turnip is much used for feeding milch-cows. Red and white clover are common, and are mixed with rye-grass. Potatoes are extensively cultivated and exported. In the neighbourhood of the towns there are market-gardens and nurseries for the supply of the inhabitants.

The ancient breed of horses in this county, commonly called Garrons, is small but hardy, and capable of enduring much fatigue. They are still numerous in the Grampian district. Their colour is gray; they feed chiefly on the stunted grass which they find on the sides of the mountains. The cattle were formerly diminutive, but they have been greatly improved. The original sheep of this county is the small white-faced breed. Some small flocks of these still remain in the Grampians, but generally they are much crossed with the black-faced breed of Tweeddale, which constitute a large proportion of the whole stock of the county. Superior and more delicate breeds are reared in the parks and lawns of the resident proprietors. Hogs are kept by every farmer and cottager. There are two principal breeds: one, a thin-backed, raw-boned animal, with long bristles, a tapering snout, and projecting tusks, appears to be the descendant of the ancient wild boar of the forest; the other is the small common Chinese breed, which is by far the most numerous. Poultry and pigeons are generally kept by every farmer. Bees are also commonly kept.

Game is plentiful; wild roebucks traverse the extensive plantations and glens of the Grampian and Sidlaw hills. They are small, timid, and untameable. In ancient times the red-deer or stag abounded among the Grampians, but is now very rarely seen. The large antlers of the moose-deer are found in the mosses, together with enormous horns of the ancient Caledonian cattle. The alpine hare, whose fur in winter is snowy white, is found in the highest parts of the Grampians. Otters and seals frequent the rocks on the eastern sea-coast. During the salmon-fishing season numbers of seals and porpoises frequent the mouths of the rivers, especially the estuary of the Tay, where they destroy large quantities of fish. Wild geese and swans visit the county in November. The Grampians are frequented by eagles, kites, and hawks.

Industry, &c.—The deep-sea fishing off the eastern coast is very productive, and large quantities of salmon and smaller fish are taken in the Frith of Tay, and at the mouths of several streams thence to the North Esk. The villages of Ferrydeu, Usan, and Auchmithie are extensively engaged in the sea-fishery, which employs the whole of their population: the villages of Broughty Ferry and Carnoustie also contain a considerable fisher population. In favourable seasons large supplies of salmon are sent to the Loudon market packed in boxes of pounded ice. The most abundant kinds of fish are salmon, cod, herrings, haddocks, turbot, soles, sprats, lobsters, and crabs. The lochs and principal streams supply abundance of pike, perch, trout, and eels.

This county is so favourably situated for commerce that a ready market for its agricultural and manufacturing produce can always be relied upon, and its exportation of linen fabrics, cattle, corn, and salmon is very extensive. The coarser kinds of linen fabrics, as huck-abacks, canvass, sheeting, sackings, &c., are manufactured in this county to a large extent. Finer bleached linens for shirting and sheeting, and coloured thread, are also extensively manufactured. A great deal of the weaving is performed by the hand-loom, but the spinning is wholly done by steam and water power. Of the whole steam-power employed in the linen manufacture in Scotland, Forfarshire possesses about three-fourths. It thus forms the great seat of the linen manufacture of the country.

Divisions, Towns, &c.—There are in Forfarshire 58 parishes.

According to the 'Census of Religious Worship and Education,' taken in 1851, it appears that, so far as could be ascertained, there were then in the county 187 places of worship, of which 67 belonged to the Established Church, 51 to the Free Church, 23 to the United Presbyterian Church, 10 to the Independents, 8 to Episcopalians, 6 to Original Seceders, 5 to Roman Catholics, 5 to Methodists, 4 to Baptists, and 8 to other bodies. Of 170 of these places of worship, the number of sittings is stated at 92,931. The number of day schools returned was 303, namely—181 public schools, with 15,961 scholars, and 122 private schools, with 6159 scholars. Of evening schools for adults, 35 were stated to be attended by 673 males and 657 females. The number of Sabbath schools returned was 230, with 18,153 scholars, of which 84 schools belonged to the Free Church, 63 to the Established Church, and 29 to the United Presbyterian Church. Returns were obtained from 5 literary and scientific institutions in the county, of which 4 had an aggregate membership of 970. With these institutions were connected 5 libraries, containing an aggregate of 5311 volumes.

The county town is FORFAR. The most important town in the county is however DUNDEE, and after it is MONTROSE. ARBROATH anciently Aberbrothwick, BRECHIN, ALYTH, and CUPAR ANGUS, are described under their respective titles. The place next in importance is Kirriemuir, an ancient burgh of regality and market-town in the parish of Kirriemuir, situated 5 miles N.W. from Forfar, on the edge of a mountain glen overlooking the valley of Strathmore: the population of the town in 1851 was 3518. It consists of several irregular but handsome streets, and has an elegant church, an episcopal chapel, a town-hall, and other public buildings. Its market is well attended. Coarse canvass and various kinds of brown linen are manufactured. Many plash-mills, in addition to corn-mills, have been established on a rivulet called the Gaire, which flows near the town. There are several schools, two of which are well endowed; libraries, reading-rooms, and a savings bank.

In addition to the villages of Auchmithie, Broughty Ferry, Carnoustie, East and West Haven, Ferryden, and Uuan, referred to in our notice of the coast-line, the following may be mentioned:—*Edzell*, population of the parish 1034, has a handsome reading-room, and there are spinning-mills in the parish. *Frickheim*, in Kirrden parish, population of the parish 1763, is mostly inhabited by weavers. It has sprung up from the extension of the linen manufacture. The railway to Aberdeen here leaves the Arbroath and Forfar line. *Glamis*, about 12 miles N. from Dundee, population of the parish 2152, consists of an old and a new town. Osnaburghs and sheetings are largely manufactured. There are a library, two friendly societies, and two schools, besides the parochial school. Glamis Castle is noticed below. *Letham*, in Dunnichen parish, population of the parish 1834, is inhabited chiefly by weavers. The village is finely situated on an elevation commanding an extensive prospect. *Newtyle*, population of the parish 1141. The village has risen from the construction of the Dundee and Newtyle railway, which here joins the Scottish Midland line.

History, Antiquities, &c.—The history of this county is treated of under the different towns, there being no events of general importance of which it was the theatre. Brechin is believed to have been a seat of the Culdees. It was afterwards an important bishopric. [BRECHIN.] The Abbey of Aberbrothwick, or ARBROATH, the Priory of Restennet, [FORFAR], and the monastic church of Dundee have been elsewhere noticed. Many smaller monasteries stood in various other parts of the county.

Of the ancient vitrified forts, which occur at regular intervals along the heights of the northern parts of Scotland, there are three principal remains in this county. The fort called the Castle of Finhaven, is on Finhaven Hill, 1500 feet above the surrounding country. It is quadrangular, 476 feet by 83 feet and 125 feet, and constructed on the edge of an elevated and precipitous rock. The remains of another of these forts is on the summit of a mount in Drumsturdy Muir. The third is on the top of the Law of Dundee, a remarkably high conical hill on the north of Dundee town. Of hill forts there are many in this county. The most important is on the summit of a steep hill in the parish of Meunuir, north-west of Brechin; the area within the walls, which are of great thickness, is oval, 134 yards by 60 yards. On a hill to the east, separated from this only by a deep ravine, is another of these forts, formed entirely of earth. Two miles south-west of Glamis, on the Sidlaw Hills, is one of a semicircular form, with a wall 335 feet in circuit, 27 feet high, and 30 feet in thickness. On the hills of Dumbarrow, Caerbuddo, and several others, the remains of similar forts are to be traced. There are remains of several extensive Roman camps, which seem to have formed a chain of military positions in a line from the south-west to the north-east sides of the county, including the towns of Forfar and Brechin. The encampment at Harefaulds, north of Caerbuddo, traces of the inner and outer works of which remain, might contain 60,000 men. Similar camps occur in the parishes of Forfar, Brechin, and Oathlaw. Many curious specimens of early antiquities have been discovered in this county, as stone coffins and urns in sepulchral cairns, battle-axes and other weapons, sculptured stones, coins, &c. On some of the uncultivated Grampian moors are vestiges of the ancient Caledonian dwellings, consisting of large slab stones placed together in a circle without cement.

Of baronial castles there are several magnificent specimens. At Broughty, near Dundee, are the remains of a noble castle, consisting of several massive towers and walls, standing on a rock which juts into the water of the Frith. On the shore of Lunau Bay are a square tower and other remains of Red Castle, so called from being built of red sandstone. Edzel Castle, the Castle of Invermark, Kelly Castle, the Castle of Affleck, and several others, present similar remains. There are numerous vestiges of less important baronial structures. Glamis Castle, the residence of the earls of Strathmore, is a venerable castellated mansion, about a mile from the village of that name. In the time of Charles II. it was a large quadrangular mass of buildings, with lofty towers and gateways opening beneath them into two spacious courts. Much of the original structure remains, and great additions were made of wings and turrets under the direction of Inigo Jones. Brechin Castle stood a siege by Edward III. in 1303, during three weeks. Many additions to the old buildings were made by the Earl of Panmure in 1711. Panmure Hall, 10 miles north-east from Dundee, is a large ancient edifice, much dilapidated from neglect. It is surrounded by an extensive park and stately plantations. The modern mansions in the county are numerous; some of them are distinguished for architectural magnificence and picturesque beauty of situation.

In 1852 the county possessed two savings banks at Dundee and Montrose; the total amount owing to depositors on 20th November 1852 was 82,340*l.* 9*s.* 3*d.*

FORLÌ, a legation or province and town in the Papal States. The province is bounded N. by the province of Ravenna, W. by Tuscany, S. by the province of Urbino-e-Pesaro, and E. by the Adriatic. Its area is 632 square miles, and in 1843 its population was 202,315, distributed in 8 towns, 32 terre having a communal council, and 404 villages or hamlets. The province is watered by the Rabbi, Ronco, Savio, the Rubicone (the sacred boundary of the Romai Republic), Marecchia, and other rivers which have their sources in the Tuscan Apennines, and empty themselves into the Adriatic. The Marecchia at one part of its course separates the province from the republic of Sammarino. The country is in part hilly, being occupied by offsets from the Apennine chain, which extend towards the Adriatic; and partly flat, especially towards the north, where there are some extensive marshes near the coast. Excepting in the marshy district the climate is healthier than that of the neighbouring flats of Ravenna. In summer the heat is very great, and the rivers frequently are dried up. The principal productions are maize, hemp, hay, and wine. Among the other products are barley, a little oats, rye, and rice; beans, pulse of various kinds, flax, fruits, silk, madder, cummin, saffron, anise seed, &c. Only a small number of cattle are reared. Honey is very abundant. A large quantity of fish is taken along the coast. There are manufactories of silk, linen, and oil-cloth, and refineries of sulphur, which is found of good quality in the province.

Towns, &c.—The town of Forlì, the ancient *Forum Livii*, is said to have been founded after the victory of the Metaurus, and to have taken its name from M. Livius Salinator, one of the two consuls who defeated Hasdrubal. It stands on the ancient Æmilian Way in a fertile plain between the Montone and the Ronco, 44° 13' 25" N. lat., 10° 1' 37" E. long. The present town is well built: the streets are lined with arcades. It has a fine square, a cathedral, several handsome palaces and churches adorned with paintings by Carlo Maratti, Guido, Guercino, Cignani, and other masters, a lyceum, and fine public walks. Forlì is a bishop's see and the residence of the legate. The population is about 16,000. The town is surrounded by old walls which are little worth as a defence. The French took Forlì in 1797. The citadel, famous for its noble defence by Catherine Sforza in the 15th century, is now a prison.

Cesena, a pretty town in a fertile country near the foot of the Apennines, watered by the river Savio, over which there is a fine bridge, has a handsome town-house on the market-place, which is adorned by a colossal statue of Pius VII., who, as well as his predecessor, Pius VI. was a native of this town. Cesena is a bishop's see, has a college for clerical students, and a valuable public library, collected by the Malatesti, who were lords of the Romagna in the middle ages. The library is rich in manuscripts, among which is a curious work of St. Isidorus, bishop of Seville in the 7th century, entitled 'Etymologia,' which is a kind of cyclopædia. In the Capuchin church is a fine painting by Guercino. Cesena is an ancient place. It has given title to a bishop since A.D. 92, when its first bishop, St. Philemon, was appointed under Pope Clement I. On a high hill about a mile from the town is the handsome church of Santa Maria del Monte, reputed to be a work of Bramante, and near it is a Benedictine monastery in which Pius VII. took the vows. To the south of Cesena are valuable sulphur mines, the produce of which is sent to Bologna and Rimini. These mines are said to yield about 4,000,000 lbs. of sulphur yearly. The population of Cesena is about 9500.

Between Forlì and Cesena is the little town of *Fortimpopoli*, the ancient *Forum Popilii*, with a collegiate church, a castle built by Cesare Borgia, and about 4200 inhabitants. Near Fortimpopoli is *Bertinoro*, famous for its wines: population of the commune 4800.

Savignano, on the road from Cesena to Rimini, near the site of the ancient Comptum, has some good buildings and about 4000

inhabitants. Near Savignano flows a small river, called Rugone, which is believed by some to be the ancient *Rubicon*: it joins, below Savignano, another stream, called Pisatello, after which the united stream enters the Adriatic. A Roman bridge is thrown across the Fiumicino, or Savignano, a small stream which joins the other two, and with them enters the Adriatic at Due Bocche. Near the Fiumicino on a pillar, is an apocryphal inscription (which has been mistaken by some for an ancient one), containing the *senatus consultum*, which forbade, under the heaviest penalties, any commander to cross the Rubicon in arms. The true Rubicon however, which still is called by the peasantry *Il Rubicone*, is nearer Rimini, and flows direct into the Adriatic from the Apennines, where it rises, between Monte Taffi and Sarcina. It flows nearly parallel to the Marecchia, and has a length of about 25 miles.

Rimini, the Roman *Ariminum*, a considerable town with about 10,000 inhabitants within the walls, is situated near the mouth of the Marecchia, which is crossed by a handsome marble bridge of five arches and 220 feet long, begun under Augustus and finished under Tiberius, and still in very good preservation. The sea having receded all along this coast, the ancient harbour of Ariminum is now choked up with sand; but there is a small harbour at the mouth of the Marecchia, which admits vessels of light burden, and by which Rimini carries on some trade by sea. At the eastern entrance of the town, on the road to Rome, there is a fine triumphal arch, raised in honour of Augustus for repairing the roads, and now called *Porta Romana*. This arch is larger than any of the arches in Rome; it is built of white marble in a simple massive style, with two Corinthian pillars on each side. Between the arch and the pillars are medallions of Neptune and Venus on one side, Jupiter and Minerva on the other. There are also some remains of an amphitheatre, besides inscriptions and other marbles found on the site of the ancient harbour. Rimini, with its Roman monuments, appears a fit entrance into the limits of the classical part of Italy. Among the modern buildings is the noble cathedral church of San Francesco, which Leon Battista Alberti raised by order of the Malatesti, lords of Rimini, and which is adorned with the mausolea of that distinguished family of the middle ages, many beautiful bas-reliefs, and other works of art. The fortress was also erected by the Malatesti, but it is now disfigured by unsightly barracks. The city of Rimini has several other fine churches besides the cathedral. In the market-place is a stone in the form of a pedestal from which, as stated in the inscription, Julius Cæsar harangued his army after crossing the Rubicon. A handsome fountain in the square before the town-hall (*palazzo publico*) is surmounted by a bronze statue of Pope Paul V. Rimini has a good library of 30,000 volumes, founded in 1617 by the advocate Alessandro Gambalunga, and which contains manuscripts, chiefly concerning the history of the town, a museum of antiquities, and a college. The supposed site of the house in which resided Francesca da Rimini celebrated in the '*Divina Commedia*' of Dante, is still shown. Numerous fishing craft frequent the harbour of Rimini; and there is a good trade in silk manufactures, fish, glass, and earthenware. Sulphuric and nitric acid, and verdigris are also among the industrial products of Rimini. Ariminum, originally an Umbrian city, was important as a military position and for its situation at the junction of the Flaminian and Æmilian Ways. In all their great wars in Italy the Romans, who colonised it early, made a point of occupying Ariminum with their troops. It was also a flourishing commercial town. The soldiers of the triumvirs were settled in the lands of Ariminum, and the city itself was embellished by Augustus. Under the Eastern empire it was one of the cities of the Pentapolis which was governed by the exarchs till the invasion of the Lombards. A great ecclesiastical council was held in Ariminum in A.D. 359. Rimini stands in 44° 4' N. lat., 12° 34' 43" E. long.

Sarrina, at the foot of the Apennines, south-west of Rimini, an ancient city of the Umbri, and the birthplace of Plautus, is now a decayed town surrounded by walls, with only 3000 inhabitants.

Cesenatico, on the sea-coast, north-east of Cesena, midway between Ravenna and Rimini, in a plain abounding with wheat, Indian corn, and hemp, has 4000 inhabitants.

The province of Forlì is one of the finest and richest in the Papal States, and the road from Rimini to Bologna is one of the pleasantest in Italy, leading through a succession of neat, considerable, and cheerful-looking towns, in a fine well-cultivated country, with a landscape heightened by a constant view of the Apennines of Tuscany.

FORMENTERA. [BALEARIC ISLANDS.]

FORMOSA. [TAI-WAN.]

FORMOSO, RIO. [BENIN RIVER.]

FORRES, Elginshire, Scotland, a royal and parliamentary burgh and market-town in the parish of Forres, is situated in 57° 37' N. lat., 3° 36' W. long., distant 12 miles W. from Elgin, and about 160 miles N. from Edinburgh. The town is situated on a declivity, sloping northward to the estuary of the river Findhorn, and is about 3 miles S. from Findhorn, the port of Forres. The population of the parliamentary burgh in 1851 was 3468, that of the municipal burgh 3339. It is governed by a provost, 3 bailies, and 13 councillors; and unites with Inverness, Nairn, and Fortrose, in returning one member to the Imperial Parliament.

The town consists of one chief street, forming a part of the highway between Elgin and Inverness, with several smaller streets branching off from it. The houses are mostly modern and well built. The town is well supplied with water. Besides the parish church, which is a plain building, there are a Free church and chapels for Episcopalian and United Presbyterians. The jail is a substantial building. Corn-markets are held weekly. The most important of the schools in Forres is that endowed by the late Jonathan Anderson of Glasgow, which occupies a neat and commodious building. The town dates as a royal burgh from the time of William the Lion. Its castle, now in ruins, was the occasional residence of some of the early kings of Scotland.

A tower in memory of Nelson has been erected on the top of the Cluny Hill near the burgh, from which a most extensive view is to be had. In the immediate vicinity of Forres is the celebrated ancient pillar called Sweno's Stone, considered one of the finest memorials of the Danes that exist in Scotland. It is a hard sandstone of the country, and well preserved, showing on its four sides numerous figures of men and horses, in marching and in battle array. A handsome suspension-bridge crosses the river Findhorn here.

(*New Statistical Account of Scotland; Communication from Forres.*)

FORTH, a river in Scotland, which rises in the mountains separating Loch Katrine from Loch Lomond. It is formed by two branches which after a course of 16 and 12 miles respectively, unite at Aberfoyle; this united river receives the name of Forth. The first of these streams, which rises on the north side of Benlomond, is called the Duchray; the other is formed by the junction of three rivulets, which proceed from three small but very beautiful highland lakes, called Loch Con, Loch Dow, or Dhu, and Loch Ard. At Aberfoyle the Forth issuing from the mountains, enters a wide valley, surrounded by hills of moderate elevation. From the north it is joined by three tributaries of some note—the Teith, which drains the mountainous country north of Loch Katrine; the Allan, which runs through Strathmore; and the Devon, which brings down the water collected in the greater portion of the Ochil Hills. No considerable river joins it from the south. Where it unites with the Devon the river, which higher up is only of moderate size, begins to widen, and gradually assumes the appearance of a gulf. This gulf, called the Frith of Forth, increases in width in its progress to the east, and joins the North Sea between Fifeness and the rocks of Tantallon Castle, where it is about 15 miles across. The source of the Forth is not much more than 30 miles from the mouth of the Devon in a straight line, but as it flows with many sinuosities, its real course exceeds twice that length. The length of the Frith from west to east rather exceeds 50 miles. The Forth is not a rapid river below Aberfoyle, and may be navigated by vessels of 70 tons as far as Stirling; but it is not much navigated above Alloa, which may be regarded as its principal port. On the southern shore of the Frith, near the mouth of the river Carron at Grangemouth, commences the canal which unites the Forth and the Clyde; and contiguous to it on the east, between Grangemouth and Queensferry, is good and secure anchoring ground in the bay. The countries along the westerly and southern shores of the Frith of Forth comprehend the most fertile and best cultivated parts of Scotland.

FORTROSE, Ross-shire, Scotland, a royal burgh, market-town, and port, in the parish of Rosemarkie, is situated in 57° 34' N. lat., 4° 8' W. long., on the western side of the Moray Frith, nearly opposite Fort George, from which place there is a regular ferry, the Frith being here about 2½ miles broad. It is about 10 miles N. from Inverness by land, and about 7 miles by water. The population of the burgh in 1851 was 1148. The town is governed by a provost and 14 councillors; and conjointly with Inverness, Forres, and Nairn, returns one member to the Imperial Parliament. Fortrose is described by historians as having during the 16th century been the seat of art, science, and divinity for that corner of the kingdom, and possessed of considerable trade. Rosemarkie, a village about a mile eastward, was constituted a royal burgh by Alexander II.; and Chanoury, the episcopal see of the bishop of Ross, was united with it by a charter of James II. in 1444, under the name of Fortross.

The town is finely situated. The harbour has a depth of 14 feet water at high tide. There are some remains of the ancient cathedral, one part of which is used as a prison and court-house. Besides the parish church, which is at Rosemarkie, there are in Fortrose a Scottish episcopal chapel, and chapels for Free Church and Baptist congregations. At Fortrose is an extensive distillery. A public academy was founded in 1701.

(*New Statistical Account of Scotland; G. and P. Anderson, Guide to the Highlands and Islands of Scotland.*)

FORTUNATE ISLANDS. [CANARIES.]

FOSSANO. [CONI.]

FOTHERINGAY. [NORTHAMPTONSHIRE.]

FOUGÈRES. [ILLE-ET-VILAINE.]

FOULSHAM. [NORFOLK.]

FOWEY. [CORNWALL.]

FOX ISLANDS. [ALEUTIAN ISLANDS.]

FOXFORD. [MAYO.]

FOYLE, LOUGH, an inlet of the sea on the north coast of Ireland, between the counties of Derry and Donegal, extends from south-west

to north-east about 16 miles. Its entrance, which, between Magilligan Point on the east, and Greencastle on the west, is a mile across, lies about the point $55^{\circ} 12' N.$ lat., $6^{\circ} 58' W.$ long. The lough is widest at its southern extremity, where it has a breadth of about 10 miles. At low-water a great part of the area of the lough is left bare; the west side alone is navigable; the eastern side presents a flat strand, fringed by a sandy beach, which stretches round Magilligan Point to the mouth of the Bann; on this eastern shore the base of the Ordnance survey of Ireland, 53,200 feet in length, was measured. Northward from the entrance of the lough, and between it and Innishowen Head, is a shoal called the Tuns, over which the sea sometimes breaks with great violence. At the harbour of Greencastle is a pier, which affords shelter for small coasting vessels. Vessels of 600 tons ascend Lough Foyle, and its principal tributary, the river Foyle, as far as the city of LONDONDERRY. The railway from Londonderry to Coleraine runs along the east side of Lough Foyle.

FRAMLINGHAM, Suffolk, a market town in the parish of Framlingham, is situated on the left bank of the river Ore, in $52^{\circ} 13' N.$ lat., $1^{\circ} 19' E.$ long., distant 14 miles N.E. by N. from Ipswich, and 87 miles N.E. from London. The population of the parish of Framlingham in 1851 was 2450. The living is a rectory, with the curacy of Saxted annexed, in the archdeaconry of Suffolk and diocese of Norwich.

The Castle of Framlingham was during the middle ages an important fortress. Of the castle the outer walls are still standing; its form approaches to a circle, and it is strengthened at intervals by 13 square towers. The walls are 44 feet high, and 8 feet thick; the towers are 53 feet high. The principal gateway is on the south side, opposite the town. There are some remains of the outworks, and a double ditch. It was to this castle that Queen Mary retired on the death of her brother, Edward VI., till the succession to the throne was settled. The town of Framlingham consists of a spacious market-place, and a few streets branching off from it, which are irregularly laid out. The town contains many neat and substantial houses, and is lighted with gas. The church, a commodious and stately edifice, is situated in the centre of the town. It is built of black flint, and consists of a nave, chancel, and aisles, with a tower 96 feet in height, in which are eight bells. The roof of the nave is of curiously carved oak. The Independents, Wesleyan and Primitive Methodists, and Unitarians have places of worship. There are Free schools, British schools, several almshouses, a parochial library, an agricultural society, and a savings bank. Petty sessions for Framlingham division and a county court are held. The market is held on Saturday for corn and provisions, and there are two yearly fairs.

(White, Suffolk; Communication from Framlingham.)

FRANCE, the most westerly of the kingdoms of continental Europe, with the exception of the Spanish peninsula. Its form is very compact, and resembles an irregular polygon, the general contour and dimensions of which, with the latitude and longitude of the extreme points, are given in the subjoined diagram. From this it appears that it is comprehended between $42^{\circ} 25'$ and $51^{\circ} 5' N.$ lat., $8^{\circ} 17' E.$ and $4^{\circ} 46' W.$ long.; that the aggregate length of the circumscribing lines of the polygon is 2157 miles, of which 1183 miles are coast (929 miles on the ocean and 259 miles on the Mediterranean) and 969 miles of land frontier. If all the less important windings of the coast, or of the frontier, were followed these numbers would be of course materially increased. The longest diagonal is from south-east to north-west (E to M on the diagram), about 660 miles; and the next longest from north-east to south-west (B to I), about 615 miles.

The area of France, including the island of Corsica, amounts to 204,953 square miles, or to 201,576 square miles exclusive of that island. According to official census returns, the population (including Corsica) in 1840 numbered 34,133,726, and 35,781,623 in 1851. Excluding Corsica the numbers become respectively 33,917,263 and 35,545,377. The census of 1851 gives the average number of persons on each square mile of France, including Corsica, to be 174,534, or without Corsica 176,336. Paris, the capital, is the second European city in respect of population, being inferior only to London. The population of Paris is 1,053,262. The observatory of Paris, from which the French measure longitudes, is situated in $43^{\circ} 50' 13'' N.$ lat., $2^{\circ} 20' 22\frac{1}{2}'' E.$ long. (from Greenwich). The summit of the lantern of the Pantheon, from which point the French engineers have calculated the geographical position of Paris, is in $43^{\circ} 50' 49'' N.$ lat., $2^{\circ} 20' 57\frac{1}{2}'' E.$ long.

Coast, Islands, and Frontier.—That part of the coast which faces the north-north-west (M to A in the diagram, 481 miles) lies along the channel which separates England from the Continent, to which the French gives the name of La-Manche. The coast is generally irregular in its outline. It forms two large bays, separated from each other by the peninsula of Cotentin, of which Cape La-Hague (O in diagram) forms the north-west extremity. Near the middle of the northern coast of Cotentin, and a little east of La-Hague, is the strongly-fortified naval harbour of Cherbourg. Of the bays just named the more easterly is divided into two subordinate bays by the rounded projection of the coast about Fécamp and St.-Valery. One of these subordinate bays receives the Somme, the other the Seine, at the mouth of which the town and port of Le-Havre (P in diagram)

are situated. This part of the coast is mostly low and shelving, lined in many parts with sand-hills, which prevent the tide from overflowing the lands that are below the level of the sea. About Cape Gris-Nez, or Grinez, there are cliffs, and west of the mouth of the Seine the shore is skirted by rocks. The peninsula of Cotentin has, besides Cape La-Hague, another considerable promontory to the north-east—Cape Barfleur. The coast of this peninsula is commonly shelving, interrupted however by groups of rocks. The bay of St.-Malo, the second of those formed by the coast of La-Manche, is a deep bay, the sides of which, facing respectively the west-by-south and the north, form an acute angle with each other in the neighbourhood of Mont St.-Michel, in Cancale Bay. The coasts of the Bay of St.-Malo are rocky and much broken, especially to the west of Mont St.-Michel, by a multitude of small inlets with their intervening promontories. No important river falls into this bay, but many of the inlets are the estuaries of small streams. The remainder of the coast of the ocean faces the south-west and west, and extends 443 miles. At its north-western extremity (L to M in diagram) it is broken by a deep inlet, the subdivisions of which form the roadstead and naval harbour of Brest and the Bay of Douarnenez. The coast here is lofty and precipitous. From the Bec-du-Raz (L) the coast runs facing the south-west, and continues for some distance to present the same general features as the adjacent parts of the Channel coast—a broken outline, frequent inlets with intervening promontories, and a shelving coast interspersed with rocks. As it proceeds south-eastward from the mouth of the Loire (which falls into the ocean mid-way between K and L) it becomes less broken in its configuration, low, and lined with salt-marshes. This character it retains to the mouth of the Gironde (a little to the southward of the point K), from which the coast runs in a nearly straight line, broken only by one small inlet, the bay or basin of Arcachon, and skirted by sandy downs to the foot of the Pyrenees (at I), near which it assumes a rocky and precipitous character. This coast forms one side of that bay known familiarly to us as the Bay of Biscay, but designated by the French the Bay of Gascogne.

The coast of the Mediterranean forms by its sinuities the two great bays of Lyon and Genoa, which are separated from each other by the projection of the coast about Toulon (F in diagram). The Gulf of Lyon, or, as perhaps it ought to be called, Lions (the name, it is said, being derived not from the city of Lyon, but from the violence of the tempests by which it was supposed to be agitated—"It is called the Lion's Sea because it is ever rough, tempestuous, and destructive"—) is characterised by the étangs, lagoons, or shore-lakes by which its coast is skirted; it receives the waters of the Rhône. This part of the coast is commonly low, but towards the foot of the Pyrenees (H in diagram) and near Toulon (F) it assumes a bolder character. The coast of the Bay or Gulf of Genoa, of which only a part belongs to France, is elevated and broken. It has many smaller inlets, as the harbour of Toulon, the road of Hières and that of Bormes, and the bays of Grimaud, Fréjus, Napoule, and Juan.

Along the coast are several islands. In the Manche, or English Channel, are Guernsey or Guernsey, Jersey, Aurigny or Alderney, and Gers or Sark, which, though belonging to France by geographical position, and connected with it by the language and origin of their population, are politically united to the British Isles, and form indeed the sole relic of the once extensive Norman or other French possessions of the early English kings; the islands of Brebat, les Sept Îles (the Seven Islands), and the Isle of Bas, are of minor importance. At the western extremity of France are the Isles of Ouessant or Ushant, and along the remainder of the coast of the ocean are the Isles of Gléuan, Groaix or Groix, Belle-Île, Noirmoutier, Ile-Diou or d'Yeu, Ré, Oléron, and others of less importance. In the Mediterranean are the islands of Hières and Corse, or Corsica. All these are noticed either under their respective heads, or in the articles on the departments to which they belong.

The land frontier of France is, for the most part, formed by great natural barriers. On the southern or Spanish frontier are the Pyrenees, along the crests of which from the Mediterranean to the ocean (H to I in diagram) the line of demarcation runs. On the south-east the frontier towards the continental dominions of the king of Sardinia (from between C and D to E in diagram) is formed by the lofty ridges of the Alps; and that towards the Swiss Confederation (from C towards D) by the lower but still considerable heights of the Jura. On the east the broad stream of the Rhine (B to C) separates France from the dominions of the grand duke of Baden. The remaining part of the frontier (A to B) is purely conventional, and has varied materially, as the fortune of war has enabled the French to extend or obliged them to contract their dominions. The eodeminious states are Bavaria, Prussia, and Belgium.

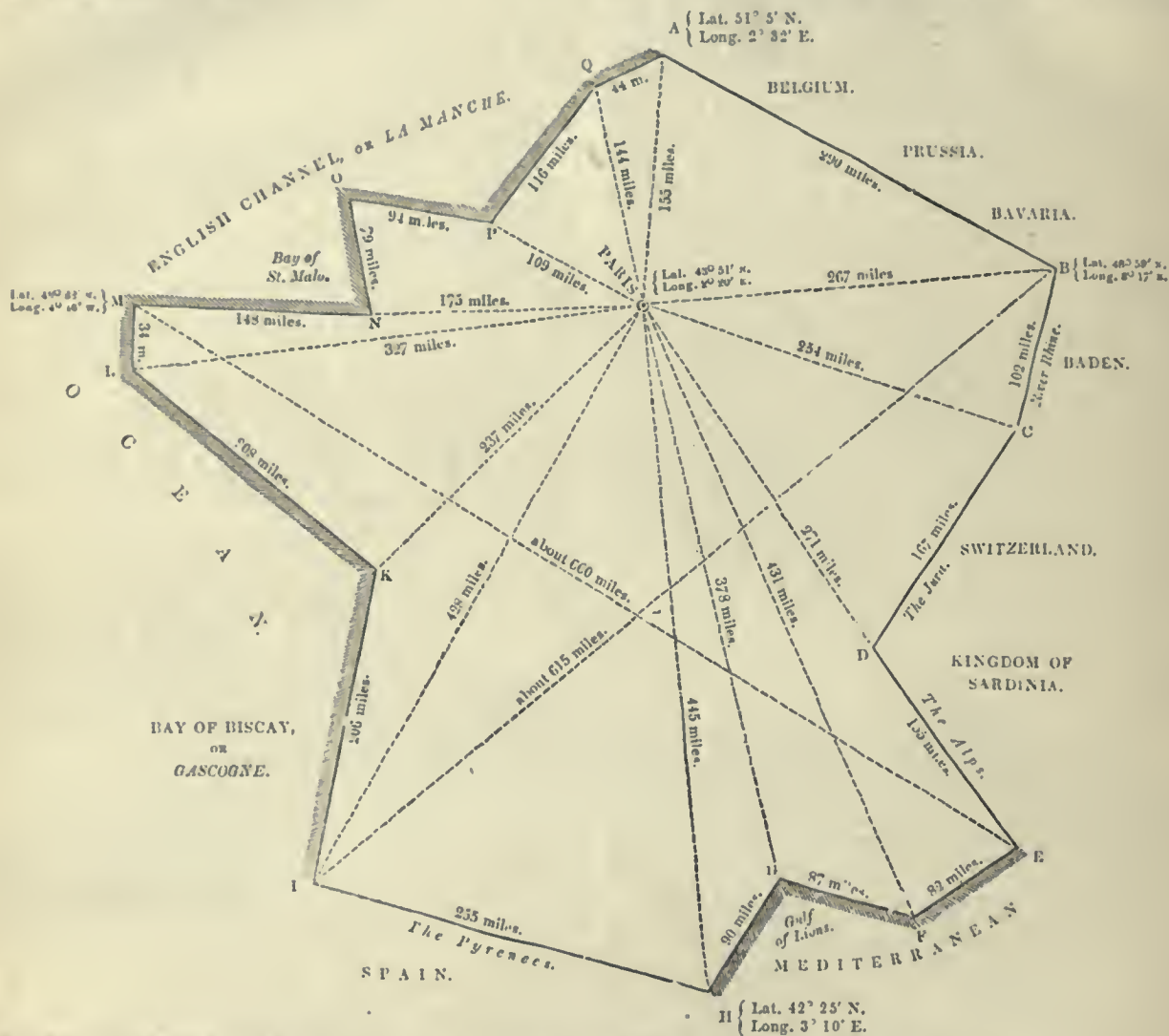
Surface, Geological Character, Hydrography.—The loftiest mountains in France are those on the Sardinian and Spanish frontiers, the Alps and Pyrenees. Of the Alps the loftiest summits lie beyond the boundary of France, in Savoy or Switzerland; but some of those on or within the line of the frontier are of great elevation: as Mont Olan, in the valley of Godemard, on the upper waters of the Drac, 13,120 feet; the peak of the Pelvoux-de-Vallouise, south-west

* "Mare Leonis nuncupatur quod semper asperum, fluctuosum, et crudelic."—William of Nangis, a monk of the 13th century, quoted by Malte Brun.

of Briançon, about 14,000 feet; a peak west of the village of Maurin 13,107 feet; Mout Trois Ellions, 12,737 feet; and others. Of the Pyrenees the highest point is in Spain, but other points which nearly equal it are in France, several of the peaks of the Vignemale group, at the head of the valley of Caunteretz, reaching to nearly 11,000 feet; Mont d'Or, in the Jura, has a height of 4920 feet, and Le-Gros-Taureau, near Pontarlier, 4351. [ALPS; PYRÉNÉES; JURA MOUNTAINS; ALPES, HAUTES; DOUBS.]

feet high; Le-Brensoir near the source of the Meurthe, 4049 feet; and Le-Ballon-d'Alsace, 4124 feet. [VOSGES.]

From the heights of Langres a range of high lands (including the Faucilles Mountains, the Argonne hills, and heights of the Ardeune), extends in a north-west direction to the coast of La-Manche, about Cape Griz-Nez, separating the streams which belong to the basins of the Rhine and the Escant from those which belong to the river systems of central France. A branch from these heights divides the basins of



A, the frontier towards Belgium meets the coast.
 B, the frontier towards Bavaria meets the Rhine.
 C, the frontier towards Switzerland meets the Rhine.
 D, junctions of the Rhône and the Gulers.
 E, mouth of the Var.

F, Cape Noire-Dame, on the coast near Toulon.
 G, mouth of the canal of Algues Mortes.
 H, the frontier towards Spain meets the Mediterranean.
 I, the same frontier meets the ocean.
 K, mouth of the Sèvre of Niort.

L, Bee-du-Raz.
 M, on the coast north-west of Brest.
 N, Mont St.-Michel, in Cancale Bay.
 O, Cape La-Hague.
 P, Le-Havre, at the mouth of the Seine.
 Q, Cape Gris-Nez, between Calais and Boulogne.

The Cévennes are separated from the Pyrenees by a valley, through which the great canal of Languedoc runs; they extend in a north-north-east direction, and after sending off branches to join the group of primitive and basaltic mountains of Auvergne, turn to the northward and skirt the valley of the Rhône and the Saône; in this part of their course they are known (according to the districts through which they pass) as the heights of Vivarais, Forez, Lyonnais, Beaujolais or Charollais. Mont Mezen, the culminating point of the Cévennes, is 5800 feet high. The mountains of Auvergne surpass the Cévennes in height. The Pic-de-Saney, the highest of the Monts-Dores or Mont d'Or Mountains, is 6196 feet high, and the Plomb-de-Cantal is 6095 feet above the level of the sea. There are several other 'Puys,' or volcanic summits, of inferior height among the Auvergne Mountains. [ARDÈCHE; AUVERGNE; CANTAL; CÉVENNES; PUY-DE-DÔME.]

The comparatively humble slopes of the Côte-d'Or of Bourgogne (Burgundy) may be regarded as a continuation of the Charollais heights, and serve with the heights of Langres to connect the Cévennes with the Vosges, whose branches extend to the south-east so as to unite with the Jura, and whose wild and wooded steep form the western boundary of the valley of the Rhine. The principal summits of the Vosges are Le-Ballon-de-Soultz, or Guebwiller, 4695

the Seine and the Somme. From the Charollais heights a range of hills of gradually diminishing elevation extends to the neighbourhood of the Loire, separates that river from the streams which flow into the Seine, and connects the mountain system of central France with the heights of Beauce, which are a prolongation of the Menez Mountains of Bretagne. These run from the headlands near Brest in an easterly direction. A range which proceeds in a north-west direction from the central group of the Auvergne Mountains toward the mouth of the Loire, and is called the heights of Gatine, separates the basin of the Loire from that of the Garonne; and another range, which branches off from the Pyrenees near the Pie-du-Midi, and runs north-west till it subsides in the Landes near Bordeaux, separates the basins of the Garonne and the Adour.

The Cévennes, the heights of Langres, the Faucilles Mountains, and the uplands of the Ardenne, separate the western or oceanic slope from the eastern; the latter is subdivided by the Faucilles Mountains, and by a branch of the Vosges which unites with the Jura, into the north-eastern or Rhenish slope, and the south-eastern or Mediterranean slope.

The western slope includes the basins of the Adour, the Garonne, the Charente, the Loire, the Vilaine, the Orne, the Seine, the Somme,

and a number of others of less importance. The basin of the Adour is bounded by the Pyrenees and the range which extends from these to the mouth of the Garonne: the length of this river is about 200 miles. The basin of the Garonne is bounded by the heights last mentioned, by the Pyrenees, the Cévennes, the mountain group of Auvergne, the heights of Gâtine, and a small branch from these which divides the basins of the Garonne and Charente. The general course of the Garonne is to the north-west; that of its principal tributaries which flow from the Cévennes and the Auvergnat group (as the Dordogne, the Lot, and the Tarn) is to the west-by-south; that of the Pyrenean tributaries, which are smaller, to the north-by-west; the Dordogne is the last tributary of importance which it receives in its course to the ocean; and their joint estuary is called the Gironde, a name which like that of our own Humber applies to the estuary alone. The length of the Garonne is about 360 miles; its basin is inferior in extent to that of the Loire, but exceeds that of the Seine. [GARONNE.] The basin of the Charente is bounded by the heights of Gâtine or their branches, and the length of the river is 200 miles. [CHARENTE; CHARENTE-INFÉRIEURE.]

The basin of the Loire, the largest river that wholly belongs to France, is bounded by the heights of Gâtine, the Auvergne Mountains, the Cévennes in which it rises, the Charollais heights, the hills which connect these with the plateaux of Orléans and Beauce, and the offsets of the Menez Mountains. The direction of a line drawn from the source of the Loire to its mouth would be north-west, and it would lie nearly along the ridge of the heights of Gâtine, but from the great bend which the river makes, its course is first north and then west; its principal tributary, the Allier, has a northward course nearly parallel to and not far distant from the upper part of the Loire: the Cher, the Indre, and the Vienne, have a north-west course. These all join the Loire on the left bank; the most important tributary which it receives on the right bank is the Mayenne. The length of the Loire is above 600 miles; that of the Allier is about 250 miles; that of the Cher, 215 miles; that of the Vienne, 207 miles; and that of the Creuse, an affluent of the Vienne, 166 miles.

The basin of the Vilaine is bounded on the north by the Menez Mountains, and on the east by a branch of the same mountains which separates it from the basin of the Loire; the length of the Vilaine is about 124 miles. The basin of the Orne is bounded by the Menez Mountains, or their branches; the length of this river is above 82 miles.

The basin of the Seine is bounded by the heights of Beauce and those of Langres, with their connecting range; and by the hills which branch off from the heights of Langres toward the Channel. The length of the Seine is 480 miles; that of its principal tributary, the Marne, is 268 miles. The basin of the Somme is bounded by the heights that run from those of Langres to the coast of the Channel; the length of the river is about 110 miles.

The north-eastern or Rhenish slope comprehends parts of the basins of the Escaut or Schelde, the Meuse, the Moselle, and the Rhine. Only a comparatively small part of the course of each of these rivers belongs to France; no part of the course of the Rhine is entirely included in that country, of which it only forms the boundary.

The Mediterranean slope comprehends the basins of the Aude and the Rhône, and of one or two other streams, which are too small to require notice. The basin of the Aude comprises part of the slopes of the eastern Pyrenees, the southern slopes of the Montagnes Noires, the most southern part of the Cévennes, and the great depression between these two mountain systems. The Aude is about 100 miles in length; its course is at first northward as far as Carcassonne, and then eastward to the Gulf of Lyon, which it enters below Narbonne. The basin of the Rhône is bounded by the Cévennes, the heights of Charollais, the Côte-d'Or, the heights of Langres, the Vosges, the Jura, and the Alps: its greatest extension is from north to south, and it is comprehended partly in Switzerland and the Sardinian states, but chiefly in France. The course of the Rhône in Savoy, Switzerland, and part of France is nearly west; at the great city of Lyon it bends to the southward: its whole course is about 525 miles; that of the Saône, its principal affluent, is 304 miles; that of the Isère and the Durance, two other affluents, about 190 and 220 miles respectively; and that of the Doubs, a feeder of the Saône, about 210 miles.

Geological Character.—The sands, clays, limestones of later formation, marls, and sandstones, which constitute the strata above the chalk (including the alluvial and diluvial beds), occupy several extensive districts. 1. The largest of these districts is in the south-west of France; it comprises the countries that lie between the foot of the Pyrenees from the ocean to the Mediterranean, and a line drawn from the mouth of the Gironde below Blaye to the shore-lake of Sigéan, near Narbonne. It comprehends nearly the whole of the valleys of the Adour and the Garonne, with the intervening 'laudes,' or heaths; the lower part of the valleys of the Dordogne, the Lot, the Tarn, the Ariège, and the other streams which join the Garonne on the right bank; the whole of the valleys of those streams which join it on the left bank, except such as have their sources in the higher part of the Pyrenees; and a narrow belt from the valley of the Garonne to the Mediterranean, along the coast of which beds of this formation, probably alluvial, extend to the border of Spain. 2. The next district in

extent is what is designated 'the Paris basin,' extending for several miles in every direction round that city, bounded by an irregular line drawn from the neighbourhood of Gisors, on the north-west of Paris, to La Fère on the Oise; thence to the neighbourhood of Epernay on the Marne; from Epernay to the Seine, at the junction of the Loing, and along the valley through which the canals of the Loing and of Briare have been cut, to the valley of the Loire, along which valley these formations extend upwards to Cosne, and downwards below Blois: from this last point they are bounded by a line drawn northward to the neighbourhood of Gisors. 3. The third district extends along the valley of the Saône on the east side of that river from the junction of the Doubs to Lyon, and then along the east side of the valley of the Rhône to below the junction of the Drôme: this long strip has a breadth of several miles on the east side of the Saône and Rhône, but does not extend to the west of these rivers, except between the junction of the Doubs and the Canal du Centre with the Saône. 4. The next district comprehends the alluvial formation of the delta of the Rhône, and the lower part of the valley of that river, and of its tributaries the Aigues, Ouvèze, and Durance. 5, 6, 7. There are three other narrow portions occupied by these later formations, extending along that part of the valley of the Rhine which belongs to France; along the valley of the Allier, from near Brioude to below Moulins; and along the valley of the Loire from near Feurs to the junction of the Avron. 8. That small part of France which lies to the north of a line drawn from Calais by St.-Omer to the Belgian frontier, is occupied by those formations which extend into Belgium, and occupy a large part of that country.

The chalk-formation skirts the district occupied by the super-cretaceous deposits on the north-east side alone, extending from the coast between the Gironde and the Charente to the river Lot, southward of which it is not found: the breadth of this belt of chalk is tolerably uniform—about 25 or 30 miles. The Paris basin is surrounded on almost every side by the chalk, which forms a circular belt of very variable breadth, from 24 or 25 miles (between Reims and Rethel), to more than 100 miles (between Clermont-sur-Oise and the coast near Calais): the continuity of this belt is only interrupted by the extension of the super-cretaceous strata up the valley of the Loire toward Cosne. The chalk formation occupies the coast of the channel from Cape Grinez to the west of the mouth of the Seine, except near Boulogne, where it is interrupted for a short interval by the strata of the formations below it, which here rise to the surface.

The group, which comprehends the oolitic and other formations from the chalk-marl (which underlies the chalk) to the lias, surrounds the chalk belt of the Paris basin on the west, south, and east sides. On the west side the district occupied by these formations is narrow, except just on the coast of the Channel, along which it extends from near the mouth of the Seine to the peninsula of Cotentin. On the south-west it becomes wider, and extends to the chalk belt which bounds on the north-east the first super-cretaceous district above defined: along this belt it extends, forming an outer belt from the ocean, to the river Lot; and from the Lot it extends towards the south-east, skirting the super-cretaceous district. Along the south side of the chalk of the Paris basin, these underlying strata have a variable breadth: on the south-east and east they extend, interrupted only by the more ancient strata of the Vosges, to the valley of the Rhine and the upper waters of the Saône, and across that river to the Jura, the heights of which consist of these formations. From the Saône and the Jura these formations extend southward to the Mediterranean, bounding the third super-cretaceous district on the east, and then, extending westward across the Rhône, inclose the fourth super-cretaceous district between their branches. A belt of these strata extends, with one or two interruptions, along the foot of the Pyrenees, on the south of the super-cretaceous district, from the ocean nearly to the Mediterranean.

The new red-sandstone or red marl, and the magnesian limestone which underlies it, formations which in England spread over a great extent of country, occupy only a small part of France: they are found in the Vosges, the Cévennes, and one or two other places.

The coal-measures, the slates, and the granites and other primitive rocks occupy several extensive districts. 1. The whole of Bretagne and the adjacent part of Normandie, and the other conterminous provinces in the west. 2. The mountain district of Auvergne, part of the Cévennes, the hills of Vivarais, Forez, and the Charollais, and a large extent of country west of Auvergne, as far as the banks of the Vienne and the sources of the Charente: this region is intersected by the sixth and seventh super-cretaceous districts; and here the oldest and the latest formations may be found in juxtaposition, without the intervention of any of the intermediate strata. 3. The Alps. 4. The Pyrenees, in which calcareous formations abound, and organic remains are found at a vast height. 5. The Vosges, where they are not occupied by the new red-sandstone or magnesian limestone, by which formations the primitive district is nearly surrounded. 6. A considerable insulated district in the southern part of the Cévennes, between districts 2 and 4. 7. A small tract in the northern part of France, between the Sambre and the Meuse.

The great primitive district of central France (the second in our enumeration) abounds in extinct volcanoes, and in the rocks, such as trachytes, basalt, lava, &c., which have arisen from them. Several of

the 'Puys' of Auvergne consist of the craters of these volcanoes resting on the granite, which is the prevailing rock of the district, and on other crystalline rocks. [AUVERGNE.] The Cévennes and the valley of the Rhône (even in those parts occupied by the strata between the chalk and the primitive rocks) exhibit traces of volcanic agency, as likewise the isolated primitive district between Auvergne and the Pyrenees. Others are observed in the ancient Provence, near the sources of the Argens, and one or two in the north-east of France.

The mineral riches of France are considerable. Granite, sienite, porphyry, variolites, and serpentine are quarried in the department of Hautes-Alpes, in Corsica, and in some of the departments of the north-west; lava in Auvergne, and marble of great variety and beauty in the Pyrenees, in Corsica, and in various other parts. Vast slate quarries are wrought at the foot of the Pyrenees and in the department of Maine-et-Loire, as well as in the Ardenne district near the Belgian frontier; and excellent limestone quarries for building abound. Lithographic stone, clay for bricks and tiles, kaolin, or porcelain clay, pipeclay, gypsum, chalk, pavingstone, and millstones are found at various points. Of the metals—iron, manganese, antimony, and lead there is a great abundance. The mining or manufacturing of iron enters into the industrial occupation of the inhabitants of no less than 52 of the departments of France. Silver, gold, and platina are found in the department of Isère. Some coppermines are wrought, the most important in the neighbourhood of Lyon. Gold is found in the soil brought down by some of the streams which rise in the Pyrenees and the Cévennes, by the Rhône, and by the Rhine.

No less than 46 coalfields are explored in 34 departments, the greater number yielding chiefly good bituminous coal, some lignite; and others anthracite. Sulphate of iron, alum, asphalt, bitumen, and petroleum are also found. The most productive coal-districts are near Valenciennes in the north, and St-Etienne in the south of France. Much coal is dug in the departments of Saône-et-Loire, Aveyron, and Gard. The department of Meurthe contains brine-springs and rock-salt; the rock-salt field of Vic, discovered in 1819, has an extent of not less than 30 square leagues. There are in France 240 mineral springs, of which more than 150 are collected in baths for the reception of patients. Of hot springs the most famous are those of Barèges, Cauterets, Bagnères-de-Bigorre, Eaux-Chaudes, among the Pyrenees; those of Aix and Digne at the foot of the Alps; those of Vichy, Chaudes-Aigues, and Neris in the Cévennes region; those of Bourbonne-les-Bains in the Vosges; and those of St-Amand in the Ardennes. The hottest of the springs in France is that of Chaudes-Aigues in the Auvergne region, department of Cantal, the temperature of which is not less than 190° Fahr. The administration of the several hot and cold springs is under the inspection of physicians appointed by the government.

Climate.—The northern and western parts of France are drier than the southern and eastern. In the department of Isère, the mean annual quantity of rain is 32 inches; in the mountainous part of Haut-Rhin 30 inches (French measure); in the plains of the same department more than 23 inches; and in the department of Rhône (Lyon) above 29 inches; while in the department of Ille-et-Vilaine it is only 21 inches; in those of Orne and Eure, between 20 and 21 inches; and at Paris, in the department of Seine, between 19 and 20 inches. Of the difference and the variations of temperature in different parts of France, a judgment may be formed from the following table:—

Place.	Average Temperature.	
	Summer.	Winter.
Clermont in Auvergne	64·40°	34·52°
Dunkerque	64·64°	38·66°
Paris	64·58°	38·66°
St-Malo	66·02°	42·08°
Nantes	63·54°	40·46°
Bordeaux	70·88°	42·08°
Marseille	72·50°	45·50°
Montpellier	75·74°	44·06°
Toulon	75·02°	48·38°
Nîmes	73·40°	48·28°
Agen	83·70°	36·50°

Agriculture.—France has always been considered one of the most agricultural countries in Europe; but until very recent times the system of husbandry has remained almost unimproved for centuries, and even yet the changes for the better are far from being general. The want of ready communication by roads and canals in times gone by, prevented any great exertions being made to increase the produce of the soil, beyond the immediate demand of the neighbourhood. One part of France often had a deficiency of corn approaching to a famine, when plenty reigned in another. The price of grain in the south of France varied so much from that in the north, that there was a difference in the duty paid on the importation of foreign corn in different ports. Arthur Young, in his tour through France in 1787, was surprised to find the state of cultivation so low in every province, except those bordering on the Netherlands. His observations have been acknowledged to be just by the French agricultural writers themselves, and a certain spirit of improvement has been

excited by his remarks. Since the revolution in 1793, every encouragement to agriculture has been held out by the government; but notwithstanding the numerous excellent publications which have been produced, and the establishment of agricultural schools, and model farms, the progress towards a more general adoption of improved methods of cultivation is slow. In most parts of France the farmer resides in or near the village, and the land which he cultivates is dispersed over a considerable extent of distant unclosed fields. He loses much time in going and returning, and he has a great way to carry the little manure which he makes. Artificial grasses are cultivated to a considerable extent, especially in the southern provinces, but not sufficiently to maintain as much stock as would produce the requisite quantity of manure; and the very small demand for animal food, at a distance from the large towns, gives little encouragement to the feeding and fattening of cattle, except where natural meadows abound, which is chiefly along the course of the rivers, and in the provinces of Normandie and Brittany.

The great division of property which arises from the law of equal distribution among all the children at the death of the parent, tends much to lessen the size of farms. In a country where there are domestic manufactures to give employment to the labourer or peasant, when his plot of ground does not require all his time, a more careful cultivation is the consequence of small occupations. Habits of constant employment excite industry; and the ingenuity is sharpened by the practices of the mechanical arts. But in an ignorant peasant leisure produces idleness; and if a mere sufficiency of food can be procured from a small possession, for which no rent is paid, it is seldom that a great surplus is raised.

The proportion of the population of France which is occupied in agriculture, is much greater than in those countries which are chiefly engaged in manufactures and commerce. There are in France very few large proprietors of land, who, like the English country gentlemen, spend a great part of their time in the country, and take an interest in agricultural pursuits. There are not many speculative farmers who have capital, and are possessed of a superior practical, as well as a theoretical knowledge of agriculture, and who make it a means of acquiring wealth. Few expensive instruments can consequently ever be tried, or brought into general use, nor any extensive improvements undertaken. All these causes concur in preventing a rapid improvement in French agriculture.

The northern part of France, on the confines of Belgium, and in the immediate neighbourhood of Paris, are the best cultivated. In most other parts, except where maize is cultivated, the old system of two or three crops of corn and a fallow is generally adopted. If the fallows were well worked and clean, the crops would be better; but this is by no means the case. The variegated appearance of the corn in May, from the abundant blossoms of weeds, proves that they have not been extirpated. When they appear likely to choke the corn they are sometimes weeded out; but as the method of sowing the seed in rows or drills with an instrument is unknown or undervalued, there is no possibility of hoeing the intervals between the growing plants, and all the weeding must be effected with the hand.

Arthur Young divides the whole of France into four distinct climates as regards agriculture. In the northern the vine does not thrive so as to make good wine. This district lies north-west of a line which passes north of Paris, and is parallel to the line of the French coast on the Channel. The next division is that in which wine is made, but maize or Indian corn does not thrive. The boundary of this district to the south is nearly parallel to the line first mentioned, and passing through Nancy in Lorraine divides France nearly into two equal parts. The third division is that in which both maize and wine abound, but where the climate is still too severe for the olive or the white mulberry; this is bounded on the south-east by the Jura and a line passing to the north of Lyon. The last division consists of the southern provinces from the last-mentioned line to the Pyrenees, where the olive and the mulberry abound as well as maize and the vine. In this part the year often yields two harvests of corn, but the soil is not well adapted to permanent pastures except at a considerable elevation above the sea.

The finest climate is in the third division, where corn, maize, and wine are good and abundant. The heat is not so oppressive as in the southern provinces, and there is the greatest scope for agricultural operations. The most fertile lands are towards the north and east. The Beauvais immediately south of Paris is also a fine wheat country, and so are Touraine, Alsace, and the plain of the Garonne. The worst soils are in Champagne, Sologne, and along the coast of the Bay of Biscay. The cultivation of rice has been in recent years introduced into the Isle of Cumargue, in the department of Bouches-du-Rhône, with we believe tolerable success.

The Comte du Gasparin, in his 'Cours d'Agriculture,' divides France into three zones, which he names regions of cereals, vines, and olives, according to the most important product of each. The cereal region comprises all the north of France to a line drawn from the mouth of the Loire to the Rhine, a little north of Paris. To the south of this is the region of vines, which extends to a line drawn nearly parallel to the former through the town of Orange. The remainder of France forms the zone of the olive.

According to a recent return of the whole surface of France (131,069,931 acres), including Corsica, there were 13,808,171 acres under wheat; 11,715 acres were sown with spelt; 2,251,439 with mixed corn (maslin); 6,369,379 with rye; 2,936,453 with barley; 7,416,297 with oats; and 1,561,372 with maize: and the products were in bushels—191,284,670 of wheat; 374,348 of spelt; 32,530,982 of mixed corn; 76,482,175 of rye; 45,819,020 of barley; 134,474,408 of oats; and 20,955,726 of maize. This gives a total cereal produce of 501,921,629 bushels, and the average corn produce for the whole of France at only 14·6 bushels per acre. The average yield of wheat per acre for the whole of France is hardly 14 bushels. In England no strictly accurate statement of the average can be given for want of agricultural statistics; it is however all but certain that the average yield of wheat per acre for all England is about 28 bushels.

Since the above return was published the corn-produce has increased considerably in favourable years, and France has since the abolition of the English corn-laws exported corn largely. The increased facilities for transit by means of railroads has no doubt also, among other causes, operated as a stimulant to agricultural industry. The cultivation of the vine, of the artificial grasses, of pulse, and above all of potatoes, has greatly increased within the present century. Beet-root is extensively grown for the manufacture of sugar. The esculent roots and table-vegetables are common. Flax, hemp, and oleaginous seeds are cultivated extensively. Hops, tobacco, and madder are grown. The olive and the mulberry are also extensively cultivated: of the latter there are between fifteen and twenty millions of trees planted in the departments that lie in the basins of the Rhône, the Garonne, and the Upper Loire. The departments of Gard, Drôme, Vaucluse, and Ardèche are the most distinguished for their mulberry plantations, and for the produce of silk. The industry of the peasants in some of the more sterile districts is very great: in the Cévennes and in Auvergne they build walls to retain the alluvial soil brought down by the mountain streams, and cultivate the sides of the mountains by means of the terraces thus formed.

In the south the soil of the hills is stony, which suits the vine, but is unfit for the growth of corn; between the hills there are valleys which abound in every kind of produce, and where there is a command of water to irrigate the fields the most productive water-meadows may be made. The French bean is extensively cultivated for its seeds, which when boiled are said to contain more nutritive matter than any other seed in the same compass. The arable land and pastures are not intermixed as in England, but generally lie wide of each other. The horses and cows are fed chiefly on clover, lucern, sainfoin, and other artificial grasses, of which no greater extent is raised than is absolutely necessary. More attention is now given however to the feeding of cattle for the markets, and cattle-shows are coming into vogue in Paris and the chief provincial towns.

The agricultural implements in use in France are in most instances few, and not of an improved kind. Each province has its own fashion in making ploughs, most of which are rude and do their work imperfectly. At cattle-shows there are, as in England, exhibitions of improved agricultural instruments, which will thus come immediately under the notice of farmers, and no doubt cause a general amelioration in this respect. The corn is reaped with the sickle. In the northern parts the barns are very large, to hold the whole crop of the farm; for stacking corn, or even hay, is almost unknown. In the south the corn is thrashed out in the field, and put into granaries immediately after harvest. The size of farms in France is much less than the average of English farms.

Model farms and establishments for the diffusion of agricultural knowledge have been established in various parts of France. At Grignon, near Paris, is an agricultural establishment supported by the government; and in several of the provinces similar establishments have been founded of late years. They cannot fail gradually to introduce improved methods of cultivation.

The vine is one of the most important objects of cultivation in France. In 10 of the 86 departments it is not grown for the purpose of making wine, or at all upon a considerable scale: in the other departments it is more or less an object of attention. The amount of land occupied by this culture is about 5,000,000 acres. The average yearly produce of the French vineyards is estimated at 42,000,000 hectolitres (about 924,000,000 gallons), of which about one-seventh is converted into brandy. The departments drained by the Garonne, the Charente, and the Adour; those lying along the Rhône and the Saône; the basin of the Loire; the region of the Moselle; valleys of the Seine, the Yonne, and the Marne, produce wines of the finest growth and the greatest variety. The banks of the Charente produce no wines of reputation, but the grapes grown on them yield the best distilled spirits in the world, Cognac brandy. The department of Gers also is famous for a mild and delicate brandy called Armagnac. The wines of Languedoc, Provence, and Roussillon are remarkable for fullness of body. The average annual produce of the vineyards is estimated at 720,000,000 of francs, or about 28,500,000*l.* In the departments of the north and north-west, which do not produce the vine, elder forms the usual drink of the poorer classes. The actual quantity of wine produced during the last few years is as follows:—

1848 . 1,135,687,344 gals.	1850 . 983,786,166 gals.	1852 . 626,133,222 gals.
1849 . 782,214,686 „	1851 . 867,443,053 „	1853 . 498,557,774 „

Of the fruit-trees which are cultivated on a considerable scale in France, the mulberry is one of the most important: it is reared for the nourishment of the silk-worm. This branch of culture has much increased of late years. The olive, the orange, the lemon, the pistachio, are grown along the shore of the Mediterranean: the plum when dried furnishes a considerable article of export. The apple and the pear are grown in Normandie and Bretagne for making cider and perry, which furnish the peasantry with their common drink: the apple is also exported in a dried state. The chestnut furnishes the peasantry of the more barren districts with an important article of food, and the walnut is grown for its oil.

Of forest-trees France has the oak, the cork-tree, which is cultivated in the departments of the south-west, the elm, the ash, the beech, the birch, the poplar (white and black), the larch, the juniper, the wild cherry, and the pine. The hox, the cornel, the maple, and others furnish the cabinet-maker with ornamental wood. The eastern part of central France is the best wooded district, and the former province of Bretagne is the most destitute of wood. As in France wood is almost universally used for fuel, it is an object of considerable attention; and it is calculated that about one-seventh of the whole country is occupied as woodland. The principal forests are on the various mountain ranges; except on the Alps and Pyrenees, which are rather bare of wood. The ranges of the Jura and the Vosges furnish good deals; and the forests of the maritime pine enable the peasant of the Landes between the Garonne and the Adour to turn that otherwise barren tract to some account: these forests yield charcoal, rosin, and pitch.

Animals.—The domesticated animals of France are, for the most part, similar to those of Great Britain.

Horses in France are by no means equal either in number or in excellence to what they might be under a better system of agriculture. A considerable number are imported annually, although the richness of the soil should rather enable the French to export. Considerable pains have been taken by the establishment of government studs and by other means to improve and increase the breed. The horses of the provinces of Normandie, Picardy, and Alsace are well adapted for war, posting, and agriculture; those of the departments of Orne and Calvados are excellent for the saddle or the carriage; those of the departments of Maine-et-Loire and Sarthe, and the departments adjacent to the mountain chains of the Alps and the Jura, are adapted for light cavalry; the horses of Limousin, Auvergne, Guienne, Gascony, and Béarn are in the highest repute for the combination of lightness and strength. The horses of Bretagne are a rough hardy breed.

The ass, though probably superior to that of Great Britain, is, except in the department of Vienne, far inferior to the ass of Spain or Italy. Mules are bred in many parts, and some of them are exported. Oxen in France are much employed in the labour of the field instead of horses: they are of many different breeds and sizes: among the smallest are those of Bretagne, and the mountain cattle of the Alps, Pyrenees, and Cévennes. Oxen are frequently bred in one part of the country and fattened in another part. The rich plains of Lower Normandie afford pasturage to great numbers of oxen which are brought thither from various quarters, especially from the hilly districts of central France where they are bred. The sheep are of various breeds, some of which have been so far improved as to furnish a wool equal to that of Saxony. The number of sheep in proportion to the population is by no means equal in France to what it is in England; they are most numerous in the former provinces of Berry, Bourbonnais, Normandie, Picardie, Île-de-France, Orléanais, Rouergue in Guienne, and part of Languedoc. The sheep of Poitou and Picardie, and of some parts of Normandie, the Île-de-France, and Guienne, are the fattest; those of Bourgogne and the Ardennes are most esteemed for their mutton: but the best mutton on the whole is fed on the sandy districts near the sea. The sheep of Roussillon approach nearest to merinoes in the fineness of the fleece. Some goats are bred in the mountainous districts: the Tibet goat, the hair of which is woven into Cashmere shawls, has been naturalised in the Pyrenees. The swine are of three races: the original breed, which existed in the time of the Celts, and which is still found in Normandie, especially in the valley of Auge; the Poitevin breed, and that of Perigord: from the crossing of these breeds a number of varieties have resulted. The trade in salt provisions forms an important branch of industry in the department of Basses-Pyrénées (where the Bayonne hams are cured), and in the frontier departments of the east and north-east.

The rearing of poultry is in most parts much attended to. By a peculiar mode of treatment the livers of the duck and goose are rendered very large and very delicate. The duck-liver pies of Toulouse and the goose-liver pies of Strasbourg are known to epicures.

Of wild animals the black and brown bears have their haunts in the French Pyrenees; the lynx is found, though very rarely, in the recesses of the higher Alps; and the wolf and the wild boar are common in the forests. The chamois and the wild goat are found on the summits of the Alps and the Pyrenees. The stag, the roebuck, the hare, and the rabbit are common. The marmot inhabits the Alps and the Pyrenees, and the ermine and the hamster are found in the neighbourhood of the Vosges.

The red squirrel, the alpine squirrel, and a species of the flying squirrel are also found in the forests of the Vosges and in the woods on the banks of the Moselle or on the slopes of the higher Alps. The smaller beasts of prey and vermin, such as the fox, the badger, the hedgehog, the polecat, the weasel, the rat (of which the original black species has been, as in England, exterminated and replaced by the invasion of a larger kind), the mouse, the mole, and the field-mouse are sufficiently numerous in their respective haunts. Among the amphibious animals are the otter and the water-rat.

Of birds the chief songsters and the birds of passage are much the same as in England, with the addition of the hoopoe and one or two others.

The flamingo is found on the shores of the Mediterranean. Of game, there are the red partridge, common in the departments of the centre and west, and the gray partridge, common in the south; the quail, the ortolan, the beccafico, the pheasant, the woodcock (abundant in Picardie), and the snipe in Auvergne. The plover, lapwing, wild duck, and others are taken in great numbers on the coasts of the Channel and the Ocean, especially in the department of Charente-Inférieure.

Of other animals we mention only a few: the gecko of Mauritania is found on the Mediterranean coast. There are several species of vipers and of harmless snakes: the latter are in some places regarded as fit for food. Frogs are numerous and of many species: one, the prickly frog, is of a great size and hideous form.

The tortoise, the salamander, the scorpion, and a kind of spider closely resembling the tarantula of Italy, are found. The honey bee (which is reared in great numbers) and the silk-worm are the most valuable insects; the Spanish fly is sufficiently numerous to furnish an article of exportation. Leeches are found in many parts.

Fisheries.—The coasts abound in fish of various kinds, the taking of which occupies a number of hands: the herring, the mackerel, and especially the sardine or pilehard, are the chief objects of attention to the fishermen of the coasts of the Channel and the Atlantic: the tunny and the anchovy, to the fishermen of the Mediterranean. The oyster, crab, lobster, and other *Crustacea* are in great demand. The best are found on the coast of the departments of Manche, Calvados, and Charente-Inférieure.

Divisions Civil, Ecclesiastical, Judicial, and Military.—Before the revolution of 1789 France was divided into 33 governments or provinces of very unequal extent. It is now divided into 86 departments, which are named from the principal rivers that drain them, from the mountains within their limits, from their situation, or from some remarkable locality. The *arrondissements* are always named from the chief town in each. These 86 departments are divided into 363 *arrondissements*, 2847 cantons, and 36,835 communes, which, except that they have a corporate form of government, do not generally differ much in extent from parishes. Each department is administered by a prefect; each *arrondissement* by a sub-prefect; and each commune by a mayor (*maire*). In each department there are also several officers connected with the arrangement and receipt of taxes, an engineer of roads and bridges, a military sub-intendant, and a company of gendarmes. In the chief towns of departments courts of assize are held; each *arrondissement* has its tribunal of first instance, and each canton a judge of the peace. The more important departmental capitals are seats of high courts of justice and appeal, and head-quarters of Military Divisions.

The prefect is appointed by the central power and is invested with the civil, financial, military, and in some respects judicial administration. He regulates the articles of the departmental budget, which he discusses with the council-general. He presides at the conscriptions for recruiting the army, and overlooks the whole financial administration, including direct and indirect taxes, public domains, woods and forests, &c. Assisted by his council he forms a tribunal of first instance. In all these capacities he communicates with the ministers of the crown. Once a year a council-general of department, composed of as many members as the department has cantons (but not exceeding 30), assembles to examine the accounts and proposals of the prefect, to assign to each *arrondissement* the proper share of taxation, to determine upon the demands for reduction made by councils of *arrondissement*, &c., and to settle the amount of taxes for departmental purposes. The council of *arrondissement*, which consists of not less than 9 members, has similar duties in conjunction with the sub-prefect, only in a narrower sphere; it addresses its opinion on the state and requirements of the *arrondissement* to the prefect, who decides. Finally the communal council (composed of 10 to 36 members according to the importance of the commune), considers with the mayor the special interests of the commune, its octroi duties, roads, communal property, receipts, and local expenses. The members of the departmental councils are chosen by the electors of the department; those of the municipal councils by the communal electors.

The old governments or provinces of France, as well as all their more important subdivisions, are noticed in this work. The departments and all the large towns are also described.

In the following table the area and population of each of the 86 departments is given as returned in the official census of 1851:—

Department.	Area in Sq. Miles.	Population in 1851.
Ain	2,242.0	372,039
Aisne	2,843.0	558,980
Allier	2,821.8	336,758
Alpes (Basses-)	2,670.0	152,070
Alpes (Hautes-)	2,130.8	132,038
Ardèche	2,133.8	280,505
Ardennes	2,021.0	831,296
Ariège	1,889.0	287,435
Aube	2,317.2	265,247
Aude	2,436.7	289,747
Aveyron	3,384.4	304,183
Bouches-du-Rhône	1,934.9	423,089
Calvados	2,131.8	491,210
Cantal	1,999.2	253,329
Charente	2,295.6	382,912
Charente-Inférieure	2,626.0	469,992
Cher	2,770.8	300,261
Corrèze	2,205.0	320,864
Corse	3,377.5	236,251
Côte-d'Or	3,382.7	400,297
Côtes-du-Nord	2,659.0	632,013
Creuse	2,150.0	287,075
Dordogne	3,536.8	505,789
Doubs	2,010.0	296,670
Drôme	2,519.2	326,846
Eure	2,689.4	415,777
Eure-et-Loir	2,208.7	294,802
Finistère	2,593.8	617,710
Gard	2,250.5	408,163
Garonne (Haute-)	2,431.0	480,794
Gers	2,424.9	307,479
Gironde	3,760.0	614,387
Hérault	2,303.1	389,266
Ille-et-Vilaine	2,597.5	574,618
Indre	2,629.7	271,938
Indre-et-Loire	2,360.6	315,641
Isère	3,201.1	603,497
Jura	1,928.3	313,290
Landes	3,599.1	302,190
Loir-et-Cher	2,452.2	261,892
Loire	1,841.8	472,588
Loire (Haute-)	1,916.0	304,615
Loire-Inférieure	2,654.3	535,664
Loiret	2,612.1	341,029
Lot	2,012.8	296,224
Lot-et-Garonne	2,067.8	341,345
Lozère	1,094.9	144,705
Maine-et-Loire	2,751.3	515,452
Manche	2,291.0	600,882
Marne	3,158.6	373,302
Marne (Haute-)	2,401.8	268,398
Mayenne	1,993.1	374,566
Meurthe	2,353.0	450,423
Meuse	2,405.9	328,657
Morbihan	2,626.8	478,172
Moselle	2,073.3	459,684
Nièvre	2,632.0	327,161
Nord	2,103.5	1,158,285
Oise	2,260.5	403,637
Orne	2,355.6	439,884
Pas-de-Calais	2,550.5	602,004
Puy-de-Dôme	3,072.8	596,897
Pyrénées (Basses-)	2,943.3	446,007
Pyrénées (Hautes-)	1,748.4	250,934
Pyrénées-Orientales	1,591.4	181,955
Rhin (Bas-)	1,756.0	587,434
Rhin (Haut-)	1,585.8	494,147
Rhône	1,077.4	574,745
Saône (Haute-)	2,064.5	347,469
Saône-et-Loire	3,306.7	534,720
Sarthe	2,396.2	473,071
Selle	183.6	1,422,005
Seine-et-Marne	2,281.7	345,076
Seine-et-Oise	2,163.5	471,882
Seine-Inférieure	2,332.7	702,030
Sevres (Deux-)	2,310.5	323,613
Somme	2,378.4	570,641
Tarn	2,218.5	363,073
Tarn-et-Garonne	1,436.6	237,553
Var	2,790.0	357,067
Vaucluse	1,372.4	284,618
Vendée	2,500.6	333,734
Vienne	2,602.4	317,305
Vienne (Haute-)	2,130.3	310,379
Vosges	2,347.6	427,409
Yonne	2,608.0	381,133
Total	204,052.0	33,781,628

The ecclesiastical division of France before 1789 was into 18 archbishoprics, exclusive of Avignon. Of these one (Cambray) was reduced to a simple bishopric, but has since been restored to its former higher

dignity; four were united with others, namely, Arles and Embrun with Aix, Vienne with Lyon, and Narbonne with Tonlonse: the addition of Avignon makes the present number 15. Of the dioceses 49 were suppressed at the first revolution; the remainder, with the new sees of Nancy, St.-Dié, and Moulins, make up the present 65 bishoprics.

In general throughout France a bishop's see is co-extensive with the department in which the town is from which he takes his title. In a few cases two departments are united under one bishop, and in four instances (the archdiocese of Reims; the archdiocese of Aix, Arles, and Embrun; and the bishoprics of Châlons and Marseille) the see is less than the department. In the articles on the episcopal towns and the departments of France, the extent of each see is expressly stated.

We here merely name the dioceses, which, with the arch-see given in italics, are comprised in each of the 15 ecclesiastical provinces of France:—

1. *Paris*.—Chartres, Meaux, Orléans, Blois, and Versailles.
2. *Cambrai*.—Arras.
3. *Lyon-et-Vienne*.—Autun, Langres, Dijon, St.-Claude, and Grenoble.
4. *Rouen*.—Bayeux, Évreux, Séez, and Contances.
5. *Sens-et-Auxerre*.—Troyes, Nevers, and Moulins.
6. *Reims*.—Soissons, Châlons, Beauvais, and Amiens.
7. *Tours*.—Le-Mans, Angers, Reuues, Nantes, Quimper, Vanues, and St.-Brienc.
8. *Bourges*.—Clermont, Limoges, Le-Puy, Tulle, and St.-Flour.
9. *Alby*.—Rodez, Cahors, Mende, and Perpignan.
10. *Bordeaux*.—Agen, Angoulême, Poitiers, Périgueux, La-Rochelle, and Luçon.
11. *Auch*.—Aire, Tarbes, and Bayonne.
12. *Toulouse-et-Narbonne*.—Montanhan, Pamiers, and Carcassonne.
13. *Aix, Arles, et Embrun*.—Marseille, Fréjus, Digne, Gap, and Ajaccio. Algérie forms a bishopric of this province.
14. *Besançon*.—Strasbourg, Metz, Verdun, Belley, St.-Dié, and Nancy.
15. *Avignon*.—Nîmes, Valence, Viviers, and Montpellier.

The French Lutherans, who are chiefly resident in Alsace, are under the consistory of Strasbourg. The French Calvinists, a much more important body, have meeting-houses in 51 departments, and are governed by consistories, five forming a synod.

Judiciary.—The administration of justice in France is uniform. As before stated each canton has its justice of peace, who is always a professional man, and has summary jurisdiction in matters of less importance, and all suits must come before him with a view to an amicable settlement if possible; failing which, they are carried before a higher court. The mayors of communes also act as inferior magistrates. The large towns are divided into several cantons. In each arrondissement the tribunal of first instance takes cognisance of civil and police causes, in accordance with the code and the laws of the state; and 26 high courts, formerly called royal courts (*Cours Royales*), take cognisance of appeals against the judgments of the tribunals in their respective jurisdictions. Before these courts are tried all offences against the state. In cases of misdemeanour the first jurisdiction rests with the justice of peace, who may send the person or persons charged before the tribunal of first instance, which then acts as a tribunal of correctional police; from these the accused parties may appeal to the high court. In matters of grave character the criminal is finally brought before the court of assize (the judges in which are one or more members of the high court), where he is tried before a jury of 12, drawn by lot, from a list of the electors of the department in which the assizes are held. Courts of assize are held in the chief towns of the departments three or four times a year.

Commercial causes are carried before tribunals of commerce, the judges in which are elected for three years by the leading merchants of the arrondissement, subject to the approval of the central power. In matters that involve amounts exceeding 1500 francs, an appeal lies to the high court of the district. These courts exist with the greatest advantage in nearly all the great commercial and industrial districts of France. Where there are not tribunals of commerce their functions are discharged by the tribunals of first instance.

In the maritime and manufacturing towns there are besides councils of Prud'-Hommes ('experienced men'), with summary jurisdiction in matters to the amount of 100 francs. If the amount in dispute exceeds 100 francs, an appeal lies to the tribunal of commerce. These councils are composed of master manufacturers and workmen elected annually; they do not suffer lawyers to plead in their courts: they sit in the evening when the workpeople leave the shops and factories, and take cognisance also of disputes between masters and apprentices, manufacturers and their workmen. The council of Prud'-Hommes is one of the most extensively useful institutions in France: in Lyon alone above 5000 cases are decided annually, appeals are rare, and a reversal of the decree of the council rarer still.

Finally, in each military division and naval head-quarters, councils of war and maritime councils are held to decide (subject to a council of revision) upon the offences of soldiers and sailors.

The high court of appeal from all these courts and tribunals, and for the whole of France, is the 'court of cassation,' which sits in Paris, and the judges of which are appointed from amongst the most distinguished French lawyers.

A high court of justice chosen from amongst the high magistracy, and having as jury members of the councils-general of all France, takes cognisance of all attempts against the chief of the state and the public safety.

The following is a list of the high courts, showing the departments within the jurisdiction of each:—

1. *Agen*.—Gers, Lot, and Lot-et-Garonne.
2. *Aix*.—Basses-Alpes, Bouches-du-Rhône, and Var.
3. *Amiens*.—Aisne, Oise, and Somme.
4. *Angers*.—Maine-et-Loire, Mayenne, and Sarthe.
5. *Bastia*.—Corsica.
6. *Besançon*.—Doubs, Haute-Saône, and Jura.
7. *Bordeaux*.—Charente, Dordogne, and Giroude.
8. *Bourges*.—Cher, Indre, and Nièvre.
9. *Caen*.—Calvados, Manche, and Orne.
10. *Colmar*.—Bas-Rhin, and Haut-Rhin.
11. *Dijon*.—Côte-d'Or, Haute-Marne, and Saône-et-Loire.
12. *Douai*.—Nord, and Pas-de-Calais.
13. *Grenoble*.—Drôme, Hautes-Alpes, and Isère.
14. *Limoges*.—Corrèze, Creuse, and Haute-Vienne.
15. *Lyon*.—Ain, Loire, and Rhône.
16. *Metz*.—Ardennes, and Moselle.
17. *Montpellier*.—Aude, Aveyron, Hérault, and Pyrénées-Orientales.
18. *Nancy*.—Meurthe, Meuse, and Vosges.
19. *Nîmes*.—Ardèche, Gard, Lozère, and Vaucluse.
20. *Orléans*.—Indre-et-Loire, Loiret, and Loir-et-Cher.
21. *Paris*.—Aube, Eure-et-Loir, Marne, Seine, Seine-et-Marno, Seine-et-Oise, and Yonne.
22. *Paris*.—Basses-Pyrénées, Hautes-Pyrénées, and Landes.
23. *Poitiers*.—Charente-Inférieure, Deux-Sèvres, Vendée, and Vienne.
24. *Rennes*.—Côtes-du-Nord, Finistère, Ille-et-Vilaine, Loire-Inférieure, and Morbihan.
25. *Riom*.—Allier, Cantal, Haute-Loire, and Puy-de-Dôme.
26. *Rouen*.—Eure, and Seine-Inférieure.
27. *Toulouse*.—Ariège, Haute-Garonne, Tarn, and Tarn-et-Garonne.

Military Divisions, &c.—By a decree dated December 26, 1851, France is now divided into 21 Military Divisions, each of which comprises one department or more. They are each named from the chief town, which is the head-quarters of the officer in command of the army corps of the division. These divisions, with the departments included in each, are as follows:—

1. *Paris*.—Seine, Seine-et-Oise, Oise, Seine-et-Marne, Aube, Yonne, Loiret, and Eure-et-Loir.
2. *Rouen*.—Seine-Inférieure, Eure, Calvados, and Orne.
3. *Lille*.—Nord, Pas-de-Calais, and Somme.
4. *Châlons-sur-Marne*.—Marne, Aisne, and Ardennes.
5. *Metz*.—Moselle, Meuse, Meurthe, and Vosges.
6. *Strasbourg*.—Bas-Rhin, and Haut-Rhin.
7. *Besançon*.—Doubs, Jura, Côtes-d'Or, Haute-Marne, and Haute-Saône.
8. *Lyon*.—Rhône, Loire, Saône-et-Loire, Ain, Isère, Hautes-Alpes, Drôme, and Ardèche.
9. *Marseille*.—Bouches-du-Rhône, Var, Basses-Alpes, and Vaucluse.
10. *Montpellier*.—Hérault, Aveyron, Lozère, and Gard.
11. *Perpignan*.—Pyrénées-Orientales, Ariège, and Aude.
12. *Toulouse*.—Haute-Garonne, Tarn-et-Garonne, Lot, and Tarn.
13. *Bayonne*.—Basses-Pyrénées, Landes, Gers, and Hautes-Pyrénées.
14. *Bordeaux*.—Gironde, Charente-Inférieure, Charente, Dordogne, and Lot-et-Garonne.
15. *Nantes*.—Loire-Inférieure, Maine-et-Loire, Deux-Sèvres, and Vendée.
16. *Rennes*.—Ille-et-Vilaine, Morbihan, Finistère, Côtes-du-Nord, Manche, and Mayenne.
17. *Bastia*.—Corsica.
18. *Tours*.—Indre-et-Loire, Sarthe, Loir-et-Cher, and Vienne.
19. *Bourges*.—Cher, Nièvre, Allier, and Indre.
20. *Clermont-Ferrand*.—Puy-de-Dôme, Haute-Loire, and Cantal.
21. *Limoges*.—Haute-Vienne, Creuse, and Corrèze.

For purposes of naval conscription the territory of France is also divided into maritime provinces, of which there are five, named from the great naval harbours of France—Cherbourg, Brest, Lorient, Rochefort, and Toulon.

The territory of France is admirably defenced by nature against foreign enemies except towards the north-east. The Atlantic coast on the north and west with few harbours of any depth, and those that are deep being difficult of access or strongly defenced, warn off the invader by sea. The Pyrenees would be impassable in the face of united France; the eastern frontier with the wall of the Alps, the Jura, and the Vosges equally so. But towards the north-east, on the Belgian, Prussian, and Bavarian frontiers, the country has no natural defence. But in this quarter military science has done its utmost in constructing fortresses to command all the leading approaches, and in no country in the world are there so many strongly fortified towns in the same extent of territory. Along this frontier are the fortresses of Dunkerque, Lille, Douai, Cambrai, Valenciennes, Condé, Mauhenge, Avesnes, Rocroy, Givet, Charlemont, Mézières, Sedan, Thionville, Metz, Bitche, and Wissembourg. Along the Rhenish frontier (the

proper defence of this quarter however is not the Rhine but the Vosges Mountains) are the fortresses of Haguenau, Strasbourg, Schelstadt, and Nonf Brisach; Belfort, Kœnigsau, and the Fort-de-l'Eluse command the approaches from Switzerland: towards the Alps and the Sarlinian frontier are Grenoble and Briançon; the Pyrenean passes are defended by Perpignan, Bellegarde, Mont Louis, St-Jean-Pied-de-Port, and Bayonne. In the interior many of the towns are strongly fortified, but Paris, with its continuous wall and detached forts, is the most important in every point of view. The detached forts erected in recent times round Lyon, also render that city a very important military position. The great naval dock- and building-yards are Brest, Toulon, Rochefort, Cherbourg, and Lorient. Sloops of war are built also at Bayonne, Nantes, and St-Servan, a suburb of St-Malo.

Government.—The constitutional monarchy and representative government which had prevailed in France under King Louis Philippe, the head of the younger branch of the Bourbons, were abolished by the republican revolution of 1848. A republic in form, governed by a president and a national assembly, the members of which were elected by ballot, with a suffrage all but universal, succeeded.

On December 2, 1851, Prince Louis Napoleon Bonaparte, president of the republic, issued a decree dissolving the Legislative Assembly, establishing universal suffrage (the assembly had considerably restricted the suffrage), proposing a president for ten years, and a second chamber, or senate. On the 20th and 21st of December the French people, by 7,439,210 affirmative votes against 640,737 negative ones, adopted a 'plebiscite,' or decree of the people, maintaining the authority of Louis Napoleon Bonaparte, and delegating to him the powers necessary for establishing a constitution on the bases proposed in the above proclamation. The power thus conferred upon the president resulted in the important state paper issued January 15, 1852, which contains the constitution under which France has been since governed.

According to this proclamation the president, while he wisely retained that title, assumed more than royal authority. He is responsible to the people alone, who had elected him, and not to a national assembly: the command of the land and sea forces, the exclusive initiation of new laws, the right to declare the state of siege, were among his leading attributes. A Senate was appointed, whose number was not to exceed 150, the members to be named for life by the president, who may also grant them salaries. A lower chamber, called the Legislative Body, consists of 261 members, one for every 35,000 electors, and chosen for ten years by universal suffrage, but without the ballot. The sittings of both chambers to be private; official reports only of the proceedings to be published. No member of either chamber has the power to originate any law; if amendments are adopted they must be sent to the council of state, and cannot be discussed if not also adopted by this body. The president convokes, adjourns, prorogues, and dissolves the Legislative Body. In case of a dissolution a new one is to be convoked within six months. The session of the chambers to last three months.

A council of state, composed of 40 or 50 salaried members, nominated and presided over by the president, draws up the projects of all laws. The Senate is not to be transformed into a court of justice. For crimes against the chief of the state and the public safety a high court (as above explained) is appointed. Ministers cannot be members of the legislature. Petitions may be addressed to the Senate, but none to the Legislative Body. The mayors of communes are appointed by the executive.

In this draught of the constitution the name of republic was retained, and the title of president; but on December 2, 1852, in accordance with a decree of the Senate dated November 7, 1852, and a plebiscite carried by 7,839,552 votes against 254,401, the name of the government was changed, the empire was re-established, and Louis Napoleon Bonaparte became emperor of the French under the title of Napoleon III., the throne being hereditary to his legitimate male descendants, failing which, the succession rests in Prince Jerome Napoleon Bonaparte and his direct legitimate descendants in the male line by order of primogeniture. Since the establishment of the empire some very slight modifications have been made.

Revenue, Expenditure, &c.—The general revenue of France is derived from direct and indirect taxes, and from customs and import duties. The budget of the minister of finance having been voted by the chambers the amount of the direct taxes is distributed among the 86 departments of France according to their extent, industrial progress, population, and presumed degree of prosperity. The prefect, aided by the council-general of each department, allots to each arrondissement its share of the amount imposed on the whole department; the sub-prefect, in concert with the council of arrondissement, divides this quota among the cantons and communes; and, finally, the mayor, with the assistance of the municipal or communal council, assigns to each inhabitant the amount he has to pay. The indirect taxation comprises land and assessed taxes, the duties on wines and spirits, the navigation of rivers, tithes of the octroi duties of towns, licences, stamps, sale of state property, post-office and mail service, import and export duties, profits from the state forests, &c.

According to the budget for 1854 the total receipts amounted to 1,520,039,572 francs; and the expenses voted to 1,516,820,459 francs. The expenditure is thus distributed:—Interest on the public debt,

896,503,439 francs; expense of the chambers, 36,604,180 francs; credits to ministers, 756,073,254 francs; expense of collecting taxes, &c., 151,973,334 francs; drawbacks, &c., 86,106,242 francs; extraordinary expenses for public works, &c., 89,560,000 francs.

The budget for 1855 estimates the receipts at 1,566,012,213 francs; and the expenditure at 1,562,030,308 francs. The expenditure includes the following grants:—

Ministry of State	12,146,400 fr. or 341,650 fr. more than in 1851.
Justice	27,443,380 fr. or 802,600 fr. more than in 1851.
Foreign Affairs	9,621,000 fr. or 391,000 fr. more than in 1851.
Finance	711,964,619 fr. or 20,584,201 fr. more than in 1851.
Interior	130,991,220
War	815,897,791 } together, 16,933,145 fr. more than in
Marine	127,602,402 } 1851.
Public Instruction and Public Works	65,719,722 fr. or 90,586 fr. more than in 1851.
Agriculture, Commerce, and Public Works	156,735,242 fr. or 5,400,000 fr. less than in 1851.
Interest on New Loan	15,407,933 fr.

The total receipts of customs duties in France were:—In 1846, 153,953,903 francs; in 1847, 134,117,730 francs; and in 1848, the year of the revolution, only 80,448,453 francs.

The amount of indirect taxes (which supplies a certain test of the condition of the people) in 1848 was 676,000,000 francs; in 1849, 707,407,000 francs. From the last year they increased to 846,000,000 francs in 1853.

The imports and exports of France in 1851, 1852, and 1853 were as follows:—

	1851.	1852.	1853.
Imports	1,157,700,000 fr.	1,438,200,000 fr.	1,630,600,000 fr.
Exports	1,629,700,000 fr.	1,681,500,000 fr.	1,866,300,000 fr.
Totals	2,787,400,000 fr.	3,119,700,000 fr.	3,497,400,000 fr.

The ships employed in the import trade in 1853 numbered 20,779, measuring 2,750,699 tons: of these vessels 9210 were French, carrying 1,065,688 tons; and 11,569 foreign, carrying 1,685,011 tons. The imports by sea were valued at 1,028,400,000 francs; by land, at 602,200,000 francs.

The export trade in the same year employed 15,841 ships, measuring 1,854,665 tons, and including 6625 French and 8856 foreign vessels, carrying respectively 790,350 and 1,053,315 tons.

The totals of the imports and exports given above, when turned into English pounds sterling, are 111,496,000*l.*, 124,788,000*l.*, and 139,896,000*l.* respectively. This last sum shows an excess over 1852 of 15,108,000*l.*, and over 1847, the year before the revolution, of 35,480,000*l.*

The tonnage representing the arrivals and departures of loaded vessels by sea engaged in the foreign trade amounted to 4,605,000, or 303,000 tons more than in 1852, and 308,000 tons more than in 1847. From this, and the preceding paragraph, it appears that value has increased more than tonnage, showing a great increase in the commerce over the land frontiers of France, consequent on the extension of railway communication.

Of the imports into France in 1853, valued as above (in English money), at 65,224,000*l.*, to the amount of 44,120,000*l.* were for home consumption. Of the exports, the value of which in pounds sterling was 74,672,000*l.*, 54,520,000*l.* represent French produce; the difference, exceeding 20,000,000*l.*, shows the importance of the transit trade of France.

The principal articles of import and export during the last three years are given in the following table, with the values of each in pounds sterling:—

	1851.	1852.	1853.
Imports.—Breadstuffs	80,000	200,000	3,840,000
Coal	1,480,000	1,520,000	1,680,000
Iron	200,000	240,000	410,000
Cotton	4,100,000	5,120,000	5,320,000
Raw Silk	3,680,000	5,360,000	5,200,000
Wool	1,360,000	2,600,000	1,720,000
Exports.—Breadstuffs	3,800,000	2,360,000	1,160,000
Cotton manufactures	6,600,000	6,000,000	6,560,000
Silk manufactures	8,120,000	9,040,000	11,520,000
Woolen manufactures	5,280,000	5,120,000	5,840,000
Linens manufactures	1,080,000	1,200,000	1,360,000
Wines	3,200,000	3,400,000	3,030,000
Gloves and hosiery	1,480,000	1,480,000	1,800,000

The consolidated debt of France on the 1st of January, 1851, amounted to a total of 5,345,637,300 francs. Besides this, the floating debt, according to a report of the finance minister, in February, 1853, amounted to 600,000,000 francs: this sum included the deposits in savings banks (190,000,000 francs), deposits of communes and public establishments, security money of the receivers general of the taxes, 88,000,000 francs deposited by the Paris-Lyon railway company, 122,000,000 treasury bills and other items. The amount applied as a sinking fund amounted at the same date to 37,960,300 francs.

The consolidated debt has been increased in consequence of the

war with Russia, by the loan of 250,000,000 francs, contracted in the spring of 1854.

Military Forces; Navy.—The effective of the French army in January 1853 amounted to 350,000 men and 80,000 horses; but these numbers have been recently increased considerably in consequence of the war with Russia.

Infantry.—100 regiments of 2000 men each; 10 battalions of Chasseurs-à-pied of 800 men each; 3 regiments of Zouaves; 3 battalions of African light infantry; 12 training companies (fusiliers and pioneers); a foreign legion numbering 2600 men; 3 battalions of native African tirailleurs; and 6 veteran companies.

Cavalry.—12 regiments of reserve; 20 regiments of the line; and 26 regiments of light cavalry; besides 3 regiments of Spahis and 4 companies of remonte.

Artillery.—14 regiments with 16 batteries, and 1 regiment of pontoon men; 12 companies of workmen, and 1 company of armourers; 4 train squadrons; and 5 companies of veteran gunners.

Engineers.—3 regiments of sappers and miners; 2 companies of workmen, and 1 company of veterans.

Gendarmerie.—25 legions spread over the departments of France, with about 5000 men for special purposes, make a total of 25,572 men.

Of general and superior officers there were, marshals 6; generals of divisions, 80; in reserve, 69; generals of brigade, 160; in reserve, 172;—colonels, 30; lieutenant-colonels, 30; chiefs of squadrons, 100; captains and lieutenants, 400; adjutants, &c., 246.

At the end of 1852 the French fleet numbered 25 sail of the line (6 of 120 guns, 4 of 100 guns, 9 of 82 to 90 guns, and 6 of 80 guns), 37 frigates (12 of 60 guns, 14 of 50 to 52 guns, and 11 of 40 to 48 guns), 30 corvettes, 44 brigs, 43 small armed vessels, and 32 transports—in all 211 sailing vessels.

The steam fleet included 3 screws (one of 90 guns, a second of 80 guns, and a third of 120 guns), one ship of the line (90 guns, 960 horse-power), 20 frigates of 450 to 650 horse-power, 5 corvettes (320 to 450 horse-power), 22 corvettes (220 to 300 horse-power), and 57 small vessels—in all 103 steamers.

There were besides 49 sailing-vessels and 7 steamers huilding in the naval dockyards. Many of these have been finished and launched in consequence of the Russian war.

The number of officers in the navy in 1852 was 1874, including 2 admirals, 12 vice-admirals, 20 rear-admirals, 110 captains of men-of-war, 230 captains of frigates, 650 lieutenants, 550 ensigns, and 300 aspirants. The seamen enrolled numbered 100,000; but only 27,000 were on active service. The marine infantry numbered 11,868 men including 483 officers; the marine artillery, 2971 men; medical officers, &c., 1233.

Population, Religion, Educational Establishments, &c.—The principal stock from which the French nation derives its origin is the Celtic. At the period of Julius Cæsar's invasion the Celts occupied nearly all the midland, western, and southern parts of the country. The south-western corner of the country was occupied by the Aquitanians, whose territory extended from the Garonne to the Pyrenees; and probably some Ligurian tribes were intermingled with the Celts on the shore of the Mediterranean. Some Greek settlements, of which Massilia (Marseille) was the chief, existed along that coast. The north-eastern parts of the country, from the Seine and Marne to the Channel and the Rhine, were occupied by the Belgæ, a Celtic people, some of whom in Cæsar's time were mixed with Germans, without however having lost their national characteristics. The immediate vicinity of the Rhine was occupied by some tribes who affected a Germanic origin. The subjugation of the country by the Romans produced an intermixture of Romans with the natives. The modern French language shows how extensive and how permanent has been the influence of the Latin tongue.

At the breaking up of the Roman empire, three of the invading tribes possessed themselves of France: the Visigoths south and west of the Loire, the Burgundians in the south-east, extending from the Saône and Rhône to the Jura and the Alps, and the Franks in the north and east. A branch of the Celtic nation, migrating from the British Isles, settled in the extreme west, and have transmitted to the present age their peculiarity of language and the name of the island (Bretagne or Britain) from which they came. Politically the ascendancy of the Franks extinguished the independence of their co-invaders; but the tribes which succumbed to their yoke remained in the settlements they had acquired, and have influenced more or less the characteristics of their descendants. But notwithstanding these admixtures, the Celts may still be considered as the main stock of the French people.

As the predominance of the Celtic race may be inferred from that of their adopted language in the greater part of France, so the local predominance of other tribes is indicated by that of their peculiar tongue. The Breton, an adulterated form of the language imported by the British settlers, is still the language of the rural districts of Bretagne; the Basque is yet found at the foot of the Pyrenees, and may be considered as the representative of the ancient dialect of the Aquitanians. In Alsace the German language is predominant; a circumstance which may be ascribed to that province having been more completely occupied by those tribes who overthrew the Roman empire, and who have preserved their own language; and also to the long incorporation of Alsace with Germany, and its com-

paratively late annexation to the rest of France. The dialect of Lorraine, the adjacent province to Alsace, may be considered also as having strong affinity to that of Germany, from similar causes to those stated above.

The population of France at the commencement of the 18th century was about 19,669,320, exclusive of Corsica and part of Lorraine, which were not then united to France. In the year 1762 the population had increased to 21,769,163, inclusive of Corsica and the whole of Lorraine. In 1784 it had further increased to 24,800,000.

The population, according to the different census returns of the present century, has been stated to be as follows:—

1801	27,349,003	1836	33,540,910
1811	29,092,734	1841	34,230,178
1821	30,461,875	1846	35,401,761
1831	32,569,223	1851	35,781,628

The predominant religion of France is the Catholic; the Protestants, who reside chiefly in Alsace and in Languedoc, number about 1,500,000, of whom two-thirds are Calvinists, and the remainder Lutherans, Methodists, &c. The Jews number about 80,000. Both Catholic and Protestant clergymen are paid by the state. Those of the Catholic hierarchy who have the dignity of cardinal have a yearly income of about 1300*l.*; the archbishops have about 800*l.*; and the bishops about 600*l.* Of the working clergy the incomes are from 20*l.* or 30*l.* to 40*l.* or 60*l.* a year. The total number of priests rather exceeds that of the communes, which is 36,835. Before the first French revolution, the country abounded with monastic establishments. The abbeys and convents for men have been, with very few exceptions, abolished. The nunneries and abbeys for women for the most part remain. The French nuns do not, except a few, lead a life of pure meditation, but are actively engaged in attendance upon the sick, or in the instruction of youth.

The Catholic clergy are chiefly educated in seminaries established for the express purpose of clerical instruction. There is one establishment for the higher studies at Paris; and above 200 seminaries scattered throughout France. Strashourg is the chief place of instruction for the clergy of the Lutheran Church; Montauhan for those of the Calvinistic or Reformed Church.

Before the revolution France had 23 universities, of which that of Paris was the most important and enjoyed great privileges. Under Bonaparte a body was organised with the title of University, which has continued with some modifications to hold to the present time the chief direction of education. Of this body, which is incorporated, and which possesses large disposable funds arising partly from real property, partly from public grants, and partly from the payments of pupils, all public teachers are members. The highest officer of this body is the minister of public instruction, who has a seat in the cabinet; he fills up all appointments in this branch of the administration, and all vacancies in the academies and colleges, upon the recommendation however of the local authorities, by whom strict examinations are instituted. Twenty-six university-academies were established in different parts of France, and the whole territory was divided into as many circuits, one to each. The seats of these university-academies were—Aix, Amiens, Angers, Besançon, Bordeaux, Bourges, Caen, Cahors, Clermont, Dijon, Douai, Grenoble, Limoges, Lyon, Metz, Montpellier, Nancy, Nîmes, Orléans, Paris, Pau, Poitiers, Rennes, Rouen, Strashourg, and Toulouse. The number of these institutions has we believe been recently increased, and the bishops in their respective dioceses have obtained a share in the management and superintendence. Each academy consists of a rector, who inspects all schools and places of public instruction within his circuit, and communicates with the higher authorities at Paris. He is assisted by a council of ten members. These form the administrative portion of the academy. The plan of instruction, if the institution is complete in all its parts, comprehends the five faculties of theology, law, medicine, literature, and the sciences, together with a college or high school. The preparatory instruction to the academies is furnished in the colleges, which are established in almost all the chief towns of arrondissements. Besides these establishments there are several colleges and schools of high repute in Paris. The lay religious order of the Christian Brothers devotes itself exclusively to the education of boys, and a very large number of schools is conducted by its members. Almost all the orders of nuns are actively engaged in the education of girls.

Nearly every commune has one school of elementary instruction. Every commune, the population of which exceeds 6000, has a school for superior instruction (elements of geometry, and its application to the arts; elements of chemistry and natural history; elements of history and geography, and more especially the history and geography of France). Every department has a normal school for the instruction of schoolmasters, either by itself or by uniting with some other department. These schools are supported partly by private foundations, donations, and legacies; partly by the communal, departmental, or general government.

All the poor who are incapable of paying for the instruction of their children have them educated gratis at the elementary schools, and a certain number selected after an examination are educated gratis at the schools of superior instruction.

Commercial and Manufacturing Industry.—The woollen manufac-

tures of France are important in value and superior in quality. They are not confined to two or three great centres of production, but are spread over the whole empire. The principal seats of the woollen manufacture are Metz, Montiers, Nancy, and Mühlhausen in the east; Beauvais, Elbouf, Louviers, Vire, Abbeville, and Sedan in the north; in the south at Dijon, Vienne, Clermont, Lavelanet, Carcassonne, Lodève, Castres, Bédariens, Montauban, Limoges, &c.; and in the centre at Tours, Châteauroux, Romorantin, and Châteaurenard: light woollen fabrics at Paris, Reims, Amiens, and Beauvais; hosiery at Paris, Troyes, Orléans, and at different places in Picardie, in the north of France; and in the south at Nîmes, Lyon, and Marseille: carpets at Paris (La Savonnerie and Les Gobelins), Abbeville, Beauvais; and at Aubusson and Felletin in central France: cashmere shawls are made at Paris, Lyon, Nîmes, and St. Quentin.

The cotton manufacture is still more important, and since the introduction of steam-machinery it has increased and extended very rapidly. The north and east of France are the chief seats of this manufacture. Rouen may be considered the Manchester of France; and Paris, Amiens, Troyes, St. Quentin, and the towns of the department of the Nord, also participate largely in this manufacture. The cotton manufactures are established also in Lyon, Tarare, Nîmes, Montpellier, and many other towns in the south. Printed calicoes are made at Rouen and Beauvais; and at Colmer, Mühlhausen, and other places in the department of Haut-Rhin, the printed cottons of which are much approved.

French silks surpass those of any other country for pure brilliancy of colour and the exquisite taste of the patterns. The silk manufacture is carried on chiefly in the south. Lyon is its principal seat. The other chief seats of the silk manufacture are—Nîmes, Avignon, Annonay, and Tours. Ribands are made at St. Étienne and St. Chamond, towns to the south-west of Lyon. A part of the raw silk required for these various fabrics is grown in France. The white mulberry-tree, as before stated, is most extensively cultivated for the rearing of silkworms.

Linen of the finer sort are made in Flanders, at St. Quentin, Cambrai, Valenciennes, Douai, &c.: the damask linens of St. Quentin rival those of Saxony and Silesia. Coarser linens and sail-cloth are made in Bretagne and various other districts. The linen manufacture is also carried on in Dauphiné. Lace is made at Caen, Alençon, and Bayeux, in Normandy; also at Valenciennes, Douai, and several other places.

The working of metals, especially iron, has much increased of late years, owing to the introduction of steam-machinery and railroads. The quality and appearance of the steel and wrought-iron goods have much improved, yet the quality of the French iron is inferior. The principal iron-works are in the departments of the valley of the Loire, especially about Nevers, and the district of Forez about St. Étienne. The introduction of railways has originated many steam-engine factories. In the manufacture of jewellery, marquetry, bronze ornamental work, and furniture, the French are almost unrivalled.

In the manufacture of clocks and watches France is eminent; for chronometers and instruments for scientific purposes it is not surpassed by any country. The inventions of the French chemists and the improvement of chemical science have done much in producing with economy and expedition the many chemical agents employed in the various branches of manufacture, and particularly dyeing.

Among other branches of industrial occupation must be mentioned the manufacture of buttons; embroidery; hats (at Paris, Lyon, Bordeaux, and Marseille); cutlery (at Langres, Thiers, Châtellerauld, and St. Étienne); glass manufactures of all kinds; gloves; dressed skins used in manufactures of various kinds to the value of above 12,000,000*l.* sterling a year; musical instruments; essential oils; household furniture; wearing apparel; hardware, &c.

The commoner sort of French earthenware improves in beauty of design. Fine porcelain is made at Sèvres, Paris, and Limoges. The cut-glass is nearly equal to that of England in beauty of workmanship, and it is perhaps superior in elegance of form.

Sugar from beet-root is a most important manufacture in France. It originated in the necessity of finding a substitute for colonial sugar, which was prevented from entering France by the vigilance of the English cruisers during the last war. In 1852 there were 329 beet-root-sugar factories (25 more than in 1851) in operation; and the quantity of sugar turned out of all these establishments amounted to 75,369,158 kilogrammes, or 1,483,561 cwt.

The commercial transactions of France, as we have before seen, are of a most extensive character. The countries from which the imports chiefly come are the United States of America, Sardinia, Belgium, the United Kingdom, Switzerland, Austria, British India, Germany, Spain, and Russia. The imports from England consist of linens and linen yarn; cotton goods and cotton yarn; wool, woollen yarn, and woollen goods; brass and copper goods; iron, steel, and hardware; coals, enamel, and clanders; tin, tin-plate, and tin wares; machinery and mill-work; lead, &c.

The chief articles of the general imports are—raw silk, wool, hemp, flax, cotton, hardware, iron and steel, lead, copper, tin, gold, silver, tobacco in leaf, sugar, coffee. Among the miscellaneous imports are—raw hides, tallow, bones and horns, olive-oil, hard woods for cabinet-ware, cheese, sulphur, wax, &c.

The exports to the French colonies are not so great as those to the

United States, to the British dominions, and to some other of the European states.

The leading exports are—wine, brandy, liqueurs, salt, linen, hempen cloth, woollens, silks, cottons, besides hats, jewellery, and household furniture. The values of the leading imports and exports have been given above.

The total number of ships into and out of all the ports of France, including those engaged in the foreign, the coasting trade, and the fisheries, in 1852 was 240,778, measuring 11,734,325 tons, and carrying 1,241,254 men.

The principal sea-ports of France on the Atlantic are—Bayonne, Bordeaux, Nantes, Rochefort, La-Rochelle, Lorient, Brest, Cherbourg, Havre, Rouen, Dieppe, Boulogne, Calais, Dunkerque; on the Mediterranean—Marseille, Cette, and Toulon.

The cod and whale fisheries of France have been increasing for many years past.

Communications.—The means of internal communication in France are, as in other neighbouring countries, roads, canals, and railways. The roads are divisible into those maintained by the central government, and designated Royal, National, or State roads, and those which are kept up at the cost of the several departments to which they belong, and designated Departmental roads. Besides these there are communal and bye-roads. The state or high-roads are divided into three classes. Those of the first class are from 43 to 65 feet wide, and frequently planted on each side with chestnut or other large trees, forming long avenues. About one-eighth of all these roads are paved like a street, but in the reign of Louis Philippe the system of Macadam was usually adopted in making repairs. Those of the first class have a common point of departure, and the distances are measured from the cathedral of Notre-Dame in Paris. There are altogether 28 of these state roads with a total length of somewhat more than 22,700 miles. Diligences ran with passengers on the great roads before the introduction of railways. There are no tolls. The total length of roadway afforded by the state and departmental roads is 44,400 miles.

The inland water communication is carried on by means of the great rivers and by the canals which have been formed. The Schelde or Escaut, the Scarpe, the Sambre, and the Aa, with the canal of Deule, 41 miles long, and several other canals, abundantly supply the department of Nord with the means of water communication. The canal of the Somme and the canal of St. Quentin connect the port of St. Valéry, at the mouth of the Somme, with the Escaut and the Oise. The navigation of the Seine commences at Troyes; that of the Aube at Arcis-sur-Aube; that of the Yonne at Auxerre; that of the Marne at St. Dizier; that of the Oise at Chauny; that of the Aisne, a feeder of the Oise, at Neufchâtel, between Reims and Soissons; and that of the Eure at Pacy. Several canals connect the navigation of this important river system with other parts of France. The canal of St. Quentin connects the Oise with the Somme and the Escaut; the canals of Briare and of the Loing connect the Seine, just below the junction of the Yonne, with the Loire at Briare; and the canal of Orléans, 45 miles long, branching from the canal of the Loing, opens another communication with the Loire lower down, at Orléans. The canal of Bourgogne connects the navigation of the Yonne, between Auxerre and Joigny, with that of the Saône at St. Jean-de-Lône, and being continued by another system of inland navigation ultimately communicates with the Rhine. The canal of the Oureq, near Paris, is 58 miles long. The canal of Nivernais, connecting the Yonne with the Loire, at some point above Briare, 109 miles long, is in course of execution. Havre is the chief port for the basin of the Seine.

The water communication of the western part of France consists chiefly of the navigation of the river Vilaine from Rennes, of some smaller rivers which are navigable only for a few miles, and of three canals. The canal of the Ille and the Rance connects the Rance, a small stream which falls into the Bay of St. Malo, at St. Malo, with the Vilaine, at the junction of the Ille, one of its feeders, at Rennes, and saves a tedious and dangerous navigation round the whole peninsula of Bretagne. This canal is 53 miles long. The canal of the Blavet renders the river Blavet navigable up to Pontivy. Another canal, yet unfinished, but open in part for navigation, is designed to connect Brest with Nantes, avoiding the navigation of a dangerous coast, and affording secure communication in case of a war with England.

The navigation of the Loire commences at Roanne, in Forez; that of the Arroux below the little town of Toulon; that of the Allier above Vichy; that of the Cher at St. Aignan; that of the Indre at Loches; that of the Vienne at Châtellerauld; that of the Sarthe at Le-Mâns; that of the Mayenne at Laval; and that of the Loir at Château-du-Loir. The canals connecting the Loire with the Seine have been noticed. The canal of the Centre, or of the Charollais, opens a communication between the Loire, near the junction of the Arroux, and the Saône, at Chalon-sur-Saône. Its length is about 73 miles. A canal is in course of execution, intended to shorten the navigation of the Loire, by avoiding the great bend which that river makes between the junction of the Allier and that of the Indre, called the canal of Berri. Nantes is the port of the district watered by the Loire.

The navigation of the Garonne commences at Cazères, several miles above Toulouse; that of the Ariège at Auterive; that of the Tarn at Gaillac; that of the Baïse at Nérac; that of the Lot at Entraygues;

that of the Dordogne at Mayronne, near Souillac; that of the Vezère, its tributary, at Montignac. The only navigable canal connected with this river system is the Great Canal of Languedoc, or Canal-du-Midi, the most important in France. It connects the Garonne, near Toulouse, with the Mediterranean. It follows for some distance the valley of the Lers, a feeder of the Garonne, and passing through a depression between the Cévennes and the Pyrenees follows the valley of the Aude, and the line of the coast to the sea at the port of Cette. Its length is more than 150 miles, and its large dimensions, its immense reservoir, and its numerous sluices, bridges, and aqueducts, render it one of the most magnificent canals in the world. It was opened in the reign of Louis XIV., A.D. 1681.

The navigation of the Adour commences at St.-Sever; that of the Midouze, its tributary, at Mont-de-Marsan. The port of Bayonne is the channel for the exports and imports of the basin of the Adour.

The navigation of the Rhône is liable to interruption after it leaves the Lake of Geneva: it recommences a little above Seyssel, on the frontier towards Savoy, and remains open throughout the rest of the course of that river. The navigation of the Saône begins at Seveux, between Gray and Vesoul. The canal of the Centre, which unites the navigation of the Saône with that of the Loire, and the canal of Bourgogne, which unites the Saône with the Yonne, have been noticed. The canal of Monsieur, or the Canal-du-Rhône-au-Rhin, unites the Saône near St.-Jean-de-Losne with the Ille, a feeder of the Rhine, just above Strasbourg. A canal was opened in October 1853 from the Marne to the Rhine, which unites the valleys of the Marne, the Meuse, the Moselle, the Meurthe, and the Rhine. There are many great works in its course—tunnels, cuttings, and aqueducts, with 180 locks. There are several other canals in France, all of which are noticed in the articles on the departments.

Steam-boats ply on the Seine, the Loire, the Charente, the Garonne, the Adour, the Rhône, the Saône, the Rhine, the Somme, and some of the other rivers of France.

The railway system of France converges upon Paris, whence trunk-lines and branches, either finished or in course of construction, stretch out to all the more important points on the frontiers, and pass through most of the great manufacturing centres. Looking northward from the capital we see the Great Northern of France passing through Creil, Amiens, Arras, Douai, and Lille, a little east of which it is linked to the Belgian railway system at Monscon. From Creil a branch runs up to the important industrial town of St.-Quentin, whence it is in course of construction to the Belgian frontier, near the coal-field of Charleroi. From Amiens an important branch runs northward through Abbeville to Boulogne, on the English Channel. From Douai a line runs to Valenciennes, and joins the Belgian system between that town and Mons. From Lille the main line runs north-west to Calais, through Hazobroncke, whence a secondary branch runs nearly due north to Dunkerque.

The second trunk-line runs north-west from Paris down the valley of the Seine to Rouen and Havre, with a branch northward from Rouen to the port of Dieppe. A very important branch, now in course of construction, leaves this trunk-line at the Rosny station, near Mantes, to pass through Caen and Bayeux, and terminate at the naval harbour of Cherbourg. Other branches are being made to connect the towns of Lisieux, Evreux, and Bernay with the main line.

The western trunk-line from Paris to Brest is open through Versailles and Chartres to Le-Mâns, whence through Rennes to Brest it is still unfinished. From Le-Mâns a line in course of construction runs northward through Alençon and Sez to the Caen line between Caen and Lisieux. Between Alençon and Sez this branch is joined by another unfinished line from the La-Lonpe station, on the Paris-Brest railway.

Two short lines connect Paris with Versailles, another with St.-Germain, and another with Corbeil.

South-west from Paris run the great completed lines to Bordeaux and Nantes. The main line runs through Orléans and Blois to Tours, whence the Nantes line runs west down the valley of the Loire through Angers, and the Bordeaux southward through Poitiers and Angoulême. Bordeaux is joined by a short line with Tête-de-Buch, a small port to westward, on the Bay of Arcachon, and from the point in this line where it crosses the Leyre a railway is in course of construction to Bayonne. A line is projected from Bordeaux up the valley of the Garonne to Toulouse, thence into the valley of the Aude and along the coast to Cette. From Orléans a railway runs southward to Vierzon, whence two branches diverge, one south-west to Châteauroux, the other south-east through Bourges, Nevers, and Moulins to Varennes.

The Paris-Avignon line, now open to Lyon, runs first south-east from the capital through Montreaux (whence a branch runs up the valley of the upper Seine to Troyes) to Dijon; from Dijon it runs nearly due south through Châlon, Mâcon, Lyon, Vienne, and Valence, to Avignon. From Avignon the line is completed to Marseille, through Arles, whence a railroad runs westward to Nîmes, Montpellier, and Cette. Lyon and St.-Etienne are united by a railroad, one of the first completed in France; from St.-Etienne a line runs northward up the Loire to Roanne, with a short branch to Montbrison. A short branch runs north-west from Nîmes to the coal-field of Alais. A branch in course of construction projects east-

ward from the main line, between Vicune and Valence, to Grenoble; and from Dijon a line has been planned to Besançon and Mühlhausen.

The Great Eastern trunk-line runs from the capital through Meaux, Châlons-sur-Marne, and Nancy to Strasbourg, where it is connected by a line along the left bank of the Rhine, through Colmar and Mühlhausen, with Bâle in the north of Switzerland. A short branch connects Mühlhausen with the manufacturing town of Thann. Lastly, from Nancy a branch runs northward to Metz, and thence eastward to the frontier, where it joins, at Forbach, the Bavarian line, which reaches the Rhine opposite Mannheim.

The total length of the completed railways in France is now (June 16, 1854) 2684 miles.

Life Statistics.—In the interval of 34 years, from 1817 to 1850, there were born in France 16,953,957 boys, and 15,972,905 girls. These numbers give the annual averages of male and female births to be respectively 498,646 and 469,791, which are nearly in the ratio of 17 to 16.

This ratio is general throughout France, difference of climate between the north and south having no sensible effect upon it. It was not constant however throughout the interval. In the first eight years (1817-1824) the ratio was 1.0654; in the last eight years (1843-1850) 1.0563; the mean on the whole interval is 1.0614. In other words during the first period (1817-1824) for every 10,000 female there were 10,654 male births, and in the last period (1843-1850) there were 10,563 boys born for every 10,000 girls; the average on the 34 years being 10,614 male against 10,000 female births.

In the same interval of 34 years the number of illegitimate children born throughout France was 1,202,208 boys and 1,155,690 girls, which numbers are nearly in the ratio of 25 to 24, showing in this class of infants a nearer approach to equality in the number of the sexes at birth, than in the case of legitimate children.

The ratio of the deaths of the two sexes during the interval has also varied. In the first eight years (1817-1824) it was 1.0215, or 10,215 males died for every 10,000 females; in the last eight years (1843-1850) it was 1.0039, and the means on the whole period give the ratio 1.0143, or on the average of the 34 years 70 males died for 69 females. For the whole interval the mean annual number of births was 968,437; of deaths, 812,227; of increase of population, 156,210; and of the marriages, 253,333. These numbers afford ready means for checking the census returns.

The population increased continuously throughout the interval (1817-1850). The mean annual increase 156,210, as just stated, is extremely small, being only 1.211th part of the mean population of France for the whole interval, which was 32,972,000. This increase is so small, that if it continue to bear the same ratio to the population, it would take France no less than 86 years to increase her population by one-half, and 147 years to double its present amount.

The ratio of the population to the births increases continuously also throughout the period. In the first eight years (1817-1824) it was 31.8; in the last eight years (1843-1850) 36.4, and the mean on the 34 years is 34.0. These numbers multiplied into the corresponding births give the population of France. But in the case of a population that is stationary (as that of France may be almost considered to be), the population is equal to the annual births multiplied by the mean duration of life. The numbers 31.8, 34.0, and 36.4 therefore represent approximately the mean duration of life in France for each period. Thus in 1817 the mean duration of life was 31.8 years; 17 years later it had increased to 34 years; and now it is 36.4 years. Before the first revolution the mean duration of life in France was according to Duvillard's tables of mortality, 28½ years. Since that time then it appears that there is an increase in the mean duration of life of rather above seven years; a result to be attributed to the introduction of vaccination, to improved sanitary conditions, and to the more easy circumstances which the people enjoy.

The French colonies, with the area and population of each at the end of 1841, are as follows:—

	Area in sq. miles.	Population in 1841.
In Asia.—Pondichéry in the Carnatic, Karikal in Tanjore, Mahé on the Malabar Coast, and the factories of Yamaon and Chandernagor in Bengal	518	167,790
In Africa.—The establishments on the Senegal, the isles of St.-Louis and Gorée, the isle of Reunion (Bourbon), and Sainte-Marie-de-Madagascar	1,043	131,360
Algérie	105,800	216,538
In America.—The islands of Martinique, Guadalupe, St.-Martin, Marie-Galante, Desirade, and the group of the Saintes	1,343	255,689
Part of Guyana, with the isle of Cayenne	10,961	22,010
The isles of St.-Pierre, and Miquelon off Newfoundland	148	1,338
In Australasia.—The Marquises or Marquesas	508	20,200
Total	120,321	814,925

In September 1853 France took formal possession of New Caledonia, a group of islands that lies east of New South Wales, in about 23° S. lat., 165° E. long.

History.—Gallia, or as we have Englished it, Gaul, was the general term by which this country was designated by the Romans. Little was known of it till the time of Cæsar, who found in it the three races of Aquitani, Celts, and Belgæ, with an intermixture of some Germans, Ligurians, and Greeks: of these the Belgæ occupied the north and north-east, the Celts the western, central, and south, the Aquitani the south-western part. The Celts, who were probably the oldest race, must have settled in Gaul at an early period, as the wants of an increasing population led them, in the reign of the elder Tarquin of Rome, about B.C. 600, to send out two vast emigrating bodies, one into Italy, the northern part of which was subdued and peopled by them, and the other eastward, into Germany and Hungary. The part of Gaul with which the Greeks formed the earliest acquaintance was the Mediterranean coast, on which they established colonies. The earliest and most important of these colonies was *Massalia*, or *Massilia* (now Marseille), founded by the people of Phocæa (itself a Greek colony of Asia Minor), B.C. 600, and augmented by the emigration of the main body of the Phocæans when they sought refuge, B.C. 546, from the pressure of the Persian monarchy. The power or influence of *Massilia* extended over the neighbouring districts, and several colonies were founded on the coasts of Gaul, Italy, Spain, or Corsica, by its inhabitants, such as *Agatha* (Agde), *Antipolis* (Antibes), *Nicea* (Nice), &c.

At the commencement of the second Punic war Hannibal marched through Gaul in his route from Spain into Italy; and Scipio, the Roman consul, who had conveyed his army by sea to *Massilia* to intercept him, sent a small body of cavalry up the banks of the *Rhodanus* (Rhône) to reconnoitre, and these had a smart skirmish with a body of Hannibal's Numidians. Hannibal however marched onward into Italy, to which country Scipio also returned, sending his army forward under his brother Cneus into Spain.

After the close of the Punic wars the Romans gradually extended their power in Gaul. *Fulvius Flaccus* and his successor, *Sextius Calvinus*, conquered the *Salyes*, *Vocontii*, and some other tribes. The coast of the Mediterranean was now secured by the foundation of the Roman colony of *Aquæ Sextiæ* (Aix), B.C. 122; and that portion of Transalpine Gaul which the Romans had subdued was shortly after formed into a prætorian province (B.C. 118), of which *Narbo Martius* (Narbonne), colonised the following year (B.C. 117), became the capital. *Massilia*, nominally in alliance with, but really in subjection to Rome, was within the province. In the migratory invasion of the *Cimbri*, *Teutones*, and *Ambrones*, the Roman province of Gaul was for several years the seat of war: the Roman armies were repeatedly defeated; in one dreadful battle (B.C. 104) they are said to have lost 80,000 men. The province was however rescued from the invaders by the great victory obtained by *Marius* (B.C. 101) over the *Teutones* and *Ambrones* near Aix. The *Cimbri* had marched into Italy.

The conquests of Cæsar nearly reduced the whole country between the *Rhenus* (Rhine), the Alps, the Mediterranean, the Pyrenees, and the Ocean, into subjection to Rome. The Aquitani and the tribes who inhabited the Alps were not subdued till afterwards; the former were conquered by *Messala*: some of the Alpine tribes retained their independence till the time of Nero.

Under Augustus Gaul was divided into four provinces—*Narbonensis*, *Celtica*, or *Lugdunensis*, from the colony of *Lugdunum* (Lyon), *Belgica*, and *Aquitania*: the limits of the last extended beyond the limits of the country of the Aquitani, being augmented by the addition of the country between the *Garumna* (the Garonne) and the *Ligeris* (the Loire). Shortly afterwards the province of *Belgica* was dismembered by two provinces being formed out of the districts along the *Rhenus* (Rhine), to which the names of provinces of *Germania Prima* and *Germania Secunda*, or of the First and Second Germany, were given: and at a subsequent period the number of provinces reached, by successive dismemberments of the larger provinces, its maximum, seventeen.

In the decline of the Roman power Gaul was ravaged by the Franks, the Burgundians, and the Lygians (who had been all driven out by *Probus*, A.D. 277); again by the Franks and the Allemans, who were repulsed by the emperor *Julian* (A.D. 355 to 361) and *Valentinian* (A.D. 365 to 375), and by the piratical Saxons who ravaged the coasts. The Roman power still sufficed to keep these barbarians from settling in Gaul; it could not however abate the constant pressure on the frontier.

The Franks (namely, the *freemoo*) were a confederacy of German nations, the *Salians*, the *Bructerans*, the *Ripuarians*, the *Cauci*, the *Cherusci*, the *Chamavi*, the *Catti*, the *Teneteri*, and the *Angrivarians*. These tribes preserved their independence while confederated, and each had its king. Like the Saxon chieftains who professed all to derive their lineage from *Woden*, the Frankish princes claimed a common ancestor, *Meroveus* (Meer Wig, Warrior of the Sea), from whom they bore the title *Merovingiana*. The era of *Meroveus* is not ascertainable. In the fourth century the Franks were settled on the right bank of the Rhine from the junction of the *Mein*, or *Mayn*, to the sea, and in the latter part of that century and during a considerable part of the next appear to have been in alliance with the empire.

The Allemans dwelt on the same bank of the Rhine from the *Mayn* upwards.

Upon the downfall of the Roman empire Gaul became a prey to the barbarous nations by which the empire was dismembered. There was no revival of national independence as in Britain. The nationality of the Gauls had been lost, when the extension of the right of Roman citizenship to all the natives of the provinces by *Caracalla*, A.D. 212, merged the distinction previously maintained between the conquerors of the world and their subjects; and the national religion, Druidism, had sunk beneath the edicts of the emperors and the growing influence of Christianity.

On the last day of the year 406 the Rhine was crossed by a host of barbarians who never repassed that frontier stream. They consisted of Vandals, Alans, Suevians, Burgundians, and other nations. The Vandals, who first reached the bank, were defeated by the Franks who defended, as the allies of the empire, the approach to the frontier; but on the arrival of the Alans, the Franks in their turn were overcome, and the passage was effected. *Armorica* (the present Bretagne), into which the settlement of the British soldiers who had followed *Maximus* the usurper into Gaul [BRETAGNE] had infused a military spirit, assumed and established its independence; but the rest of Gaul became a prey. The Suevians, the Alans, and the Vandals crossed the Pyrenees into Spain: the Burgundians settled, with the sanction of the Roman government, in the east of Gaul, on both sides of the *Jura*, and on the west bank of the Rhine, from the Lake of *Geneva* to the confluence of the Rhine and the *Moselle*; and the *Visigoths*, who had been long ravaging both the Eastern and Western empires, were induced, just before the settlement of the Burgundians (A.D. 412 to 414), to accept the cession of that part of Gaul which lies to the south and west of the *Loire*. *Toulouse* was their capital. Both Burgundians and Visigoths took the name of Romans, and professed subjection, which was however merely nominal, to the emperor of the West. Hostilities were before long renewed between the troops of the empire and these new-settled nations; but their settlement opportunely supplied Gaul with the means of defence against a fresh invasion. In A.D. 451, *Attila*, king of the Huns, with an immense host of barbarians, passed the Rhine at or near the confluence of the *Neckar*, destroyed *Divodurum*, or *Mediomatrici* (Metz), and *Atunuca*, or *Tungri* (Tongres), and besieged *Genabum*, or *Aureliani* (Orléans). *Ætius*, the Roman general, supported by the Visigoths and the Burgundians, and numbering in his ranks Franks, Saxons, Alans, and other barbarians, advanced against *Attila* and obliged him to raise the siege and retire towards the frontier. At *Durocatalannum*, or *Catalauni* (Châlons-sur-Marne), a battle was fought in which victory was doubtful, but which was attended with a dreadful slaughter of his forces, and induced *Attila* to evacuate Gaul.

During these events the Franks had attracted little notice; their subdivision into tribes weakened their power, and perhaps their fidelity to the empire restrained them from pressing it with their attacks. They retained their possessions on the right bank of the Rhine; but had obtained by concession or conquest some settlements on the left bank or along the banks of the *Escaut*, or *Schelde*, and the *Meuse*.

It was not until the reign of *Clovis*, who commenced his career as king of the *Salians*, one of the Frankish tribes settled at *Tournay*, about A.D. 481, that the Franks assumed a commanding position. The empire of the West had now fallen, and Italy was under the government of the *Ostrogoths*; but a relic of the empire remained in Gaul; and the territory in which the patricians *Ægidius* and his son *Syagrius* upheld the name of Rome was between the possessions of the Visigoths and Burgundians and the settlements of the Franks. This territory was among the early conquests of *Clovis* (A.D. 486). He then defeated the people of *Tongres* and (A.D. 496) subdued a portion of the Allemans, who had made an inroad into Gaul: the conquered people recognised *Clovis* as their king; his opportune conversion to Christianity advanced his popularity and his power in Gaul, as well as his profession of the faith in what was deemed an orthodox form, while all the other princes who shared among them the once extensive territories of the empire were the supporters of *Arianism* or some other form of doctrine that was looked upon as heretical.

The sway of *Clovis* extended from the banks of the Lower Rhine, the cradle of his power, to the *Loire*, the *Rhône*, and the Ocean, for *Armorica* had submitted to him. He now determined, on the pretext of uprooting *Arianism*, to attack *Alaric II.*, king of the Visigoths, whom he defeated and slew at *Vouglé* in *Poitou*. The Burgundians hoping to share in the spoils of the conquered nation supported *Clovis*; but the *Ostrogoths* of Italy supported the Visigoths and prevented their entire subjection. A large part of their territory, including *Bordeaux* and *Toulouse*, and extending perhaps to the foot of the Pyrenees, fell into the hands of *Clovis*; but the Visigoths preserved the coast of the Mediterranean, together with Spain, which they had conquered: the *Ostrogoths* had *Provence*, and their king *Theodoric* held the sovereignty of the Visigoths also as guardian of their king, his grandson *Amalric*. The assassination of the various Frankish kings by *Clovis* rendered him undisputed head of the tribes of his own nation, and his sovereignty extended over Gaul, with the exception of the parts retained by the *Ostrogoths*, *Visigoths*, and

Burgundians. Clovis may be considered the real founder of the French monarchy: he died A.D. 511.

The death of Clovis brought on the dismemberment of a monarchy which had been established too short a time for consolidation. The four sons of Clovis had each his share of the regal inheritance, but though the sovereignty was divided, the nation was regarded as one, and all the kings claimed their thrones by virtue of descent from Clovis. The Franks now first invaded Italy, though without success: but their power was increased by the subjection of the Burgundians and the cession of Provence to them by the Ostrogoths: and ultimately the dismembered monarchy of Clovis was reunited, together with these accessions, under Clotaire, the youngest of his sons. Under the successors of Clotaire, France was again repeatedly divided and reunited: it is needless to describe changes which it is difficult to trace and to remember, and which left no other permanent effects than the weakness of the nation and the decline of the kingly power. The Merovingian kings, the descendants of Clovis, ceased with Childeric III., who was deposed A.D. 752; but the kingly power had already come into the hands of the hereditary dukes of Austrasia, Pepin l'Heristal, Charles Martel, and Pepin le Bref; while the governors of provinces had acquired all but absolute independence of the crown.

The accession of Pepin le Bref to the crown, upon the deposition of Childeric III., reanimated the spirit and power of the Franks. Pepin waged war with the Saxons and with the Saracens, who had possessed themselves of the coast of the Mediterranean, which he wrested from them; and the subjugation of the duchy of Aquitaine reunited the empire of Clovis with new acquisitions in the hands of Pepin, who reigned A.D. 752-768; but the splendour of his achievements faded before the superior glory of his son Charlemagne, who extended his power over Italy, except the southern part, then held by the Greek emperors, and over the greater part of Germany. His reign (in conjunction with his brother Carloman, A.D. 768-771; alone, 771-814) was distinguished by the attention which he paid to the revival of letters. But the fabric of empire which he had raised fell to pieces under the less vigorous sway of his son and successor (A.D. 814-840) Louis le Débounaire.

In the confused history of the Carolingian princes, successors of Charlemagne, it is difficult to trace the events which belong to France, or to separate its annals from those of Italy and Germany. Divisions and subdivisions of the Frankish empire took place; and the wars of rival princes, and the degeneracy of the descendants of Charlemagne delivered up France a prey to the ravages of the Northmen, or Normans, who acquired possession as a fief of the crown, by cession from Charles le Simple (A.D. 911), of the territory subsequently known as the Duchy of Normandie. The governors of provinces established an hereditary authority in their several governments: the cities, destitute of protection from the government, declined in wealth and population, and in many cases lost their municipal rights and privileges; the number of serfs, or vassals, increased, and the mechanic arts were exercised by the slaves of the great lords. The power of Hugues le Grand, count of Paris, surpassed that of the later Carolingian kings, and on the death of Louis V. the Carolingian dynasty expired, and a new family was called to a sovereignty little more than nominal, in the person of Hugues Capet, son of Hugues le Grand, who was elected by his army and consecrated at Reims, A.D. 987.

From the time of Hugues Capet the history of France is less involved: the crown descended with tolerable regularity to the son or other successor of each deceased king, and the divisions and reunions of the parts of the kingdom ceased. The kingly power was indeed feeble; but it gradually acquired strength, and the royal domain (as distinguished from the domains of the great feudal lords) was progressively enlarged by the conquest, forfeiture, inheritance, or acquisition by other means of the greater fiefs.

The following chronological table of the kings marks the principal extensions or diminutions both of the regal domains and of the kingdom at large; and those changes which form the characteristics of the periods in which they occurred:—

(987.) Hugues Capet, son of Hugues le Grand, count of Paris.

The dukes of Bourgogne and Normandie, the latter especially, were among the most powerful of the French lords: and of the rest the principal were—the Count of Champagne, the Count of Vermandois (part of whose inheritance passed to the counts of Blois, and elevated them to a degree of consideration which they had not previously possessed), the Count of Flanders, the Count of Anjou, the Count of Poitou and Duke of Aquitaine, the Count of Toulouse; and, though at a somewhat later period, the Duke of Bretagne. The six paramount feudatories, who afterwards became exclusively peers of France, were—the dukes of Bourgogne, Normandie, and Aquitaine, the counts of Flanders, Champagne, and Toulouse. The vassals of Hugues, as count of Paris and Orléans, made such approaches to independence, that at his death the authority of his successor extended little beyond the walls of Paris and Orléans.

(996.) Robert, son of Hugues Capet, born A.D. 970.

(1031.) Henri I., son of Robert, born A.D. 1005.

(1060.) Philippe I., son of Henri I., born A.D. 1053.

The power of the first four Capetian kings was very small, and the kingdom over which their nominal sovereignty extended was not co-extensive with modern France; Lorraine, Transjuran Bourgogne,

and Provence were subject to the imperial crown. Their reigns constitute the era of the rise of chivalry. The reign of Philippe I. was marked by the conquest of England by William of Normandie. The communes or municipalities of France originated in leagues of the inhabitants of towns for defence against baronial oppression, formed in the reign of Philippe, though commonly ascribed to the reign of his successor. Philippe was engaged repeatedly in hostilities with the Anglo-Norman kings, William I. and William II. The first crusade took place in Philippe's reign, and by exhausting the power of the nobles prepared for the emerging of the regal authority from its depressed condition.

(1108.) Louis VI., *le Gros*, son of Philippe I., born A.D. 1078.

This reign comprehends an important period in the history of the French, whether by the progress of the people in the communes, the rights of which had scarcely received at this epoch their first legal sanction; or by the progress, not less marked, of the central authority in the power of the crown, which, instead of remaining unnoticed, as under Philippe I., between the Seine and the Oise, began really to make itself felt from the Meuse to the Pyrenees; or, lastly, by the development in the same interval of the feudal system. This system, profiting by the progress of intelligence and the study of other systems of legislation, acquired a regularity and authority which no one dared any longer to dispute with it.

(1137.) Louis VII., *le Jeune*, son of Louis *le Gros*, born A.D. 1120.

The king carried on the policy of his father, of establishing his authority in his own domains. He married Eléonore of Guienne, from whom he was afterwards divorced. She subsequently married Henry Plantagenet, afterwards Henry II. of England; this marriage made the power of Henry superior to that of Louis: he had Normandie, Anjou, Maine, Touraine, Poitou, Limousin, Angoumois, Saintonge, Berri, Marche, part of Auvergne, Guienne, and Gascogne; but his quarrels with Becket and with his sons prevented his availing himself of his superiority. Louis *le Jeune* was personally engaged in the second crusade, but he met with no success.

(1180.) Philippe II., *Auguste*, son of Louis VII., *le Jeune*: born A.D. 1165.

The predominance of the Anglo-Norman power united the other great vassals of Philippe more closely in alliance with the crown; and the exhaustion of the Anglo-Normans from their civil dissensions, from the crusades, the heavy ransom of Richard I., *Cœur de Lion*, and the weakness of John, enabled Philippe to raise the power of the crown above that of his puissant vassals. Philippe displayed considerable warlike activity: he was engaged in the third crusade 1189-91, in conjunction with Richard *Cœur de Lion*, and in hostilities with Richard and John, and with the emperor Otho, whom he defeated at Bouvines, near Lille, A.D. 1214. He united Normandie, Maine, Anjou, Touraine, and Berri, to the domain of the crown; increased the previously small domain of the crown in Auvergne, and other parts of the south of France; and consolidated the regal power by substituting constitutional forms for individual caprice. This reign was marked by the blood-stained crusades against the Albigeois in the south of France, which weakened the power of the count of Toulouse who protected the Albigeois. France, in its present extent, was at this time divided between four sovereign princes—the king of France; the emperor, who held the provinces of the east and south-east; the king of England; and the king of Aragon, who had considerable territories near the Pyrenees and the Mediterranean.

(1223.) Louis VIII., *Cœur de Lion*, son of Philippe Auguste, born A.D. 1187.

Louis conquered Poitou, and engaged in the crusade against the Albigeois.

(1226.) Louis IX. (*St. Louis*), son of Louis VIII., born A.D. 1215.

(1270.) Philippe III., *le Hardi*, son of St. Louis, born A.D. 1245.

(1285.) Philippe IV., *le Bel*, son of Philippe, *le Hardi*, born A.D. 1268.

(1314.) Louis X., *le Hutin*, son of Philippe *le Bel*, born A.D. 1289.

(1316.) Jean I., a posthumous son of Louis *le Hutin*, lived only three or four days.

(1316.) Philippe V., *le Long*, second son of Philippe *le Bel*, born A.D. 1294.

The accession of Philippe established the Salic law: he was preferred to the daughter and heiress of his elder brother, Louis *le Hutin*.

(1322.) Charles IV., *le Bel*, third son of Philippe *le Bel*, born A.D. 1295.

The direct line of the Capetian kings ended with Charles IV.

The reign of St. Louis, one of the most equitable and virtuous of princes, and the reigns of his successors, some of them as remarkable for the opposite qualities, are marked by the consolidation of the power of the law as distinguished from that of arms. This beneficial change was however accompanied under the successors of Louis with the most revolting acts of injustice under the forms of law. Many of the nobles were despoiled of their fiefs; the order of the Templars was extinguished in the blood of its members; the Jews and Lombards grievously oppressed; and trade ruined by the abusing of the coinage. Persecution assumed a more systematic form by the establishment of the inquisition at Toulouse. In this period the greater part of Languedoc was added to the domains of the crown, which were considerably augmented in other places.

COLLATERAL BRANCH OF VALOIS.

(1323.) Philippe VI., *de Valois*, born A.D. 1293, grandson of Philippe *le Hardi*, by his third son Charles of Valois.

(1350.) Jean II., *le Bon*, son of Philippe *de Valois*, born A.D. 1319.

(1364.) Charles V., *le Sage*, son of Jean II. *le Bon*, born A.D. 1337.

The reigns of these three kings are marked by the wars of the English in France under Edward III. (who claimed the throne of France in the right of his mother), and his son the Black Prince. The French were defeated in the great battles of Sluys (naval) A.D. 1340, Crécy, A.D. 1346, and Poitiers 1356. But the premature infirmity of Edward III. and the death of his son, who had at one time received the cession of a large territory in the south-west of France, under the title of the principality of Aquitaine [BORDEAUX], caused the downfall of the English power, and tended ultimately to the extension of the domains of the French crown.

(1380.) Charles VI., *le Bien Aimé*, son of Charles *le Sage*, born A.D. 1368.

(1422.) Charles VII., *le Victorieux*, son of Charles VI., born A.D. 1403.

The reigns of these two kings were marked by another desperate struggle with the English under Henry V. and his successor Henry VI. At one time the success of the English was so decided that Henry V. was recognised as heir to the throne of France, to succeed on the death of Charles VI.: but the perseverance and spirit of the French ultimately triumphed, and of all their splendid domains in France the English monarchs retained only Calais. This was a period not only of foreign invasion, but of civil dissensions and of the most frightful massacres and assassinations. The dukes of Bourgogne, who descended from a younger son of Jean II., were acquiring a vast territory and great power.

Charles VII. was the first to substitute a standing army for the military service of the feudal vassals.

(1461.) Louis XI., the first entitled *le Roi Très Chrétien*, son of Charles VII., born A.D. 1423.

Louis, a crafty and intriguing prince, did for France what Henry VII. did for England in breaking down the feudal system. Upon the death of Charles *le Téméraire*, duke of Bourgogne, he seized a portion of his inheritance. [BOURGOGNE.] The domain of the crown was now become very extensive, though parts of Picardie in the north, Bretagne in the west, several parts of Gasconie in the south, Limousin, Perigord, Auvergne, Bourbonnais, Orléanais, and several districts of the centre were not included.

(1483.) Charles VIII., son of Louis XI., born A.D. 1470.

In him ended the direct succession of the house of Valois.

BRANCH OF VALOIS ORLEANS.

(1493.) Louis XII., *le Père du Peuple*, born 1462, descended from a younger son of Charles V., *le Sage*.

BRANCH OF VALOIS ANGOULÊME.

(1515.) François I., *le Père des Lettres*, descended from the same stock, born 1494.

In the reign of this prince the arts, commerce, and literature began to revive. The domains of the crown were augmented by several additions, as of Auvergne and Bourbonnais in the centre, parts of Picardie in the north, and parts of Gasconie in the south; and virtually of Bretagne in the west; if indeed we may not rather ascribe this last acquisition to the reign of Louis XII.

(1547.) Henri II., son of François I., born A.D. 1519.

In this reign the French reconquered Calais and its territory, the last relic of the English possessions in France. [CALAIS.]

(1559.) François II., eldest son of Henri II., born A.D. 1544.

(1560.) Charles IX., second son of Henri II., born A.D. 1550.

(1574.) Henri III., third son of Henri II., born A.D. 1551.

The reigns of the last two princes were distinguished by the religious wars of the Catholics, at the head of whom were the dukes of Guise, of the family of Lorraine, and the Huguenots under the Prince of Condé and admiral Coligny, afterwards under Henri of Navarre.

The dreadful massacre of St. Barthélemy was perpetrated by the Catholics who formed the celebrated Confederation of the League, at the head of which were the Guises. The court, which had previously supported the Catholics, was driven by the fear of this powerful and ambitious family to an alliance with the Protestants, and Henri III. perished by the hand of a Catholic assassin A.D. 1589. In him ended the direct succession of the branch of Valois Angoulême.

BRANCH OF VALOIS BOURBON.

(1590.) Henri IV., *le Grand*, born A.D. 1553, descended from Robert, Count of Clermont, younger son of St. Louis, and brother of Philippe II., *le Hardi*.

In the reign of Henri IV., the resources of France were so far developed that the country began to assume that station in European politics to which its territorial extent, population, and social improvement entitled it. A fairer prospect seemed to be opening to the rulers of that country. The earlier kings had to struggle with the spirit and the institutions of feudalism; and when, at the close of the direct line of the Capetians, the predominance of the law over the armed violence of feudalism seemed to be gaining consistency and

strength, the accession of the house of Valois brought on the struggle between the kings of France and England for the right and possession of the crown. The excesses of the disbanded soldiery, the struggles of the contending factions (the Bourguignons and the Armagnacs), and the rising of the commons of Paris and of the peasantry or 'jacquerie,' as they were termed, were added to the ravages of the enemy; and when, after more than a century, the contest terminated in the almost entire expulsion of the English, the kings of France had to watch or struggle with rivals of almost equal strength in the dukes of Bourgogne, and the other nobles whose power, the result of the feudal system, still survived when the spirit of the system was gone. The reviving strength of the crown and the kingdom under Charles VIII., Louis XII., and Francis I., was repressed by the rising power of Spain and the ascendancy of the imperial house of Austria, and exhausted by the unsuccessful attempts made to gain possession of Italy. Then came the ascendancy of the house of Lorraine, and the wars of religion which desolated France for thirty years. At length however the exhaustion of the Lorraine party, or 'the League,' and the opportune conversion of Henri IV. to the Catholic faith, restored peace. The French frontier was now advanced to the Pyrenees, except on the side of Roussillon, which alone remained to the Spaniards of their possessions in Langue doc, and the districts, such as the Nivernois and Auvergne, over which any of the nobility retained territorial sovereignty, were of little importance when compared with the royal domain, now augmented by Bearn, and the other portions of Henri's patrimony. The generous disposition and popular manners of Henri acquired for him the love of his people; and the wisdom of Sully, his chief minister, promoted the prosperity and subdued the resources of the country. Henri granted to the Protestants the enjoyment of many important rights and privileges by the edict of Nantes, A.D. 1598, and was more desirous of improving the condition of his people than of extending his frontier by foreign conquest.

(1610.) Louis XIII., *le Juste*, son of Henri IV., *le Grand*, born A.D. 1601.

Cardinal Richelieu, the minister of this prince, had in view to crush the nobility, to humble the Protestants, and to set bounds to the power of the house of Austria. His attempts to humble the Protestants led to a renewal of the religious wars: the Duke of Rohan and his brother, the prince of Soubise, were at the head of the Protestant party, but their talents were exerted without success: the court triumphed, and the Protestants lost the towns which they held as securities: the edict of Nantes was not however revoked. To abase the house of Austria, Richelieu supported the Protestants of Germany in the 'Thirty Years' War;' but the French armies obtained little distinction until the next reign.

(1643.) Louis XIV., *le Grand*, son of Louis XIII., *le Juste*, born A.D. 1638.

The minority of this prince was marked by the dissensions and hostilities of the courtiers and powerful nobles, and by the splendid success of the French armies under the Prince of Condé and the Marshal Turenne. The dissensions of the nobles so weakened their power, that the king was enabled to assume and exercise a more despotic power than any of his predecessors had possessed. The nobility were reduced to be mere dependents on the court; their titles descended to all their children, and a noble held the pursuit of commerce, and even of the liberal professions to be a degradation: the country was burdened by the expenses of a court which had such a body of retainers, and the privileges and exemptions from taxation, which the nobility possessed, and other relics of the feudal system were among the principal causes of the French revolution.

The military successes of the French in this reign were splendid, except near the close, when the arms of the coalition against France, under the guidance of Marlborough and Eugene, gained the ascendancy. The boundaries of France were however considerably enlarged in this and the preceding reigns by the addition of Roussillon, Artois, part of Flanders, Frauche-Comté, and Alsace: the boundaries of France thus became nearly what they are at present. The manufactures and trade of France made considerable progress in this reign under the able management of Colbert.

(1715.) Louis XV., *le Bien Aimé*, great-grandson of Louis XIV., *le Grand*, born A.D. 1710.

The long reign of Louis XV. presents little worthy of notice, except the changes in the public mind which were preparing the overthrow of all the ancient institutions of the kingdom; and the increasing dilapidation of the finances. These circumstances, with the gross sensuality of the king, and the disputes of the Jesuits with the Jansenists, and of the clergy and the crown with the parliaments or courts of justice, all tended more or less to prepare the way for great changes.

In this reign Corsica was added to France; the last relics of the feudal sovereignties, the duchies of Lorraine and Bar, and the principality of Dombes, were added to the domain of the crown. Le Comtat d'Avignon and Le Comtat Venaissin remained in the hands of the Pope.

(1774.) Louis XVI., grandson of Louis XV., *le Bien Aimé*, born A.D. 1754.

In this reign the catastrophe of the revolution, which had been

long preparing, took place. The population of France, previously to the first revolution, was politically divided into three classes called *états*, or states—the clergy, the nobility, and the commons, or tiers *état*. The clergy, as a political body, was divided into the old French clergy and the foreign clergy, that is, those belonging to the provinces which had been united with France since the reign of Henry II.

The nobility of France was exceedingly numerous; for not only all the children of a noble belonged to the class of their father, but that class was continually increased by the creation of new nobles. There were about 4000 offices or places in the country which conferred nobility. The nobility possessed great privileges. The third class of the inhabitants of France comprehended the whole population except the nobility and clergy, and constituted somewhat more than $\frac{2}{3}$ parts of the whole. The tiers *état* were crushed by the burden of a most injudicious taxation, the weight of which pressed almost exclusively on them. This was rendered still more intolerable by the oppression of the landowners or their agents, and by the grossest abuses of the manorial jurisdiction. A consequence of all this was the greatest misery among the people, and a deeply-rooted hatred towards the higher classes, which manifested itself in the terrible acts of revenge and bloodshed which accompanied the revolution in France.

The revenue was derived from direct and indirect taxation. The direct taxation consisted:—1st, of a land-tax called *taille*, levied only on the lands belonging to the non-privileged classes; 2nd, the capitation, to which all classes were equally subject; 3rd, a property tax, principally assessed on lands. These taxes were in many respects very oppressive; but the indirect taxes were still more so. They consisted—1st, of customs, levied not only on goods imported from abroad, but on those which passed from one part of France to another; 2nd, of the monopoly of snuff and tobacco; and 3rd, the monopoly of salt. This last was a complete fiscal tyranny, both in its nature and in its mode of collection. The oppression caused by this system of taxation was increased by the custom of farming out the indirect taxes, and by injudicious corn-laws. (Young's 'Travels in France,' 'Police of Corn,' i. 488, 2nd ed.)

The revenue extorted from the people by this system of taxation was squandered in the most profligate manner. Louis XIV. and Louis XV. shamelessly paid their courtisans and favourites out of the public purse. Louis XVI., on whom the storms of popular indignation subsequently fell, was far less obnoxious to these charges than his predecessors.

The royal power, which had long been limited by the feudal institutions, gradually became absolute. The meeting of the states-general (*états généraux*) had been discontinued since 1614. Some provinces, as Artois, Bretagne, Languedoc, &c., had their provincial states, which were composed of the deputies of the nobility, clergy, and tiers *état*; all their powers however consisted in making the assessment of the taxes in order to raise the quota of the general revenue which was required of these provinces. The municipal institutions, which were flourishing in France during the middle ages, were almost entirely abolished, and the offices of towns were generally either hereditary or acquired by purchase. The offices of state and the courts of justice were all so regulated as to give the people as little voice as possible in the national affairs. This caused a fierce though repressed indignation, which showed itself with terrible effect before the close of the 18th century.

After the decapitation of Louis XVI. in 1793 the state was declared a republic; after a time Napoleon Bonaparte became its first consul, and then its emperor, until 1815, when, on his final overthrow, the Bourbon dynasty was again restored. In 1830 another revolution took place, by which Charles X. was dethroned and Louis Philippe substituted. In 1848 another revolution displaced him, and again a republic was declared, of which, after a time, Louis Napoleon, the nephew of the first Napoleon, was elected president. In December 1852 Louis Napoleon was elected by universal suffrage emperor, with nearly despotic powers, and has assumed the title of the Emperor Napoleon III., recognising the title of the son of Napoleon I. by the daughter of the emperor of Austria, in whose favour he had abdicated in 1815, though the act was never acknowledged either by the nation or the allied sovereigns.

French Language.—The dominion established in Gaul by the Romans ultimately destroyed the ancient languages of the country. It is also probable that the Greek colony of Massilia (Marseille), established about six centuries before our era, had diffused in some parts of southern France the use of the Greek tongue. No monuments of the poetry of the Celts of Gaul have reached us, although we may conjecture that they had one similar to that of the Scottish Gaels. Under the Roman dominion Latin became the general language of the country, which produced many writers in that tongue, such as Ausonius, Sidonius Appollinaris, Salvianus, Sulpicius Severus, &c.

The invasion and settlement of Germanic nations in Gaul produced a corruption of the Latin by the admixture of foreign idioms. The influence of the Visigoths, who established themselves in the southern provinces, was however, in respect to language, not considerable, and their northern idiom was soon absorbed by the Latin. Yet this Latin, which, except among the educated, had probably never been spoken with great purity by the population of Gaul, became still more corrupted by the admixture of a foreign race, and degenerated into a

peculiar idiom called the Romanzo, or *Lingua Romana Rustica*. This idiom became not only the language of France, but of many other parts of southern Europe, where the barbarians of the north established their dominion on the ruins of the Roman empire.

The conquest of Gaul by the Franks hastened the corruption of the Latin tongue. The conquerors however seem for a long time to have preserved their native tongue; as the council of Tours, held in 813, recommends the bishops to translate their homilies into two languages, the Roman and the Theotisk, or German. The same injunction was repeated at the council of Arles in 851.

It appears that the separation of the German from the Roman language dates from the division of Charlemagne's empire among the sons of Louis le Débonnaire, when the German part of it became separated from France. The most ancient monument of the French Romanzo is the oath of Louis the Germanic, son of Louis le Débonnaire, on the occasion of a treaty with his brother Charles the Bald of France, concluded at Strasbourg in 847. The German monarch took the oath in Roman, and the French in Teutonic.

The Romanzo of France had a variety of idioms, according to the provinces where the influence of the invaders was more or less exercised. These were however but shades, and the language of France in general could be divided into two principal idioms, separated by the Loire. These were called respectively from their affirmatives, the southern the *Langue d'Oc*, and the northern the *Langue d'Oïl*, or *d'Oui*.

The *Langue d'Oc*, or as it was frequently called the Occitanian language, is better known under the appellation of the Provençal, as the rulers of Provence united at the beginning of the 12th century under their dominion the greatest part of southern France.

The Provençal language was rather formed by a modification of Latin words, than by the admixture of foreign words and idioms. Many favourable circumstances united with the beautiful climate of those countries to promote the early development of a poetical literature in the Occitanian language. The poetry of Provence was not like the northern, of a melancholy and meditative character, but rather of a sprightly and animated tone; and it bore the appropriate name of the merry science (*Gaya Ciencia*). It was cultivated by the Troubadours, who spread its glory over all Europe. The dialect of northern France, or the *Langue d'Oïl*, although formed like the *Langue d'Oc* from the Latin, had a greater admixture of the Germanic element. It underwent still greater changes, owing to the establishment of the Normans in France at the beginning of the 10th century. The first authors who wrote in the *Langue d'Oïl* were descendants of Normans, who introduced the romance of chivalry. This kind of composition was originally a versified chronicle, which though often founded on facts was disfigured by the most extravagant fictions. Robert Wace, an Englishman educated in Normandy, who lived at the court of Eleanor of Aquitaine, mother of Richard Cœur de Lion, wrote the '*Brut d'Angleterre*' about the middle of the 12th century. He is also the author of the celebrated '*Roman de Rou*.' Many other romances were written about that time. Their principal theme was King Arthur, and his Knights of the Round Table. The exploits of Charlemagne and the crusades are also the subject of many romances; and some of them are founded on ancient history, for instance the romance of '*Troy*,' written about 1170, by Benoit St. More; and the celebrated romance of '*Alexander*,' written in the beginning of the 13th century, which is the origin of the Alexandrine verses of twelve syllables which are still used by modern French writers. ('*Corps d'Extraits de Romans de la Chevalerie*,' par Tressan; Dunlop, '*History of Fiction*;' and Huet, '*De l'Origine des Romans*.')

The poets who wrote in the *Langue d'Oïl* were called '*Trouveres*,' and like their namesakes of Provence, the Troubadours, reckoned among their body several persons of high rank, such as Thiebaut, count of Champagne, and king of Navarre (1201-53), who imitated with great success the poets of Provence. His poems were published in 1742 at Paris, under the title '*Poesies du Roi de Navarre*,' 2nd edit. 1824. Another kind of poetry which belongs to this period is the *Fabliaux*, or tales, which are partly of oriental origin, and were imported by the crusaders into Europe. They are generally written in verse, and sometimes alternately in verse and prose. They often contain a great deal of wit and fun, but are also frequently disfigured by a coarse licentiousness. The poets of other countries have borrowed from them, and Boccaccio has largely drawn from this source. A fine edition of the *Fabliaux*, printed from the manuscripts of the Royal Library, was published by Barbazan in 1756, 3 vols.; and a new edition of the same collection in 4 vols., by Meon, 1808, and in 2 vols. 1823. The most entertaining of these *Fabliaux* were translated into modern French by Legrand d'Aussy, and published in 1779 under the title of '*Fabliaux, ou Contes du 12me et 13me Siècles*;' a new edition by Raynouard appeared in 1829.

The persecution of the Albigenses, whose tenets were embraced by many of the Troubadours, plunged the south of France during the 13th century into an abyss of misery, and destroyed the literature of Provence. The Troubadours, who had spread the glory of the language of Provence disappeared for ever, and the language itself sunk to the condition of a patois, or country dialect. Divided into many dialects, it is still spoken over all the south of France, and is the idiom of a part of eastern Spain, extending from Figueras to

Murcia, as well as of the populations of Sardinia and the Balearic Islands; but in all those countries the educated classes have adopted the Castilian, Italian, and French. This decline of the Occitanian language on the one hand, and on the other the establishment of the seat of government for France and of a university at Paris, rendered the northern dialect, or the Langue d'Oïl, the predominant language of all France.

FRANCE, ISLE OF. [MAURITIUS.]

FRANCHE-COMTE, a province of France, and one of the thirty-two military governments into which in ante-revolutionary times that kingdom was divided. Its greatest length from north-north-east, near the head of the Saône, to south-south-west, near the town of St-Julien, on the Sarraud, a feeder of the Ain, is above 130 miles; and its greatest breadth at right angles to the above, from near the river Vingeanne to the banks of the Doubs, more than 90 miles. It was bounded N. by Lorraine, E. by Switzerland, from which it was separated by the Jura, S. by Bresse, W. by Bourgogne, and N.W. by Champagne. It now forms the departments of Jura, Doubs, and Haute-Saône.

The province is wholly in the basin of the Rhône: it is watered by the Saône and the Ain, feeders of the Rhône, the Doubs, and Oignon, feeders of the Saône, and several other streams belonging to the same system. The lower and more level parts of the province are fruitful in grain; the upper parts produce pasturage for a vast number of cattle. The capital was Besançon; amongst the other towns were—Dôle, Saint-Claude, Pontarlier, Gray, and Vesoul.

Franche-Comté was in the time of Cæsar inhabited by the Sequani, a Celtic people, one of the most powerful in Gaul. Their contentions with the Ædui led them to call in the Germans under King Ariovistus, by whose aid they effectually humbled their opponents; but the warlike strangers whom they had introduced became the tyrants of that part of Gaul, and especially of the unhappy Sequani. Cæsar drove out the Germans (B.C. 45); but it was for the natives only a change of masters, and the Sequani, with the rest of Gaul, passed under the yoke of Rome. Under the Roman dominion Franche-Comté, with Switzerland and part of Bourgogne, constituted the province of Maxima Sequanorum.

Upon the downfall of the Roman empire Franche-Comté was comprehended in the kingdom of the Burgundians, upon the overthrow of which it became subject to the Franks. In the division of the territories of Clovis among his sons and descendants it formed part of the kingdom of Austrasia, and afterwards of Lotharingia, or Lorraine. In the reign of Charles the Simple, king of France, to whom after several changes this district, then called Haute-Bourgogne (Upper Burgundy), or the principality of Outre-Saône (beyond the Saône), had fallen, Besançon with the surrounding districts was formed into a county, called the county of Bourgogne, in favour of Hugues, the first count (A.D. 915). Some writers however represent Franche-Comté to have been part of the kingdom of Bourgogne Transjuran, and postpone the erection of the county of Bourgogne till A.D. 995.

Renaud III. (A.D. 1127-1148), count of Bourgogne, whose dominions had acquired great extent, reaching from Bâle to the Isère, refused homage on various pleas to Lothaire, emperor of Germany, to whose predecessors the counts of Bourgogne had paid homage, and maintained his refusal during his life. It is supposed that the county derived from this circumstance its designation of La Franche-Comté. The marriage of Renaud's daughter to the emperor Frederick Barbarossa brought the county into the hands of that prince, who made Besançon a free imperial city. He resigned the county to his son Otho, by the marriage of whose descendants the county passed into various hands, as of the kings of France and the dukes of Bourgogne of the first and second race of the blood royal of France. On the death of Charles le Hardi, last duke of Bourgogne of the second race, the county passed, with a considerable portion of his inheritance, to the Archduke Maximilian, from him to his grandson Charles V., and so to the Spanish branch of the Austrian family. In 1668 Louis XIV. of France conquered Franche-Comté from the Spaniards, but restored it by the peace of Aix-la-Chapelle in the same year. He again conquered it in 1674, and it was ceded by Spain to France at the peace of Nimoguen in 1678.

FRANCISCO, RIO. [BRAZIL.]

FRANÇOIS, CAPE. [HISPANIOLA.]

FRANCONIA. [BAVARIA.]

FRANEKER. [FRIELAND.]

FRANKENBERG, in the bailiwick of Chemnitz, in the kingdom of Saxony, is an agreeable town situated on the Zschopen, and in a picturesque valley: it is well built and regularly laid out, and contains 6273 inhabitants. Next to Chemnitz it has the largest factories in Saxony for printing cottons, and employs upwards of 600 hands in this branch alone: it also manufactures cottons, linens, and leather, and has extensive bleaching-grounds in the vicinity. The copper-mines near it produce but small quantities of the metal.

FRANKENSTEIN. [SILBIA.]

FRANKFORT. [KENTUCKY.]

FRANKFURT on the Main, a small republic in the western part of central Germany, so named from its capital Frankfurt-am-Main, which forms the subject of the next article. The town is supposed to date its origin from the times of the Merovingian princes. Charlo-

magne built a palace in the town, in which he held a council of the church in the year 794. Lewis the Pious surrounded it with walls and ditches in 833. In consequence of the treaty of Verdun, by which Aix-la-Chapelle fell to the share of Lotharius, Frankfurt became the capital of the empire of the Eastern Franks, and thither Lewis the German transferred the fairs held by the Austrasians. A palace, called the Roemer (Roman palace), was also built here by its sovereigns, who held their courts of ceremony under its roof from time to time, though it was not their fixed abode. In the records of the middle ages Frankfurt is mentioned as one of the principal cities in the German empire, and the emperor William pledged himself, in 1254, that it should never be mortgaged or alienated—a pledge which made it an immediate dependence of the empire itself. A golden bull confirmed the privilege which Frankfurt had long enjoyed, of being the place of all imperial elections. In the early part of the 13th century the Roemer, which had become the property of one of the burghesses about fifty years before, was purchased and converted into a town-hall by the magistrates, who about this time availed themselves of the prodigality of the German emperors to buy their monopolies and domains in and near the town. The emperor Richard conferred additional immunities on it in 1257; in 1272 Charles IV. sold the bailiwick of the empire to the magistracy; and in 1320 Lewis the Bavarian empowered them to redeem all the properties, tolls, &c., in Frankfurt or its vicinity which he or his predecessors might have pawned to others. The great Easter fair, in addition to the Michaelmas fair, which had been held since the days of Lewis the German, was instituted in 1330. In 1390 the town acquired the lands on the left bank of the Main, on which Sachsenhausen now stands, by which acquisition it completed its present extent of territory. In 1555 Charles V. endowed it with the right to the free navigation of the Main. The treaty of Westphalia recognised all its immunities, and it was taken under the special protection of the empire by the imperial rescripts of 1682 and 1683. The noblemen who settled in the town and connected themselves with the wealthier class of inhabitants, gradually formed clubs, or exclusive companies, and these societies ultimately engrossed nearly the whole government; but the Congress of Vienna in 1815 put an end to the abuse. The emperor Charles VII. resided here from 1742 to 1744, and the German diets were at that period transferred to Frankfurt from Ratisbon. It was the place of assembly for the states of the electorate of the Upper Rhine; and dating from A.D. 753, 21 German diets were held here. Under the settlement of the empire in 1803 all the ecclesiastical property within the boundaries was made over to the town, on condition of its paying certain annuities to the amount of 34,000 gulden, about 3000l. sterling. The arch-chancellor of the empire, who had a large property in the town, became a member of the Confederation of the Rhine established by Napoleon in 1806, accepted the title of 'Prince-Primate,' and was placed at the head of the government; Napoleon reserving to himself the right of nominating his successors. This was a short-lived dignity; for Napoleon, finding it convenient to separate lay from ecclesiastical jurisdictions, put an end to the prince-primacy in February 1810, added the principalities of Fulda and Hanau, with some small exceptions, to the town and territory of Frankfurt, erected the whole into the 'Grand Duchy of Frankfurt,' and appointed Prince Eugene, viceroy of Italy, its sovereign. This grand duchy contained an area of about 1990 square miles. It fell to pieces with the downfall of its founder, and a resolution of the congress of Vienna on the 9th of June, 1815, re-established the city of Frankfurt and its former territory as a free state.

The small extent of territory (38 square miles) which Frankfurt possesses beyond its walls, lies immediately round them on both sides of the Main; it is quite level, and its soil, a deep sand covered with a layer of lava, has been at every point brought into a high state of productiveness. It is watered by the Main, and produces corn, though not in quantity sufficient for the consumption; potatoes, vegetables, fruit, and wine: many horned cattle and sheep are also bred. The inhabitants of the eight villages on the extramural dominions are partially employed in manufacturing and mechanical pursuits within the walls of the city itself; but the most lucrative occupation they follow is that of carriers through many states of Germany. The population of the whole territory of the republic in 1811 amounted to 47,372; in 1849 it was 77,950; namely, 62,500 in the city and 10,650 in the eight villages, and 4800 federal troops. The Jews, who number about 6000, are admitted to enrol themselves in the class of burghesses. The majority of the inhabitants are Lutherans; the numbers of Reformed Lutherans being about 3000, Roman Catholics 8000. There are 14 Lutheran places of worship (of which 7 are in the town), 2 Reformed Lutheran, 3 Roman Catholic, and 2 Jewish.

The constitution, promulgated on the 15th of May, 1816, vests the sovereign power in the burghesses. This power is delegated to three superior authorities: the senate, the permanent committee of burghesses, and the legislative body. The senate is composed of 20 members, with the two burgomasters as its presidents, who are elected annually; the head burgomaster draws up all reports to the senate and has the control of the military department, while the junior controls all affairs relating to the police, the corporation, and criminal proceedings. The senators discharge all the administrative functions

and compose the civic tribunal as well as a secondary court of appeal; the highest court of appeal being the supreme tribunal at Lübeck. The permanent committee is composed of 61 members, and its principal office is to control the income and expenditure. The legislative body consists of 85 members, 20 of whom are senators, and as many are members of the permanent committee; the remaining 45 are chosen from an electoral college of 65 burghesses, elected by the three civic orders; the patrician, or men of letters, the merchants, and the tradesmen, mechanics, &c. They are elected for the session only, which opens in November and sits for six weeks; their sanction is requisite to all new laws as well as to the budget. The nine deputies who are returned by the rural dependencies of Frankfurt do not assist at the deliberations, excepting when matters connected with the interests of their constituents are brought forward. The senate and permanent committee are chosen, as vacancies occur, from among the other members of the legislative body. Foreign consuls reside at Frankfurt. Alterations were made in the constitution of the republic in 1848 and 1849, during the revolutionary epidemic in Germany; but as all efforts made during four years to make the new constitution work proved ineffectual, the German Diet, in August 1852, decreed a return to the former system.

The public income, according to the budget of 1853, is estimated at 1,655,200 florins, and the expenditure at 1,636,140 florins. The debt in the same year amounted to 6,680,000 florins, exclusive of 6,768,700 florins owing for the construction of railways.

The Lutherans have a consistory and the Calvinists two presbyteries, which direct all their respective ecclesiastical affairs. The Roman Catholics are under the bishop of Limburg-on-the-Lahn.

Frankfurt is a member of the Germanic Confederation, and in conjunction with the other free towns, Lübeck, Bremen, and Hamburg, occupies the seventeenth place in the limited Council of the Diet, but enjoys its independent vote in the full council. It furnishes a contingent of 693 men to the army of the confederation, and pays a quota of 47 florins 35 kreutzers towards the annual expenses of that body.

FRANKFURT-AM-MAIN (Frankfort-on-the-Main). This celebrated commercial city, the seat of the German Diet, stands on the right bank of the Main, across which there is a stone bridge, which unites it with the suburb of Sachsenhausen. It is situated in 50° 6' 43" N. lat., 8° 41' 24" E. long., and had, in 1849, a population of 62,500. The valley and the town are commanded on the north by the gentle heights of the Rödenberg, and at some leagues distant behind them by the range of the Taunus; and on the side of Sachsenhausen, in the south, by the Mühlberg, Sachsenhausenberg, and Lerchesberg, offsets of the Odenwald. The old walls and ramparts, with their stagnant ditches, were razed between the years 1806 and 1812, and the site converted into spacious park-like grounds; the glacis too is now covered with vineyards and gardens, which are externally bounded by a broad road; and beyond this road the adjacent ground is embellished with a profusion of villas, pavilions, and private gardens.

The principal public entrances are nine large gates, which were formerly flanked by cumbrous quadrangular towers: most of these have in modern times been replaced by handsome buildings, modelled from the ancient temples of Athens, Rome, &c. Of the nine entrances Frankfurt has seven and Sachsenhausen two. In front of the north-eastern entrance is the monument erected by Frederick William II., king of Prussia, to the memory of the Prince of Hesse-Philippsthal and his gallant followers, who fell at the successful storming of the town on the 2nd of December, 1792: it consists of a quadrangular block of German marble, surmounted with appropriate trophies, bearing a commemorative inscription, and resting on an artificial rock. The Bockenheim gate, which is the western entrance, is built on the model of the temple of Aperial Victory at Athens, and the Upper-Main gate is an imitation of the porch of the Campus Martium at Pompeii. The adjacent buildings are neat structures appropriated as guard-houses and for the use of the custom-house officers. The Eschenheim gate, the north-western entrance, is the only specimen extant of the ancient gates; it is a lofty massive tower, crowned by five turrets, and is a fine specimen of the German architecture of the 14th century.

Frankfurt, inclusive of Sachsenhausen, contains nearly 4000 houses; between 400 and 500 of them being in the latter suburb. They form 6 large and 14 minor squares or open spaces, and above 220 streets and lanes. The places of worship include 7 Lutheran, 2 Calvinist, and 3 Roman Catholic churches, and one synagogue.

The city is divided into 14 quarters, numbered from A to O, 12 within the walls and 2 in the Sachsenhausen suburb. The Belle Vue and other streets built along the Boulevards, which form a handsome screen to the more ancient part of Frankfurt, have been erected since the fortifications were demolished. The largest square, called the Rossmarkt, is surrounded by fine buildings, and connected with the square of the theatre by a spacious avenue of lime-trees and acacias. There are fountains in the centre of the Ross-Markt, as well as in the squares of the Liebfrauen and Roemerberg. The right bank of the Main, from the upper to the lower gate, which is nearly the whole length of the city, is edged by a spacious quay, and behind this lies an uninterrupted line of buildings. During the fairs a

portion of the quay, on which rows of booths are erected, presents a scene of the most animated description.

The most remarkable buildings in the town are the 'Roemer,' or Guildhall, an irregular structure, with lofty roofs in the old Frankish style. Under its roof are the Wahlzimmer, or Hall of Election, a spacious and handsomely-furnished apartment, in which the electors and their representatives were wont to assemble and partly conduct the business of electing the emperors of Germany. It is now used for the meeting of the senate. Next to it is the Kaisersaal, or Imperial Hall, where the emperor upon his election held his public dinner, at which he was waited upon by the counts and the high officers of the empire. There are niches in this hall which contain portraits of the emperors of Germany from Conrad to Leopold II.; but there was not one left unoccupied for receiving the portrait of Francis II., the last of those sovereigns. A sort of ante-hall with a painted cupola, and furnished with specimens of the pictorial talent of the Frankfurters, opens into the Electiou Hall. Here is also the Depository of the Archives, surrounded by walls six feet in thickness. It contains, among other valuable records, the celebrated 'Golden Bull' promulgated by Charles IV. in 1356, which is written on 45 sheets of parchment. The Roemer is situated on the western side of the Roemerberg, an irregular open space or square, which has also much of historical interest attached to it. This is the spot where the people collected to welcome the newly-elected emperor, bearing his crown and sceptre in solemn procession, after he had been anointed in the cathedral.

Not far from the Roemer is the new Hall of Justice with its various courts and offices; and south of it, on one side of the Fahr-gate on the quay of the Main, stands the Saal Hof, on the site of a palace built by Lewis the Pious, Charlemagne's son, in which Charles the Bald was born and Lewis the German long resided, but of which scarcely any part is extant, save the Chapel of St. Elizabeth, a vaulted chamber with columns of red-sandstone, and walls six feet in thickness. The present building, which is private property, was raised in 1717. The Braunfels belongs to one of the old equestrian clubs; the courtyard is used for the Exchange, and the spacious saloons on the first floor are occupied, in the fair times, by dealers in all kinds of luxuries, &c., and are the favourite lounge for visitors. The Palace of the Prince of Tour und Taxis, in the north-western part of Frankfurt, is a spacious structure in the French style of 1730, richly adorned with paintings, sculptures, and ancient hangings: it contains 150 apartments, including two octagonal halls; and here the Diet of the Germanic Confederation holds its sittings. The ancient House of the Teutonic Knights in Sachsenhausen, is a sombre massive building in a low situation, but well laid out in its internal arrangements. It is at present the property of the emperor of Austria.

The two large buildings in Frankfurt, which were once public arsenals, were stripped of their contents by the French, and are now appropriated to the police as a prison, and for other purposes. The guard-house, which is chiefly used as a prison, is an unsightly structure of the early part of the 16th century, which disfigures the Parade. An old Carmelite convent, now the quarters of the garrison of the town, has cloisters covered with faded fresco paintings executed in the beginning of the 16th century; the Stone House, near the Roemerberg, is a fine remnant of the middle ages, and the Fürsteneck, near the bridge, may be instanced as one of the oldest buildings in Frankfurt. Besides these, the theatre, public library, academy of arts and sciences, the new hospital of the Holy Ghost, a Jews' hospital, and an orphan asylum, are deserving of attention.

The church of St. Bartholomew, formerly the cathedral, is built in the gothic style and in the shape of a Roman cross, and though begun in the time of the Carolingian princes, was not finished until the middle of the 14th century. Its colossal tower, 160 feet in height, is one of the latest models of the Gothic. The colossal statue of St. Bartholomew in this church is reckoned a masterpiece of sculpture. On the right of the grand choir is the chapel, in which the electors accepted the German emperor elect as their sovereign after he had been crowned and anointed at the high altar. The tower was begun in 1415 and finished in 1509. At a short distance north of the town is the public cemetery, laid out like a pleasure ground of shrubs; and adjoining it an equally well-arranged burial place for the Jewish community. There are four hospitals, one of which is for lunatics and epileptic persons; an orphan asylum, a house of refuge for sick poor, and several other benevolent institutions. Among the scholastic establishments are a gymnasium of six classes, conducted by a director, six professors, and nine masters; a normal school of 13 classes, 7 for boys and 6 for girls, and a variety of other seminaries. The public library contains about 60,000 volumes, among which are a complete collection of works relating to German history, and many rare manuscripts, early editions, and engravings.

The scientific institutions of Frankfurt comprise a Medical Institute, founded in 1763 by the liberality of Dr. Seukenberg, which is composed of a medical library, an anatomical theatre and lecture-rooms, and botanical garden. The Senkenberg Society of Naturalists was united to this establishment in 1817, and in the adjoining building possesses an extensive museum, to which Rüppell, the explorer of north-eastern Africa and the parts adjacent, who travelled partly at the society's expense, has contributed several valuable collections in

natural history. Frankfurt also possesses a philosophical society, a society of the useful arts, which has a mechanics school; a society of industry; Stadel's Institute of the fine arts, which possesses a choice collection of paintings, &c., bequeathed by the founder, who left an endowment for lectures and instruction in such branches of knowledge as are connected with the fine arts; a school of design, a society for the fine arts, the Bethmann museum of antiques; a society for encouraging the study of the German language, &c. Dr. Senkenberg also endowed the town hospital. The libraries of the cathedral and the Dominicans are also rich in rare manuscripts and old editions. There are 22 booksellers' establishments, 14 printing-houses, and 3 type-foundries in Frankfurt.

With the exception of Sachsenhausen, whose inhabitants are principally agriculturists, gardeners, and day-labourers, the citizens of Frankfurt derive their subsistence from commerce, money operations, and manufactures. It is a place of considerable transit for German and foreign produce. The chief articles of trade are wines, English, French, and Italian goods, Bavarian timber, German wools, colonial produce, and German manufactures. There is scarcely any article of colonial or European produce which may not be found at the Frankfurt fairs. The sale of books too is very important. The fairs, held at Easter, and in August or September, are no longer what they were in the 16th century, when they were frequented at times by as many as 40,000 strangers; but they still present an animating and attractive scene. The chief manufactures are carpets, table covers, tobacco, cards, cottons, silks, woollen stuffs, jewellery, printers' black, &c.

Frankfurt was made a free city A.D. 1154. It derives great wealth from transactions in banking, commission, and the public funds. The aggregate capital of its bankers is said to be about 20 millions sterling, and the annual transactions in bills of exchange are estimated at about 12 millions sterling. The city is connected by railways with all parts of Germany; steam packets ply regularly on the Main. The Constituent Assembly, elected in 1848 to frame a constitution for Germany, held its sittings in Frankfurt, and chose the Archduke Johann of Austria as Lieutenant-General of the Empire. The archduke was solemnly installed in office July 11, 1848. In April following the assembly elected the king of Prussia as hereditary emperor of Germany, an honour which the king declined, as well as a constitution which they had framed for his own kingdom. Austria also protested against all the decisions of the assembly; its representatives withdrew, those of Prussia were soon after recalled, and the assembly on the 30th of May, 1849, agreed to transfer its sittings to Stuttgart.

FRANKFURT (an-der-Oder), capital of the circle of Frankfurt in the Prussian province of Brandenburg, is pleasantly situated on the left bank of the Oder, in 52° 22' N. lat., 14° 46' E. long., at an elevation of 116 feet above the level of the sea, and at a distance of 50 miles by railway E. by S. from Berlin. It is regularly built, and encircled by walls with towers, and a ditch. Outside the walls, which are pierced by five gates, are three suburbs, one of which, the Damm, situated on the opposite bank of the Oder, is joined to the town by a wooden bridge. The population numbers about 26,000. Frankfurt has six Protestant churches, a Roman Catholic church, and a synagogue. The Upper church has some fine windows of painted glass. The university, founded here in 1506, was transferred to Breslau in 1810. Frankfurt possesses a gymnasium with a library, a grammar school, a school of midwifery, an orphan asylum, two hospitals, a house of correction, and a free school for 300 soldiers' children, founded in memory of Leopold, duke of Brunswick, who lost his life here in April 1785, while endeavouring to save a man from drowning. A monument is erected to him at the eastern end of the bridge across the Oder. In front of the Guben gate is a triangular pyramid in memory of Kleist, the poet, who fell in the battle of Kunersdorf in 1759, when Frederick the Great was defeated by the Austrians. The manufactures of the town consist of woollen and silk fabrics, mustard, brandy, tobacco, sugar, gloves, stockings, linen, leather, &c.; its trade is extensive, and much facilitated by its position on a navigable river, by canals, and railways. Three annual fairs, instituted in 1253, are held in February, July, and November, and are well frequented, particularly by Polish dealers. At these fairs, woollen, cotton, linen, and silk manufactures, feathers, wool, hardware, iron, porcelain, glass, &c., are among the principal articles sold. The inhabitants are engaged also in the navigation of the Oder, on which above 2000 vessels and craft annually pass Frankfurt.

FRANKLIN. [MISSOURI.]

FRANZENBRUNN. [EGGER.]

FRASCATI, a town of the Campagna, 8 miles E.S.E. from Rome, is situated on the north-west slope of the Tusculan Mount. On the summit of the mountain, which is 2000 feet above the sea, and about two miles above Frascati, are the ruins of ancient Tusculum, a town of Latium, built long before Rome, and often mentioned in Roman history. After the subjection of Latium to Rome it was governed as a municipium. Several distinguished Roman families, such as the Manilia and the Porcia, came from Tusculum. It was a strong place both from its position and the solidity of its polygonal walls, which enabled it to resist the attack of Hannibal. Tusculum continued to exist after the fall of the empire, and was governed by counts till the end of the 12th century. It was the occasional residence of several popes, among others of Alexander III.,

who here received the ambassadors of Henry II. to assert the king's innocence of the murder of the Archbishop of Canterbury. In 1169 the Tusculans fought and defeated the Romans, but in 1191 the Romans took Tusculum and destroyed it. Remains of the walls of houses and of the citadel are still extant, as well as a small theatre and a curious crypt with a klud of arched roof of primitive construction. The hill of Tusculum is volcanic, and is separated from the central mass of the Alban Mount by the Alban valley, through which runs the Via Latina.

After the destruction of Tusculum the inhabitants built themselves huts on the lower slope of the hill towards Rome, and covered them with 'frasche,' boughs of trees, from which the modern town has taken its name. It has some good buildings, 5000 inhabitants, and is a bishop's see. Many of the older houses date from the 13th or 14th century: the church of San Rocco, formerly the cathedral of San Sebastian, and still called Duomo Vecchio, dates from 1309. The principal modern building, the cathedral of San Pietro, was completed in 1700. It contains a monument to Cardinal York, who was bishop of Frascati, and another erected by the cardinal in memory of his brother, Prince Charles Edward, the young Pretender, who died in Frascati, January 31, 1788. The air is wholesome, the place being above the region of the malaria, and the country around is planted with fine trees. But its villas form the great attraction of Frascati, it being a place of resort of the Roman nobility and cardinals in the summer and autumn. One of the most splendid of these residences is the Villa Aldobrandini, called also Belvedere, adorned with numerous fountains, and water-works, and paintings. The villas Taverna and Mondragone, belonging to the Borghese family; the Villa Bracciano, with frescoes by Dominichino; the Villa Conti, with its fine groves; the Villa Falconieri, and others, are also worthy of attention. The site of the Tusculanum of Cicero is not exactly known: some believe it to have been near Grotta Ferrata, on the road from Frascati to the Alban Lake; others place it near La Rufinella, on the hill of old Tusculum. The Villa Rufinella formerly belonged to Lucien Bouaparte. On the slopes of a hill within the grounds are plaques in box the names of celebrated ancient and modern authors constituting the Parnassus of the prince just named. There are remains of ancient buildings all about this neighbourhood. Near Frascati is the Canaldoli, one of the finest and most beautifully-situated monasteries in Italy. Grotta Ferrata is an abbey of Basilian monks, established in the 11th century, who retain the Greek liturgy. The church is adorned with fine frescoes by Dominichino, and the convent has a library with many Greek manuscripts.

(Valéry, *Voyages en Italie*; Mattei, *Memorie Storiche dell' antico Tuscolo oggi Frascati*; Gell, *Topography of Rome*; *Handbook for Central Italy*.)

FRASERBURGH, Aberdeenshire, Scotland, a market-town and seaport in the parish of Fraserburgh, is situated on the east coast of the county, in 57° 44' N. lat., 2° 0' W. long., distant 42 miles N. from Aberdeen. The town is built on the west side of the Bay of Fraserburgh, which is bounded S.E. by Cairnbulg Point and N.W. by Kinnaird's Point, on which there is a lighthouse. The population of the burgh in 1851 was 3093. The town took the name of Fraserburgh from Sir Alexander Fraser of Philorth, who in 1613 obtained for it a charter as a burgh of regality. The streets are generally wide and clean, and the houses substantial, and many of them elegant. The town-house, the market-cross, and the tolbooth were erected by Sir Alexander Fraser. In addition to the parish church there are an Episcopal chapel, a Free church, and a chapel for Independents. Fraserburgh is the head-quarters of an extensive fishing district. Fishing begins in July and lasts till September, and during its continuance the population of the town is augmented by some 1200 persons. The harbour is good, but not sufficiently capacious for the accommodation of the vessels which resort to it in the fishing season. The bay affords good anchorage. Rope and sail making are carried on. The exports include barley, oats, and potatoes, cattle, dried and pickled cod, and herrings. Freestone is quarried in the parish; the piers and some of the houses are built of it. There are in the parish the ruins of two ancient chapels, one of which belonged to the Cistercian abbey at Deer. At the west end of the town is an old quadrangular building of three stories, designed by Sir Alexander Fraser for a college; he had obtained a charter from the crown in 1592 for the institution and endowment of a college and a university, but the plan was never carried into effect. There are in the town a savings bank and a parochial library. The fishing village of Broadsea adjoins Fraserburgh on the west.

FRAUENREUTH. [BERCHTESGADEN.]

FRAUSTADT. [POSEN.]

FREDERICKSBURG. [VIRGINIA.]

FREDERICKSHALL, FREDERICKSTADT, and FREDERICKSVAERN. [AGERHUSUS.]

FREDERICKTOWN. [MARYLAND; NEW BRUNSWICK.]

FREEBRIDGE LYNN, a hundred in the western division of the county of Norfolk, which has been constituted a Poor-Law Union. The hundred of Freebridge Lynn is bounded N. by the hundred of Smitidon, E. by the hundreds of Gallow and Launditch, S. by the hundreds of Clackclose and South Greuhoe, and W. by the hundred of Freebridge Marshland. Freebridge Lynn hundred comprises 34

parishes, with an area of 83,667 acres, and a population in 1851 of 14,536. Freebridge Lynn Poor-Law Union, which is not so extensive as the hundred, contains 32 parishes, with an area of 64,738 acres, and a population in 1851 of 13,468.

FREETOWN. [SIERRA LEONE.]

FREIBERG, a mining town in the kingdom of Saxony, is situated on the Münzbach, a feeder of the Mulde, on the northern slope of the Erzgebirge Mountains in 50° 55' N. lat., 13° 21' E. long., about 25 miles S.W. from Dresden, and has about 12,000 inhabitants. Freiberg is the centre of administration for the Saxon mines. It is surrounded by walls; the streets are regular, well-built, well-lighted, and paved; and it has a suburb, besides the Freudenstein, or Freistein, an old castle, now used as a storehouse for mining produce. It contains six churches; to which a Roman Catholic church was added in 1831. The High church (once a cathedral) is a fine specimen of the architecture of the middle ages. It contains a handsome monument in memory of Prince Maurice of Saxony, who fell in the battle of Sievershausen in 1553, and another to the memory of Werner, the great mineralogist, who died in 1817. Among the other buildings of note in the town are the town-hall, the high school, and the mining academy, which was opened in 1767, and comprises class and lecture-rooms, Werner's mineralogical collection, a museum of models of mining machines, and a library of 13,000 volumes. Werner and A. von Humboldt studied in the mining academy of Freiberg, which is conducted by seven professors and other teachers. Freiberg has also a number of benevolent institutions, among which are an hospital, an orphan asylum, a house of industry, and infirmaries.

The manufactures consist of gold and silver lace, brass wares, white lead, gunpowder, shot, iron and copper wares, linen, woollen goods, ribands, tape, leather, and laces. There are several large breweries in the town. In the vicinity are about 130 mines of silver, lead, copper, cobalt, &c. About three miles from the town at Halsbrücke are the extensive amalgamation and smelting works for this rich mining district.

FREIBURG (Freyburg), an archiepiscopal town in the southern part of the grand-duchy of Baden, is situated on the Treisam, 83 miles by railway S. by W. from Karlsruhe, 40 miles N. by E. from Basle, stands at an elevation of about 940 feet above the level of the sea, in 47° 59' N. lat., 7° 53' E. long., and has a population of about 16,000 including the suburbs. The town is surrounded with walls pierced by three gates, a fourth having been removed. It is in general open and well built, the 'Kaiserstrasse' in particular being broad, and lined with handsome houses. Among the public edifices are the former house of assembly for the states, which is at present the archbishop's palace; the grand duke's palace, on the site of the former citadel; the government buildings; the edifice containing the courts of justice and post-office; the old and the new university buildings, the latter of which was once a college of Jesuits; the town-hall, museum, granary, theatre, and house of correction. Freiburg has several squares, in the centre of one of which, the fish-market, is a fountain surmounted by a statue of Duke Berthold III. of Zähringen, the founder of the town, represented in the habiliments of his time. Besides three Catholic churches and one Lutheran church, the religious establishments have several churches and chapels attached to them. The most attractive feature in the town is the cathedral or minster, probably the most beautiful and perfect specimen of gothic architecture in Germany. It is a work of the 12th century, begun in 1122, and not completed until 160 years afterwards; the tower, which is 336 feet high, is peculiarly remarkable for its lightness and elegance. Though not quite so lofty as St. Stephen's at Vienna, or the cathedral at Strasbourg, it is deemed to excel both in purity of style, symmetry of proportions, and holdness of construction. The structure is built of red-sandstone, in the form of a cross, and contains several windows of finely-painted glass, sarcophagi of the dukes of Zähringen, and paintings by Grien, Holbein, and other artists. Holbein's Assumption of the Virgin, which forms the altar-piece, is esteemed his masterpiece.

The university, which was founded under the name of 'the Albertina' by the archduke Albert VI. of Austria, in the year 1454, enjoys endowments to the extent of upwards of 2500*l.* a year, and is possessed of a library of more than 100,000 volumes, as well as a museum, an anatomical theatre and clinical establishment, a botanic garden, &c. It is likewise supported by an annual grant of about 3400*l.* from the States. The university of Freiberg is famous as a school of Catholic theology. There are also a gymnasium, a normal school, a civic school, many private seminaries, several Sunday and holiday schools, and a garden of industry, where the management of forests, orchards, and gardens is taught. There are three hospitals and an orphan and foundling asylum.

The manufactures of Freiberg consist of leather, chicory, paper, sugar, starch, tobacco, soap, bells, musical instruments, &c. There are also bleaching and dye-works.

Freiburg was founded by Berthold III. in 1118; it was formerly the capital of the Breisgau. The fortifications were levelled by the French in 1754. The archbishop of Freiberg is the head of the Catholic Church in the grand duchy of Badeu; his province includes the whole of the grand duchy, the principalities of Hohenzollern, and the bishoprics of Mainz (in Hesse-Darmstadt), Fulda (in

Hesse-Cassel), Rottenburg (in Würtemberg), and Limburg (in Nassau). A statue was erected in memory of Berthold Schwartz, the inventor of gunpowder, in Augustin Platz, near St. Martin's church, in 1853.

FREISTADT. [ENS.]

FREJUS. [VAR.]

FREMANTLE. [WESTERN AUSTRALIA.]

FREYBURG, or FRIBURG, one of the Swiss cantons, is bounded N. and E. by the canton of Bern, S. by Vaud, and W. by Vaud and the Lake of Neuchâtel, which divides it from the canton of Neuchâtel. Its length from north to south is 40 miles; its breadth, which is very unequal, is about 28 miles in the widest part. The area is 563 square miles; and the population in March 1850 was 99,805, of whom 87,753 were Catholics, 12,133 Calvinists, and the remainder foreigners and Heimathlosen. The south part of the canton is very mountainous, being covered by offsets from the great Alpine chain which divides the waters that fall into the Rhône and the Lake of Geneva from those which flow into the Aar. The canton of Freyburg belongs to the basin of the latter river, being watered in its length from south to north by the Sarine or Saane, one of the principal affluents of the Aar; the general slope of the ground is towards the north and north-west, down to the plains which border the lakes of Morat and Neuchâtel. There is but a very small fraction of the south-west part of the canton which slopes southward towards the Lake of Geneva. The highest summits in the south part of the canton, and on the left bank of the Sarine, are the Moléson, 6700 feet, and the Dent de Jaman on the borders of Vaud, which is 4500 feet. On the right or east bank of the Sarine the Dent de Branleire is above 7700 feet, and Mount Berra is about 5300 feet high. The Sarine or Saane rises near the head of the Sanetsch Pass, the most western pass in the Bernese Alps in the canton of Bern. It flows first northward through the valley of Gsteig; but on approaching the village of Saanen, or Gessenai, it runs a few miles westward in the canton of Vaud, and then resuming a northerly direction it traverses the canton of Freyburg from south to north, passing Gruyère and Freyburg. A few miles below Laupen where it re-enters the canton of Bern, it joins the Aar on the left bank after a rapid course of about 70 miles. The Charmey, one of its feeders on the right bank, waters the valley of Bellegarde, which opens upon the Sarine a little below Gruyère. Besides the Sarine and its affluents, which drain more than two-thirds of the territory of Freyburg, the Broye, which has its source on the borders of Vaud, runs northward, crossing the western part of the canton, enters the Lake of Morat, and issuing from it at the opposite end, empties itself into the Lake of Neuchâtel.

The climate is cold in winter and subject to sudden changes of temperature in the spring and autumn. The principal productions of the soil are wheat, rye, barley, potatoes, and oats. There is good pasture, both natural and artificial. Vines and other fruit-trees are grown in the lowlands near the lakes of Morat and Neuchâtel, where the climate is milder than in the south of the canton. Some tobacco is grown in the same district. Timber from the forests and peat are important products. In common years the canton produces sufficient corn for its own consumption. The principal wealth of the greater part of the country consists in its pastures and its cows, sheep, goats, pigs, and horses, which are very numerous in proportion to the area of the canton, and of excellent breed, especially the horses and cattle, which are the best in all Switzerland. Dairy husbandry is much attended to and well understood. The cheeses made in the canton of Freyburg are among the best in Switzerland. The cheese properly called Gruyère is made on the left bank of the Upper Sarine and in the valley of the Charmey, in the south part of the canton. It is estimated that about 40,000 cwt. of cheese is made yearly; and of this quantity the valleys of the Upper Sarine and the Charmey furnish the greater part.

The manufactures are considerable—straw-plat, leather, kirsch-wasser, tobacco. There are some unimportant iron-works, glass-works, and paper-mills. Coals are dug in the valley of Bellegarde, and are sold at Freyburg. Turf is cut in the marshes of Morat and elsewhere.

The game consists of hares, chamois, red partridges, woodcocks, wild ducks, &c. Wolves and bears have become very rare, and stags and boars are extinct. The rivers and lakes abound with trout, carp, pike, tench, and eels.

The natives of the canton are generally robust and well made. The Roman Catholic is the only religion of the canton, with the exception of the district of Morat, the inhabitants of which are Calvinists. Elementary education is given in above 200 schools. There is also a normal school for teachers. Before the late revolution in Switzerland the college of Freyburg, under the direction of the Jesuits, was attended by about 500 students; a boarding-school was kept by the Jesuits, and a grammar-school also at Freyburg, founded in 1835. Since the expulsion of the Jesuits in 1847 we know not how these establishments are regulated. There is a Protestant college at Morat. Over the greater part of the canton a French patois is spoken; in the valley of the Upper Sarine the language spoken is a dialect of the Romansche; in the northern and eastern districts, which approach Bern, a Swiss-German dialect is spoken, but educated people everywhere speak French. The territory composing the canton of Frey-

burg, together with the neighbouring parts of Bern, was known in the middle age by the name of *Gdland*, *Uechtland*, and *Desertum Helvetiorum*, the country having been utterly desolated by the irruptions of the Alemanni and other barbarous hordes, after the fall of the Western empire. It formed part of the kingdom of Burgundy till the 11th century; it was afterwards governed as a fief of the empire by the hereditary dukes of Zähringen, who built Freyburg ('free town'), to which they gave a municipal government, independent of the neighbouring petty feudal lords. After the extinction of the house of Zähringen, Freyburg passed under the house of Kyburg, and from this into that of Habsburg. Rudolph of Habsburg, the founder of the Austrian dynasty, confirmed and increased the municipal liberties of Freyburg in 1274. At that time the territory of Freyburg extended only about eight miles round the town, and is still known by the name of 'alte landschaft,' 'the old country.' In 1450 the Duke Albrecht of Austria, being unable to give assistance to Freyburg, which was assailed by Bern and the other Swiss cantons, released the citizens from their oath of allegiance, and they remained for some years under the protection of the dukes of Savoy. In the war with Burgundy it took the part of the Swiss against Charles the Bold, in recompense for which it was received into the confederacy as a sovereign canton or state in 1481. By that and the subsequent wars Freyburg increased its territory to its present extent, at the expense of the neighbouring lords and of the dukes of Savoy.

The government, which was originally a popular municipality like that of Bern, all the burghers having the elective franchise, became for a long time aristocratic. In December 1830 a new constitution was framed, by which all natives of the canton aged 25, and who are neither servants nor in the service of a foreign state, have the right of voting in the primary assemblies, which choose the electors in the proportion of 1 for every 100 souls. The electors assemble in the head town of their respective districts, forming what is called the electoral colleges, which elect the members to the Great Council of the canton in the proportion of 1 for every 1000 souls. The members are appointed for nine years. The Great Council holds two ordinary sessions every year, in May and November. It appoints the council of state, or executive, composed of 13 members for eight years, and the court of appeal of 13 judges for life. The *svoyer* is president of the council of state, and is elected by its members for two years. Under the new constitution for the general government of Switzerland Freyburg returns 5 members to the National Council. [SWITZERLAND.] The canton is divided for administrative purposes into 13 districts. The capital, FREYBURG, is the subject of the next article. Among the other towns the more important are here noticed.

Morat, on the right bank of the Lake of Morat, has about 1600 inhabitants, a college, a public library, an hospital, an orphan asylum, and a castle, built in the 13th century. Near it is a pyramid raised in 1522, in commemoration of the battle against Charles of Burgundy, the old chapel and ossuary having been destroyed by the French in 1798.

The *Lake of Morat*, in German *Murtensee*, is about 5 miles long and 2 miles broad, and about 160 feet in its greatest depth; it abounds with fish. It is subject to floods, at which times it overflows the neighbouring plains, which are mostly towards the north, in the direction of the Lake of Bienné. It is separated by a flat tract of land from the Lake of Neuchâtel, into which it discharges its superfluous waters by the *Broye*.

Bulle, midway between Freyburg and Vevay, being about 18 miles from each, is the chief dépôt for Gruyère cheese. It has a population of 1500.

Gruyère, a small decayed place of under 400 inhabitants, is built a short distance from Bulle, near the left bank of the Sarine, and on a hill, the top of which is crowned by one of the best preserved feudal castles in Switzerland.

The projected railway from Bern to Geneva skirts the south shore of the lake, and passes the town of Morat.

FREYBURG, or FRIBURG, the capital of the canton of Freyburg, in Switzerland, is built on several steep hills on both banks of the Sarine, and its appearance is extremely bold and picturesque. Part of the houses rise along the slope of the hills, others are supported by massive substructions and buttresses, and separated from each other by deep ravines. Naked rocks, gardens, trees, and green fields are seen intermixed with churches, convents, and other buildings, the whole being surrounded by ramparts flanked with towers, and pierced by fortified gates. Four bridges join the two banks of the Sarine, one of iron and two of wood; the fourth, an iron suspension-bridge, erected in 1834, is one of the finest in the world; its length is 905 feet, its breadth 23 feet, and it stands 174 feet above the level of the river. The other remarkable structures in the town are—the town-house, built in the 16th century, in which the Great Council meets; the collegiate church of St. Nicholas, built in the 12th century, and famous for its curious bas-relief of the Last Judgment, and for its splendid organ, built by a native of the town; the college of St. Michel, founded by the Jesuits, with an establishment for boarders, in which several hundred young men are educated; the monastery of the Ursulines, who keep the female elementary schools; the lycœum, opened in 1805, annexed to which are collections of medals, mineralogy, zoology, &c.;

the chancellery, in which the council of state sits, and the archives and other offices of government are kept; the Franciscan convent, of which Father Girard, the zealous promoter of popular education, was an inmate; and several other convents and churches. The population of the city is about 8500. The manufactures are few: the principal are woollens, pottery, hardware, leather, tobacco, and straw-hats; there are also sugar refineries, dye-houses, two printing-presses, and several booksellers' shops in the town. Freyburg has several libraries and learned societies, public baths, a prison, a diocesan school, museum, an hospital, and a savings bank. A market is held every Saturday, besides five cattle fairs in the course of the year. Freyburg lies 16 miles S.W. from Bern, and 32 miles N.E. from Lausanne. It is the residence of the bishop of Lausanne.

FRIENDLY ISLANDS are situated in the Pacific, between 18° and 23° S. lat., 173° and 176° W. long. They consist of three separate groups, which contain several hundred islands: 15 of them rise to a considerable height, and 35 attain a moderate elevation. The remainder are low. The most southern group, the Tonga Islands, were discovered by Tasman in 1643. The largest of them, Tonga, is about 20 miles long and 12 miles wide in the broadest part. It rises about 80 feet above the sea, and its summit is a level plain. On the northern side an excellent roadstead was discovered by Cook. The population of the island is about 8000. The larger among the other islands of the group are Boscawen and Keppel islands. The central group, called the Hapai islands, is composed of a considerable number of small islands. The largest of them is Lefooga, about 8 or 9 miles long and 4 miles wide. All these islands are low and very fertile. The most northern group is formed by the Vavaoo Islands, which are likewise small and low, except the Island of Vavaoo, which is about 36 miles in circumference; its surface is uneven, and on the northern side it rises to a considerable elevation. On its southern side is Curtis Souud, or Puerto de Refugio, one of the safest and most spacious harbours in the Pacific. The most northern island belonging to this group is Amargure, or Garduer Island, in 17° 57' S. lat. The most southern of the Friendly Islands is Pylstaart, in 22° 26' S. lat.

These islands are remarkable for the mildness of their climate, their fertility, and the great variety of their vegetable productions. For food there are cultivated and planted cocoa-nut trees, bread-fruit trees, bananas, yams, sugar-cane, and the sago palm; the Chinese paper mulberry-tree is cultivated for its inner bark, from which the clothing of the inhabitants is made. Hogs and dogs are numerous, and both are used for food. Fish is plentiful, and also different kinds of birds, as fowls, pigeons, parrots, and the tropic bird, whose beautiful feathers here, as in other islands, are used as an ornament.

Cook called these islands the Friendly Islands, because he was received by the inhabitants in a very friendly manner; but it is now well known that they intended to kill him and seize his vessels. They are a very industrious people, and pay great attention to the cultivation of the soil. They apply themselves also to fishing, and evince much ingenuity in the manufacture of their clothing and of their domestic utensils. The inhabitants belong to the Malayan race, and speak a language which does not materially differ from that spoken in many other islands of the Pacific. The political constitution is a despotism, supported by an hereditary aristocracy. The number of the inhabitants is estimated to amount to 200,000. Many of the inhabitants have been brought to profess Christianity by English missionaries, who hold important depôts on the principal islands.

(Cook, *Voyages*; Mariner, *Account of the Tonga Islands*; *Missionary Reports*.)

FRIESLAND (*Friesland*), the most northern province of the kingdom of Holland, situated between 52° 40' and 53° 23' N. lat., 5° 24' and 6° 20' E. long., is bounded N. by the North Sea, E. by the provinces of Groningen and Drenthe, S.E. by that of Overijssel, W. and S.W. by the North Sea and the *Zuiderzee*. Foreigners sometimes call it *West Friesland*, in order to distinguish it from *East Friesland* in Hanover. The area is 1261 square miles, and the population on the 31st December 1852 was 255,915.

The surface, as well as the soil itself, are so identified in character with those of the province of North Holland that there cannot be a doubt that they formed one and the same country antecedently to the convulsion out of which the *Zuiderzee*, which now separates them, arose. There are many parts of Friesland which, like North Holland, lie lower than the level of the sea, and are protected from the storms of the North Sea by costly artificial dykes. The whole land is flat and intersected by canals; nor is there an eminence throughout it excepting some mounds, here called 'terpen,' on which the ancient Frisians were accustomed to take refuge in seasons of marine inundations. In all parts there are deep swamps and marshy bogs, between which, especially in the south and east, tracts of sand and moor, or low meagre woodlands, occasionally interpose. The canals, which are frequently higher than the land they drain (the water being pumped up into them), and have enabled human industry to bring it under cultivation, mostly join the great canal, which begins at Haarlingen, a port on the west coast, and leads through Franeker, Leeuwarden, and Dokkum to Groningen. Near Leeuwarden this canal is joined by another, which runs southward to Suck whence the water communication is continued by the junction of several small lakes to the

Zuiderzee at Lemmer. A great part of the surface is below the level of the sea, and the provincial administration of the water-staat exercises a watchful superintendence of the dykes, sluices, and canals, for the maintenance of which the land-owners of the province pay an assessment called a dyke tax. The lowlands near the coast, particularly in the north-west, are mostly appropriated to the feeding of cattle; and the interior of the province, where the ground is somewhat more elevated, to the growth of corn. Friesland has no river of any note, the principal are the Laver which falls into the Laver-see, a small inlet of the North Sea, on the north-east coast; the Boorn in the centre, and the Kuinder and the Linde, which unite just before their entrance into the Zuiderzee on the south of the province: the first only is navigable for small craft; the others are broad rivulets of inconsiderable lengths. There are a multitude of small lakes or ponds, the majority of which have been formed by extensive diggings for turf, and are well stocked with fish. Of late years many of them have been drained either in part or wholly, and converted into polders. The principal occupation of the people is breeding cattle, dairy farming, growing corn, fishing, and digging and preparing turf for fuel. The stock of cattle is very numerous; above 5,000,000 lbs. of butter and 1,000,000 lbs. of cheese (one kind of which called Kanter-kaas is in high repute) are annually exported, but the quality generally is inferior to the cheese of the western provinces of Holland. There are numerous flocks of sheep, but they are of an inferior breed, and the wool is coarse. A great quantity of lambs are exported; and a considerable number of horses are bred: they are strong limbed and stand high, and are much sought after as carriage horses, but like most Dutch horses they are soft in the hoof. Swine are reared everywhere, and fed with a view to the production of lard rather than for meat. The agricultural produce of Friesland is more than adequate to its consumption, and some corn is exported: the chief articles of growth are wheat, barley, rye, peas, beans, flax, hemp, potatoes, huck-wheat, and clover-seed, which last is exported largely. One of the effects of the extensive cultivation of clover is that the honey of Friesland enjoys great repute. Apples and plums are extensively grown. There are few manufactures: they include wooden clocks, woollen stuffs, linen, sailcloth, salt, paper, potatoe starch, spirits, chicory, ironmongery, and tiles. Ship-building is also carried on. Steamers ply between the towns on the west coast and Amsterdam, and small iron steam-boats ply on the canal from Lemmer to Sneek and Leeuwarden. The province is traversed by good roads.

The inhabitants are principally Calvinists; about one-ninth of the population are Catholics. Their language has a greater similarity to the German than the Dutch: in this respect indeed, as well as in their dress and manners, they have retained much that was common to their ancestors, the Frisians. In the larger towns Dutch is spoken. Elementary instruction is afforded by nine special charity schools, and in 264 other schools, in which poor children are taught gratuitously. The number of savings banks in the province is six. Charitable institutions are very numerous, including no less than 53 hospitals, 7 workshops for employing poor artisans, and numerous other institutions capable of affording relief to several thousand persons. There is also a colony, called a 'Society of Benevolence,' for the employment and maintenance of orphans, foundlings, and beggars.

Friesland is divided into three circles, Leeuwarden in the north, and Sneek and Herrenveen in the south. The chief town of the province is LEEUWARDEN. *Bolswaart*, a walled town, 8 miles S. from Leeuwarden, has 4300 inhabitants, who manufacture woollen goods, and trade in butter and other agricultural products. *Francker*, on the canal from Leeuwarden to Haarlingen, is an old well-built town, with 5200 inhabitants, a high school, a public library, botanic garden, and tile manufactories. *Haarlingen*, a fortified sea-port on the Zuiderzee, 16 miles W. from Leeuwarden, has a population of about 8000, five churches, a town-hall, and manufactures of sailcloth, gin, bricks, paper, salt, &c., and a brisk foreign trade, especially to England, whither steamers convey butter, cheese, fowls, vegetables, cattle, and wool. *Dokkum*, a well-built town, with 3800 inhabitants, two churches, a handsome town-hall, surmounted by a high tower; manufactures of beer, brandy, salt, &c., and a brisk trade in butter and cheese, is situated on the ship canal above mentioned, 13 miles N.E. from Leeuwarden, and 6 miles W. of Laver Bay. *Sneek*, situated on the canal between Lemmer and Leeuwarden, has two churches, about 7000 inhabitants, a town-hall, manufactures of pottery, linen, deals, oil, &c., and much trade in corn and butter. The district around Sneek is very marshy. *Stavoren*, a decayed sea-port town, on the most south-westerly point of Friesland, once the residence of the Frisian kings, is now a mere village. *Workum*, a port on the Zuiderzee, 13 miles S. from Haarlingen, has about 3200 inhabitants, chiefly engaged in the coasting trade and the fisheries. *Herrenveen*, a market-town, with about 4000 inhabitants, 17 miles S.E. from Leeuwarden, is built in the midst of turf moors.

The islands Schiermonnikoog, Ameland, and Terschelling, which lie off the north coast, belong to the province of Friesland. *Terschelling*, the largest of these islands, is about 16 miles long and 3 miles wide; it has a population of about 2500, who are engaged in fishing and agriculture. Ameland is the subject of a separate article. [AMELAND.] *Schiermonnikoog* is 6 miles long and 2 miles broad; its population, which is under 900, is engaged chiefly in fishing. All these islands

rest upon banks which have but little water on them, being apparently portions of the mainland submerged, intersected however here and there by narrow intricate channels of considerable depth.

Friesland is part of the territory inhabited by the ancient *Frisians*, a people of Germany, who formed part of the nation of the Ingvæones. They were divided into Frisii Minores, who inhabited the lands north of the island of the Batavi—the present provinces of Oberyssel, Gelders, and Utrecht, and the greater part of the province of Holland, inclusive of the Zuiderzee, which at that time was mostly dry land; and the Frisii Majores, who inhabited the land between the Yssel, Ems, and the country of the Bructeri—that is, the present provinces of West Friesland and Groningen. The old Rhine separated them from the Batavi, and the Ems from the Chauci. According to Tacitus ('Anu.' ii. c. 24) they were the most steadfast allies whom the Romans possessed in this quarter, but upon the Roman governor Olenius making an attempt (A.D. 28) to treat them as subjects, they rose in arms, massacred and expelled the Romans, and razed with one exception all their strongholds in these parts. (Tacit. 'Anu.' iv. 72, 73, xiii. 54.) In the 4th and 5th centuries they were in possession of all the territory along the coast of north-western Germany from the Schelde to the Elbe, and they allied themselves with the Saxons, whom they aided in their conquest of Britain. Pepin, major-domo of the Franks, put Radbod their king to flight, and wrested their western lands from them between the mouths of the Schelde and the Rhine. Charlemagne brought the eastern Frisians under subjection, and appointed dukes over them, whose office subsequently merged into that of chieftain (häuptling). The result of continued struggles for the mastery between these chieftains, who called themselves counts, was, that count Edzard prevailed, and established himself in that part called East Friesland in 1458. In 1657 count Enno acknowledged it as a fief of the empire under the emperor Ferdinand, and was raised by him to the dignity of a sovereign prince. The last prince died in 1744, and by virtue of an imperial grant in 1690, Prussia took possession of East Friesland. This province was wrested from her in 1803, and transferred to Holland; in 1810 it became a province of the French empire; in 1813 Prussia recovered it, and in 1815 she ceded it to Hanover.

The ancient Frisians resembled the Germans in their habits and mode of living, and according to Tacitus, the only tribute they could afford to pay the Romans consisted of skins. Their chief occupations in ancient as in modern times was agriculture and cattle breeding.

(Tacitus, *Annals*; Wiarda, *History of East Friesland*.)

FRIESLAND, EAST. [AURICH.]

FRISES HAFF, a large shore-lake in the north of Prussia, communicating by a narrow strait with the Baltic, and lying to the south of the Gulf of Danzig, from which it is separated by a long narrow spit of land called the Frische Nehrung. Its length from north-east to south-west is about 60 miles; its breadth varies in different parts between 4 and 12 miles; and it occupies an area of about 310 square miles. At the north-eastern extremity of the Frische Nehrung, opposite to Pillau, there is a narrow strait, 12 feet deep and 3000 feet wide, called the Gatt. This passage was formed by an inundation of the waters of the Haff in the year 1510. In consequence of the shallowness of water in the Frische Haff, particularly in summer, no large vessels can navigate it, and Pillau is therefore the port both of Königsberg and Elbing, cargoes being conveyed to and from these towns in lighters. Among the numerous streams which find an outlet in this Haff, are the Pregel, Frisching, Passarge, Baude, and two arms of the Vistula. That the Frische Haff is not an inlet of the Baltic, as it is sometimes called, is sufficiently proved by the name, which is descriptive and means 'fresh-water sea.'

The *Frische Nehrung* projects for about 40 miles along the north shore of the Frische Haff. Its widest part is hardly 3 miles across, but the general breadth is under a mile. The portion of it west of the Gatt belongs to the government of Danzig, and is in parts fertile, but generally a hungry waste with a few hamlets inhabited by fishermen. On the part east of the Gatt, which belongs to the government of Königsberg, are the port of Pillau and the little town of Fischhausen, which lies on the north shore of the Haff.

FRIETH, or FIRTH, a term which corresponds to the 'fjord' of the Danes and Norwegians, and the 'fiördur' of the Icelanders, is properly used to indicate a narrow and deep inlet of the sea, especially in a rocky and elevated coast. It is generally used in Scotland for the estuary of the more important rivers.

FRIULI, one of the old provinces of Venice, now the most eastern part of Austrian Italy, forming the province of Udine, is bounded N. by the Carnic Alps, which divide it from the valley of the Drave in Carinthia; N.E. by the Julian Alps, which divide it from the valley of the Save; N.W. by an offset of the Carnic Alps, which divides it from the valley of the Piave in the province of Belluno W. by the province of Treviso, from which it is divided by the river Livenza; S. by the Adriatic Sea; and E. by the government of Trieste or Littoral Istria. The former limits between Venetian Friuli and the Austrian district of Trieste were marked by the river Isonzo, but the boundary is now placed farther west, running from Palmanova to the mouth of the Ausa, leaving out Aquileia and Grado, which make part of the circle of Istria. [AQUILEIA.] The boundaries of Italy on this side are not strongly marked by nature, the chain of the Alps does not approach near the sea and the main

ridge or Julian Alps turns off to the eastward a considerable distance inland between the sources of the Isonzo and those of the Save. The valleys of the Isonzo also and its tributaries present an opening into Carniola, and the coast of the Adriatic affords an easy access to Italy from Istria, Croatia, and other parts of Illyricum. Many centuries ago Paulus Diaconus and other writers had observed that Italy was most accessible to foreign armies on its eastern frontiers on the side of Illyricum and Pannonia, and this may explain in part, why the Germans have always found greater facility than the French in maintaining a footing in the Peninsula. Accordingly this was the road by which the Goths, the Heruli, the Huns, the Longobards, and the Hungarians, successively invaded Italy.

The name of Friuli is a corruption of *Forum Julii*, a town in the territory of the Carni said to have been founded by Julius Cæsar, on the river Natiso, one of the affluents of the Isonzo, which flows along the western base of an offset of the Julian Alps which bounds Friuli to the north-east. Forum Julii was most probably at first a central place of meeting for the neighbouring Carni in their intercourse with the Roman magistrates. It was long an inconsiderable place, but rose to some importance in the later times of the Roman empire. After the fall of Aquileia A.D. 452 it became the capital of Venetia, a dignity which it continued to hold under the Gothic and Lombard rulers of Italy. The date of its destruction is unknown. Excavations made in recent times under the direction of the Canon della Torre have exposed to view numerous remains of antiquity, including foundations of temples, and other public buildings in the neighbourhood of Cividale di Friuli, a small town which marks the ancient site. Alboin, who entered Italy on this side, after conquering the plains of the Po, placed his nephew Gisulfus as governor or Duke of Friuli. From that time Friuli formed one of the principal duchies of which the elective monarchy of the Longobards was composed. When Charlemagne overthrew that monarchy in the 8th century, he left Friuli to its Longobard Duke Rotogaldus, but Adelgisus the fugitive son of Desiderius having re-appeared in Italy with troops, the Duke of Friuli joined him, for which he was attacked by Charlemagne, defeated and executed. Charlemagne then gave the duchy to a Frenchman of the name of Henri, adding to his government the territories of Styria and Carinthia. Henri was assassinated A.D. 799; after which several dukes followed in succession, and among others Berengarius, who obtained the crown of Italy after the extinction of the Carolingian dynasty. Berengarius was assassinated in 924. Mention is made however of subsequent dukes of Friuli till the beginning of the 11th century, when Conrad the Salic, emperor of Germany and king of Italy, gave both the duchy of Friuli and the marquisate of Istria to his chancellor Poppo, patriarch of Aquileia. Poppo's successors held Friuli as sovereign princes, though nominal feudatories of the empire till the year 1420, when the patriarch being at war with Venice, the Venetians conquered Friuli and annexed it to their territories, leaving to the people of the towns their municipal laws and magistrates, and to the feudal lords their jurisdictions, and allowing them to retain a considerable degree of independence. The county of Goriz and the territory of Mofalcone, on the east bank of the Isonzo, belonging to the old duchy of Friuli, were given up to Austria. Friuli remained subject to Venice, till the fall of that republic in 1797, when it was ceded to Austria, by the peace of Campo Formio. It was annexed to the kingdom of Italy in 1806, but was reconquered by Austria with the other Venetian provinces in 1814. It now forms the province of Udine in Austrian Italy.

Friuli, though little visited by travellers, is a very fine and interesting part of Italy. Its length is about 60 miles from the sources of the Tagliamento to the sea, its breadth is about 45 miles, and its area about 2520 square miles. Its population in 1850 amounted to 429,844. The country is watered by numerous rivers, and has considerable plains in its southern part, producing abundance of corn and very good wine, while the northern part is hilly and affords excellent pasture and plenty of game. The climate is healthy, the inhabitants are robust and spirited, and were considered good marksmen in the time of the Venetian rule. They speak a dialect of the Italian, different from the Venetian; on the borders however German and Slavonian are spoken.

The town of *Cividale* or *Cividale di Friuli* stands on the Natiso, in 46° 4' 54" N. lat., 13° 26' 51" E. long., and has a population of above 6000 including its territory. It is surrounded by old walls and a ditch. The Natiso is at Cividale crossed by a long bridge. For a further notice of the province see UDINE.

FRODSHAM. [CHESHIRE.]

FROME, Somersetshire, a municipal and parliamentary borough, market-town, and the seat of a Poor-Law Union, in the parish of Frome, is situated on the small river Frome, a feeder of the Avon, in 51° 13' N. lat., 2° 19' W. long., distant 12 miles S. by E. from Bath, 103 miles S. by W. from London by road, and 115½ miles by the Great Western railway. The population of the parliamentary borough of Frome was 10,148 in 1851. The borough returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Wells and diocese of Bath and Wells. Frome Poor-Law Union contains 29 parishes and townships, with an area of 50,206 acres, and a population in 1851 of 25,325.

Frome was anciently, and is still often designated Fromo Selwood,

from its position near the once-extensive forest of Selwood. The situation of the town is pleasant and healthy. The houses are irregularly built, and the older streets are narrow. Of late years new streets and roads have been formed, and new buildings erected, including a market-house, with a handsome public room in the upper part. The town is lighted with gas. A stone bridge of five arches crosses the river at the lower part of the town. The parish church is ancient, but was enlarged and altered, and five painted windows added a few years since. Two new churches have been erected. There are two Independent chapels, two for Baptists, two for Wesleyan Methodists, and a Quakers' meeting-house. Frome possesses a Blue-Coat charity school for 25 boys, an asylum for 25 girls, which clothes, educates, and apprentices the children, and charities for old men, women, and children, which distribute 1300l. annually. There are a literary institute with a good library and museum, and a savings bank. A county court is held in the town. The principal manufactures are those of woollen cloth, silk, and hats. There are also manufactures of fur, and of cards used by the wool combers in dressing cloth. Frome has been long noted for brewing ale. The river Frome in its course to the Avon supplies water power to numerous mills. The principal market is held on Wednesday, a lesser one is held on Saturday, and a large one for agricultural stock monthly; fairs are held on February 24th and November 25th.

One of the most active promoters of the recent improvements in Frome, Mr. T. Bunn, has at his own expense planted many thousand trees, and thereby added not a little to the pleasant appearance of the town. There are some very dilapidated remains of a monastery near Frome. In the vicinity are numerous fine mansions.

(Communication from Frome.)

FRONTIGNAN. [HÉRAULT.]

FROSINONE, a province and town in the Papal States. The province is bounded N. and W. by the Comarca di Roma, E. by the Terra di Lavoro in the kingdom of Naples, and S. by the Mediterranean. Its greatest length from north to south, from the ridge north of Anagni to Monte Circello, the most southern point of the Papal States, is about 40 miles; its greatest breadth is about 30 miles. The area is 720 square miles; and the population in 1843 was 141,930. This province includes also in its jurisdiction the small district of Poute Corvo, which is in the valley of the Liris, within the territory of Naples, but belongs to the Pope. The province of Frosinone consists of four natural divisions: 1, the Valley of the Sacco, which is fertile; 2, the mountains north of it, the *Hernica Saxa*, or *Rocks of the Hernici*, which are mostly barren; 3, the *Monti Lepini*, *Volturnum Montes*, south of the valley of the Sacco, which are partly cultivated; and 4, the *Pomptine Marshes*, extending south of the *Monti Lepini* to the sea-coast as far as Monte Circello and Terracina. The province contains 7 towns and 45 terre, or villages, having a communal council, and 24 hamlets. (Calindri.) Frosinone, built on a hill above the junction of the river Cosa with the Sacco, is the capital of the province, and the residence of the delegate. The nature of the surface of the province is described under CAMPAGNA DI ROMA. The principal towns are here given:—

Frosinone, the ancient *Frusino*, a town of the Volsci, afterwards a Roman colony, is built on a hill at the opening of the valley of the Cosa into that of the Sacco, in the midst of a well-cultivated country, and has about 7000 inhabitants. It gives title to a bishop, and has an old castle, a college, and some remains of an ancient amphitheatre at the foot of the hill. *Ferentino*, on the site of the ancient *Ferentinum*, is an episcopal see, and has 6700 inhabitants. The existing remains of antiquity at Ferentino comprise large portions of the ancient walls, built with vast irregular polygonal blocks of limestone, patched up in many places with Roman masonry; an ancient citadel; and portions of Roman buildings. *Ferentinum* was a city of the *Hernici*. *Alatri*, built on a steep hill above the valley of the Cosa, 7 miles from Ferentino, is an episcopal see, has 8000 inhabitants, and manufactures of coarse woollen cloth. On the summit of the hill is a vast space, 660 yards in circuit, defended by a wall of massive polygonal masonry without cement. The wall of this acropolis is 12 feet thick, and in some places 50 feet high. Two gates lead into the inclosed space, where the cathedral and the episcopal palace have been built. The walls of the citadel, and those of the town itself, are built of hard Apennine limestone, and for massive solidity, and as specimens of the polygonal style of masonry, are unsurpassed in Italy. *Alatri* is the ancient *Alatrium*, another town of the *Hernici*. *Veroli*, an episcopal see, also built on a mountain, has 7000 inhabitants, mostly agriculturists. North of it, near the source of the Cosa, is the fine Carthusian convent and church of *Trisulti*, built in a wild glen of the Apennines; and near the village of *Colleparado* is a vast cave in the form of a dome, nearly 200 feet high, full of splendid stalactites. *Anagni* has been already noticed. [ANAGNI.] *Ceccano* has 5500 inhabitants; and *Ceprano*, on the Liris, above its junction with the Sacco, and on the Neapolitan frontier, has 3000. Opposite *Ceprano*, on the left bank of the Liris, are some ruins, which mark the site of the ancient *Fregelle*, a Volscian city early colonised by the Romans, distinguished for its fidelity to Rome in the invasion of Hannibal, but utterly destroyed for its rebellion A.C. 125. *Signa*, the ancient *Signia*, is built on the Lepini ridge, with Cyclopean walls of four miles extent, and seven gates, and the remains

of an ancient temple, now turned into a church. The town gives title to a bishop, and has 4100 inhabitants. *Paliano*, a walled town 7 miles N.W. from Anagni, has 3700 inhabitants and a large baronial castle, which was for a long time the residence of the powerful family of Colonna. The above towns, besides several others with between 2000 and 3000 inhabitants, are situated at a short distance from each other, in or near the valley of the Sacco, which is traversed by the road from Rome to Naples, the ancient Via Latina. Many travellers prefer the lower or Appian road by the Pomptine marshes, which is better; but the country is unwholesome and desolate in summer. On the southern slope of the Monti Lepini, looking towards the Pomptine marshes, are *Piperno*, the ancient *Privernum*, with 3700 inhabitants; *Sezze*, the ancient *Setia*, an episcopal see, with 8500 inhabitants; *Cori* (*Corva*), famous for its fine temple of Hercules, its massive Cyclopean walls, and its ancient Latin bridge, population 4300; *Norcia*, the ancient *Norba*, destroyed by Sulla, 1500 inhabitants. At the eastern extremity of the Pomptine marshes, on the high road to Naples, is *Terracina*, the ancient *Anxur*, which has some handsome modern buildings, many ancient remains, and 4000 inhabitants. *Terracina* gives title to a bishop.

Beyond the mountains east of *Terracina*, which form the boundary of the Papal States, is the town and territory of *Pontecorvo*, in the valley of the Liris, and in the midst of the Neapolitan territories, but belonging by an old donation to the see of Rome. *Pontecorvo* has a population of 6500, a cathedral, and a long bridge over the Liris, or *Garigliano*.

FROZEN OCEAN, a term used to indicate the seas surrounding the Poles, in which great masses of ice swim about. It is consequently synonymous with Icy Sea, and in some degree also with what are called the Arctic and Antarctic Seas or Oceans, or Polar Seas.

FRYERNING. [ESSEX.]

FUEGO, TIERRA DEL, South America, is the name by which the archipelago is designated which constitutes the southern extremity of America. It includes all the islands south of the Strait of Magalhaens as far as Cape Horn, and lies between 52° 30' and 56° S. lat., 65° and 76° W. long. Staten Island however extends more than a degree farther east, but is divided from the archipelago by the Strait le Maire, which is nearly 20 miles across. The whole length of the archipelago, from Cape Good Success, on Strait le Maire, to Cape Pillar, at the western entrance of the Strait of Magalhaens, exceeds 450 miles. Its greatest breadth, between 68° and 70° W. long., is not less than 250 miles.

Tierra del Fuego consists of one large island, four others of moderate extent, and a great number of smaller islands and rocks. The larger island forms the eastern and north-eastern portion of the group, and occupies considerably more than one half of the whole. It is called King Charles's Southland, and is more than 250 miles long and 170 miles wide; its area is near 20,000 square miles. On the south of it lie the islands of Navarin, which is about 40 miles long and 20 miles wide; and Hoste, which is 70 miles long and 36 miles wide; these islands are separated from King Charles's Southland by Beagle Channel, extending in a straight line, east and west, for 120 miles, and being only from one third of a mile to one mile across. South of Hoste is a group of smaller islands, the most southern of which is the bare rocky mass called Horn Island, the southern point of which, Cape Horn, is considered to be the most southern extremity of America. Navarin Island is separated from Hoste Island by Ponsonby Sound. To the west of King Charles's Southland are Dawson's Island, Clarence Island, and South Desolation. Dawson's Island lies in the widest part of the Strait of Magalhaens. It is a rocky mass, 50 miles long and 6 miles wide; some of the mountains attain an elevation of nearly 3000 feet. The surface of the island generally is covered with trees. Clarence Island is separated from King Charles's Southland by a crooked channel, which towards the Strait of Magalhaens is called Magdalen Sound, but towards the open sea Cockburn Sound, and which affords an easy passage between the Atlantic and the Pacific. Clarence Island resembles Dawson's Island in character, but the shores are more broken by deep inlets, and the mountains are lower, the highest summit hardly attaining an elevation of 2500 feet. The island is about 50 miles long and 12 miles wide. South Desolation, or Staines Island, which forms the most western portion of the archipelago, is separated from Clarence Island by Barbara Channel. It is nearly 100 miles long, and has a mean width of 15 miles. It is rocky and barren, the scanty vegetation being chiefly of stunted trees. Many of the mountains rise above the snow-line.

The northern portion of King Charles's Southland is a plain, on which there are a great number of low hills with a gentle ascent. No trees grow upon it, but there are shrubs and grasses. The shrubs are thinly scattered, but the grasses are abundant, and though of a harsh and dry appearance they feed large flocks of guanaco. Captain Fitzroy considers this plain more fertile than those of Patagonia south of 45° S. lat., and thinks that parts of it may be cultivated. It is at present occupied by natives, resembling the Patagonians. [PATAGONIA.] This plain is almost the only level portion of the country; it being, according to Mr. Darwin, extremely rare to find an acre of level ground: in fact, Tierra del Fuego suggested to him the appearance of a vast mountain region partially submerged. The line

of separation between the plain and the mountain country begins on the Strait of Magalhaens, on the northern shores of Admiralty Sound, and extends thence to the Strait of Le Maire. It is formed by a range of mountains, the loftiest summits of which are Mount Sarmiento (6900 feet) and Mount Darwin (6800 feet), both towards the westward end of the range; eastward the highest points are about 3400 feet. The shores of this mountain region are intersected by deep inlets, some of which form good harbours. Along the valleys is a good deal of timber; and the declivities of the mountains are covered from the water's edge up to 1000 to 1500 feet with dense forests, chiefly of beech (*Fagus betuloides*). Above the forest land are many varieties of dwarf alpine plants.

The mountainous portion of the archipelago comprehends the southern and western part of King Charles's Southland, and all the other islands besides. It presents a succession of hills and mountains valleys and ravines; the mountains rise in general to 2000 or 3000 feet, and several attain the snow-line, which here is often 3500 to 4000 feet. In this region every valley, and almost every arm of the sea which penetrates far inland, displays glaciers of greater or less size descending into the sea. The shores are intersected by deep but narrow arms of the sea, on whose sides rise the mountains, whose summits for the greatest part of the year are covered with snow, while their steep and rocky declivities are partially overgrown with evergreens. The natives of this country differ considerably from the Patagonians: they are low in stature, varying from 4 feet 10 inches to 5 feet 6 inches in height, and live in a very barbarous condition; they have frequently no other covering than a scrap of hide, which is tied to their waists. Their colour is darker than that of copper, and like mahogany or rusty iron. "The most remarkable traits in the countenance of the Fuegian are his extremely small low forehead, his prominent brow, small sunken black eyes, wide cheek-bones, wide and open nostrils, large mouth, and thick lips." (Captain Fitzroy's 'Voyage of Adventure and Beagle,' ii. 175.) They have no government; and the neighbouring tribes, who speak different dialects, are almost always hostile. Cannibalism is practised. They never cultivate the soil; but, occupying only the sea-shore, they live chiefly on shell-fish. Almost the only vegetable production which they eat is a peculiar fungus (*Cyatharia Darwinii*) which grows on the beeches.

The climate of this archipelago is extremely cold. Cloudy weather, rain, and wind prevail throughout the year, and fine days are rare. No season is quite free from frost; the thermometer, even in February, which corresponds to our August, descends occasionally some degrees below the freezing point; but even during the winter the mean temperature is, according to the observation of Captain King, 2½° above that point, though it occasionally descends to 12½° of Fahrenheit. It seems that this peculiarity of the climate is chiefly to be attributed to the high temperature of the sea, the surface of which is never lower than 45° Fahrenheit, at least in the Strait of Magalhaens. The coasts, which are exposed to the influence of the open ocean, have probably a much colder climate, as during the winter they are surrounded by large fields of ice, which at that season occur as far north as 54° S. lat., along the shores of King Charles's Southland. "Fogs are extremely rare on this coast, but thick rainy weather prevails, and strong winds. The sun shows itself but little, the sky even in fine weather being generally overcast and cloudy. A clear day is a very rare occurrence. Gales of wind succeed each other at short intervals, and last several days. At times the weather is settled for a fortnight, but those times are few. Westerly winds prevail during the greater part of the year." ('Admiralty Sailing Directions.') March is the most boisterous month in the year. Lightning and thunder are almost unknown. The level portion of King Charles's Southland suffers rather from want than from abundance of moisture, like the eastern coast of Patagonia.

The zoology of this region is very poor. The *Mammalia* of the land (for whales and seals abound in the seas) is confined to "one bat, a kind of mouse, two true mice, a ctenomys allied to or identical with the tucutuco, two foxes, a sea-otter, the guanaco, and a deer. Most of these animals inhabit only the drier eastern part of the country, and the deer has never been seen south of the Strait of Magalhaens." (Darwin.) Captain King found parrots and humming-birds on the shores of the Strait of Magalhaens. A few birds, as a white-tufted tyrant, a fly-catcher, a black woodpecker, and a wren, are seen in the interior; but the most common bird is the creeper (*Oxyurus tupinieri*). Reptiles are unknown. Insects are far from numerous. Fish abound in the inlets.

A current continually sets along the south-west coast of Tierra del Fuego from north-west towards south-east as far as Diego Ramirez Islands; it then takes a more easterly direction, setting round Cape Horn towards Staten Island, and so off seaward about east-south-east. It sets rather from the land, thereby much diminishing the danger to vessels approaching this part of the coast.

(Fitzroy, *Narrative of Surveying Voyage of H.M.S. Adventure and Beagle*; Darwin, *Journal of Researches*; Hall, *Journal*, &c.)

FUENTE-OVEJUNA. [CORDOVA.]

FUENTERRABIA. [BASQUE PROVINCES.]

FUERTEVENTURA. [CANARIES.]

FULBOURNE. [CAMBRIDGESHIRE.]

FULDA, a province of the electorate of Hesse-Cassel, between 50°

inscription upon it to be the mausoleum of L. Minnatus Plancus, a friend of Augustus; another column with twelve faces, and inscribed with the names of the winds in Greek and Latin, is one of the most curious monuments in the town. In the cathedral is a baptismal vase of Parian marble with highly finished rilievs, besides other remains. Gâeta gives title to an archbishop. There is a royal residence here, to which the kiug of Naples and his family usually resort in summer. Gaëta rose to distinction after the destruction of Formia, and under the Normans became one of the most important cities of South Italy.

GAILLAC. [TARN.]

GAILLON. [EURE.]

GAINSBOROUGH, Lincolnshire, an ancient market-town and seaport, and the seat of a Poor-Law Union, in the parish of Geinsborough, is situated on the right bank of the river Trent, in 53° 23' N. lat., 0° 40' W. long., distant 18 miles N.W. from Lincoln, 148 miles N. by W. from London by road, and 155 miles by the Great Northern railway. The population of the town in 1851 was 7506. For sanitary purposes the district is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry of Stow and diocese of Lincoln. Gainsborough Poor-Law Union contains 49 parishes and townships, with an area of 105,226 acres and a population in 1851 of 27,037.

Gainsborough consists principally of one street, running parallel to the Trent, which is here crossed by a fine stone bridge of three elliptical arches. The town is well paved, and is lighted with gas. The public buildings include the town-hall, a substantial brick building, the lower part of which is occupied as the jail; the parish church, which was rebuilt, with exception of the tower, about a century ago; three handsome district churches; and chapels for Wesleyan and Primitive Methodists, Independents, Quakers, Roman Catholics, and Unitarians. There are also a Grammar school, founded in 1589; National, Infant, and Wesleyan schools; a literary institute; libraries; a savings bank, and a dispensary. A county court is held.

Gainsborough is advantageously situated both for foreign and inland trade. By the river Trent, which falls into the Humber about 20 miles below the town, vessels of 200 tons can come up to the wharfs; and by the Keadby, Chesterfield, and other canals, a communication is kept up with the interior of the country. The gross amount of customs duties received at the port in 1851 was 35,949*l.* 7*s.* 11*d.* The number of vessels registered at the port on December 31st 1853 was as follows:—Under 50 tons 6 vessels, tonnage 257; above 50 tons 5 vessels, tonnage 363; one steam vessel of 49 tons, and 4 of 307 tons. The vessels which entered and cleared at the port during 1853 were:—Inwards, 214, tonnage, 13,292; outwards, 237, tonnage, 12,725.

Lined oil is very extensively manufactured; malting, ropo-making, and ship-building are largely carried on. The market-day is Tuesday; fairs of ten days each are held at Easter and from October 20th, for cheese, horses, and stock. Gainsborough manor-house, a fine old Elizabethan hall, has been recently restored.

(Allen, *Lincolnshire*; *Communication from Gainsborough*.)

GALACZ. [MOLDAVIA.]

GALAPAGOS, a group of islands of volcanic origin, situated in the Pacific, about 700 miles from the continent of South America, near the equator. They lie between 1° N. lat., and 2° S. lat., 89° and 92° W. long., and consist of six larger and seven smaller islands. The largest is Albemarle Island, which is 60 miles in length, and about 15 miles broad. The highest part is 4000 feet above the sea. Charles Island, now called La Floriana, is 20 miles long from north to south, and about 15 miles wide.

The islands consist of enormous masses of lava, rising abruptly from a fathomless sea. In the interior, valleys and plains of moderate extent occur, which are covered with shrubs and that kind of cactus which is called prickly pear. This cactus supplies with food the great elephant-tortoises, so called from their feet being like those of a small elephant. These animals grow to an enormous size, and frequently weigh 300 lbs. or 400 lbs. There are also iguanas and innumerable crabs. Pigeons abound on the islands.

The climate is moderated by the elevation of the surface of the islands (the settlement on La Floriana being 1000 feet above the level of the sea), and by the cold current which sets along the south-south-western side of the group to the north-north-west. In dry seasons most of the water-pools dry up; but at the setting-in of the rains, in November, they are again filled. Between May and December the thermometer ranges between 52° and 74°, and from January to May between 74° and 84°, and occasionally higher.

These islands were first visited towards the end of the last century by the whalers of the Pacific Ocean. In 1832 a settlement was formed by one Bilamli, an inhabitant of Guayaquil, who obtained a grant of the island of La Floriana from the government of Ecuador. Sugar-cane, sweet potatoes, and Indian corn are cultivated. It has been recently reported that an extensive deposit of guano has been found on one of the islands.

GALASHIELS. [SHELKIRKSHIRE.]

GALATIA, a country of Asia Minor, which originally formed part of Phrygia and Cappadocia. Its boundaries differed at various times. It was bounded on the south by Phrygia and Cappadocia, on the east by Pontus, on the north by Paphlagonia, and on the west by Bithynia.

It obtained the name of Galatia from the settlement of a large body of Gauls in this part of Asia. The first horde that appeared in Asia (B.C. 279) formed part of the army with which Brennus invaded Greece. In consequence of some dissensions in the army of Brennus, a considerable number of his troops, under the command of Leonorius and Lutarius, left their countrymen and marched into Thrace; thence they proceeded to Byzantium, and crossed over into Asia at the invitation of Nicomedes king of Bithynia, who was anxious to secure their assistance against his brother Ziboetas. (Livy, xxxviii. 16.) With their aid Nicomedes was successful; and, according to Justin (xxv. 2), as the Galli received part of the conquests the country was called Gallograecia. The allies of Nicomedes now became his masters, and he, as well as the other monarchs of Asia Minor to the west of Mount Taurus, was obliged for many years to purchase safety from these barbarians by the payment of tribute. By fresh accessions their numbers became so great that Justin informs us (xxv. 2) "that all Asia swarmed with them; and that no Eastern monarch carried on war without a mercenary army of Gauls." Instances of this kind are given in Clinton's 'Fasti Hellenici,' vol. iii. p. 424. They are also said in the second book of Maccabees (viii. 20) to have advanced as far as Babylon, and to have been defeated by the Jews. The first effectual check they received was from Attalus I. king of Pergamus, who defeated them in a great battle (B.C. 239) and compelled them to settle permanently in that part of Asia which was afterwards called Galatia. (Livy, xxxiii. 21; Polybius, xviii. 24.) Though Attalus reduced their power, they still remained independent, and gave Antiochus great assistance in his contest with the Romans. Having thus incurred the enmity of the Roman republic, Cneius Manlius the consul was sent against them with a considerable army, B.C. 189. The particulars of this war, which terminated in the complete defeat of the Galatians, are recorded in Livy (xxxviii. 12-27). From this time they were in reality subject to Rome, though allowed to retain their own native princes. In the war against Mithridates, Deiotarus, originally only a tetrarch of one of the Galatian tribes, greatly assisted the Romans, for which service he was rewarded by the grant of Pontus and little Armenia, and the title of king by the Roman Senate. He was succeeded by Amyntas, according to Strabo (h. xiii.). At the death of Amyntas, B.C. 25, Galatia became a Roman province. After the time of Augustus, the boundaries of the province were enlarged, and Paphlagonia was added to it; but in the reign of Constantine it was again reduced to its former limits, and in the time of Theodosius the Great was subdivided into two provinces, *Galatia Prima*, of which the capital was Ancyra, and *Galatia Secunda*, of which Pessinus was the capital.

Strabo (b. xii.) informs us that Galatia was inhabited by three tribes of Gauls; the Troemi, the Tectosages, and the Tolistobogii. Each tribe was subdivided into four parts, and each division was governed by a tetrarch, who appointed a judge and an inspector of the army. The power of these twelve tetrarchs was limited by a senate of 300, who assembled at a place called Drynemctum, and who took cognisance of cases of murder, other offences being left to the jurisdiction of the tetrarchs and judges. This form of government continued till shortly before the time of Deiotarus. All the tribes spoke the same language, and had the same customs. Though they afterwards spoke Greek in common with the other nations of Asia Minor, yet they had not forgotten their native tongue in the time of Jerome, who informs us ('Prolegomena in Epis. ad Galatas') that their language was almost the same as that of the Treviri, or the people of Trèves. They did not entirely lose their original simplicity of manners, for Cicero, in his defence of Deiotarus, praises him as an extensive cultivator and breeder of cattle (c. 9).



Coin of Galatia, Trajan. Imperial Greek. British Museum. Actual size. Copper. Weight, 427 grains.

Galatia possessed few towns of importance, with the exception of ANCYRA, Tavium, and Pessinus. Tavium, the capital of the Troemi, was situated in the north-east part of the province, but soon fell into obscurity. Pessinus, the capital of the Tolistobogii, north-east of the river Sangarius, was a great trading-place, with a magnificent temple, sacred to the mother of the gods, who was there worshipped under the name of Agdistis. (Strabo, b. xii.) On the river Sangarius in this province was the ancient Gordium, formerly the capital of the Phrygian monarchy. Livy (xxxviii. 18) describes Gordium as a small town in his time, but carrying on an extensive commerce. The

apostle Paul appears to have visited Galatia twice, about A.D. 50 and A.D. 55 (Acts, xvi. 6; xviii. 23.) The date of his epistle to the Galatians has not been definitely ascertained.

GALENA. [ILLINOIS.]

GALICIA, the Kingdom of, is the north-eastern province of the Austrian dominions, and lies between 47° 50' and 50° 50' N. lat., 18° 54' and 26° 37' E. long. It includes the country formerly the territory of the republic of Cracow; and is bounded N. by Poland, E. by Russia, S.E. by the Bukowine, S. and S.W. by Transylvania and Hungary, and W. by Hungary, Austrian Silesia, and Prussian Silesia. The Bukowine, which was formerly included in Galicia, was separated from it by imperial patent in 1851. The area of Galicia is 30,157 square miles: the population in 1850-1 was 4,555,477. Galicia derives its name from the former principality of Haliczia or Galiczia, which, together with a considerable portion of Red Russia, once formed part of Hungary, but was incorporated with Poland in the year 1374. Its ancient connection with Hungary served as a pretext to the empress Maria Theresa, in 1772, when Poland was enfeebled by intestine divisions, to claim its restoration; a claim which the Poles were forced to concede by the treaty of the 18th September, 1773, in consequence of which that part of the republic, now termed Galicia, was surrendered to Austria, and annexed to its dominions under the name of the kingdom of Galicia and Lodomeria.

Surface, Hydrography, &c.—Galicia spreads out, in its whole length on the northern side of the Carpathian Mountains, into extensive plains: those mountains extend their arms deep into the kingdom, and on the west, the Beskide branch of them stretches as far as the banks of the Vistula, rising almost abruptly out of the lowlands into heights of from 2000 to 5000 feet. The most elevated summit in this quarter is the 'Babia Gora' (Women's Mount), 5410 feet above the sea. In the south-west, the Patra or central range of the Carpathians, with their peaked summits and desolate naked aspect, rise to still greater elevations; the great Kryvan to about 8050 feet, and the Rohicz to 7230 feet. The branches of this range penetrate much deeper into the country than those of the Beskides. The mountains are full of small lakes, which are here called *Sav*, *Plesse*, or 'Eye of the Sea'; the largest of them, which lies to the north of the Great Kryvan, is called the Fish Lake; it is at an elevation of about 4550 feet above the level of the sea, but does not exceed 1600 paces in length, or 500 feet in breadth; it has a depth of 192 feet, and forms an almost perfect oval.

The northern part of Galicia is an extensive plain, in some parts intersected by low ranges of hills; and in the western part also a dead level begins at Skavina on the right bank of the Vistula, and varying in width, extends to the banks of the San. The soil of the plains consists almost universally of loam and sand; the most remarkable accumulation of the latter is in what is called the Sand Mountain (Sandberg) near Limburg.

The rivers of the western part of the kingdom of Galicia belong to the basin of the Vistula; and those of the eastern, to the basins of the Danube and the Dniester. The Vistula forms the western boundary next to Poland for about 180 miles, flowing north-eastward from the spot where Austrian and Prussian Silesia and Galicia converge to a point, and quitting the kingdom at Popowicze, a village opposite Zavidichost at its northern extremity; this river increases in breadth along this frontier-line from about 120 to nearly 200 paces, and has a rapid current until below Cracow, the difference in the elevation of its bed from the point just mentioned and that city being about 200 feet. The tributaries of the Vistula, on the side of Galicia, are—the Dunayec or Danayec, which flows down from the Carpathians, is navigable in the low country, receives the Poprad, also a navigable stream, and other rivers in its course, chiefly northward, through the circles of Sandez, Bochnia, and Tarnof, and falls into the Vistula near Novopole, opposite Opatowic, after a course of about 105 miles. This river, like all those which flow from the Carpathians, overflows its banks in rainy seasons, does much damage, and is dangerous to navigate. The Wysloka is formed at Yaslo out of the junction of the Dembowka, Ropa, and Yasielka, flows through the circles of Yaslo and Tarnof, and after a northern course of about 70 miles, joins the Vistula near the village of Ostróf, in the north of Galicia. The San or Saan, the most important tributary of the Vistula in this quarter, rises near Sianki, a village on one of the most northerly declivities of the Carpathians, takes a north-westerly direction to Sanok and Bynof, whence it runs eastward to the town of Przemysl, and thence flows north-westward through a low country past Yaroslaf until it falls into the Vistula near Lapietof. Its whole length is about 180 miles, and its chief tributaries are the Wyslek and Tanef. The Bug, which has its efflux in the Vistula also, does not become a considerable stream until it has quitted Galicia; it rises near Gallgory to the east of Limburg, flows westward when above the latitude of that town, and before it reaches Buek turns northward and afterwards north-westward, and leaving Galicia below Sokal, enters Poland. The Dniester, another of the considerable rivers in this kingdom, through which it flows for a distance of about 310 miles, has its source in the Carpathians in the western part of the circle of Sambor, and thence continues in a south-easterly direction till it enters Russia near Cholym. [DNIESTER.] It receives numerous

affluents on both banks, but most on the left bank, in its course through Galicia. Another large river which in part belongs to eastern Galicia is the Pruth, which rises in the Carpathians within the circle of Stanislavof, flows through that circle to the borders of the Bukowine, and passes over into Moldavia below Pentuliy. There are neither canals nor railways in the kingdom.

Geological Character.—Galicia abounds in sandstone, granite, sand of a very superior grain, quartz, slate, yellow and common clay, potters'-earth, yellow ochre, marble, gypsum, &c. Mountain crystals, agates, jaspers, ordinary opal, alabaster, &c., are found in several spots. The Carpathians are rich in metals, particularly iron, which is found along the whole line of the Carpathians, from the circle of Sandez to the frontiers of the Bukowine; but the proportion of metal in the ore is small. Bog-iron likewise is met with in the circles of Stry and Zolkief. Gold is obtained in small quantities in two or three places. Veins of silver are found in the lead of Mount Dudul, near that place, and it is also extracted from the calamine obtained near Truskawicze. Native sulphur occurs at Svoszovice, in the circle of Bochnia, and Sklo, in that of Przemysl. Coal is found near Moszyn, Kuty, and Skwareczva. The northern side of the Carpathians contains enormous masses of rock-salt, and the country has numerous salt-springs. There are several sulphuretted and other mineral springs.

Climate, Soil, and Productions.—The climate of Galicia is colder than that of any other possession of Austria, in consequence of the proximity of the Carpathians. The summer is generally short, and the grape never ripens: the winter is very severe for six months at least, and it is not uncommon to see deep snow lying in the middle of April, or an oat-crop buried by the snow in the vicinity of the Carpathian Mountains. The moist and swampy plains in the northern part of the kingdom render that quarter also very chilly and raw.

The soil is of a very varied character. In the neighbourhood of the Carpathians, where sterile rocks or cold clay abound, the husbandman has difficulty in raising even sufficient barley, oats, and potatoes for his own consumption. But towards the plains, the soil becomes richer and more productive: the most fertile parts are those perhaps about Yaroslaf, such districts in the circle of Zloczof where limestone forms the substratum, and the greater portion of the circles of Stanislavof and Kolomea. In many parts the soil is so light that the grass, underwood, and even trees quickly wither under the heat of the sun.

Agriculture is still in a very backward state in Galicia. The productive land in Galicia (including the Bukowine, which was not then separated from Galicia), was thus occupied in 1846:—Arable, 8,266,698 English acres; meadows and gardens, 2,912,537 acres; pasture, 1,952,440 acres; and woodlands, 6,031,065 acres. The grain grown in the same year was in English quarters:—Wheat, 616,844; rye, 1,653,721; barley, 2,315,513; oats, 3,223,434; and maize, 116,081 quarters. Of potatoes, 38,199,690 bushels were obtained. The vine is very little cultivated, only 42 acres were returned in 1846 as vineyards. Peas and beans, potatoes, and other common vegetables, chicory, clover, flax, hemp, tobacco, anisee-seed, rape and other seed for making oil, a few hops, &c. are also grown. The supply of fruit is scanty. The forests consist principally of pine-wood, and there are large tracts of underwood. In some parts the oak attains a majestic growth. Tar and potashes are made in considerable quantities.

A great deal of attention is paid by the government as well as by private individuals to the improvement of the breed of horses. The best native horses of the Polish breed are bred in the western circles. Large droves of horned cattle are fed, the finest being brought from Moldavia. Much has been done towards improving the race of sheep, large numbers of which are raised; and Galicia now produces some fine wools. In the eastern districts much honey and wax are made. The rivers and small lakes, and ponds, the last of which occupy an area of nearly 200 square miles, are well supplied with fish. The bear, wolf, fox, beaver, roebuck, stag, lynx, marmot, eagle, vulture, swan, heron, wild goose, squirrel, and hare are the principal wild animals.

The mining industry of Galicia is chiefly confined to iron and salt. The rock-salt mines of Wieliczka are of great magnitude and well known, and produce four-fifths of the whole quantity raised; the remainder is obtained chiefly from the mines of Bochnia. A fine kitchen-salt is made from the saline springs in the eastern parts of the kingdom. A small quantity of coal is raised at Myszyn, in the circle of Kolomea, and there are sulphur-pits at Svoszovice. Mineral pitch is distilled into uaphta at the government works in the circles of Sambor, Kolomea, and Stanislavof.

The manufactures of Galicia are gradually extending, though they are still on a confined scale. The country people in general make the materials for their clothing. The spinning and weaving of flax and hemp give employment to thousands. They manufacture very coarse and durable linen, and in some parts a few fine cloths, damask and table linen, &c. The cotton manufacture is inconsiderable. Much woollen yarn is spun, both by hand and machinery; and there are small manufactures of coarse woollens in all parts. Paper of inferior quality is made to some extent. Ship-building is carried on principally in the circles of Przemysl and Rzeszof: the produce of deals, staves, &c. is considerable; and great quantities of utensils, &c. in wood are made. Brandy is manufactured on almost every large

estate; the Jews in particular are considerable distillers, and have a large number of stills at work. Much tobacco and some beet-root sugar are manufactured. Tanning employs many hands; but the production of iron, copper, and other metallic articles is limited. Pottery ware of all sorts, ordinary china, glass, and flints may be added to this enumeration. The foreign trade of Galicia is very limited. The exports consist of cattle, skins and hides, wool, grain, salt, timber, potashes, anise-seed, horses, &c.; and the imports of raw materials from Hungary, Poland, Russia, Turkey, &c., and of wines and manufactured goods and colonial produce.

Divisions, Towns, &c.—Galicia was divided into 19 circles, but has been lately directed to be formed into three divisions, Limburg, Cracow, and Stanislawof, having for their capitals the towns of the same names. LIMBURG, the capital of Galicia, CRACOW (as well as the larger towns within the circle of that name), and BRODY are noticed under their respective titles. The other more important towns we notice here: the population is that of 1850-1.

Stanislawof, or Stanistaf, the capital of the circle of Stanislawof, population including the suburbs about 9000, is a strongly fortified town situated between the two principal branches of the Bistritza, in 48° 54' N. lat., 24° 50' E. long., 75 miles S.E. by S. from Limburg. It possesses few public buildings of any consequence, but is a place of some trade. *Biala*, on the right bank of the Biala, 45 miles W.S.W. from Cracow, population about 4000, has some manufactures of linen cloth. *Bochnia*, 25 miles E.S.E. from Cracow, population about 5300, contains a gymnasium and several churches. In the neighbourhood are extensive mines of rock-salt. *Brzeany*, on the Zlota, 50 miles S.E. from Limburg, population 6890, contains several churches, a gymnasium, a castle, and carries on some leather and linen manufactures. *Drohobycz*, 40 miles S.S.W. from Limburg, population with the suburbs about 7400, is an ancient town, containing several churches, convents and schools. Iron and salt-mines and pitch-wells are in the vicinity. A large yearly corn and cattle fair is held here. *Przemysl*, 55 miles W. by S. from Limburg, on the left bank of the Saan, population about 4200, more than half of whom are Jews, is an old walled town containing two or three churches, a monastery, a synagogue, a gymnasium and other schools, an hospital, and the ruins of a castle; and carries on some manufactures of linen and leather. *Rzesow*, on the Wisloka, about 80 miles W. by N. from Limburg, population 4600, about half of whom are Jews, contains churches, schools, a castle, &c., and has some manufactures of linen and woollen cloths. *Sambor*, on the left bank of the Dniester, 40 miles S.W. from Limburg, population about 6700, contains a court-house, churches, a gymnasium, and other schools; is the centre of a salt mining district, and has some linen manufactures. About 10 miles S.W. from it is the town of *Stari Sambor*, or *Old Sambor*, with a population of 2000. *Sandek*, or *New Sandek*, 50 miles S.E. from Cracow, population 5300, is a town of some local importance; an older town of the same name, *Stari Sandek*, population 3500, lies about 6 miles S.W. from New Sandek. *Tarnopol*, on the Sereb, 85 miles E.S.E. from Limburg, population with the suburbs about 10,000, contains several churches, a gymnasium and other schools, and is a place of a good deal of trade. *Trembowla*, 20 miles S. from Tarnopol, once the capital of an independent principality, is now a small town of about 3000 inhabitants. *Wieliczka*, 9 miles S.E. from Cracow, population 4700, is chiefly famous for its salt-mine, perhaps the largest and most remarkable in the world; it yields 35,000 tons of salt annually, and contains within it a rivulet and lake of fresh-water, and a chapel carved out of the salt-rock. *Zbaracz*, 12 miles N.E. from Tarnopol, population 5642, contains three churches, a monastery, and an ancient castle.

Government, Education, &c.—The government of Galicia is on the same footing as that of the other hereditary possessions of Austria. The highest authority in civil affairs is the Board of Provincial Administration at Limburg. The court of appeal and chief criminal court are in the same town, where also are the head-quarters of the commander-in-chief for Galicia.

Of the inhabitants above half are of Polish descent, chiefly located in the western provinces, and next in number are the Ruthenes or Russniaks, a rude, uncivilised race of men, who have spread into the centre of Russia, and are also numerous on the Hungarian side of the Carpathians: they inhabit the circles of Galicia east of the San. The remaining part of the population consists of 328,806 Jews, who are scattered throughout the kingdom, and a mixed race of Germans, Hungarians, &c.

The majority of the inhabitants (2,236,765) are Roman Catholics: but a nearly equal number (2,194,910) are of the Greek Church, who conform partially to the rites of the Roman Catholic Church. There are besides 31,069 of Greek non-conformists, and 32,714 Protestants. The Roman Catholics are in ecclesiastical matters in charge of the Archbishop of Limburg and the bishops of Przemysl and Tarnof. The Armenians, though few in number, have an archbishop at Limburg. The Græco-Catholics, mostly Russniaks, have also their own archbishop at Limburg, and a bishop at Przemysl. The Greeks, wholly Moldavians, are under a Greek bishop at Czernowitz in the Bukowine. The Protestants are under a superintendent at Limburg.

The number of benevolent institutions is considerable, and comprises eighteen Christian and three Jewish hospitals or asylums for the

sick or diseased, an hospital of the Benevolent Brothers, six hospitals conducted by the Benevolent Sisterhood, above 300 infirmaries and refuges for the indigent, besides several poorhouses.

The public provision for the general education of the people, has been greatly increased within the last 20 years: in 1846 it consisted of a university and an academy of art at Limburg, 4 philosophical and 4 theological seminaries, 13 gymnasias, 10 special and 28 general schools: in all 61 upper schools. The popular schools numbered 3063, being 43 head schools, 2195 lower schools, 42 girls' schools, 781 adult or repetition schools, and 2 infant schools.

GALICIA, a province of Spain, is bounded N. by the Bay of Biscay, S. by Portugal, W. by the Atlantic Ocean, and E. by the provinces of Asturias and Leon. It is situated between 41° 50' and 43° 47' N. lat., 6° 50' and 9° 16' W. long. The greatest length north to south is about 130 miles; the greatest width east to west is about 120 miles. It is divided into the following modern provinces:—

Provinces.	Area in Square miles.	Population in 1849.
Coruña	15,897	511,492
Lugo		419,437
Orense		380,000
Pontevedra		420,000
Total	15,897	1,730,929

Surface.—This province is almost entirely covered with mountains and hills, and is intersected by numerous valleys, many of which are narrow, rugged, and difficult of access. There are few plains of any extent. Galicia forms in fact the western termination of the direct course of the great Cantabrian mountain range. The Sierra de Peñamarela enters Galicia from the boundary of Asturias and Leon, and taking a northern direction sweeps round by Mondoñedo, after which it turns southward, and passing by Lugo and Orense on the west terminates on the coast between Tuy and Vigo. This mountain range, under the various names of the Sierra de Peñamarela, Sierra de Mondoñedo, Sierra de Lobo, Monte Faro, and other local denominations, incloses the basin of the Miño and its tributaries, dividing it from the valleys of all the other rivers which enter the Atlantic or the Bay of Biscay. Many of the summits of this series of sierras are covered with snow during a great part of the year. Another offset from the Cantabrian mountain chain passes in a south-south-west direction through the province of Leon, and enters Galicia at the south-eastern angle, whence it extends from east to west to the coast, forming the boundary between Galicia and Portugal. This latter range shuts in the basin of the Sil, and joins it to that of the Miño, of which the Sil is the largest tributary.

The coasts of this province are much broken, and are indented by numerous bays and other smaller inlets of the sea, besides which most of the rivers terminate in an estuary, or ria. There are many promontories and headlands, which project some distance into the sea, of which the best known are Cape Estaca and Cape Ortegal on the north coast, and Cape Finisterre on the west coast.

Rivers.—The two largest rivers of this province, the Miño and its affluent the Sil, are confined within the basin formed by the series of sierras which sweep round by Mondoñedo, Lugo, and Orense. Nearly all the other rivers flow westward and northward from the exterior flanks of the same series of mountains. The Miño (in Portuguese Minho) rises in the Sierra de Mondoñedo, flows southward past Lugo, and then south by west to Orense, about 10 miles above which it receives the Sil, augmented by the Cabe, the Bibey, and other streams, all of which come from the mountains of Asturias and Leon. After passing Orense the Miño flows south-south-west, and then south-west, forming part of the boundary between Galicia and Portugal, and entering the sea below Tuy and south of Vigo. The Tea rises on the western flank of Monte Faro, and falls into the Miño above Tuy. The Lerezo, the Ulla, and the Tanhre, all flow in a south-west direction, and enter the sea by wide bays or estuaries, which are named respectively the Ria de Pontevedra, the Ria de Arosa, and the Ria de Muros y Noya.

Climate and Productions.—The climate is variable, temperate on the coast, but cold in the interior as compared with other provinces of Spain. The skies are cloudy, and much rain falls. The sides of the hills are well covered with forest-trees, and also with chestnut-trees, which supply much of the food of the peasantry. The valleys supply good pasturage for large numbers of cattle, and many fine mules and asses. The soil is generally stony, but is carefully cultivated, and produces wheat, barley, maize, flax, abundance of fruit, and a considerable quantity of wine. Swine are reared in considerable numbers, and the hams are in great request. The woods abound in game and the streams in fish. The fisheries on the coast are a profitable branch of industry, and not only supply food for the inhabitants, but are exported largely into Leon and the Castiles. Linen is the chief manufacture; it is made in considerable quantity and of good quality for domestic use.

Towns.—Coruña is the capital of Galicia and the province of Coruña. [CORUÑA.] Betanzos, 10 miles W.S.W. from Coruña, is situated on a sort of peninsula formed by the junction of two streams which discharge their united waters into the Bay of Betanzos. It is

an old town, and some of the narrow streets are still entered by ancient granite gateways. The population, about 4800, are mostly employed in the fisheries. *Ferrol*, 14 miles N.N.E. from Coruña across the Bay of Betanzos, but more than twice the distance by land, is a sea-port town with one of the best harbours in Europe, and with a vast naval arsenal and dockyards founded by Carlos III. It is situated in a deep inlet from the north side of the Bay of Betanzos, and the harbour is entered by a narrow channel, which is defended by the castles of San Felipe and Palma, while the town is strongly fortified on the land side by a wall on which 200 cannon might be mounted, but are not. The arsenal and dockyards are now in a neglected and ruinous state. The old town is very irregular, but the new town is a parallelogram of seven streets, crossed at right angles by nine others, and has two square plazas. The Alameda, or public walk, is between the new town and the Astillero, or dockyard. The town contains three large churches, two hospitals, a prison, naval barracks, and schools of navigation and mathematics: the population in 1845 was 15,720. *Lugo*, 50 miles S.E. from Coruña, is the capital of the province of Lugo. It stands on the left or western bank of the Miño, and is inclosed by walls. It has a large square surrounded by arcades, and contains a cathedral of the 12th century: population, 7269. There are warm sulphur-baths, which were celebrated in the time of the Romans. *Mondoñedo*, 50 miles W. by N. from Coruña, is situated in a cultivated valley on the high lands of the Sierra de Mondoñedo. It is the see of a bishop, suffragan of Santiago, and contains a cathedral, begun in 1221: population, 6000. *Orense*, 45 miles S.E. from Santiago and 55 miles S.S.W. from Lugo, is the capital of the province of Orense. It stands on the left or eastern bank of the Miño, on a gentle ascent, and girdled by hills. It is the see of a bishop, suffragan of Santiago, and contains a cathedral begun in 1220. The streets are narrow and gloomy, but clean. It is frequented for its hot springs, which gush out of a granite rock on the west of the town almost boiling, and are applied to many uses besides medical ones: population, 5000. *Pontevedra*, 75 miles S.S.W. from Coruña, is situated on the south bank of the Lerez, at its entrance into the Ria de Pontevedra. There is a long bridge here over the Lerez, whence the name Pontevedra (Old Bridge). The town is surrounded by walls, is well built, well paved, and clean, and has a convenient harbour for small vessels: population, 4550. *Santiago de Compostela*, formerly the capital of Galicia, 43 miles S. from Coruña, is situated on the north bank and near the source of the Sar, an affluent of the Ulla. The town is built round the celebrated cathedral, which was said to contain the body of St. James the Apostle (Sant Iago): the name Compostela is from 'Campus Stellæ', because a star was said to have pointed out the spot where the body was to be found. It was formerly a place of pilgrimage of greater sanctity and frequented by greater numbers than any other place in Spain. After the Reformation the numbers began to diminish. It is the see of an archbishop, and contains the cathedral, 2 collegiate churches, and 15 parish churches, and is still visited by considerable numbers of devotees. Its numerous convents were plundered by the French in 1809, and have since been suppressed. Each of the four fronts of the cathedral looks to an open plaza. The grand façade, or western front, is modern. The body was completed in 1128. The cloisters are grand; they were completed in 1533, by Fonseca, afterwards bishop of Toledo. In one of the plazas is the Hospicio de los Reyes, the hospital for pilgrims, a fine structure built in 1504. There are several other public buildings, fountains, and other objects worthy of inspection. There are some manufactures of cottons, hats, leather, and hosiery, but the importance of the place depends chiefly on its ecclesiastical establishments. The population in 1845 was 28,970. *Tuy*, 42 miles S.W. from Orense, is a frontier town situated on the north bank of the Miño, opposite to the Portuguese town of Valença. It is walled, but of no great strength. It is the see of a bishop, suffragan of Santiago, is regularly built, and contains an old strongly-built gothic cathedral, begun in 1145; the cloisters, of much later date, are very fine. The climate here is delicious, and the country very fertile, and produces much excellent wine. The oranges and other fruits rival those of Andalusia: population of the town, 4000. *Vigo*, 15 miles N. by W. from Tuy, stands on the south shore of the Ria de Vigo. It has a good port, which was of great importance previous to the formation of the naval establishments at Ferrol. The town is inclosed by walls, with a trench, and is defended by two castles, which crown the heights behind it. It contains a large modern church, a theatre, and a lazaretto; and there is a pleasant Alameda, or public walk. It has a good export trade in wine, maize, and bacon, and an active pilchard fishery. It was much injured by the attacks of Drake in 1585, and by Lord Cobham in 1719: the population of the town is about 4000.

Inhabitants.—The Galicians (Gallegos, in Spanish) are a hardy, industrious, and docile people. In their habits they resemble their neighbours the Portuguese rather than the rest of the Spaniards. They speak a dialect which has considerable resemblance to the Portuguese language. Many of them visit Portugal, and numbers may be seen in the streets of Lisbon and Oporto employed as porters and water-carriers; and they have an established reputation for honesty. The population of Galicia is almost entirely agricultural; landed property is much subdivided, and the great majority of the people do

not live in towns and villages, as in most other provinces of Spain, but in detached dwellings on their lands and fields.

(Miñano, *Diccionario Geografico de España*; Madoz, *Diccionario de España*; Ford, *Handbook of Spain*.)

GALILEE. [PALESTINE.]

GALITSCH. [COSTROMA.]

GALL, ST. (Sankt-Gallen), a Swiss canton, is bounded N. by the canton of Thurgau and the Lake of Constance, E. by the Austrian province of the Vorarlberg, S. by the cantons of Grisons and Glarus, and W. by those of Schwyz and Zürich. Its area is 758 square miles, and its population at the end of March 1850 amounted to 169,508, of whom 105,370 were Catholics, and the rest, with the exception of some Jews and foreigners, were Calvinists. St.-Gall is a new canton, which was formed at the beginning of the present century by the union of the territories of the Abbot of St.-Gall with the free town of St.-Gall, and several districts formerly subject to the old cantons, namely, the Rheintal, Sargans, Werdenberg, Uznach, Gaster, and Sax, and the town of Rapperschwyl. By the union of so many various districts which happened to be situated all round the old canton of Appenzell, that canton is now inclosed on every side by the territory of St.-Gall. The spoken language of St.-Gall is a dialect of the German, resembling the Swabian.

Surface.—The canton of St.-Gall is in great part a mountainous country, being intersected by various offsets of the Alps, the highest of which are continuations of the great chain which bounds on the north the valley of the Upper Rhine in the Grisons country, and which on entering the territory of St.-Gall at the summit called Scheibe (9000 feet) divides into three branches—one running north along the frontiers of Glarus as far as the south bank of the Lake of Wallenstadt; another eastward between St.-Gall and the Grisons, forming the summit called Galanda (8800 feet high); and the third extending north-east into the canton of St.-Gall, between the rivers Tamina and Seez. North of the Lake of Wallenstadt is another chain running in a north-west direction, which divides the basin of the Linth from that of the Thur, and contains several summits between 6000 and 7000 feet high. North of the Thur, and between it and the Lake of Constance, is another extensive group of mountains known by the name of Alpstein, which cover nearly the whole of Appenzell, and extend also into the adjacent districts of St.-Gall. The general slope of the surface is towards the north and north-west.

Rivers.—The *Rhine*, coming from the Grisons, touches the canton of St.-Gall near Pfäfers, and flowing northward forms its eastern boundary for a length of about fifty miles, dividing it first from the Grisons and afterwards from the principality of Lichtenstein and the Vorarlberg, until it enters the Lake of Constance below Rheinek. Its principal affluent in the canton of St.-Gall is the *Tamina*, a rapid Alpine stream which rises in the Scheibe, crosses the south part of the canton, passes by Pfäfers, and enters the Rhine below Ragaz. The *Seez* rises also in the south part of the canton, runs first north-east and then north-west, and enters the Lake of Wallenstadt. The *Thur*, which rises in the central part of the canton near Wildhaus, runs northward through part of the fine district of Toggenburg, passes Lichtensteig, receives the Necker on its right bank, and after a course of about forty miles enters the canton of Thurgau and the canton of Zürich, through which it flows in a north-west direction, and falls into the Rhine on the left bank in the latter canton. The *Sitter*, coming from the canton of Appenzell passes near the town of St.-Gall and enters Thurgau, where it joins the Thur at Bischofszell. The *Goldach*, which rises also in Appenzell, runs into the Lake of Constance. The north and north-west districts of the canton towards the borders of Thurgau are mostly level, as well as the banks of the Linth, between the lakes of Wallenstadt and Zürich, where an extensive marsh has been drained by means of the Linth Canal.

The agricultural produce of the canton consists chiefly of wine, fruits in great abundance, especially apples and cherries, some corn, maize, potatoes, and pasture. The corn produced is not sufficient for the home consumption. There are considerable forests in the southern part of the canton, and much wood is exported. The domestic animals are oxen, sheep, goats, pigs, and horses, all of which enter into the exports of the canton; the rivers and lakes abound with fish and water-fowl. There are rich iron-mines at Gunzenberg, and coals and turf are found in several districts. Manufactures constitute an important branch of industry. From the 13th century the town of St.-Gall was famous for its linen manufactures, but these have been in modern times replaced by the manufacture of cotton goods and especially muslins. Muslin and other cotton fabrics are also largely manufactured in the Toggenburg, which comprises the long and fertile valley of the Thur from Wyl in the north-west of the canton to Wildhaus, the birthplace of Zwinglius, which stands at the foot of Mont Sents, at the head of the valley, on the watershed between the Thur and the Rhine. There are in the canton also numerous bleaching establishments, glass-works, and wax-bleaching factories. The women are also employed in embroidery. The tanneries have fallen off of late years. About 3000 bullocks' hides and 2000 goats' skins are exported annually. The principal imports are corn and other provisions, raw cotton, and other materials for manufacturing purposes. The town of St.-Gall is a place of great trade with Germany and

Italy, and numbers some wealthy merchants, manufacturers, and bankers among its population.

The canton is divided into 15 districts, namely:—St.-Gall, Tablat, Rorschach on the banks of the Lake of Constance, Unter Rheinthal, Ober Rheinthal, Werdenberg, Sargans, Gaster, See Bezirk (or Lake Circle) on the banks of the Lake of Zürich, Ober Toggenburg, Unter Toggenburg, Alt Toggenburg, Neu Toggenburg, Wyl, Gossau. The finest districts are the Rheinthal, Rorschach, St.-Gall, Wyl, the greater part of the Toggenburg, and the See Bezirk: the remaining or southern districts are in mountainous.

St.-Gall, the capital of the canton, situated in a pleasant valley on the Steinsch, is a well-built town, well supplied with water, and contains 11,229 inhabitants. It is still surrounded by old walls, but the ditch has been filled up and converted into gardens. The principal buildings are—the abbey-church, now the cathedral, one of the finest in Switzerland, with handsome paintings; the gymnasium, the assembly-room, the town-house, several hospitals and asylums, and the public granaries. The old abbey library has above 1000 manuscripts, many of them valuable; several of the classics which were considered as lost were discovered in the middle ages in this library. The abbey-buildings are now used for the gymnasium, and the abbot's house for public offices. St.-Gall is one of the most commercial towns of Switzerland. The environs are embellished with numerous country houses and promenades. St.-Gall is 40 miles E. from Zürich and 45 miles N. from Coire in the Grisons. The town sprung up round a cell founded here in the 7th century by St. Gall or Gallen, an Irish monk, who taught the people agriculture and Christianity. An abbey rose over the cell fifty years after the death of the saint under the auspices of Pepin l'Heristhül, and became a celebrated school from the 8th century. To the labours of the monks of St.-Gall are owing the preservation of the works of several of the classical authors. The insecurity of the times from the beginning of the 11th century compelled the abbot to fortify his monastery, and frequently he and his monks sallied forth sword in hand against their assailants. The revenues of the abbacy increased in time so considerably, that the abbots became territorial lords of a considerable portion of northern Switzerland, and ranked as princes of the empire. In the beginning of the 15th century Appenzell threw off the yoke of the abbot; and the town of St.-Gall, which owed its origin and prosperity to the abbey and its inmates, became restive under the rule of the abbots, and gained its independence at the Reformation. At the French revolution the abbey was secularised, and its revenues were soon after sequestered. The last abbot died in 1829 in the convent of Muri.

Rapperswil is prettily situated on a peninsula projecting into the Lake of Zürich: a wooden bridge, 4500 feet long, crosses over to the south bank of the lake. The town has some manufactories and about 1500 inhabitants. *Altstätten*, in the Upper Rheinthal, in the midst of a fertile country, is a place of some trade, with sulphur springs, and about 2000 inhabitants, who manufacture muslins. *Rheineck*, in the Lower Rheinthal, on the left bank of the Rhine, has about 1500 inhabitants: the red wine made in the neighbourhood ranks high among the wines of Switzerland.

The government of St.-Gall is a democracy. The members of the Great Council are chosen in their respective districts by the citizens above twenty-one years of age. They are elected for two years. The Great Council appoints from among its body the members of the Little Council or executive for four years. It also appoints those of the criminal court and of the court of appeal. The citizens of each district appoint every year their own amman, or prefect, and other local authorities. The constitution of St.-Gall is one of the most democratic among the representative cantons of Switzerland: it approaches nearly to that of the pure democracies of the little cantons. The revenues of the state are derived from the income-tax; licences for shops, public-houses, and sporting; stamp-duties, tolls, monopoly of salt, post-office, and national domains. Under the new constitution of Switzerland the canton of St.-Gall returns eight members to the National Council. [SWITZERLAND.]

GALLARDON. [EURE-ET-LOIR.]

GALLATOWN. [FIFESHIRE.]

GALLA-TRIBES. [ABYSSINIA.]

GALLE, POINT DE, a town, fort, and harbour on the south coast of the island of Ceylon, 72 miles S. by E. from Colombo, is situated in 6° 1' N. lat., 80° 16' E. long. The town and fort are built on a low rocky promontory named the Point de Galle. The harbour is formed between the point, which extends towards the east, and a piece of land sloping inwards from the west, thus forming a small bay. The entrance to the bay is about a mile wide, but as there are many rocks in it a pilot is required to take the vessel to the anchorage, which is abreast the town in 5 fathoms depth of water. There is a pier; a jetty was constructed in 1847, and a new wharf in 1853. The increase in the number of steam-vessels calling at the port chiefly to take in coals has caused various proposals to be made for improving the harbour, but funds are wanting. The fort, built by the Dutch, is upwards of a mile in circumference, and contains several large and commodious houses inhabited by Europeans. The town, or pettah, inhabited by natives, is extensive, contains many neat houses, and has a large population. The government schools maintained here include an elementary school with 41 scholars in

1852, a mixed school with 144 scholars, and a superior school for females which had 88 pupils in 1852. An iron lighthouse, constructed in London, was erected in 1848; the total height of the light above the sea is 103 feet. The mail-steamers stop at Point de Galle, and the letters, &c., are forwarded immediately to Colombo, whence they are transmitted to all parts of Ceylon. Letters taken by steamers from Point de Galle reach Madras in three days and Calcutta in nine days. Bombay is reached by steam-vessel in six days.

GALLI'POLI, the ancient *Callipolis*, in the Thracian Chersonesus, a town of European Turkey, is situated on the northern shore of the eastern extremity of the Dardanelles, anciently denominated the Hellespont. Gallipoli is situated on a peninsula, and has two harbours, which are frequently the rendezvous of the Turkish fleet, of which the port is one of the chief stations. It was selected as the landing-place and depot of the first detachments of the British and French troops sent in the spring of 1854 to assist the Porte in the war with Russia. Gallipoli occupies a considerable space: the population is variously estimated; the number of residents does not probably exceed 20,000. The population includes Turks, Armenians, Jews, and some Greeks. It has an extensive bazaar, with domes covered with lead, and the shops are tolerably well supplied. The dwellings are destitute of comfort, and the streets are kept in a dirty state. Some improvement was effected in the appearance of the town in May 1854 by the allied troops, particularly the French, who set to work to write up names on the corners of the streets and to number the houses, and otherwise to introduce something like regularity. The trade of the town is chiefly in corn, wine, and oil. In the vicinity some profitable cultivation is carried on, but not to any great extent. Excellent water-melons grow in the neighbourhood. Gallipoli is interesting as being the first place in Europe where the Turks acquired dominion, having been taken by them in 1357. There are several ancient remains in the town and neighbourhood, of which the most noticeable are the magazine and cellars built by Justinian, and the tumuli to the south of the city, which are said to be the tombs of the Thracian kings. The only defences of the town are an old square castle and tower, probably built by Bajazet. Gallipoli is the see of a Greek bishop. Several foreign consuls reside in the town. Numerous steam-vessels, English, French, Austrian, and Turkish, call at Gallipoli on their passage to and from Constantinople.

GALLIPOLI. [OTRANTO, TERRA DI.]

GALLOWAY, an extensive district in the south-west of Scotland, comprising the shire of Wigton and stewartry of Kirkeudbright, with part of the shires of Ayr and Lanark. It appears to have been independent until the overthrow of the Picts, when the Scottish monarchs assumed a feudal superiority over the lords of Galloway. The lordship subsequently descended to the family of Douglas, with whom it remained till 1455, when, by the rebellion of James, earl of Douglas, the estates became forfeited to the crown.

GALSTON, Ayrshire, Scotland, a small market-town in the parish of Galston, on the left bank of the river Irvine, 22 miles S. by W. from Glasgow and 5 miles E. from Kilmarnock by road; and 39 miles from Glasgow by the Glasgow and South-Western railway. The population in 1851 was 2538. The inhabitants of the town are chiefly cotton weavers. Besides the parish church there are chapels for Free Church and United Presbyterian congregations; and an Endowed school. In the town is the ancient castle of Barr. In the neighbourhood are the remains of a Roman camp, and vestiges of a stone circle. Loudon Castle, the seat of the Marquis of Hastings, is near the town.

GALT. [CANADA.]

GALWAY, a maritime county of the province of Connaught, in Ireland, lies between 52° 55' and 53° 42' N. lat., 7° 53' and 10° 17' W. long, and is bounded N. by Mayo and Roscommon, E. by King's county and Tipperary, S. by the county of Clare, and W. by the Atlantic Ocean. The extent of coast, which is very irregular, has been estimated at 400 miles; and the Shannon and Suck, both navigable rivers, form the eastern boundary of the county. Its greatest length from east to west is 164 miles, from north to south 52 miles. The area comprises 1,566,354 acres, of which 742,805 are arable, 708,000 uncultivated, 23,718 in plantations, 1801 in towns, and 90,030 under water. The county of Galway is the largest in Ireland except Cork; its population in 1851 was 293,564, exclusive of Galway town.

Surface, Hydrography, and Communications.—With the exception of the Slieve-Baughta Mountains, which cover the south coast of the county from the Clare boundary to Loughrea [CLARE], and an extension of the Burren Mountains on the south-west, the whole of that part of Galway which lies east of Lough Corrib is comparatively flat, and although to a great extent encumbered with bog, is pretty generally improved and productive. A low table-land running north and south and joining the Slieve-Dart Mountains on the northern boundary separates this part of Galway into two nearly equal districts, the waters of one of which run eastward into the Suck and Shannon, and those of the other westward into the head of Galway Bay and Lough Corrib. The district of the Suck is most encumbered with bogs; it contains much well-improved land, particularly in the neighbourhood of Ahascragh and Ballinasloe. The district extending eastward from the head of Galway Bay is the richest part of the county. The surface of the county east of Lough Corrib is

more diversified with hill and dale, and is generally in a good state of cultivation. The centre of this eastern district is a bare flat tract disfigured by numerous bogs and very inferior in fertility to any of the other portions.

The district west of loughs Corrib and Mask has latterly attracted much attention in consequence of its capabilities of improvement, and the wildness and beauty of its scenery. The most prominent object in this district is a group of conical mountains called Binabola, Burabola, or Twelve Pins, rising abruptly from a table-land of moderate elevation which stretches south and west from their bases to the sea. Round their bases are numerous lakes, of which the chief are Lough Inagh, under the eastern front of the group; the upper and lower lakes of Ballinahinch skirting them on the south, and loughs Kylemore and Foe lying on their northern declivities. The average height of these mountains is about 2000 feet; the highest summit is 2395 feet above the sea, and as the table-land from which they rise is only of moderate elevation, their appearance is very striking. A fine view of these mountains, of the glens that divide them, and of the lakes at their feet, is commanded by the beautiful isolated hill of Coolnacarton, 900 feet, on the western shore of Lough Inagh and at the bottom of Glen Inagh. Northward and eastward from the Binabola, but separated from them by a deep glen which is traversed by the road from Oughterard to Renvyle are the Maam-Turk Mountains, a range of equal altitude, but not of so picturesque a character, extending between the head of Killery harbour and the western shore of Lough Mask. About midway between these waters lies Lough Nafooy or Neffoy, which has an outlet to Lough Mask and is surrounded by mountains above 2000 feet high; the highlands north of this lake to the boundary of Mayo are entirely uninhabited. The chief elevations of this group on the west are Shannanofola, about 2000 feet high, at the head of Lough Corrib; Ben Leva, the declivities of which form the isthmus between Loughs Corrib and Mask; and the range of Maam Trasna overhanging the western shore of Lough Mask. Along the western arm of Lough Corrib, there is a small plain from which the hill of Glan rises abruptly to a height of 1060 feet. To the north of this hill is a remarkable chain of lakes stretching westward from Lough Corrib to near the head of Birterbuy harbour. These lakes lie in the hollows of a great bed of granite, extending southward from the Binabola Mountains to the shores of Galway Bay and the Atlantic, from which the country gradually rises to about 300 feet, with hills to the north-east nowhere exceeding 700 feet, and presents a most bleak, dismal, and dreary appearance—vast bogs, barren moors, lakes, and morasses. The district just described is now geographically known as 'Connemara'; among the Galwegians, however, that name is applied to the country which lies west of a line drawn from the head of Killery harbour along the ridge of the Maam Turk Mountains to the summit of Shannanofola and thence to the head of Kilkerran Bay. The mountainous district east and north of this comprising the isthmus between Lough Corrib and Lough Mask is called the 'Joyce Country.' The low granite country south of both the preceding is called 'Iar-Connaught,' or Western Connaught.

The islands off the coast of Galway are very numerous: the chief are the three south islands of ARRAN, lying about midway between the coasts of Iar-Connaught and Clare, in the opening of the Bay of Galway; Geronna Island between Greatmen's Bay and Kilkerran Bay; and the islands of Innisturk, Innisboffin, and Innishark, which extend across the offing of Killery harbour, between the coasts of Connemara and Murrisk, and belong politically to the county of Mayo. On the highest point of Inishmore or Arranmore Island, 498 feet above the level of the sea, there is a lighthouse with a revolving light, which in clear weather can be seen at a distance of 28 miles. There are also lighthouses with fixed lights on Slyne Head in Connemara, and on Mutton Island in Galway Harbour.

On the southern side of the Bay of Galway the coast is not favourable for the construction of harbours. From Burrin Quay, or New Quay, in the county of Clare, to Kinvarra, at the eastern extremity of the Bay of Galway, there is no place of shelter for craft except at Killeany in Arran, and Duras Pier on the peninsula of Duras, which is situated between Kinvarra inlet and the county Clare, opposite the town of Galway. The creek of Ballynacourty which opens into Killecolgan Bay, and Renville Creek, 5 miles E. from Galway town, are good harbours for small vessels, and the harbour of Galway has lately been much improved. Westward however from Galway, and round the entire coast of Iar-Connaught and Connemara (so named from Cun-na-mar 'bays of the sea') to the boundary of Mayo, there is a succession of harbours for vessels of the largest class, unequalled perhaps on any similar extent of coast in Europe. The first of these noble roadsteads next Galway is Costello Bay, at the mouth of the celebrated fishing stream the Costello. This harbour admits large ships, and is defended by a Martello tower. Casheen Bay, Greatmen's Bay, and Kilkerran Bay occur immediately west from the Costello, being separated from one another by narrow peninsulas and islands. Kilkerran Bay contains 100 miles of shore, and is capable of receiving the largest vessels. A pier, 500 feet in length, with a return of 100 feet, was constructed here in 1822. An extensive peninsula, 10 miles by 7 miles, and interspersed with lakes, separates Kilkerran Bay from the Bay of Birterbuy, which runs

inland about 5 miles, being only half a mile wide at the entrance, and from 2 miles to 3 miles wide within; it has deep water and fine ground. On the western side of the entrance to Birterbuy Bay is the opening to Roundstone harbour, a safe and capacious inlet, with clean good ground, and 2 to 5 fathoms water. At the entrance of the Ballinahinch River into the head of the harbour there is an excellent salmon fishery. A considerable village has recently sprung up at Roundstone; a road runs hither from the main line of communication between Galway and Clifden, and the harbour is the nearest point for the shipment of the fine green marble of Ballinahinch. From Birterbuy the coast stretches, with occasional anchorages, to Slyne Head, the most western point of Galway; off Slyne Head lie a number of islands with navigable sounds between them, which remained unnoticed in the maps till Mr. Nimmo's coast survey. Between Slyne Head and Achris Head occur the bays of Mannin and Ardbear; the former possessing good anchorage, but exposed, and the latter forming an excellent harbour with safe anchorage in 6 to 8 fathoms water. At the head of this harbour a considerable town has recently grown up. [CLIFDEN.] North of Clifden harbour is Cleggan Bay, an excellent roadstead, with a pier built in 1822, to which a branch of the new coast-road has been extended. Between Cleggan Bay and Cape Renvyle, which forms the southern boundary of the entrance to Killery Bay, is the harbour of Ballynakill, well sheltered by the island of Truchelaun, and capable of receiving vessels of the largest class. Rounding Cape Renvyle there is an open bay, from the head of which two inlets run eastward between steep mountains. These are the Great and Little Killierie; the latter an arm of the sea, about 12 miles in length, by a quarter to three-quarters of a mile in width, having for a great part of its length 10 to 12 fathoms of water and clean ground. An island at the mouth completely protects it from the sea, but from being overhung on each side by steep and lofty mountains it is exposed to squalls, and not safe for sailing boats. The scenery of the Great Killery is much admired, and considered to approach nearest to the Norwegian 'fjords' of any in these islands.

No part of the district west of Lough Corrib is more than 4 miles from existing means of navigation. The harbours fit for vessels of any burden are upwards of 20 in number; it contains 25 navigable lakes of a mile or more in length, and hundreds of smaller size. Lough Corrib and Lough Mask alone have upwards of 70 miles of navigable coast; and all these waters abound with fish. The sea-shore affords a constant supply of red and black seaweed, which is used as manure, and is largely exported for that purpose, or in the manufacture of kelp, of which very large quantities are made. Banks of calcareous sand and beds of limestone are of frequent occurrence. There is an inexhaustible supply of peat fuel, which is an important article of export, and the numerous mountain streams furnish a most abundant supply of water-power. Notwithstanding these capabilities, if the neighbourhoods of Clifden and Roundstone be excepted, the population of all this western district is chiefly scattered along the coast or in the islands, leaving the interior almost wholly waste. During the famine of 1847 the inhabitants suffered dreadfully, and want and misery almost completely stifled the few germs of industrial progress which were gradually raising this remote people to a state of comparative prosperity. Since that terrible year great exertions have been made to promote the fisheries; better built boats and superior tackle have been introduced, and several piers have been erected on the coast and among the islands for the greater security of the life and property of the fishermen. The operation of the Encumbered Estates Act has produced a considerable change in this district; the great Martin estate, the largest in the kingdom, and the Darcy estates, have been sold to new proprietors; and English farmers have been attracted to Connemara as likely to prove a highly remunerative field to the skillful agriculturist.

The rivers of Galway, being either feeders of the Suck and Shannon, or descending by short courses from the western district to the sea, are in general small. The Clere-Galway River, which rises near Dunmore, in the north-east of the county, and passes near Tuam, has a course, from its source to its termination in Lough Corrib, of about 50 miles. South of Tuam it expands into a periodical lake or 'turlough'; the waters generally rise in September or October, and do not subside until May, after which a coarse grass springs up, which is generally grazed as a common by the tenants of the adjoining land. In the limestone districts are numerous subterranean cavities, which in some instances absorb considerable rivers. The Shrule, on the northern border of the county, dips underground, and emerges before it terminates in Lough Corrib. The entire waters of Lough Mask also pass more than 2 miles by subterranean channels under the isthmus of Cong into Lough Corrib. The lakes of Loughrea and Gort are fine sheets of water; the latter has well-wooded banks, and the scenery in its vicinity is very picturesque.

The Shannon is navigable all along the eastern boundary. An extension of the Grand Canal connects Ballinasloe with the line to Dublin at Shannon Harbour. A navigable canal is in progress, to unite Lough Corrib with Galway Harbour, and to form part of a water communication to Lough Mask and the navigable lakes in Mayo county. The Midland Great Western railway affords communication between Dublin and Galway. Prior to 1813, the only roads

west of Galway were a narrow coast-road to Costello Bay and a central road by Oughterard to Ballinahinch. Since then, a good coast-road has been formed, which touches the heads of all the chief inlets from Costello Bay to the Killery, where it joins an inland line leading through the heart of Joyce Country to the head of Lough Corrib, and thence across the central plain of Iar-Connaught to the southern coast-road at Costello Bay. The construction of numerous piers and fishing harbours on the coast, has greatly facilitated the improvement of the west country. Galway town is connected by good mail-coach roads with Dublin through Ballinasloe, whence another mail-road runs north-west through Tuam to Westport; with Limerick through Gort; and with Clifden through Oughterard. Besides these, there are numerous good cross roads.

Geology, Mineralogy, &c.—The whole country westward from the Shannon and the Suck, including a narrow belt along the western shore of Lough Corrib and the isthmus between loughs Corrib and Mask, belong to the great central limestone plain of Ireland, with the exception of the Slieve-Baughta and Slieve-Dart Hills, which consist chiefly of old red-sandstone and millstone grit. The granite field before noticed stretches westward from Galway to Slyne Head, and northward to the southern base of the Twelve Pins, where it is succeeded by gneiss and mica-slate, with beds of hornblende and granular limestone running east and west from Lough Corrib to Clifden. The group of Binabola consists of a schistose quartz of a grayish-brown colour, large sheets of which are exposed on the precipitous sides of all the chief eminences. On their northern bases the limestone, which shows along their southern side, disappears; and the mica-slate and hornblende rise beyond Kylemore and the passes of Maam Turk into the southern mountains of Joyce Country; these are succeeded, more northward, by a transition tract of greenstone and graywacke slate, covered by old red-sandstone and conglomerate, constituting the entire country between the head of Killery harbour and Lough Mask, and extending beyond the bounds of Galway into the mountain ranges of southern Mayo. Westward of the Binahola, the county, with the exception of the hill of Renvyle, which is a mass of quartz, consists principally of mica-slate traversed by beds of granular limestone, and in some places by veins of granite. To the east the range of mountains rising from the northern edges of the granite tract terminates in the hill of Glan; into the structure of this hill all the formations of the district enter.

The mountains of the primitive district are highly metalliferous. The neighbourhood of Oughterard is rich in copper and lead; and the same ores exist in the group of Binabola. Fine green marble is quarried at Ballinahinch at the southern base of the Binabola, and a beautiful green variegated marble is exported from Oughterard; the black and variegated marbles of Angliman and Merlin Park near the town of Galway are of a superior quality. In the eastern district ironstone has been found at Woodford, Gort, and Lawrencetown. Manganese is of frequent occurrence in the district about Gort. Potters-clay and yellow ochre are found near Atherry. A fine grit, fit for millstones, is raised near Dunmore; and the Slieve-Baughta Mountains afford an excellent stone for polishing marbles.

Climate, Soil, and Agriculture.—The climate is mild, damp, and in some low districts unhealthy; snow rarely lies in the western district, where cattle are never housed. The coast is exposed to very heavy storms from the Atlantic, which, when they occur in August, generally destroy the potato crop on the coasts and islands, causing those occasional famines which scourge the population of the western coast of Ireland.

The richest soil in the county occurs in a tract extending from Gort through Loughrea to Portumna, Eyre Court, and Ballinasloe. The wheat produced in the southern portion of this tract is of a superior quality; and the numerous demesne lands occurring throughout it are among the most fattening pastures in Ireland. The remainder of the eastern district is more an oat and barley country. On the lighter soils great numbers of sheep are fed, principally for the supply of the Leinster graziers, who purchase them for fattening, at the fairs of Ballinasloe. Throughout this district marl is of frequent occurrence. Throughout the entire county, with the exception of demesnes, the dry-stone wall is the prevailing fence.

Large quantities of bog have from time to time been reclaimed. The system of farming pursued in the county is in general slovenly; the system of green crops and turnip husbandry is gradually extending; but the farmers who adopt new methods form a small minority. The number of acres under crops in 1853 was 235,168, of which 16,817 grew wheat; 83,840 oats; 15,751 barley, here, rye, peas, and beans; 46,134 potatoes; 18,288 turnips; 10,764 cabbage, vetches, and other green crops; 794 flax; and 45,780 were in meadow and clover. In 1851 the total extent of plantations amounted to 26,540 acres. On 37,023 holdings in 1851, there were 23,086 horses; 12,490 mules and asses; 115,566 cattle; 327,697 sheep; 36,478 pigs; 11,711 goats; and 326,016 head of poultry.

Ballinasloe fair, the great fair for stock in the county, is frequented by sellers from all the western parts of Ireland. The occupations of the population are chiefly agricultural; but the inhabitants of the sea-coast are mostly engaged in fishing. Coarse linens, frizzes, woollen hosiery, and felt hats, are manufactured; and kelp is made in large quantities on the coast.

Fisheries.—The fisheries of the coast yield a considerable produce. The fishing districts are Galway and Clifden, comprising together 217 miles of coast, which had in 1836 one decked vessel, 116 half-decked, 479 open sailing boats, and 1376 row-boats, manned by 8539 men and boys; while in 1850 there were only 833 fishing-vessels, employing 3596 men and boys. Besides the herring fishery, there is an excellent take of cod, ling, haddock, whiting, and turbot, from December to March; and of gurnet, mackerel, bream, and pollock, from May to August, together with a copious supply of salmon, oysters, lobsters, and crabs. The sun-fish deep-sea fishery is peculiar to this coast. The sun-fish, or basking-shark, has its name from only appearing about sun-rise and sun-set, at which times it is distinguishable by its tail and black-fins protruding from the water. It is killed with the harpoon like a whale; and as it is 30 feet in length, and 6 tons in weight, five or six men are required, for three hours or more, to kill a single fish. Several excellent new piers are in progress of erection for the protection of vessels engaged in the fisheries.

Divisions and Towns.—Galway is divided into 18 baronies. West of loughs Corrib and Mask are the baronies of—1, Ross, nearly co-extensive with the district of Joyce Country; 2, Ballinahinch, nearly co-extensive with the district of Coumshingaun, and 3, Moycullen, corresponding with the district of Iar-Connaught. East of loughs Corrib and Mask, the district bordering on Mayo is occupied by the baronies of—4, Clare; 5, Dunmore; and 6, Tyaquin. The district bordering on Roscommon is occupied by the baronies of—7 and 8, Ballymoe and Killian; 9, Kilconnell; and 10, Clonmacnoon. The district bordering on the Shannon has the baronies of—11, Longford; and 12, Leitrim. The district extending from the centre of the county to the head of Galway Bay and to the Clare boundary has the baronies of—13, Atherry; 14, Loughrea; 15, Duukellin; and 16, Kiltartan. The town and neighbourhood of Galway form the barony of—17, Galway; and 18, the islands of Arran constitute a barony and parish in themselves.

The following places in the county which are seats of Poor-Law Unions are noticed in separate articles, namely, BALLINASLOE, CLIFDEN, GALWAY, GLENNAMADDY, GORT, LOUGHREA, MOUNTBELLEW, OUGHTERARD, PORTUMNA, and TUAM. The village of AGRIM has also been separately noticed. Arramore, the largest of the Arran islands, has been described under its more correct designation Inishmore, in the article ARRAN, ISLE OF.

The following towns and villages may be noticed here, with their populations in 1851:—*Ahascragh*, a small post- and market-town, situated on the left bank of the Clonbrock River, a feeder of the Suck, 7 miles N.W. from Ballinasloe; population, 680. The town, which is clean and neat, possesses a handsome church, and a Roman Catholic chapel. On the high grounds above the town are the beautiful demesne and mansion of Castlegar. *Atherry*, one of the most ancient towns in Connaught, situated in a flat, dreary country, 14 miles E. from Galway; population, 1487. It is said to have existed previously to the Norman invasion; it subsequently gave the title of baron to the family of the De Berminghams, who built a strong castle near the town; of the castle there are still some remains. There are also extant some portions of a Dominican monastery founded here by one of the De Berminghams in the reign of John. The walls and gates which inclosed the ancient town may still be traced. Atherry returned members to Parliament from the reign of Richard II. till the Union, when the borough was disfranchised. It is now a poor desolate looking place; it has, however some share of business in consequence of the fairs, weekly markets, and petty sessions, that are held in it. *Barna*, population 482, besides 1009 in an auxiliary workhouse, is a small fishing village, situated at the head of a creek of Galway Bay, about 4 miles W. by S. from Galway. The pier at this place is of considerable advantage to the shipping on the coast. Near the town are some remains of an old castle. *Clare-Galway*, a small village on the Clare River, 7 miles from Galway on the road to Tuam, is only remarkable for the ruins of an old castle of the De Burghos, and for the remains of a Franciscan monastery founded in 1290. *Clonfert*, about 3 miles N.E. from Eyre-Court, had, until lately, the title of a city, and was the seat of a bishop. The city, the smallest perhaps in the world, stands on a rising ground on the edge of a vast bog, and comprises the former palace, an ordinary looking country house; the ex-cathedral, now the parish church, a small structure of the 12th century, and dedicated to St. Brendan; a ruined church of still more ancient date; and a few cabins. The bishopric, founded in the 6th century, was united in 1602 to the see of Kilmacduagh, and both sees were annexed to those of Killaloe and Kilfenora by the Church Temporalities Act. The diocese of Clonfert lies chiefly in Galway, but comprises also parts of King's County and Roscommon. The chapter consists of a dean, archdeacon, and 5 prebendaries; the number of benefices is 11. [KILLALOE.] *Dunmore*, situated in a rather pretty country on the Dunmore River, a feeder of the Clare, contains a church attached to the ruins of an ancient monastery, the remains of an old castle built by the De Berminghams, a Roman Catholic chapel, a court-house, and an infantry barrack. It is a post and market-town, with 880 inhabitants. *Eyre-Court*, a market and post-town, is situated 9½ miles S. by E. from Ballinasloe, on rising ground, overlooking a dreary waste of low boggy country, and has a bridewell and 940 inhabitants. *Headford*, population 1195, about 14

milea N. from Galway, is a market- and post-town, clean and tolerably neat in appearance. The chief buildings are the sessions house and a chapel for Roman Catholics. There are a handsome mansion and a glebe house, with well-wooded grounds in the vicinity. *Kinvarra*, a post-, market-, and sea-port town, is situated in a hilly country, at the head of Kinvarra Bay, 12 miles S.E. by S. from Galway, and has 1102 inhabitants, many of whom are engaged in fishing, and in the importation of turf from Connemara. Corn is exported in small craft from the quays. The town is the residence of the Roman Catholic bishop of Kilmacduagh and Kilfenora; the Roman Catholic chapel is the most important public building. *Mentlough*, population 764, about 2 milea N. by W. from Galway, is a poor village situated on the left bank of the Corrib River. In the vicinity is Mentlough Castle, the seat of Sir Valentine Blake, Bart. A quarry of black marble is in the neighbourhood of the village. *Oranmore*, a small post-town 6 miles E. from Galway, population 627, stands at the extremity of an inlet from Galway Bay, and possesses a large Roman Catholic chapel. Situated at the point of convergence of the roads from the county of Clare to Galway town, Oranmore is a considerable thoroughfare. Turf and sea-weed manure are imported at the quay. There are some remains of Oran Castle, a structure erected by the earls of Clanricarde to command the pass. The town has a brisk retail trade, and some share in the fisheries. *Roundstone*, population 471, besides 845 in the auxiliary workhouse, a village founded by the late Mr. Nimmo, is situated on the western shore of Roundstone Bay, 37 miles W. by N. from Galway, and has a Roman Catholic chapel, a monastery, a National school, and a small court-house. The harbour of Roundstone affords excellent anchorage for the largest vessels. From the pier the principal exports are turf, sea-weed, and corn to Galway and the ports of Clare.

Galway county is represented in the Imperial Parliament by four members, namely, two for the county and two for the county of the town of Galway.

In December 1851 there were 133 National schools in operation in the county, attended by 9620 male and 9495 female children; there are also a much greater number of other elementary schools, several classical schools, and, for superior education, Queen's College in Galway town. Assizes for the county are held in Galway, where are the county prison, county infirmary, and fever hospital. For civil business the county is divided into two ridings—East and West. Quarter sessions are held in 7 places, and petty sessions in 34.

The county expenses are defrayed by grand jury assessment. The county is in the military district of Limerick, and there are barrack stations at Longhrea, Portumna, Galway, Gort, and Oughterard: the staff of the county militia is quartered at Ballinasloe. The constabulary force in 1852 consisted of 738, including officers. Longhrea is head-quarters for the east riding; Galway town for the west riding. There are revenue police stations at Galway, Oughterard, Roundstone, and Tuam; and there are 18 coast guard stations, with a total of 74 men and 6 officers.

History, Antiquities.—The Anglo-Norman family of De Burgho and their followers, in the beginning of the 13th century, fixed themselves chiefly about Athenry and Galway, and maintained the administration of English law until the middle of the next century, when the assassination of William, earl of Ulster, led to a revolt of the entire Connaught branch of the De Burgho family. English law was again introduced by the reduction of this county to shire-ground by Sir Henry Sidney in 1585. Many of the proprietors are of English descent; but the great mass of the population are of original Irish descent, and speak the Irish language.

Galway is very rich in antiquities. The remarkable antiquities of the Arran Isles are noticed under ARRAN, ISLES OF. There are round towers at Ballygaddy, Kilbannon, Kilmacduagh, Meelick, Murrongh, and Ardahan. Cromlechs and stone circles are of frequent occurrence. The antiquities of the episcopal seats of Tuam, Clonfert, and Kilmacduagh are contained within this county. Of the numerous remains of religious houses throughout Galway, the ruined abbey of Knockmoy is the most interesting. It was founded in the year 1189 by Cathal O'Connor. Above the tomb of the founder are some fresco paintings of great interest, as exhibiting the costume of the ancient Irish. The raths or earthen fortresses of the old Irish and the castles of the Anglo-Normans are very numerous.

GALWAY, Ireland, a municipal and parliamentary borough and sea-port, a county in itself, and the head of a Poor-Law Union, is situated on the north side of Galway Bay, in 53° 16' N. lat., 9° 3' W. long., distant 130 miles W. by S. from Dublin. The town is governed by a high sheriff, recorder, local magistrates, and a board of 21 commissioners, elected triennially; and returns two members to the Imperial Parliament. The population of the town in 1851 was 20,656, besides 3009 inmates of the workhouse. Galway Poor-Law Union comprises 26 electoral divisions, with an area of 197,465 acres, and a population in 1851 of 61,397.

Galway was erected into a separate county by charter of 8th James I. The county of the town embraces a tract of 24,132 acres, of which 628 acres are in the town. This district is divided into nearly equal parts by the river, which here discharges the waters of Lough Corrib into the sea. The town of Galway is built on both sides of this river and on two islands situated in its channel; the main town stands on the left side of the river.

A fortress was erected on the site of the town in the year 1124. On the invasion of the English in 1180, Galway was put in a state of defence by the O'Flahertys, from whom Richard De Burgho took it in 1232; and in 1270 the walling and fortification of the town were undertaken by the conquerors. About this time the ancestors of many of the present leading families of Galway settled here, and from the entry of customs on the Pipe roll, it appears that the place had already become a considerable depôt of foreign merchandise. The town continued to increase in mercantile prosperity till the middle of the 17th century. On the final success of the Parliamentarians in 1652, Galway, after enduring a blockade of some months, submitted to Sir Charles Coote. On the breaking out of the war of the revolution in 1688, the inhabitants declared for James II. The town surrendered to General Gincell on July 26th 1691.

The walls have been almost entirely pulled down since 1779, and the town has extended on all sides beyond its former limits. There still remain some of the antique residences, which are generally square castellated buildings, with an interior court-yard and arched gateway opening on the street. The whole of the old part of Galway bears considerable resemblance to a Spanish town. The river is crossed by two bridges; the west bridge, built about 1442, connects the town with Ballymana Island and the opposite suburbs. The disposition of the streets within the circuit of the ancient walls is very irregular, but in the newly-built portion of the town uniformity and airiness have been more consulted. The new town is built on a gently-rising eminence stretching down to the river on the west and to the sea on the south. On the sea side a creek of the bay forms a natural harbour, which is the site of the docks. The floating docks occupy about 5 acres, with water for vessels of 500 tons. The spit of land which separates this basin from the river is quayed for a distance of 1300 feet, and terminates in a return pier. A new canal passing through the town is to form a communication between the harbour and Lough Corrib. There are also two small docks on the river side of the town. The town is lighted with gas, but is badly paved. The outskirts of the town are composed of hovels inhabited by a very poor population.

On the right side of the river is Claddagh, an extensive suburb of mean huts set down together in narrow streets, and inhabited by fishermen who will not permit strangers to reside among them. The laws of their fishery and most of their internal regulations are under the control of a functionary whom they call their mayor, and elect annually. They all speak the Irish language, and the women still retain much of the Irish costume.

The borough jail, erected in 1810, is situated on the upper of the three islands which the river here forms; and adjoining it is the county jail, connected by a bridge, built in 1831, with the county court house, a handsome cut stone building with a portico of four Doric columns, erected in 1815. The borough court-house, or 'tholsel,' erected during the civil wars of 1641, is a respectable edifice: the under part forms an extensive piazza. Opposite the tholsel stands the collegiate and parish church of St. Nicholas, founded in 1320. It is cruciform, 152 feet long by 126 feet in breadth. In the interior are various monuments of interest. Attached to the church is a singular ecclesiastical body called the Royal College of Galway, founded in 1484, when Donat O'Murray, the then archbishop of Tuam, sanctioned by Pope Innocent VIII. and King Edward IV., erected the church of St. Nicholas into a collegiate body, consisting of a warden and eight vicars choral. The presentation and election of the members of the college lie wholly with the Protestant members of the corporation. The Roman Catholics have two chapels, 3 monasteries, and 5 nunneries in Galway; the Presbyterians and Methodists have each a chapel. The chief educational establishment is the Queen's College, which opened for the reception of students in Nov. 1849. The number of students during session 1852-53 was 154, namely,—matriculated, 141; non-matriculated, 13. The building is large and handsome. Erasmus Smith's College, of which the charter is dated 1669, has an income from endowment of 126*l.* a year, and has several exhibitions of the value of 12*l.* a year each, tenable for seven years, at Dublin University. There are also schools for boys and girls connected with the monasteries and nunneries.

Besides the buildings already mentioned there are a county infirmary, a fever hospital, a custom house, a Union workhouse, and extensive barracks. The chief manufacture of Galway is that of flour, which is carried on to a very considerable extent. In addition to numerous flour-mills on the Corrib River, there are oat-mills, malt-mills, and fulling-mills, driven by the same water-power. In the town and its vicinity are an extensive paper-mill, breweries, distilleries, a tan-yard, a bleach-mill, and foundries. Salmon and sea-fishing are extensively carried on. The assizes for the county and borough, and quarter and petty sessions are held at Galway. A chamber of commerce regulates the mercantile affairs of the town. Markets are held on Wednesday and Saturday; and fairs on May 31st, September 21st, and October 21st.

On December 31st 1853 the number of vessels registered as belonging to the port of Galway was—12 under 50 tons, of 359 tons; and 3 above 50 tons, amounting to 502 tons. The number and tonnage of vessels entered and cleared at the port during 1853 were:—Inwards 141, tonnage 21,613; outwards 124, tonnage 17,499. The

gross amount of customs duties received at the port during 1851 was 28,757*l.* 18*s.* 5*d.*

Galway Bay is a noble sheet of water, and with the harbour offers great advantages for an extended commerce.

(Hurdiman, *History of Galway*; Inglis, *Ireland*; Fraser, *Handbook of Ireland*; Thom, *Irish Almanac*.)

GAMBIA COLONY, the British settlements on the Gambia, a river in Western Africa. The source of the Gambia has not been definitely ascertained. According to the most reliable accounts it rises in the country of the Fouta-Jalon, very near and a little to the south of the source of the Rio-Grande, in 10° 36' N. lat., 11° 18' W. long., in a valley surrounded by mountains. The river flows first east and then north till it reaches 13° 22' N. lat., whence it turns and flows south to 11° 18' N. lat., where, after having flowed upwards of 400 miles, it is less than 50 miles from its source. Its course is then generally north-west as far as 14° 30' N. lat., 13° 15' W. long., whence it flows westward with many bends to the sea, which it enters in 13° 30' N. lat., 16° 40' W. long. The Gambia has many affluents, especially in the upper part of its course. The most remarkable on the right bank are the Ba Creek, the Neolacaba, the Nyarico, the Nicolico, and the Nanijar. On the left bank it receives the Poré, the Jelata, and the Eropina, 45 miles below which the Gambia throws off a considerable branch named the Casamansa, which by numerous channels flows into the St. Domingo. The width between Cape Ste. Marie and the island of Sanguomar is about 20 miles. The width gradually diminishes. For nearly 400 miles the Gambia presents a fair water-road into the interior. Early in 1851 Governor Macdonnell, at the close of a tour of inspection on the river Gambia, proceeded up the river as far as about 160 miles above the Rock of Barraconda, which has generally been considered to be 450 miles above Bathurst. The governor's party included Mr. Bage, the colonial engineer, Staff-Surgeon Kehoe, and Lieutenant Mostyn; they proceeded in open boats, accompanied by a canoe. In their progress they observed few signs of cultivation or of inhabitants along the banks. Near the junction of the Nyarico the inhabitants of a town called Jallacoota waited upon the governor, soliciting the visits of traders to their district. The influence of the British has been beneficially exercised in abating the violence of intestine strife among the native tribes in the interior, and cultivating commercial intercourse, thereby promoting agricultural industry, and fostering conciliatory feelings amongst the tribes. By the exertions of Governor Macdonnell and Staff-Surgeon Kehoe vaccination has been brought into very extensive adoption among the native tribes on the Gambia.

The English have trading establishments at intervals along both banks of this river for many miles into the interior. The whole of the establishments are included under the title of the Gambia Colony. The colonial revenue for 1851 was 8414*l.* The exports from the Gambia are African teak, ship-timbers, ground-nuts, ivory, hides, gold, palm-oil, gum-arabic, and bees-wax. The value of the exports in 1851 amounted to 186,404*l.*, of the imports to 107,011*l.* In 1852 the exports amounted to 217,856*l.*, the imports to 110,174*l.* The number of vessels arriving at the colony during 1852 was 258, tonnage 29,274, of which 31 ships of 5307 tons were British. The number and tonnage of ships cleared outwards during 1852 were:—Ships 260, tonnage 30,188, of which 30 ships of 4994 tons were British. The number and tonnage of vessels registered as belonging to the port of Bathurst on December 31st 1853 were:—Under 50 tons 49 vessels, tonnage 923; above 50 tons 14 vessels, tonnage 1270. Of the amount of exports for 1851 (186,404*l.*) the article of ground-nuts alone furnished 133,133*l.* value. The quantity of ground-nuts raised by agricultural labour in the countries immediately bordering on the Gambia River and exported from Bathurst has risen from 47 tons in 1835 to 11,094 tons in 1851. The ground-nuts are chiefly exported to France. The increased demand for this produce has tended to encourage settled and industrious habits among the native African population, many of whom travel hundreds of miles from the interior and hire from the chiefs whose lands lie on the banks of the Gambia such small portions of ground as their circumstances allow them to cultivate. After the produce of two or three years has enabled them to purchase supplies of European goods, they usually make up parties of from 20 to 100 strong and return to their homes in the interior. These migratory labourers are called 'tilliebunkas,' or men from the east. The principal establishments of the Gambia Colony are at *Bathurst*, on the island of St. Mary, at the mouth of the river, whence the produce of the country is shipped for England, and at Mac Carthy's Island. A colonial steamer has been stationed at Bathurst for some years, and has been of considerable benefit in facilitating communication with Mac Carthy's Island and with the trading stations on the banks of the Gambia. The land and sea breezes blow regularly over St. Mary Island for a considerable part of the year. The surface is a low plain, with a slight descent on the north and east towards the centre, which during the rainy season is much inundated. The soil is sandy, with a very small admixture of loam. In the shade the thermometer does not rise above 90°. Water is scarce and not of good quality. Bathurst town does not stand more than 12 or 14 feet above high-water mark. Many good and substantial government and public buildings have

been erected, as well as numerous handsome and convenient warehouses and dwellings; the remainder of the houses are rude African huts. The European residents average only about 50, but the number of European and American sailors and others visiting Bathurst every year is little short of 1200. There is a Roman Catholic chapel, capable of accommodating 600 persons, but no suitable place of worship for Protestants. The circumstances of the colony having been somewhat prosperous of late years several improvements are being effected. Among these may be mentioned—the placing of a light-ship at the mouth of the river; the sinking of wells in Bathurst for the use of the shipping; the erection of a public hospital, a market, a wharf, a church, a court-house, and public offices at Bathurst; and the construction of roads in the neighbourhood. About the close of 1850 a piece of ground in a very healthy spot, about 8 miles from Bathurst, was obtained from the King of Combo. The ground is about 2½ miles in length, and stretches along the shore of the Atlantic, with an elevation above the sea varying from 50 to 90 feet. It is situated near Cape St. Mary, and being intended to be built upon by merchants and others, residents of Bathurst, it has been called Clifton.

The population of Gambia Colony, according to the census taken March 31st 1851 was 5693, as follows, namely:—

	Whites.		Coloured population.	
	Males.	Females.	Males.	Females.
Island of St. Mary . . .	167	13	2192	1890
Mac Carthy's Island . . .	8	0	637	526
Barra Point	1	0	131	74
Cape St. Mary	1	1	36	16
Total	177	14	2996	2506

Of the total population 82 were returned as engaged in agriculture, 330 in manufactures, and 278 in commerce.

Mac Carthy's Island, the Janjan Buro of the natives, has an area of about 3 square miles, and is 180 miles from the mouth of the river, following its windings, in a populous district, 60 miles below the falls of Barraconda, up to which spot the river is navigable for vessels of 50 tons burden. Fort George, on the island, is in 13° 33' N. lat., 14° 45' W. long. Like St. Mary Island, it is but little raised above the level of the sea, and both are in a great measure covered with water during the rainy season. Tropical remittent fever occurs at both places, but with most intensity at Mac Carthy's Island. Mac Carthy's Island has a rich alluvial soil, which in the dry season becomes a mass of burnt clay. The thermometer frequently rises to 106° or 108° in the shade.

The Wesleyan Methodists have schools at Bathurst, at Mac Carthy's Island, and at Barra, opposite Bathurst; the total number of scholars is about 600. The Roman Catholics have a school at Bathurst under the care of several Sisters of Charity.

GANDERSHEIM. [BRUNSWICK.]

GANDICOTTA. [CUDDAPAH.]

GANGES. [HINDUSTAN.]

GANNAT. [ALLIER.]

GAP. [ALPES, HAUTES.]

GARD, a department in the south of France, is bounded N. by the department of Ardèche, E. by Vaucluse and Bouches-du-Rhône, S. by the Mediterranean, and W. by the departments of Hérault, Aveyron, and Lozère. The form of the department is irregular; its greatest length is, in a direction nearly east and west, about 76 miles; its greatest breadth, at right angles to the length, is about 70 miles. The area is 2250 square miles. The population, by the census of 1851, was 408,163, or 181¼ to a square mile, being 6·81 above the average per square mile for the whole of France. According to the census of 1841, the population of the department was 376,062. A large number of the population are Calvinists, who have consistorial churches at Alais, St.-Ambrois, Vézénobres, St.-Jean-du-Gard, Anduze, Uzès, St.-Chaptes, Nîmes, Vauvert, Aiguës-Vives, Calvisson, Le-Vigan, Sommières, Vallerangue, St.-Hippolite, Sauve, and La-Salle; and above 70 meeting-houses in other localities of the department.

Surface, Hydrography, Communications.—The north-western part of the department is occupied by the branches of the Cévennes, of which the principal ridge is for the most part without the boundary of the department. From this part the face of the country gradually declines to the south-east, in which direction the principal rivers flow to the Rhône and the Mediterranean. The coast and the lower banks of the Rhône are lined with marshy lakes of considerable size.

The principal rivers are—the Rhône, which bounds the department on the east, and its feeders the Ardèche, which has the lower part of its course along the northern boundary [ARDÈCHE]; and the Cèze, which flowing from the Cévennes, in the most northern angle of the department, runs south-east into the Rhône below Bagnols, after a course of 55 miles. The feeders of the Cèze are the Luech, the Auzonet, the Aiguillon, and the Tave. The *Gard*, or *Gardon*, which gives name to the department and drains its central districts, falls into the Rhône a little above Beaucaire, after a course in a general south-east direction of about 70 miles. It is formed by the junction of three streams which rise in the Cévennes in the department of Lozère, and are distinguished by the names of Gardon-d'Alais, Gardon-d'Anduze, and Gardon-de-Mialet. All the rivers mentioned as flowing from the Cévennes are subject to inundations, which sometimes cause great ravages. The Vidourle flows

south from its source near Le-Vigan, forming below Sommières the western boundary, into the shore-lake of Mauguio, in the adjacent department of Hérault. Its course may be estimated at from 48 to 50 miles. The Vistre, which flows near Nîmes, and the Rhosny, which passes Aymargues, unite and serve as feeders to the Radelle Canal, which connects the Beaucaire Canal with the Canal-des-Étangs. The Hérault and some of its tributaries, and also the Dourhie, an affluent of the Tarn, have their sources and part of their course in the department. Of these rivers only the Rhône and the Ardèche are navigable.

The department is traversed by a navigable canal from the Rhône at Beaucaire to Aiguemortes, the principal town in the south of the department, which communicates with the Mediterranean by the Grande-Rhône Canal and the Grau (a harbour formed by dykes running into the sea); and by the Radelle Canal with the Canal-des-Étangs, which last joins the Canal-du-Midi at Cette. There is another branch-canal, that of Bourgidou, from Aiguemortes to the canal of Sylveréal by which the navigation of the most western branch of the Rhône is facilitated. The length of canal navigation in the department is above 50 miles. The department is crossed by 10 national, 28 departmental, and 21 parish roads. It is also crossed by three railroads: one from the coal mines of Grand'Combe through Alais to Nîmes; another from Nîmes through Beaucaire to Marseille; and a third from Nîmes to Cette through Montpellier.

Geological Character and Mineral Products.—The department is chiefly occupied by the oolitic and other strata that lie between the cretaceous group and the new red-sandstone. In the south-east of the department the rocks of the supercretaceous group occur. The primitive rocks which form the crest and the western slope of the Cévennes appear in this department. Important iron, coal, and silver-lead mines are worked. Silver, copper, and calamine are found; but the working of the mines has been abandoned. Sulphate of iron, manganese, kaolin, antimony, fullers' and potters' clay, gypsum, huddling stone, &c., are also found. There are mineral springs in various places, and a good deal of salt is made in the salt marshes that line the coast. Some gold is found in the sands of the Cèze and the Gardon.

Climate.—The air in this department is commonly mild; but in March and April considerable changes of temperature are experienced within the twenty-four hours. In June, July, and August the heat is very great, the maximum in the shade being 99° 5' Fahrenheit. The department is scourged by the wind called *Mistral* [BOUCHES-DU-RHÔNE], and, when this does not blow, by clouds of mosquitoes during the hot weather. The autumn is usually dry and cool. The greatest cold is commonly at the end of December.

Products.—The surface contains 1,440,348 acres: of this area about 360,000 acres are arable; 176,207 under vineyards; 20,711 are meadow land; 152,988 are under plantations of the mulberry, olive, &c.; 266,078 are covered with woods and forests; 390,584 with heaths and moors; and 37,391 with canals, pools, and marshes. The sheltered sides of the hills and the plains are devoted to the cultivation of the vine, the olive, the mulberry, and the almond. The arable land is contained chiefly in the valleys. The produce of the department in grain is not sufficient for the home consumption; but what wheat is grown is of superior quality. Besides wheat, the other grains cultivated are oats, rye, barley, maize, millet, and huckwheat, of which the total annual produce does not exceed 515,625 quarters. Lentils, peas, and potatoes are grown; of chestnuts immense quantities of excellent quality are produced on the slopes of the Cévennes. The vine is extensively cultivated all through the department, which yields annually 26,400,000 gallons of excellent red and white wine, one-fourth of which is consumed at home, one-sixth is distilled into brandy, and the remainder is exported through Cette, chiefly for the purpose of mixing with the poorer wines of more northern departments. Some muscadel wine is grown in the vineyards of St.-Gilles. The olive, too, is carefully cultivated in sheltered spots and on the southern slopes of the hills; the oil of the department is in high repute. The cultivation of the white mulberry, which here becomes a large and beautiful tree, is very extensive; the number growing in 1835 amounted to 5,709,466, and it has been greatly increased since then. These trees are grown almost exclusively for their leaves, which are the favourite food of silkworms: the leaves are also given to cattle and sheep, which prefer them to almost every other food. Cherries, apricots, peaches, figs, pomegranates, &c., are abundantly produced. Indeed the chief agricultural wealth of the department consists in its wines, oil, silk, and delicious fruits. Medicinal herbs, madder, and other dye stuffs, are grown.

Only a small number of oxen are reared: but sheep are numerous, and their wool is very fine. The horses are small, but vigorous and lively. Among the wild animals are wolves, foxes, otters, beavers, eagles, vultures, wild ducks, ortolans, red partridges, storks, bustards, &c.; the ponds and rivers abound with fish.

Manufactures, &c.—The industrial products of the department are varied and important. The principal are silk textures of all kinds, the chief seat of which is Nîmes; cashmere shawls, made of a mixture of Thet wool, silk, and cotton; silk and cotton hosiery of every description; table-covers, carpets, &c.; woollen cloth, swanskins, blankets, shoe and glove leather; silk hats; ribands and gloves;

iron, steam machinery, wine casks; pottery, tiles, and bricks; glass, paper, cards; nails, plaster, and lime; cotton and woollen yarn; salt, &c. The manufacture of carpets has in recent times become of considerable importance in this department. Nîmes is the centre of this manufacture also. In Sommières and the country about it the woollen manufactures are firmly established. Leather is an important product of Nîmes, Beaucaire, Uzès, Bagnols, Sommières, Alais, St.-Hippolite, and Le-Vigan. The commerce of the department consists of the various products already mentioned. About 100 fairs are held annually. The number of wind-mills and water-mills amounts to 754; iron forges and furnaces to 135; factories and workshops, of different kinds, to 526.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Nîmes	11	73	148,564
2. Alais	9	97	102,339
3. Uzès	8	98	90,011
4. Le-Vigan	10	79	67,249
Total	38	347	408,163

1. Of the first arrondissement and of the whole department the capital is NÎMES or NISMES. The other towns are here named, the population in every case being that of the commune. *Aiguemortes*, situated in an unhealthy spot among stagnant marshes, at the junction of several canals before mentioned, presents the most perfect specimen extant of a feudal fortification. The walls, towers, gates, and ramparts are said to have been erected after the model of *Damiatta* in Egypt by St. Louis, who twice embarked here for the Holy Land. The fosse has been filled up. The population is now only 3393. The streets are wide and straight; within the walls there are large spaces, once covered with houses, which are now cultivated as fields and gardens. The most remarkable buildings are—the *Tour-de-Constance*, opposite the citadel and outside the walls, which served as a prison for the Protestants taken after the revocation of the Edict of Nantes; the *Tour-des-Bourguignons*, a tower in which the Burgundians, slain in defence of the town in January 1421, were thrown between layers of salt to prevent the danger of miasma from their putrefaction; and the gate-tower, called *La-Carbonnière*, to the north of the town. Soda, fish, and salt, which is made at the great salt-pans of *Peccais*, in the neighbourhood, are the chief articles of commerce. There is a lighthouse 65 feet high on the north-west mole of the Grau, which forms the harbour of *Aiguemortes*. *Aramon*, prettily situated in a fine olive and fruit district on the right bank of the Rhône, to the east of Nîmes, has 2751 inhabitants. *BEAUCAIRE* has been noticed in a separate article. *Bellegarde*, on the Nîmes and Beaucaire railway, has 1796 inhabitants. *Calvisson*, a small town in a rich wine district, has important brandy distilleries, and 2660 inhabitants. A good deal of cream of tartar is made here, and the town gives name to a delicious claret. *St.-Gilles*, 12 miles S. from Nîmes, stands on the slope and at the foot of a hill above the canal from Beaucaire to Aiguemortes, and has 5635 inhabitants. The most remarkable structure is the church of the ancient abbey of St. Gilles, which dates from the 10th century. *St.-Gilles* gives name to the fine strong red wines of the neighbourhood, which are well fitted for exportation. The chief trade of the place is in these wines, and in brandy and spirits distilled in the town. *Marguerites*, situated in a rich vine district, on the Vistre and the Nîmes and Beaucaire railroad, has 1886 inhabitants. *Sommières*, 14 miles W. from Nîmes, on a hill on the left bank of the Vidourle, has important manufactures of woollens, swanskins, blankets, woollen thread, brandy, and leather, besides a good trade in wine, wool, &c. There are also several fulling-mills in the town, which has a population of 3697. *Vauvert*, 12 miles S.W. from Nîmes, has 4175 inhabitants, who manufacture silk, hosiery, brandy, spirits of wine, and saltpetre.

2. In the second arrondissement the chief town is ALAIS, which has been noticed under its proper head. *St.-Ambroix*, 12 miles N.N.E. from Alais, stands among the Cévennes Mountains on the right bank of the Cèze, and has iron-smelting furnaces, zinc-foundries, a silk-factory driven by steam machinery, and 3148 inhabitants, who trade in raw silk, olives, chestnuts, mulberry-trees, wine, and coal, which is mined in the neighbourhood. *Anduze*, W. of Alais, stands on the right bank of the Gardon-d'Anduze, between precipitous rocks on one side, and hills covered with vines and olives on the other. It is an ill-built place, but the environs present some enchanting scenery. The terrace, which serves as a dyke against the inundations of the Gardon, and from the middle of which springs a cut stone bridge across the river, deserves mention. The population amounts to 5233, who manufacture silk, hosiery, silk hats, cloth, pottery, glue, and leather; and trade in cattle, raw and thrown silk, corn, &c. *Barjac* is situated near the northern boundary of the department, at the foot of the Cévennes, 20 miles N.E. from Alais, and has 2319 inhabitants. *Gérolhac*, high up among the Cévennes in the north-west of the department, has 1536 inhabitants. *St.-Jean-du-Gard*, a few miles N.W. of Anduze, stands on the left bank of the Gardon-d'Anduze, and has 4192 inhabitants. It is an ill-built place, disfiguring the scenery

that surrounds it, but it has important silk-factories, breweries, and tan-yards. A manganese mine is worked near it. *Vézénobres*, a station on the Nîmes and Alais railroad, has silk-reeling establishments, and 1066 inhabitants.

3. Of the third arrondissement the chief town, *Uzès*, stands 12 miles N. from Nîmes, among the mountains on the right bank of the Auzon, a feeder of the Gard, and has a tribunal of first instance, a college, and 6413 inhabitants in the commune. It is built on a hill, from the base of which springs the fountain of Eure, or Auro, the waters of which were (in Roman times) conducted to Nîmes by an aqueduct. The most important buildings are—the court-house; the old castle of the dukes of Uzès, which is fortified, and greatly resembles the famous Bastille of Paris; and the former cathedral. The inhabitants are engaged in the cultivation of the olive, and of the mulberry for the production of silk, and in the manufacture of silk hosiery, coarse woollens, leather, and paper. The town trades also in corn, wine, brandy, oil, cattle, raw silk, &c. *Bagnols*, on the right bank of the Cèze, in a district famous for its wines, is an ill-built place with narrow streets and 4900 inhabitants. There is a pretty square ornamented with two fountains; the college buildings, the hospital, and the canal that draws off the waters of the Cèze for purposes of irrigation, deserve mention. Coarse cloth, serge, thrown silk, cards, brandy, and leather are manufactured. *Pont-St-Esprit*, well situated for trade on the right bank of the Rhône, is an ill-built town, consisting of narrow irregular streets, and defended by a citadel. The population amounts to 5239, who carry on a considerable trade in wine, oil, fruit, silk, and provisions. The town, which is surrounded by ramparts, was anciently called *St-Savournin*. It took its present name from the bridge which crosses the Rhône here, and which has resisted the impetuosity of that river since 1309, the year in which it was completed. It consists of 19 large and 4 smaller arches; the expenses of its erection were defrayed from the offerings given in a chapel dedicated to the Holy Ghost (Saint Esprit), whence the name. *Remoulins*, a small place of 1370 inhabitants, is situated near that portion of the magnificent Roman aqueduct now called *Pont-du-Gard*. This aqueduct, which was constructed to convey the waters of the fountain of Eure to the city of Nemausus (Nîmes), spans a narrow gorge between two arid hills on each side of the Gard. It consists of three arcades built one over the other, 656 feet long and 173 feet high above the low-water mark of the river. The lower arcade consists of 6 arches, through one of which the Gard flows; the second is composed of 11 arches; and the third, which supports the channel of the aqueduct, of 35 arches. The whole structure, with the exception of the channel, which is 64 feet broad and the same in depth, is built of large cut stones without cement. Between the *Pont-du-Gard* and Nîmes there is a portion of the aqueduct more than 7 miles long, which, being under ground, is still in perfect repair. Arrived at Nemausus, the waters were conducted by three branch aqueducts to the amphitheatre, to the public fountains, and to the supply of private houses. Several country houses also were supplied by conduits with water from the main trunk. *Roquemaure*, a town of 4471 inhabitants, stands in a rich wine district on the right bank of the Rhône, which is here passed by a suspension-bridge. It has silk-reeling factories, brandy distilleries, hydraulic saw-mills, and a great manufacture of wine-casks, of which 20,000 are made annually. The trade of the place consists of the Rhône wines, brandy, horses, and cattle. *Ville-neuve-les-Avignon* stands on a hill on the right bank of the Rhône, opposite Avignon, of which it may be called a suburb, and to which it was formerly joined by a famous bridge. [AVIGNON.] The most remarkable structures are—the former abbey of *St-Audré*, now converted into a dwelling-house; the former Carthusian monastery; the church, which contains amongst other monuments the tomb of the Prince de Conti; and the public library. The population is 3671, who manufacture silk, linen, saltpetre, ropes, tilos, and lime.

4. In the fourth arrondissement the chief town, *Le-Vigan*, is beautifully situated at the foot of the Cévennes, 40 miles W. from Nîmes, and has a tribunal of first instance, a college, and 4945 inhabitants, who manufacture silk and cotton hosiery, white and shoe leather, and cotton-yarn. It is well built, and is considered to be the prettiest and most salubrious town in the Cévennes. In the principal square there is a monument erected to the heroic D'Assas, a native of Vigan, who saved the French army near Geldern in 1760 from a night surprise, at the cost of his life. *St-Hippolite-du-Fort*, east of Vigan, on the Vidourle, is a modern town, which takes its origin from a fortress erected here in the 16th century. It is traversed by a canal which supplies several fountains and turns a great number of mills. The town is well built, has a tribunal of commerce, and 5297 inhabitants, who manufacture cotton and silk stockings, woollen stuffs, glue, and leather. *Quissac*, farther down the Vidourle, is a small place with 1590 inhabitants. *La-Salle*, a long straggling village on a feeder of the Gardon-d'Anduze, has 2354 inhabitants, who manufacture hosiery, silk, yarn, and leather. *Sauve*, a small place on the Vidourle, between Quissac and *St-Hippolite*, has 2808 inhabitants. Near it are the hot-springs of Fonsange. *Sumène*, 8 miles from Vigan, has 2978 inhabitants and some cotton manufactures. *Valleraugue*, a prosperous little town, with a population of 3353, is situated 10 miles N. from Vigan, in an excellent mulberry district. A great deal of silk of the best quality is produced here.

The department forms the see of the bishop of Nîmes, is included in the jurisdiction of the Cour Royale, and University Academy of Nîmes, and belongs to the 10th Military Division, of which Moutpeller is head-quarter. There is a diocesan seminary in Nîmes, and a secondary ecclesiastical school in Beaucaire. Besides a university Nîmes has a royal college or high school, in which the ancient languages, mathematics, and the physical sciences are taught. Communal colleges, or secondary schools, are established in Beaucaire, Alais, Uzès, and Le-Vigan. The department returns three members to the Legislative Body of the French Empire.

(*Dictionnaire de la France; Statistique de la France; Official Papers.*)

GARDA, LAGO DI, the ancient *Benacus*, the largest of the Italian lakes, is in Austrian Italy, between the province of Brescia on the west and that of Verona on the east; the boundary between the two provinces traverses the lake in its length. Its south coast belongs to the province of Mantua. The northern extremity of the lake enters the territory of Trent in the Tyrol. Its length, from north by east to south by west, is 32 miles; and its greatest breadth, which is in its southern part, is above 13 miles, but it is much narrower towards the north. From its position it is exposed to the sweep of the north winds from the Alps, which agitate its waters like a troubled sea—a fact which did not escape the observation of Virgil ('*Georg.*' ii. 160). Its greatest depth is about 950 feet. It receives at its northern extremity the river Sarca, which rises in the mountains of Tyrol, and numerous other streams on its east and west banks. The Mincio issuing from its south-east extremity passes the fortress of Peschiera. Two ridges of mountains run parallel to its east and west banks; that on the east is more rugged and nearer to the coast, but the western ridge leaves a fine and fertile strip of land between it and the shore, and is known by the name of Riviera di Salò. The south coast of the lake forms part of the great plain of Lombardy; and on this side the beautiful peninsula of Sermione, the ancient Sirmio, projects into its waters. On this peninsula was the paternal residence of the poet Catullus. The waters of the Lago di Garda are of a deep blue colour, and abound with fish. On the melting of the snow in spring its level, which is 230 feet above the sea, is raised about 5 feet. Some account of the territory along the shores of this lake, the scenery of which has been praised by Catullus, Dante, and other poets, is given under the heads BRESCIA and VERONA, THE PROVINCES OF. Steam-boats ply on the Lake of Garda, between Desenzano on its south coast and Riva at its north extremity, in the Tyrol. The lake has some small islands near its west coast, the largest of which is called *Lecco*, from the name of the family to which it belongs: this islet is little more than one mile in circumference. The town of Garda, from which the lake is now named, appears from inscriptions found there to have been inhabited in Roman times, but its ancient name is unknown. From an inscription found in the village of San Vigilio, on the east shore, it appears that *Benacus* was the name of the tutelary deity of the lake, the Pater *Benacus* of Virgil. Several inscriptions have been found also at Toscolano, on the west shore, in which the name *Benacenses* occurs; and it is probable that in this place there was a temple or sanctuary, which was a place of resort for all the *Benacenses* or people of the lake side.

GARDANNE. [BOUCHES-DU-RHÔNE.]

GARFAGNA'NA is a highland district of the northern Apennines, on the borders of the states of Tuscany, Genoa, and Modena, including the valley of the Upper Serchio above its junction with the Lima. The valley extends from the sources of the Serchio in a south-east direction for about 24 miles between the main ridge of the Apennines and the lofty group called *Alpe Apuana*, which divides the valley of the Serchio from that of the Magra, and also from the maritime districts of Carrara, Massa, and Pietrasanta. The most elevated summits of the *Alpe Apuana*, called *Pisanino* and *Pizzo d'Uccello*, are between 6000 and 7000 feet high. The climate of Garfagnana is cold and foggy, and exposed to hoisterous winds from the mountains. The lowlands of the valley produce some corn, hemp, and flax, and in some sheltered and favoured spots the olive and mulberry; but the main resource of the people is their pastures and their forests of chestnut-trees, the fruit of which is to them a substitute for bread. They export some silk, cheese, undressed skins, chestnuts, wool, and timber. There are also iron and coal-mines. The Garfagnana contains 67 parishes, and is divided for administrative purposes into six jurisdictions, three of which belong to the duchy of Modena, two to the duchy of Lunca, and one to Tuscany. The principal towns are—*Castelnovo*, with 2700 inhabitants, and some good buildings, being the residence of the Modenese governor; it has a college, an hospital, and a monte di pietà. The poet Ariosto was at one time governor of this place, of which he gives a curious account. *Galliano*, with about 1000 inhabitants, the head place of the district, belonging to Luca. *Barga*, with 2500 inhabitants, head town of the district, belonging to Tuscany.

GARONNE, the ancient *Garumna*, a river in the south of France, rises in the Val-d'Aran, near the foot of Mount Maladetta, in the Spanish Pyrenees, and enters France at a place called *Pont-du-Roi*, in the department of Haute-Garonne. From this point it runs north past *St-Béat* to Montrejeau, where it is joined on the left bank by the Neste; its course is then easterly as far as *St-Martory*, where the

Salat enters it on the right bank. Hence turning north-east it passes Cazères, where it becomes navigable; between this place and Toulouse it receives the Louge on the left bank; the Volp, the Arize, and the Ariège on the right. At Toulouse it is joined by the Canal-du-Midi, and turns north-west, in which direction it continues generally to its mouth, passing Verdun, Agen, St.-Macaire, and Bordeaux, a few miles below which, at Bec-d'Ambès, it enters the estuary of the Gironde. Its principal feeders below Toulouse are the Giron, the Tarn, the Lot, and the Dropt on the right bank; the Save, the Gimone, the Gers, the Baise, the Avance, and the Ciron on the left.

The length of the Garonne is about 352 miles, of which 262 are navigable, but the navigation is much impeded above Toulouse. The river communicates either directly or by its navigable feeders with twelve departments, the total river navigation of its basin being about 1000 miles. The tide ascends to St.-Macaire, about 25 miles above Bordeaux, and vessels of the largest size go up as far as the latter town. [BORDEAUX.] By this river and the Canal-du-Midi the Bay of Biscay is united to the Mediterranean.

The basin of the Garonne is bounded S. by the Pyrenees, E. by the Cévennes, N. by the Auvergne Mountains and their western offshoots, and W. by ramifications of the Pyrenees, which extend to the mouth of the Gironde. Its greatest length from S.W. to N.E. is about 200 miles, its greatest breadth about the same; in its lower part however the basin (including therein the Gironde) does not exceed 25 miles in width. The valley of this river is remarkable for the richness of its products in corn and wine, and for the beauty of its scenery.

The estuary of the *Gironde*, which probably derives its name from *Garonda*, a name of the Garumna, which occurs in a letter of Symmachus to Ausonius, is formed by the junction of the Garonne and the Dordogne; it runs north-west, and connects those rivers with the Bay of Biscay. From Bec-d'Ambès to its mouth the channel of the Gironde presents a succession of islets and banks, which nearly divide it into two equal branches, and render the navigation somewhat intricate. Its length is about 40 miles; its breadth at Bec-d'Ambès is about a mile and three-quarters; its greatest width is 7 miles; at its entrance into the Bay of Biscay the breadth is scarcely 3 miles. Its shores below Blaye are uninviting, and present to view only bare rocks and dreary heaths. This estuary is subject to the mascaret, or bore. [BORE.] The crest of the bore rises from 13 to 16 feet above the surface of the river; and this great mass of water, moving along with impetuous velocity, often causes serious damage to vessels exposed to its violence, not only in the Gironde, but also in the Dordogne, which river it ascends for about 20 miles. [DOROGNE.]

(*Dictionnaire de la France.*)

GARONNE, HAUTE, a department in the south of France, derives its name from the river Garonne, which has the upper part of its course in the department. It is bounded N. by the department of Tarn-et-Garonne; E. by those of Tarn, Aude, and Ariège; S. by Spain, from which it is separated by the Pyrenees; and W. by the departments of Hautes-Pyrénées and Gers. Its greatest length, from north-east to south-west, is about 100 miles; its greatest breadth, at right angles to the length, 63 miles. It is comprehended between 42° 39' and 43° 54' N. lat., 0° 26' and 2° 1' E. long. Its area is 2431 square miles. The population by the census of 1851 was 480,794, giving 197.77 to a square mile, or 23.19 above the average per square mile for the whole of France. The population in 1841 amounted to 468,153.

Surface, Hydrography, and Communications.—The south of the department is covered with lofty mountains, including part of the crest and some of the branches of the Pyrenees, the peaks of which rise in this department, or just close to it, from 9000 to 11,742 feet high. The last number expresses the height of Mont Maladetta, from the snows and glaciers of which the Garonne springs. The lower slopes are covered with thick forests of oak, pine, fir, &c., or are occupied as sheep-walks and pasture-grounds. The mountains are diversified by beautiful lakes and cascades, and intersected by lovely valleys, such as that of Luchon. The lake and cascade of Oo, near the village of Oo, at the extremity of the valley of Larboust, are among the finest sights in the Pyrenees; the cascade, which is broken about midway in its descent, has a total fall of 1600 feet. The loud roar of torrents and waterfalls echoing among rocks and woods are heard with awe among the profound solitudes. The scenery higher up the mountains is of the most savage description: the highest part of the Pyrenees is covered with perpetual snow and ice; frightful precipices, yawning chasms, and naked rocks of enormous size are seen on their sides. The slope of the mountains is in general at an angle of about 35°, but in some places the descent is precipitous like a wall; and in the granite and primitive limestone formation it is not uncommon to see the rocks project far out of the perpendicular high overhead. The communication with Spain is kept up by the depressions in the mountains, here called 'ports.' The Port d'Oo, the loftiest pass in the Pyrenees, is 9850 feet high. The north of the department is occupied by hills of moderate elevations, separated by extensive and very fertile plains.

The department belongs entirely to the basin of the Upper Garonne, which traverses it from south to north. Of the other rivers the principal are—the Neste, the Salat, the Ariège, the Lers, the Louge, the Touch, the Save, the Gimone, and the Tarn; these are all directly or

indirectly feeders of the Garonne. [GARONNE; ARIÈGE; TARN.] The department is traversed by the Canal du Midi for about 32 miles of its length, and has by means of this canal and its navigable rivers (the Garonne, the Salat, the Ariège, and the Tarn) a total navigation of about 150 miles. It is also crossed in various directions by 7 imperial, 31 departmental, and 30 parish roads. The projected railway from Bordeaux to Cette passes through Toulouse and the north-east of the department.

Geology and Mineral Products.—The supercretaceous strata extends over all the north of the department, and southward as far as the junctions of the Salat and the Neste with the Garonne. The oolitic and other kindred formations crop out beneath the supercretaceous deposits, and occupy a narrow belt to the south of these. The Pyrenees are formed of primitive limestone and other rocks. The mineral treasures of the department are iron, copper, lead, antimony, bismuth, zinc, coal, rock-crystal, slates, gypsum, marble, jet, and granite. Gold is found in the sands of the Garonne and the Salat. There is a salt spring at Salies. Mineral waters are found at various places; those of Bagnères-de-Luchon are the most celebrated.

Climate and Produce.—In the higher parts of the mountains the winters are severe and long; in the lower hills and plains, which make up the greater part of the department, the climate is mild; here it rarely freezes, and a fall of snow is almost unknown. The average number of rainy days in the year is about 100; the rest of the year is dry, and almost equally divided between bright sunny and cloudy weather. The east and west winds predominate; the latter bring cold and rain. Tempests are frequent and violent. Goitrous affections are common among the mountaineers.

In the mountainous tracts it is only by dint of industry that any returns can be procured by the farmer. The valleys are very productive. The most fertile localities are the plain of Toulouse, the productiveness of which is noticed by Julius Cæsar ('De Bel. Gal.' i. 10); the valley of the Garonne generally; and the neighbourhood of Rieux, in the valley of the Arize, where two harvests are obtained in the year. The department contains 1,555,832 acres. Of this surface about one-half is arable land; 95,477 acres are grass-land; 120,858 are under vineyards; 275,357 under woods and forests; 13,853 are orchards, plantations, and gardens; 114,142 heath and moor land; and 11,654 are covered with waters, ponds, and canals. The population is not so much clustered into villages, towns, and hamlets as in most other parts of France; but is scattered over the department in farmsteads and cottages.

The arable land is well adapted to the cultivation of wheat, maize, buckwheat, millet, rye, and other graius and pulse. A great deal of garlic is grown; flax, hemp, potatoes, chestnuts, tobacco, truffles, melons, orange-flowers, fruit-trees, and medicinal plants are also produced. The quantity of wine grown in the department is 14,300,000 gallons, one-third of which is used for home consumption. The quality is generally inferior. The uplands and the valleys furnish abundance of excellent pasture; the mountains abound with wood suited for ship-building. Many oxen are bred in the extensive pastures of this department; asses, mules, sheep, and swine are numerous. Poultry is abundant. The geese and ducks are plentiful, and of great size; numbers of them are salted for household use and for exportation. A little honey and silk are produced. In the mountains there are the wild boar, the roebuck, the wolf, the fox, the heath-cock, and different varieties of the eagle. The partridge, ortolan, and quail are taken in abundance in the plains. The rivers and lakes abound with fish.

The commerce of the department is composed of the products already named, and of its manufactures, the chief of which are scythes, files, copper utensils, mathematical instruments, porcelain, pottery, tiles, coarse woollens, canvass, blaukets, calico, tape, brandy, tin-ware, and leather of various kinds. There are 78 iron-furaces, and 331 factories of different kinds, including glass-works, copper-foundries, cannon-foundries, gunpowder-mills, tobacco-factories, distilleries, marble-sawing works, &c., and 1053 wind- and water-mills. The department has considerable commercial intercourse with Spain, whither many handicraftsmen annually emigrate to exercise their callings. Fairs to the number of 360 are held in the year.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Toulouse . . .	12	133	175,671
2. Villefranche . . .	6	97	65,039
3. Muret . . .	10	126	92,988
4. St.-Gaudens . . .	11	234	147,096
Total . . .	39	590	480,794

1. Of the first arrondissement and of the department TOULOUSE is the capital. The other towns of the arrondissement are small. We give the following with the population of the commune in each case:—*Fronton*, in the north of the department, is a well-built town consisting entirely of brick houses, and has 2141 inhabitants. *Grenade-sur-Garonne* stands 15 miles N. from Toulouse, on the left bank of the Save, a little above its confluence with the Garonne, and has 4281

inhabitants. It is a regular brick-built town, situated in a rich corn country, and has manufactures of coarse woollens, serge, and leather. *Villemur-sur-Tarn*, the most northern town in the department, stands on the right bank of the Tarn, which is here passed by a suspension-bridge: population, 5472.

2. In the second arrondissement the chief town, *Villefranche-de-Lauragais*, stands in 43° 23' 56" N. lat., 1° 43' 9" E. long., in a plain of great fertility on the Lers, near the Canal-du-Midi, and has a population of 2870 in the commune. It is the seat of a tribunal of first instance, and has manufactures of sail-cloth, hosiery, blankets, pottery, and leather. *Revel*, the only other place worth mentioning in this division, stands in the north-eastern angle of the department, on a hill which commands a fine view over a very fertile country. It has 5796 inhabitants, who manufacture stockings, hats, linen, liquors, cotton-yarn, tiles, and leather.

3. In the third arrondissement the chief town, *Muret*, is situated in 43° 27' 41" N. lat., 1° 19' 41" E. long., on the slope of a hill above a beautiful valley at the confluence of the Louge with the Garonne, which is here passed by a fine suspension-bridge. It is a pretty brick-built town with a tribunal of first instance, and 4196 inhabitants, who manufacture coarse woollens, delf, and leather. Near Muret a large army under Pedro, king of Aragon, and the counts of Toulouse, Foix, Comminges, and Béarn was defeated with great slaughter by the French under Simon de Montfort, on September 12, 1213. The king of Aragon was among the slain. *Auterive*, a town of 3272 inhabitants, who manufacture cloth for soldiers' uniforms, stands on the right bank of the Ariège, which is here navigable and is spanned by a brick bridge. *Carbonne*, on the left bank of the Garonne, opposite to where that river is joined by the Arize, is a pretty little town with a population of 2293, who manufacture cloth and bricks, and trade in oil and wool. *Cadres*, 22 miles S.S.W. from Muret, on the Garonne, is a well-built town with 2471 inhabitants. It has tan-yards, dye-houses, and hat-factories. *Cintegabelle*, at the junction of the Lers and the Ariège, has 4016 inhabitants. It is a place of some commercial activity; the iron and other products of the department of Ariège are put aboard river-craft here, the Ariège being navigable from this point. *Le-Fousseret*, the birth-place of the Abbé Sicard, the great promoter of the instruction of deaf mutes in France, lies W. of Carbonne, and has a population of 2046. *St.-Lys*, W. of Muret, has 4000 inhabitants, who manufacture linen, and trade in charcoal. *Montesquieu-Volvestre*, situated on a height close to the Canal-du-Midi, has 3745 inhabitants, and some manufactures of woollens, druggs, salt-petre, and tiles. *Rieur*, a well-built town, formerly the seat of a bishop, is prettily situated on the Arize, has a fine church, manufactures of cloth and hats, and 2128 inhabitants.

4. In the fourth arrondissement, the chief town, *St.-Gaudens*, situated on a hill on the left bank of the Garonne, in 43° 6' 29" N. lat., 0° 43' 33" E. long., has a tribunal of first instance, a college, a very ancient church, and 4905 inhabitants who manufacture paper, leather, glass, delf, tiles, woollen-stuffs, tape, &c. The town has several flour, oil, and fulling-mills, and trades with Spain in corn, nails, linen yarn, mules, cattle, &c. From the Esplauade along the river there is a fine view of the scenery of the Pyrenees and the valley of the Garonne. *Aspet*, S.E. of St.-Gaudens, near the torrent of Souheil, in a most picturesque situation, has iron-factories, manufactures of nails, combs, &c., and a considerable trade with Spain in plgs. The population of the commune is 2573. *Bagnères-de-Luchon*, famous for its hot sulphureous springs, stands near the head of the valley of Luchon between two mountain streams, the Go and the Pique, which unite a little north of the town to form the Neste-de-Luchon, a feeder of the Garonne. The town which is 20 miles south from St.-Gaudens, and nearly opposite the middle point of the chain of the Pyrenees, is well built, with wide, straight, clean, and well-paved streets. It is in form a triangle, the points of which terminate in alleys, one shaded with planes, another with sycamores, and the third with limes. The alley of limes leads from the town to the baths, and is bordered with houses for the greater part of its length. The neighbourhood abounds with magnificent scenery. The bathing establishment is a large, elegant, and commodious building, fitted up with many marble baths, into each of which water from four springs is conducted by pipes. The waters of Bagnères were known to the Romans, by whom they were named *Aque Lixonenses*; the springs were re-discovered about a century ago, and they are now much frequented from the middle of May to the end of October by patients suffering from skin diseases, glandular swellings, and stiffened joints. The waters are administered in baths, douches, and as drink. Bagnères has an important chocolate manufactory; roofing slates are quarried, and copper-mines worked in the neighbourhood. *St.-Beat*, near which there are white marble and slate quarries, stands on the Garonne, and in a defile through which that river flows on leaving the Val-d'Aran. The town is small, consisting of two streets on opposite sides of the river, and united by a stone bridge: the population is 1374. *St.-Bertrand-de-Comminges*, a village of under 1000 inhabitants, stands on the site of the ancient Lugdunum Convenarum, near the left bank of the Garonne. It was formerly the chief town of Comminges, and the seat of a bishop; the former cathedral is a large and interesting structure. There are famous

marble quarries and marble works near this town. *L'Ile-en-Dodon*, famous for its poultry, stands on an island formed by the Save, and has 1813 inhabitants. *St.-Martory*, a picturesque little town at the junction of four high roads on the Garonne, which is here crossed by a fine bridge, has 1147 inhabitants. *Montrejeau*, beautifully situated on a plateau at the foot of the Pyrenees, and near the junction of the Neste with the Garonne, is a neat and well-built town with 3031 inhabitants. The magnificent scenery of the Pyrenean Mountains contrasts beautifully with the smiling landscapes and rich valleys watered by the two rivers in the neighbourhood of this town. A fine marble bridge of six arches crosses the Garonne here. Stockings and leather are the leading manufactures of the town, which trades also in corn, cattle, mules, poultry, timber, oak-staves, &c. *Salies*, is a small place on the Salat, over which a suspension-bridge is thrown. There is a fine salt spring near it.

The greater part of the territory now included in Haute-Garonne was inhabited in ancient times by the Volca Tectosages, whose capital was Tolosa, now Toulouse. The Romans incorporated this part of Gaul with Narbonensis. From the Romans the dominion passed to the Visigoths, who maintained themselves in the kingdom of Tolosa till the 8th century, when they were expelled by the Saracens, who in their turn were driven out by Pepin. Charles, brother of Charlemagne, founded the kingdom of Aquitaine, of which Toulouse was the capital, for his son, who being too young, the government was placed in the hands of dukes or counts in A.D. 788, and it is to this time that the creation of counts of Toulouse is referred. On the union of the kingdom of Aquitaine to the crown of France under Louis-le-Bègue, the counts of Toulouse became independent, and retained the sovereignty of the county till 1270, when it was re-united to the crown by Philippe-le-Hardi.

The department forms the see of the Archbishop of Toulouse and Narbonne, is included in the jurisdiction of the Cour Royale and of the University Academy of Toulouse, and belongs to the 12th Military Division, of which Toulouse is head-quarters. It returns four members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Statistique de la France; Official Papers.*)

GARRIGILL. [CUMBERLAND.]

GARROW HILLS. [HINDUSTAN.]

GARSTANG, Lancashire, a small market-town, and the seat of a Poor-Law Union in the parish of Garstang, is situated on the right bank of the river Wyre, in 53° 54' N. lat., 2° 46' W. long.; distant 11 miles S. by E. from Lancaster, and 229 miles N.W. from London by road. Garstang station of the Preston and Lancaster railway, which is one and three-quarter miles from Garstang, is 218½ miles from London. The population of the town in 1851 was 839. The living is a perpetual curacy in the archdeaconry of Lancaster and diocese of Manchester. Garstang Poor-Law Union contains 23 parishes and townships, with an area of 54,272 acres, and a population in 1851 of 23,454.

Garstang was incorporated by Charles II.; the corporation consists of a bailiff and seven capital burgesses, who have scarcely any functions. The town-hall, erected in 1755, is situated in the market-place. The parish church, a commodious edifice, is nearly two miles from the town, in a part of the parish called Garstang Churehtown. In the parish are a chapel of ease, and chapels for Independents, Wesleyan Methodists, and Roman Catholics. Garstang possesses a Free Grammar school, with an income from endowment of 36l. a year; the number of scholars in 1851 was 26. There are also a National school, a Roman Catholic Charity school, and at Churehtown a Free school. The Lancaster Canal crosses the river Wyre by a fine aqueduct near the town. Cotton-spinning and paper-making employ some of the inhabitants; and there are corn-mills and worsted-mills on the river Wyre. The market is held on Thursday, and several fairs are held in the course of the year.

GATEHOUSE. [KIRKCUDBRIGHTSHIRE.]

GATESHEAD, Durham, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union in the parish of Gateshead, is situated on the right bank of the river Tyne, in 54° 57' N. lat., 1° 35' W. long., distant 14 miles N. by W. from Durham, 274 miles N. by W. from London by road, and 277 miles by the Great Northern and York Newcastle and Berwick railways. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. For sanitary purposes the borough is under the management of a Local Board of Health. The population of the borough in 1851 was 25,568. The livings are rectories in the archdeaconry and diocese of Durham. Gateshead Poor-Law Union contains nine parishes and townships, with an area of 24,271 acres, and a population in 1851 of 48,085.

Gateshead forms in effect one town with Newcastle, the county town of Northumberland, on the opposite side of the Tyne, with which it is united by a handsome stone bridge, and by a magnificent high level bridge in connection with the York Newcastle and Berwick railway. Gateshead is supposed to have been a fortified Roman station. Numerous coins and other Roman antiquities have been discovered here. There are two principal streets; one descending towards the bridge is so steep as to be almost impassable for carriages

during winter; the other, of recent construction, is of gradual descent. The town is lighted with gas, and partially paved. The parish church is an ancient and spacious cruciform edifice, surmounted with a lofty tower. Besides the parish church are St. Edmund's chapel; St. Cuthbert's church, erected in 1848; and St. John's church, Gateshead Fell, erected in 1825. The Independents, Presbyterians, Wesleyan and New Connexion Methodists, and Roman Catholics have places of worship. The Grammar school, founded in 1700, has an income from endowment of 12*l.* a year, and in 1851 had 40 scholars, of whom 12 were free. There are also National, British, and Infant schools. St. Edmund's Hospital provides for a master, 3 elder brethren, and 12 younger brethren. There are a mechanics institute, a dispensary, and an almshouse. A county court is held here. Markets are held on Tuesday and Saturday; and fairs on the 2nd Monday in April and the 1st Monday in November. Extensive coal-mines, iron-foundries, chain-cable manufactories, glass-works, brick and tile-works, soap-works, ship-building, rope-making, and chemical and other works are carried on. There is a manufactory for patent iron-wire rope, and at Gateshead Fell is a quarry for grindstones, which are exported to all parts of the world.

(Communication from Gateshead.)

GÂTINAIS, LE, a district in France, partly comprehended in the province of Île-de-France, partly in that of Orléanais, and distinguished as Gâtinais Français and Gâtinais Orléanais, of which Melun and Montargis were the respective capitals. It extended from the Seine to the Loire, and was drained also by the Loing and the Essonne. Other towns of Gâtinais Français were Nemours, Fontainebleau, and Moret; of Gâtinais Orléanais, Chatillon, Briare, Gien, and St.-Fargeau. The county so-named consists of fertile plains, and is famous for its corn products, wine, fruits, pastures, and forests. It is now included in the departments of SEINE-ET-MARNE and LOIRET.

GÂTINE, a district of Poitou, of which Parthenay was the capital, is now comprehended in the department of Deux Sèvres. [SEVRES, DEUX.]

GATSHINA. [PETERSBURG, Government of.]

GAUL. [FRANCE.]

GAULNA. [CANDEISH.]

GAZA, now called Gazara, a town of Syria, or more properly speaking, of Palestine, on the south-west frontiers of that country, near the borders of the desert which separates it from Egypt. It consists of the upper town, with a castle situated on a hill, about 2 miles from the sea, and a lower part, or suburb, in the valley below. The population, including that of two suburban villages, is about 10,000. It has some manufactories of soap and cotton stuffs, and carries on some trade by sea, especially with Egypt, and also by land through the desert with Suez. Gaza is greatly fallen from its ancient splendour; but it still exhibits signs of commercial activity and prosperity. It is repeatedly mentioned in Holy Writ, especially in Judges (xvi.), as one of the principal towns of the Philistines. It was besieged by Alexander the Great, and taken after an obstinate defence. At a later period it was destroyed by the Jews in one of their revolts against the Romans: in the Acts of the Apostles (viii. 26), it is mentioned as being then deserted. It became at an early period the seat of a bishop. In the middle ages it was an important frontier town. The hill upon which Gaza stands is elevated about 60 feet above the neighbouring plain, and is about 2 miles in circumference at the base. It appears to have been once wholly inclosed by walls: the sites of several of the former gates are still pointed out. The greater part of the modern city is situated on the plain below. The town being surrounded by gardens and plantations of olive and date trees, above which numerous and elegant minarets rise, has a pleasing appearance from a distance. The country around, which is hilly, is remarkably fertile. The port of Gaza, called Majuma Gazze, had special privileges conferred upon it by the emperor Constantine, who gave it the name of Constantia, and exempted it from subjection to Gaza. This was done in consequence of the inhabitants professing the Christian faith. Under Julian the people of Gaza reasserted their claim to supremacy over the port; the claim was admitted by the emperor, and the new name of the port was dropped. (Robinson; Le Quien; *Dictionary of Greek and Roman Geography*.)

GEERTRUYDENBERG. [BRABANT, NORTH.]

GELA, a Grecian colony on the south-western coast of Sicily, was founded by a joint colony from Crete and from Lindus, a city in



Coin of Gela.

British Museum. Actual Size. Silver. Weight, 265 grains.

Rhodes, in B.C. 690, or about 44 years after the foundation of Syracuse. (Herod., vii. 153; Thuc., vi. 4.) It was situated at the mouth of the river Gela. The colony established here was one of the most powerful of the Grecian colonies in Sicily. About B.C. 582 the afterwards powerful city of AGRIGENTUM was founded by a colony of Geloans. Gela itself maintained an influential position till the time of Gelon, who removed the greater part of its inhabitants to Syracuse; after which it rapidly sunk in importance. It was destroyed



Coin of Gela.

British Museum. Actual Size. Silver. Weight, 269½ grains.

in B.C. 405, in the great Carthaginian invasion, and although afterwards repopled, never recovered its former prosperity. The modern town of Terra Nova is supposed to have been built upon its site. The district in which Gela was situated was a very fertile corn-growing tract. It was renowned for the excellence of its lentils. The territory also produced abundance of salt. The Minotaur on the coin of Gela, above, is symbolical of the origin of the city. (*Dictionary of Greek and Roman Geography*.)

GENAPPE. [BRABANT, SOUTH.]

GENESSEE. [NEW YORK.]

GENÈVA (Genève, Genf, Ginevra), a town and canton in the south-west of Switzerland. The canton is bounded N. by the canton of Vaud and the Lake of Geneva, E. and S. by Savoy, and W. by France. It consists of the territory of the old republic of Geneva, of the district of Versoix ceded by France, and of the districts of Carouge, Hermance, and others, ceded by the king of Sardinia by the treaties of Paris, 1814, and of Turin, 1816. The area of the canton is only 91 square miles. The population of the canton in March 1850, amounted to 63,976, of whom 34,212 were Calvinists and 29,764 Catholics, who are under the archbishop of Freyburg. This number includes the population of the city of Geneva, and foreigners who to the number of 14,928 reside in the canton. The greatest length of the canton is about 17 miles, from Hermance, on the extreme north-east frontier, to Chancy, a commune on the left bank of the Rhône, south-west of Geneva, near the Fort de l'Écluse, which is a French military outpost on that side.

The territory of Geneva extends along both banks of the Lake of Geneva and the valley of the Rhône, being confined on the west by the lower offsets of the Jura, and on the east and south-east by the mountains of Voirons and Salève, which are about 4000 feet above the sea. These mountains however are out of the territory of Geneva, which contains only some hills, the highest of which are not 400 feet above the level of the lake. The territory of the canton is divided into three districts:—1, The district north of the Rhône, including a strip of land along the west bank of the lake as far as the borders of the canton of Vaud, beyond Versoix. 2, the district south of the Rhône, and between it and the left bank of the Arve, which includes Carouge, a neat well-built town, with 4400 inhabitants, about one mile south of Geneva. 3, the district north of the Arve, and between it and the east bank of the lake, along which it extends in a narrow strip as far as Hermance. The principal place of this last district is Chesne, consisting of two large villages adjoining each other, which reckon together about 2000 inhabitants. Numerous other villages are scattered about the whole territory; and the immediate neighbourhood of Geneva, both along the banks of the lake and in the direction of the principal avenues leading to the town, exhibits extensive lines and groups of country-houses, which form handsome suburbs.

About one-third of the territory of Geneva is sown with corn, another third is pasture-land, a much smaller proportion is planted with vines, which yield an indifferent sort of wine; the rest consists of woods, orchards, and gardens. The deficiency in corn, cattle, and wine, for the consumption of the town of Geneva, is supplied by the neighbouring countries. Manufactures and commercial speculations form the principal sources of wealth. Watches and jewellery are the principal manufactures: about 100,000 watches are made annually and exported to France, England, Italy, and other countries. Other industrial products are musical-boxes, chronometers, mathematical instruments, cutlery, fire-arms, &c. There is an active transit trade carried on by steamers between Geneva and the several towns on the shores of the lake.

Geneva is one of the oldest sites in Western Europe. It is mentioned by Julius Caesar ('Bell. Gal.', i. 7). The republic of Geneva originated in the municipal government of the town, to which Charlemagne granted certain privileges and franchises, subordinate however to the bishop, who was styled Prince of Geneva, and was an immediate feudatory of the empire. Frequent dissensions occurred between the

citizens and the bishop on one side, and the counts of Genevois, a feudal dynasty which sprung into existence from the wreck of the old kingdom of Burgundy, and which ruled the adjoining province of Savoy, which is still called Genevese, and of which Annecy is the capital. These counts claimed jurisdiction over the town of Geneva. The line of the counts of Genevois becoming extinct in the 14th century, their inheritance escheated to the house of Savoy, who obtained the investiture of it from the emperor Sigismund in 1422; and hence are derived the claims of the dukes of Savoy over Geneva, claims however never completely enforced. At the Reformation, which was established in Geneva and generally all through Switzerland by the exertions of Calvin, the bishop quitted Geneva, and retired to Annecy, and from that epoch the town governed itself as an independent municipality, and formed an alliance with the Swiss cantons of Berne and Freyburg, and afterwards Zürich. The dukes of Savoy, after several fruitless attempts to reduce Geneva by force or surprise, acknowledged its independence by the treaty of St. Julien in 1603.

In the 18th century the canton of Geneva was distracted by internal feuds between aristocratic families and the popular party. These troubles furnished the French Directory with a pretence for seizing it by force, and incorporating it with France in April 1798 under the name of the department 'Du Léman.' In 1814 it was occupied by the Austrians, and was soon after restored by the allied powers to its independence as a canton of the Swiss Confederation.

The town of Geneva, the metropolis of Calvinism on the continent of Europe, is built on two hills separated by the Rhône, where it issues out of the lake. The larger part of the town is built on the south side of the river. The Rhône forms an island within the town, which is also built upon and is a separate district, joined to the two banks by bridges. The district on the north bank is called St.-Gervais. A smaller island, at the very point where the Rhône issues from the lake, is planted with trees and forms a public promenade, which is adorned with the statue of Rousseau. A handsome suspension-bridge connects both banks of the river with the island. A handsome quay with fine buildings has also been constructed along the south or left bank of the Rhône. The streets in the old part of the town (St.-Gervais) are narrow and steep, the houses high, and the appearance of the streets rather gloomy. The most remarkable buildings are the cathedral church of St.-Pierre, the handsome front and portico of which were restored in the 18th century; the town-hall, which is a very old and massive building; the hospital; the Musée Rath, which has some good paintings; the college, with a library of 50,000 volumes; the observatory; the Hôtel des Bergues, one of the largest and finest in Europe; and the penitentiary. The house in which Calvin lived and died is still shown in the Rue des Chanoines, and also the house in which Jean Jacques Rousseau was born. Geneva abounds with means of education. There is the Academy or University with four faculties— theology, law, science, and belles-lettres, with forty professors; the schools of drawing and architecture, industrial schools where they teach mathematics, physics, and chemistry applied to the arts; a school for music; besides elementary and other schools. There are also societies of arts, of medicine, of physics, and natural history; and a reading society, which has a library of above 30,000 volumes; a museum of natural history; a cabinet of medals; a botanical garden, and other scientific institutions. Geneva is 33 miles S.W. from Lausanne, and about 80 miles S.W. from Berne. Towards this latter town a railroad has been projected following the curve of the northern shore of the lake as far as the village of Morges, thence running to Yverdon on the Lake of Neuchâtel, along the southern shores of this lake and that of Morat, and thence eastward to Berne. Steamboats ply daily on the Lake of Geneva, which is described under LEMAN. In May 1850 the population of Geneva and its suburbs amounted to 37,724.

By the constitution previous to 1847 a council of state consisting of 24 members had alone the initiative of the laws. The projects of laws were laid before the representative council, consisting of 274 members, which accepted or refused, and might make amendments, with certain restrictions. The members of the representative council were elected for nine years by all the natives of either town or territory above twenty-five years of age, who paid seven florins of direct taxes, and who were neither paupers, bankrupts, nor servants, and had not been condemned in any criminal process. The representative council named the members of the council of state for eight years; it also fixed the annual budget of the canton and the municipal budget of the town, and appointed the judges and magistrates. In 1846 the Catholic cantons of Switzerland formed themselves into a separate league (Sonderbund) in order to defend themselves against the attacks of the Free Corps which had invaded Lucerne in 1845 under Ochsenbein and been defeated. The General diet of the Confederation on the proposal of the canton of Zürich decided (September 5, 1846) that the Sonderbund was illegal, to which decision almost all the Protestant cantons adhered. The grand council of Geneva however declined to accede to the proposal unless means were adopted to preserve the peace of the Confederation, and to prevent any further attacks by the Free Corps. Two days afterwards (October 5) the radical party in the canton demanded the retraction of the decision. On the 8th the council of state resigned

its power to the municipal council of Geneva, and a provisional government with the radical leaders as its members was appointed.

GENEVA, LAKE OF. [LEMAN, LAKE.]

GENÈVRE, MONT. [ALPES, HAUTES; ALPS.]

GENNESARET. [PALESTINE.]

GENOVA, or more correctly GÉNOVA, Duchy of, one of the administrative divisions of the kingdom of Sardinia, occupies, with the intervening coast, that portion of the Ligurian Apennines which lies at the head of the Gulf of Genoa, between 44° 3' and 44° 50' N. lat., and 8° 20' and 10° 5' E. long. It is bounded W. by the administrative division of Savone, N. by that of Alessandria, E. by the duchy of Massa belonging to Modena, and S. by the Mediterranean. The area is 1257 square miles. The population in 1848 was 545,182. The small islands of Palmaria and Tino, at the entrance of the Bay of Spezzia, and that of Capraja, near Corsica, belong to the duchy of Genoa.

Coast-line, Surface.—The average breadth of the country is barely 7½ miles, but about the middle near Genoa, it is 25 miles. The coast-line does not exceed 100 miles. Along the coast are numerous indentations, which form several good harbours, and two spacious bays, Rapallo, and the magnificent Bay or Gulf of Spezzia, the Portus Lunæ of the Romans. The surface of the country presents a succession of mountainous slopes and terraces, broken by valleys and ravines. The Apennines cover the greater part of the surface of the duchy, curving round the gulf at the distance of a few miles from south-west to north-east, and forming two slopes, from the northern of which descend the Bornida, the Orba, the Serivia, the Staffora, and the Trobbia, all feeders of the Po, while the Gulf of Genoa receives from the southern slope the Polevern, the Besagno, the Sturla, the Varna, and the Magra, all of them streams of little importance.

From the nature of the country there can only be one main line of road traversing the length of the duchy. But this road is an excellent one, running along the Riviera di Ponente (western shore) from the city of Genoa to Savona, and along the Riviera di Levante (eastern shore) from Genoa to Sarzana, and disclosing innumerable views of the most picturesque beauty. The transverse roads, which fall into this main road, are the terminations of those from Piedmont and Lombardy. The only railway in the duchy is the southern portion of the Turin and Genoa railway, which is now open to the latter city.

The prevalent rocks are of the magnesian limestone, and carboniferous systems. Statuary and other marble, alabaster, limestone, slate, coal, and asbestos are obtained. The soil is for the most part rocky and but moderately productive, but the industry of the inhabitants has turned to advantage every spot capable of cultivation. The climate is temperate and on the whole salubrious, and the air is remarkably pure. The winds in the mountain ravines are however bitterly cold in winter, occasioning among the inhabitants a tendency to pulmonary complaints; and the sirocco sometimes exerts its noxious influence. The chief productions are oranges, lemons, and citrons, light wine, oil, chestnuts, silk, cotton, hemp, with figs, pomegranates, almonds, and other excellent fruits. There are extensive forests and fine pastures on the mountain slopes.

The Genoese are a robust and good-looking people; shrewd, active, industrious, frugal, and parsimonious. They speak one of the most difficult Italian dialects, and have a few books of poetry printed in it. They are well calculated for commerce, which is their real element. The Rivas, or maritime districts, furnish the best sailors in the Mediterranean, and the Sardinian navy is chiefly manned by them. Genoese vessels trade to the Levant, the Black Sea, the Baltic, to America, and even to the coasts of the Pacific. The principal articles of export are silk, rice, hemp, oil, and paper. There are at Genoa manufactures of silk stuffs, of woollens, embroidered cambrics, and muslins, plain and ornamental furniture, paper, jewellery, &c.

Divisions, Towns, &c.—The duchy is divided into 4 provinces, which with the area, 'mandamenti,' and population in each, are as follows:—

Provinces.	Area in sq. miles.	Mandamenti.	Population in 1848.
Chiavari . .	353	7	116,077
Genova . . .	337	13	285,233
Levante . . .	259	6	78,850
Novi	288	6	65,013
Total . . .	1257	32	545,182

The Province of Chiavari lies between the provinces of Genova and Levante, and is watered by the Varna, a feeder of the Magra, and the torrent of Rapallo, which falls into the Bay of Rapallo. The strip of land along the coast is very productive; the mountains abound with chestnut woods. The inhabitants are chiefly employed on the sea. Chiavari, the capital of the province, is beautifully situated on the Bay of Rapallo; it is a well-built busy town, with about 10,000 inhabitants. The streets are narrow, and the houses, many of which are of a rather superior kind, are generally built on open areas. It has several splendid though not very tasteful churches; the principal, that of Madonna-del-Orto, is annexed to the ecclesiastical seminary. The Franciscan convent, in the great square, is an imposing

building. There are several old and picturesque towers in the town, the largest of which is now used as the office of the podestà. The town has a Società Economica, for the encouragement of agriculture, literature, and the arts. It has a lace and twine factory, and is noted for the manufacture of light willow chairs. *Borzonasca*, a large village with about 5000 inhabitants, lies inland among the Apennines, and is of some importance for its cloth manufactures. *Lavagna*, famous for its slate quarries, has about 6000 inhabitants. It contains a fine church and a singular-looking palace. *Rapallo*, a flourishing town with 10,000 inhabitants, extends along the shores at the head of the Bay of Rapallo, about 6 miles W. from Chiavari. It is well built; the houses stand chiefly on arcades; there are many pretty churches with peculiarly graceful campanile towers, and on the sea-shore there is a fine martello tower. The chief manufactures are lace and oil. *Santa-Margherita*, a pretty village on the shore, near the promontory of Porto Fino, has, including the district about it, 6000 inhabitants. *Sestri-di-Levante*, E. of Chiavari, stands on a peninsula connected with the Riviera by a long isthmus, and has 4000 inhabitants, who are engaged in the coasting trade and in the marble quarries of the neighbourhood. The surrounding scenery is very picturesque. *San-Stefano-d'Aveto*, in the interior, stands on a high hill, and has 6000 inhabitants. *Varese*, a small town of 2000 inhabitants, lies east of Chiavari, on the Vara.

The Province of Genoa lies west of that of Chiavari, and contains, besides the city of GENOA, the following towns on the east coast:—*Recco*, a pretty place with 5000 inhabitants, has some export trade, and builds vessels of small size. *Nervi*, a gay-looking town, with painted houses, situated also E. of Genoa, among luxuriant gardens close to the shore: population, 4000. It has a small port, silk and woollen manufactories, and a good fishing trade. The following towns are on the shore to the west of Genoa:—*Sestri-di-Ponente*, a flourishing place with about 4500 inhabitants. *Pegli*, population 3000. *Voltri*, a prosperous town with several fine churches, paper manufactories, and 3500 inhabitants.

The Province of Levante lies between that of Chiavari and the eastern boundary of the division. It is watered by the Magra and its feeder the Vara. The eastern part of the province forms part of the territory of Lunigiana, which was named from the ancient town of Lunà, now in ruins, on the left bank of the Magra. The river Magra is interesting as having been the boundary between Etruria and the territory of the ancient Ligures. The capital of the province is *Spezzia*, which stands at the head of the fine Bay of Spezzia in a most beautiful country, and has about 10,000 inhabitants. It is neatly built; the most remarkable structures are the old Genoese citadel, and the ancient castle of the Visconti. In the bay, close to the town, the remarkable appearance called 'polla' may be seen, which is a hemispherical swell of the sea, caused by the gush of a submarine spring of great abundance and power. The diameter of the polla at this place is 25 feet. *Porto-Venere* is a small but interesting town of over 2000 inhabitants, opposite the Isle of Palmaria. It contains two fine churches, one of which occupies the site of a celebrated temple of Venus. On the opposite side of the Gulf of Spezzia is *Lerici*, which is a station for coasting vessels between Genoa and Leghorn, and has 4000 inhabitants. *Levanto*, a town of 4000 inhabitants, surrounded by overhanging hills, stands in the western part of the province. *Sarzana*, on the left bank of the Magra, in the Lunigiana, is a pretty town with 8500 inhabitants. It is the seat of a bishop, and has a fine cathedral, which is a good specimen of the Italo-Gothic. The castle and the old fortifications, which are remarkable for their massiveness, add much to the picturesque appearance of the city.

The Province of Novi lies on the northern side of the Ligurian Apennines. It is drained by the Scrivia, and by the Lemmo and other mountain torrents which swell the Orba, a feeder of the Bormida. The province is not productive except in its northern part, which opens into the plain of the Po, and is planted with vines, mulberries, and other fruit-trees. The mountains supply fine pasture, or are covered with chestnut woods. *Novi*, the capital, a cheerful well-built town, stands in a plain at the foot of the Apennines, on the road from Genoa to Turin, and has a considerable transit trade and 11,000 inhabitants. It has several fine churches and palaces, and a college. *Voltoggio*, at the foot of the mountain group called La Bocchetta, has a population of 2200. *Serravalle*, on the left bank of the Scrivia, is a bustling little town with 3000 inhabitants. *Gavi*, important from its position in a defile in the mountain, and commanded by a strong castle, stands on the old road from Genoa to Turin, and has 2000 inhabitants. *Pozzuolo* and *Arquata* are towns of about 3000 inhabitants each. Above the latter is a fine ruined castle.

GENOA, GENOVA, a city of Italy, belonging to the kingdom of Sardinia, is situated on the coast of the Mediterranean, at the foot of the Ligurian Apennines, in a recess of the Gulf of Genoa, in 44° 24' N. lat., 8° 52' E. long., 75 miles S.E. from Turin. The population in 1848 was 100,382.

The city of Genoa stands partly on the declivity of several hills rising in the form of a semicircle round the spacious harbour, and partly on a narrow strip of ground between them and the sea. It is enclosed on the land-side by a double line of fortifications, the external one being above 7 miles in length. These fortifications have been greatly improved and strengthened within the last few years: the

ramparts form a favourite promenade. The higher Apennines rise immediately behind, dividing the waters which run to the Mediterranean by the valleys of Bisagno and Polcevera, from those which flow northward into the Scrivia and the Bormida, two affluents of the Po. Upon the summits of these mountains, which are near enough to command Genoa, are several detached forts, called Il Diamante, I Due Fratelli, Sta. Tecla, &c. The appearance of Genoa from the sea is truly magnificent. A succession of fine buildings more than two miles in length lines the shore; numerous palaces and gardens, churches and convents, rise behind like an amphitheatre, on the steep sides of the hills that rear their dark and barren summits above, crowned with formidable ramparts, batteries, and forts; the buildings are square and lofty, and the roofs are covered with light-coloured slate, which has a neat and pleasing effect. The interior of the town is hardly so pleasant; the streets are very narrow, crooked, and steep, with the exception of a few, such as Strada Balbi and Strada Nuova, which are entirely lined with marble palaces belonging to the Genoese patricians; and the Strada Nuovissima, Carlo Felice, and Carlo Alberto, which are also on a scale of considerable magnitude. Some of the palaces in the Strada Nuova have galleries of paintings, and their internal decorations and furniture are splendid. The palaces Serra, Reale, Durazzo, Doria, and Brignole Rosso, are among the most remarkable, but there are several others very little inferior either as architectural works or for the richness of their contents. Genoa la Superba, as it was of old named, is indeed one of the finest cities in Italy, in an architectural point of view. Genoa has many handsome churches; the magnificent cathedral, L'Annunziata, and the elegant church of Carignano, are among the finest; about half of the churches of Genoa, and among them some of the finest, were destroyed by the French during their occupation of the city. The Loggia de' Banchi, where is the Exchange, the Ponti, or quays of the harbour, the Porto Franco, or free-port warehouses, the lighthouse, the theatre Carlo Felice, the promenade of L'Acquasola, the great hospital, Albergo de' Poveri, the Ospedale del Pammatone, the former palace of the Doges, the Banco di San-Giorgio, and the Goldsmiths' Street (Strada degli Orefici), are all worthy of notice.

Genoa is an important commercial city. The exports amount to considerably over two millions sterling; the imports to nearly three millions. The principal articles of export are silk and fancy goods, rice, hemp, oil, and fruits. Genoese vessels trade to the Levant, the Black Sea, the Baltic, and to North and South America; while steamers maintain a regular communication with Marseille, Barcelona, Leghorn, Civita Vecchia, &c. The fine harbour is bounded at the two extremities by substantial piers, the Molo Vecchio and the Molo Nuovo, and above the latter is a noble lighthouse 300 feet high. The Darsena, or state dock and arsenal, is a busy and well regulated establishment. Connected with it is the Bagne for convicts. The Porto Franco, or free port, referred to above, consists of a collection of 355 bonding warehouses, forming a sort of town surrounded by a wall, within which neither soldier, priest, nor female is allowed to enter, except by special permission. It is under the management of the chamber of commerce. There are extensive and convenient quays along the harbour. The manufactures of the city are of considerable importance. The principal are of velvets and other silk-stuffs, embroidered cambrics, woollen goods, jewellery, surgical, optical, and musical instruments, paper, canvass, artificial flowers, coral ornaments, and various other fancy articles. In the making of rich velvet, and gold and silver articles of a peculiar kind of filagree work, the Genoese have long possessed, and still maintain, an almost unrivalled celebrity; but they are also very skillful artificers in many other of the more elegant branches of mechanical art.

Genoa is a garrison town, the residence of a governor-general, and of a senate or high court of justice for the whole duchy. The French civil and commercial codes have been retained, with some modifications. The government of the town is vested in a great town council, consisting of 40 members, 20 of whom are nobles and 20 merchants, a lower council, two syndics, with various other officers. For public instruction there is the University, attended by between 500 and 600 students, a royal college, a naval school, and six communal schools, one for each district of the town, a deaf and dumb school, an academy of fine arts, public libraries, &c. There are also 15 conservatore, or female asylums, and various convents and benevolent institutions besides those named above.

History of Genoa.—The history of Genoa, or Genua (its Roman name), is lost in the obscurity of old traditions, which would assign to it an antiquity greater than that of Rome. It is mentioned by Livy (xxi. 32) at the beginning of the second Punic war, when it appears to have been a town in friendship with Rome. Some years after, Mago, the Carthaginian general, coming with a fleet and army from the Balearic Islands to effect a diversion in favour of Hannibal, took Genua by surprise and partly destroyed it; but it was restored two or three years later by order of the Roman senate. (Livy, xxviii. 46; xxx. 1.) From that time Genua appears to have continued in alliance with Rome, but it was not a colony. Strabo (p. 201, Casaub.) mentions Genua as an emporium where the Ligures from the interior brought for sale hides, cattle, honey, and timber for ship-building, and received in exchange oil and wine from other parts of Italy. After the fall of the Western empire Genoa was taken possession of by the

Langobards, A.D. 641. Charlemagne afterwards took it, and put it with all maritime Liguria under the government of a count. After the fall of the Carolingian dynasty, and during the contests about the crown of Italy between the German emperors and the Berongarii and other claimants, the citizens of Genoa seized the opportunity of asserting their independence under the government of elective magistrates styled consuls. The names of the consuls began to be recorded from the latter part of the 11th century. The Genoese had already rendered themselves formidable by sea. After having suffered from the Saracens, who about 935 surprised and plundered their town, they applied themselves to strengthen their navy; and having allied themselves with the Pisans they drove the Saracens out of Corsica, Capraja, and Sardinia, between the years 1016 and 1021. From that time dates the dominion of Genoa over Corsica and Capraja, and that of Pisa over Sardinia. The Genoese took part in the great crusade under Godfrey de Bouillon, and obtained settlements on the coast of Palestine, especially at Acre. In 1146 they took Minorca from the Moors, and the next year they took by storm Almeria in the kingdom of Granada, where they made an immense booty. The Genoese fleet on this occasion consisted of 63 galleys and 163 transports, with 12,000 land forces. In the year after, having joined the Catalonians, they took Tortosa, which was defended by a Moorish garrison. These conquests excited the jealousy of Pisa and Venice, the two other naval powers of Italy. Pisa, being the nearest, was the first to come to blows with Genoa. Four wars took place between the two states: the first in 1070, which was short; the second in 1118, which was ended in 1132 by the mediation of Pope Innocent II.; the third in 1162, which lasted nearly a century; the fourth in 1232, in which the Pisans were completely defeated by sea near the rocks of Meloria, in sight of their own coast, when 3000 Pisans were killed and 13,000 taken prisoners to Genoa, where most of them died in chains. From that blow Pisa never recovered. In 1290 the Genoese under Conrad Doria destroyed Porto Pisano, and filled up the mouth of the harbour.

The rivalry between Genoa and Venice began to show itself soon after the conquest of Constantinople by the Franks in 1244. The Genoese having assisted Michael Paleologus to reconquer his capital, obtained from him the suburbs of Pera and Galata, and the port of Smyrna, with full jurisdiction over those places. The Venetians disputed with them the supremacy of the Levant seas, but after several naval fights the two powers concluded a truce in 1271. After the fall of Pisa the Genoese found themselves more at leisure to renew the conflict with Venice. They put to sea with 165 galleys, each carrying from 250 to 300 men, and sailing up the Adriatic defeated the Venetians near the island of Curzola, took or burnt 84 galleys, and made 7000 prisoners, including the Admiral Dandolo. Peace was made in 1299, by the terms of which the Genoese excluded the Venetians entirely from the trade of the Black Sea, where the Genoese had formed a succession of colonies, forts, and factories all along the coast, and from which they carried their trade, and introduced Christian customs far into the interior of Asia. War broke out again in 1346, when the Genoese defeated the Venetians in sight of Constantinople, but were afterwards totally routed on the coast of Sardinia. Genoa, disheartened by this defeat and a prey to internal factions, gave itself up to John Visconti, duke of Milan. In 1372 war broke out again between Genoa and Venice for the possession of Tenedos. Genoa had meantime shaken off the yoke of the Visconti. In this, the fourth war between Genoa and Venice, the Genoese took Chioggia and besieged Venice. The Venetians were near capitulating, when Vettor Pisani and Carlo Zeno revived their spirit, formed a new fleet, with which they blockaded the Genoese within Chioggia, and obliged them to surrender. This war, called the War of Chioggia, ended in 1381.

From that time Venice and Genoa remained at peace, with trifling interruptions. Genoa was exhausted by internal factions. To the rule of the consuls had succeeded, about 1190, that of the podestà, who were chosen annually, from among the citizens of another state, in order to avoid the partialities and intrigues resulting from family connections. This lasted with some interruption till 1270, when two citizens, Oberto Spinola and Oberto Dona, distinguished for their services, usurped the supreme power, under the name of 'captains of liberty,' which they retained till 1291. They reconciled the lower classes to their usurpation by appointing a magistrate called Abate del Popolo, a kind of tribune who supported the rights of the people against the nobles. Foreign captains were next appointed, to be chosen from among the natives of places at least 100 miles distant from Genoa. Afterwards a council was instituted, first of 12 and subsequently of 24 members, half nobles and half plebeians. Feuds and fighting often took place within the town between nobles and plebeians, and between Guelphs and Ghibellines. Both the Doria and the Spinola were Ghibellines, but having quarrelled among themselves they were overcome by the Guelphs, who were headed by the families of Fieschi and Grimaldi, and who exiled their rivals. But the Ghibellines of Genoa, unlike those of Florence, were popular among the lower classes, and they re-entered by force. From 1317 to 1331, and again in 1335, these factions continued to desolate the country, so as to render it, says the chronicler Foglietta, a frightful desert. In 1339 the citizens, weary of discord and disorder, instituted a supreme magistrate, called doge, elected for life, excluding by law all the nobles, both Guelphs and Ghibellines, from ever filling the office.

This lasted two centuries, but not without frequent contentions between the principal citizen families, especially the Adorni and Fregosi, who proved just as factious and troublesome as the patricians had been. Several doges were elected at a time, some were exiled, and others were forced upon the community by an armed faction. The neighbours of Genoa, the Visconti of Milan, and the kings of France, taking advantage of these feuds, at various times obtained possession of Genoa. At last, Andrea Doria had the merit of delivering his country from the French yoke; and in order to avoid a recurrence of the former feuds, he changed the institutions of the country, by establishing biennial doges, and councils to assist and control them. A roll was made out of all the distinguished families, both noble and plebeian, from among whom the doges, councillors, and other officers of state were to be chosen. This aristocracy however was not wholly closed and exclusive, like that of Venice: new families might be added to it at certain times and with certain qualifications. This form of government lasted from 1523 till Bonaparte's invasion of Italy, when the democratic party, assisted by the French, rose upon the aristocracy, and, after a fearful contest, a democratic government was formed, protected by a strong French garrison within the city. In 1799 the French, under Massena, were besieged within Genoa by the Austrians and the English, and after a most gallant defence the city capitulated to the Austrians, but was again given up to the French after the battle of Marengo. Bonaparte, then consul, gave a new form of government to Genoa, leaving to it only a nominal independence with the name of republic, but when he became emperor, he compelled the doge and senate to consent to the formal annexation of Genoa to France. In 1814 Genoa surrendered to the English forces under Lord William Bentinck, and in the following year, by a decision of the Congress of Vienna, it was united to the Sardinian monarchy.

Of all her foreign possessions Genoa retained Corsica the longest; till 1768, when she ceded it to France. Her numerous and wealthy settlements in the Levant and the Black Sea she lost after the Ottoman conquest of the Eastern empire. In the 18th century her navy was reduced to a few galleys, and her flag was insulted with impunity by the Barbary privateers. Since the last peace the spirit of commercial enterprise in her citizens has been greatly revived, and the city has regained a large measure of prosperity.

(Foglietta, Caffaro, and the other old Genoese chroniclers; Botta, *Storia d'Italia*; Serra, *Istoria dei Liguri e dei Genovesi*; Murray, *Handbook of Northern Italy*.)

GENTOOS. [HINDUSTAN.]

GEORGE, ST. [AZORES; BERMUDA; GRANADA.]

GEORGETOWN. [COLUMBIA, Dist.; DELAWARE; GUYANA.]

GEORGIA. This article comprehends not only a description of Georgia Proper, but of all the countries between the Black and the Caspian seas of which Russia either holds or claims possession, and which form dependencies of the government of Georgia, or, as the Russians call it, Grusia. This tract, commonly called Transcaucasia, or the Transcaucasian provinces, extends from 38° 40' to 43° 30' N. lat., and from about 36° 10' to 50° 12' E. long. It is inclosed on the north by the range of the Caucasus, which forms a part of the country; on the east it is washed by the Caspian, and on the west by the Black Sea; on the south it is bounded by Persia and Asiatic Turkey, having a line of frontier on that side of about 600 English miles. Its length from east to west, from the Capo of Abcheran or Apheron on the Caspian Sea, to Port Nikolaioff on the Black Sea, is about 460 English miles, but measured diagonally so as to include Abasia, or Abkhasia, it would of course be much greater; its breadth from the banks of the Araxes to those of the Terek, is about 350 English miles. The area of the Transcaucasian provinces is estimated by the Russian authorities at 66,500 square miles; the population in 1846 at 2,648,000.

The surface is for the most part mountainous; the northern portion being almost wholly occupied by that of ARARAT. These mountain ranges are described under their respective titles, and to them we refer for a general notice of the physical features of the country, which will be described somewhat more in detail when we speak of the several provinces presently. But the country though generally mountainous contains some extensive plains; and the scenery is altogether of a very striking character.

The principal rivers which drain the Caucasian isthmus are the Kur or Koor, the ancient Cyrus; the Araxes; the Rion, or Foz (the ancient Phasis watering the COLCHIS of the ancients); the Koban; and the Terek, besides numerous smaller rivers and streams. Owing to the hilly nature of the country only two of these rivers are navigable, and that only for flat-bottomed vessels—the Kur, from its confluence with the Araxes to its outlet into the Caspian Sea, for about 70 English miles; and the Rion, for about the same distance.

The present commerce of these countries by the Caspian Sea is carried on from the ports of Derbend, Baku, Shamakhi, and Lenkorau, to Persia and to Astrakhan. The overland trade is with Russia and Persia, as well as with Asiatic Turkey. The commerce by the Black Sea is carried on from the mouth of the Rion with Odessa and other Russian ports, as well as with Constantinople; and there is a small traffic with the highlanders of the Caucasus. The coast of the Black

Sea is defended by a chain of Russian forts, but the garrisons have for the most part been recently driven from them by the allied fleet.

The intercourse between the countries south and north of the Caucasus is carried on by the two roads described under CAUCASUS (vol. ii. col. 391). Almost the only roads available for traffic in the interior are those constructed by the Russian government for military purposes. But great improvement has been made by the government in this respect within the last few years. "The hills and valleys, which were formerly passable only on mules or horses, and in a few parts in waggons drawn by oxen, are now everywhere traversed by tolerable roads; the post service is under the best regulation for travelling, and intercourse is facilitated by a regular postal communication, which has been carried to the most distant communes." (Haxthausen, 'Transcaucasia,' p. 81.)

The climate though very varied is in general genial. The southern latitude of these regions and the high mountains by which they are surrounded and intersected, produce that variety of climate which adapts them to the production of various plants and animals proper both to warm and cold climates. But the heat and the equal temperature as well as the small quantity of rain which falls in Georgia Proper and Armenia and over a considerable portion of the east of the country, render artificial irrigation necessary as well for arable as for meadow land; and where, as below Kakhetia, the canals and sluices have been destroyed or suffered to go to ruin, the country has become a desert.

Of wild animals there are the panther, the jackal, the tiger, the bear, the wolf, &c. Besides the domestic animals common to the northern countries, there is a great number of camels and asses. A great variety of birds is found in these regions, of which the most remarkable is the pheasant, which is indigenous on the banks of the Rion, or Phasis, from which river it has derived its name. The slopes of the mountains are covered with large forests, which produce beech and other timber of the best description.

Agriculture is in a backward state, and the instruments employed are of a very rude kind. Among other efforts which have been made by the Russian government for the improvement of agriculture, has been that of establishing a number of German agricultural colonies, but though the colonists have prospered, the natives have shown little inclination to profit by their superior skill. In Georgia Proper, the mountains of Imiretria and part of Mingrelia, the land is mostly cultivated in detached farms, without intercommunication by direct roads; in other districts there are villages occasionally of considerable size, but generally small. All over the country the larger farm-houses, at least the older ones, are fortified buildings; some are surrounded by walls, and a great many of them have strong and lofty stone towers or keeps. The agricultural products embrace a wide variety. Wheat and barley are grown largely, especially in Georgia Proper. Maize and a remarkable species of millet called 'khomi,' are the chief grains raised in Mingrelia, Imiretria, Gooria, &c. The vine, which is indigenous, grows abundantly in a wild state. The vineyards produce a great variety of grapes, and a large quantity of wine and brandy is made in the country. The wine made by the natives is far from agreeable to European palates, but the German colonists make an excellent wine. Silk is cultivated in several provinces, but this branch of industry is in a very low state, owing to the unskilful preparation of that valuable commodity. Cotton is grown in the southern provinces, but it is of very inferior quality, and insufficient in quantity for the requirements of the small manufactures of the country. It is however said that by an improved management the cotton might be brought to the greatest perfection, and its quantity increased to an unlimited amount. Tobacco is grown in Gooria. In the circle of Syknak sugar and indigo are successfully cultivated. Madder grows spontaneously in several parts of the country, but is cultivated chiefly in the provinces bordering on the Caspian. The inhabitants of the district of Derbend are almost exclusively occupied with the cultivation of it. Rice grows almost everywhere except in the highlands; and saffron is produced in great quantities in the eastern provinces.

It is believed that great mineral wealth is concealed in the mountains, but hitherto nothing of any importance has been made available. The country is very rich in salt. The manufactures are confined to the articles required for home consumption.

This country is the seat of a great variety of tribes, or as they are sometimes termed races, of men differing in speech, habits, and many physical characters, yet bearing a certain general resemblance. From a very early time this appears to have been the case; for a Greek historian, Timosthenes, quoted by Pliny, affirms that 300 dissimilar tribes occupied the country; while Pliny adds that in his time 130 interpreters were required in the market of Dioscurias, a town of Colchis. These numbers are doubtless great exaggerations, but the latest and one of the best-informed travellers in Georgia, Baron Haxthausen, says there exist at the present time more than 70 tribes, each having a distinct dialect; but then some of these languages or dialects is frequently spoken only in a district composed of a few villages. The study of these tribes is of singular interest to the ethnologist, and of scarcely inferior interest to those who are more attracted by moral and antiquarian peculiarities. Here are first the Georgians, the purest members of the Caucasian type, assigned by the older ethnologists as the highest class of the human race; here also

are Circassians, who are found on the south as well as north of the Terek; the Assetes, or Irón, hardly inferior in interest even to the Georgians, and in whose habits and customs recent writers have seemed to find so marked an affinity with those of the ancient Germans; the wide-spread Armenians, from their intellect and energy, as well as from their close bond of nationality and religion, evidently destined to play an important part in the future history of this part of the globe; the Yezidis, with their worship of the evil spirit; the fire-worshippers of Buku; the Tatars, Suanians, Abasians, &c. And each of these and of the remaining tribes has "its historical traditions, its own language and usages, and in many cases its peculiar religious rites; for although in the same village Armenians, Georgians, and Tartars are found living together, they scarcely ever intermix; each people preserving its own religion, customs, dress, manners, tribunals, and police." Moreover, as the writer just quoted (Baron von Haxthausen) elsewhere observes, "All the races who have passed through this country have left memorials behind them: in fact, there exist here monuments of every period of the world's history. We find the dwellings of Troglodytes, entire cities cut out of the rock; the colossal ruins of aqueducts and canals dating from the times of the great Babylonish, Assyrian, and Persian monarchies; with Greek and Roman edifices, and rock-castles of the middle ages."

It would plainly occupy too much space to attempt to give a general account of the Georgian tribes: under the several divisions we may notice some of the more marked features of the principal ones; but here it must suffice to observe that the general characteristics of the Caucasian highlanders, although there are differences among them in origin, language, and many other respects, are a strong love of independence united with predatory habits. The men are generally indolent; much of the most laborious work is devolved on the females. Their chief indulgence is in the possession of costly weapons. Hospitality is a sacred duty among all these highlanders. Whenever a Caucasian has received a person into his house he will protect him against all his enemies, even at the risk of his own life. The law of retaliation is more strictly enforced among the Caucasians than among the Beduin Arabs: to avenge the death of a relation becomes a sacred obligation which descends from father to son, unless the quarrel is settled by a compensation accepted by the aggrieved party. Although many Caucasian tribes have been converted to Mohammedanism, the most part of them may be called idolaters, as they frequently worship some inanimate objects. It is very remarkable that the prophet Elijah is a particular object of adoration among almost all the Caucasian tribes, both Mohammedan and Pagan. There are several caverns in different parts of the Caucasus consecrated to the prophet, where the inhabitants assemble on certain days to offer sacrifices to him. If a person is killed by thunder, the highlanders say that he was killed by the prophet Elijah, and consider it a great blessing for him. The burial of such a person is accompanied with the songs and dances of his relations, who rejoice in his death instead of mourning at the event. They are much attached to their ancient superstitions and traditions, and there is little doubt that in these and many of their peculiar religious observances many vestiges of their primitive faith and habits are retained.

The attempts made by the Russian government to civilise the Caucasian highlanders for a long time proved abortive. Within the last few years however, according to the statement of a somewhat partial authority, more success appears to have attended the efforts of the Russian government to introduce European education. "In Tiflis, Noukka, and Chamaka institutions have been established to promote the cultivation of corn, silk, and wine; and in the government department artisans and labourers are trained for this wide field of agricultural enterprise. Free instruction is provided in the excellent military schools for the sons of the numerous and poor nobles. Every chief town of Georgia contains a school, amply endowed, for the education of the sons of nobles, merchants, and the upper classes of citizens. The gymnasium, and the institute for daughters of men of rank, are supported in a manner corresponding to the education required. The pupils who distinguish themselves at these institutions have free admission to the imperial universities and the polytechnic schools of St. Petersburg and Moscow. The sons of meritorious native inhabitants are received into these schools, and entire corps have been formed, principally of the sons of Mohammedans of rank, who never before passed the limits of their own country. Many of the Asiatics have made remarkable progress in science and civilisation in the schools opened expressly for them at St. Petersburg. . . . The emperor's care is extended likewise to the religious and spiritual wants of the inhabitants. The neglected state of the dominant Greek Church, of the Armenian, the Lutheran (consisting of the colonists from Würtemberg), and the Roman Catholic churches, as well as the two Mohammedan sects, was exchanged for discipline and order, with the aid and co-operation of the respective clergy of these religious bodies. Churches and chapels were restored or rebuilt, whilst education and a provision for the clergy of every faith were secured." (Haxthausen.)

The ecclesiastical affairs of the Armenian Church are directed by their patriarch, who resides at Echmiadzin; and those of the Georgian Church by the catholicos, or metropolitan of Georgia. The religious concerns of the Mohammedans are directed by a mooshted, who is acknowledged by the Russian government as the religious chief of the Mohammedan inhabitants of the country.

The government of these countries is concentrated in the person of the governor-general, who resides at Tiflis, and who is at the same time commander of a considerable military force called the Caucasian corps. The governor-general determines all the civil and military affairs of these provinces, and directs the minor diplomatic relations with the neighbouring countries.

Until within the last few years the several provinces and tribes were governed by certain customary laws, besides which there was a general code for Georgia known as the laws of King Vakhtang, which was recognised and administered by the Russian authorities; but in 1837 a commission was sent to Georgia with instructions to thoroughly examine the country and the condition of its inhabitants, and to draw up a project for its government. The commission completed its labours, and the new civil administration was inaugurated in January, 1841. The main object of this project was to remove the influence of the military power from the civil department, and to separate the political department from that of justice and finance; and in order to assimilate as much as possible the political condition of Transcaucasia to that of the rest of Russia, the laws and institutions in force in that country, the names of the magistrates, their functions and routine of business, were extended to Transcaucasia, with only such modifications as the condition of the country and its inhabitants required.

One of the most important alterations was the abolition of the old oppressive and vexatious system of dues and imposts, and the substitution for it of a new system of taxation, consisting of,—for the country communes, a tithe on the previous valuation of the aggregate landed property of the community, or in its place, where from local circumstances the tithe is inapplicable, a tax on the number of chimneys of from three to five rubles; both these assessments being valid for 15 years: and for the town communes, a fixed tax laid upon every trade, its amount being in proportion to the number of workmen employed; and a tax on commerce proportional in amount to the class of business. There is also a minor tax on each workman, the receipt for which serves for his passport. The reforms were doubtless well-intentioned, but it is to be feared that the very general corruption of the officials has deprived them of pretty nearly all the beneficial effect which they might have produced if properly carried into practice. It is certain that the inhabitants complain bitterly of the oppression they endure, and there is but too much reason to believe that their complaints are well founded.

The Transcaucasian provinces are divided into the Christian and Mohammedan. The Christian comprise the ancient czardoms of Georgia Proper, Imiretia, Gorgia, and the vassal countries Mingrelia, Abasia or Abkhasia, and Ssanetia, in which the Greek religion prevails, together with the Armenian provinces. Among the Mohammedan are classed the khanates of Karabagh, Chamaka, Nonkha, Derbend, Lenkoran, inhabited by Mohammedans of the Sheeah sect, anciently under the dominion of Persia, and the former Turkish pashalics of Akhaliz and Akkaltali, inhabited by Sunnite Mohammedans. Many of the highland tribes are however only nominally vassals of Russia and are in frequent revolt against her.

We proceed to notice the principal provinces:—

Georgia Proper consists of the former kingdoms of Kakhet and Kartli, which were united under the domination of Prince Heraclius II. in the 18th century. It contains, according to official returns, about 26,000 square miles, with a population of about 500,000. The principal town is TIFLIS, the ancient metropolis of Georgia, the chief seat of the commerce of the country, and at present the seat of government for all the Caucasian provinces of Russia. It is situated in 41° 40' N. lat., and 45° 16' E. long., and extends along both banks of the river Kur for about 1½ English mile. A notice of it will be found under its title. The inhabitants of the country parts have the reputation of being exceedingly attached to their religion and country, honest, simple-hearted, laborious, and brave. These honourable qualities are tinged with an admixture of vanity, irascibility, and some other defects common to less civilised nations. The townsmen are indolent, avaricious, and untrustworthy. The language of Georgia bears a great resemblance to the Armenian; but besides the Armenian, which constitutes its basis, the Georgian is full of Greek, Latin, Persian, Arabic, Turkish, and other foreign words. Georgia was converted to Christianity by Armenian missionaries, who introduced into the churches of this country the worship in the Armenian tongue, which however was not understood by the people. In 410 a learned Armenian named Mesrop invented an alphabet for the Georgians, and soon afterwards the Bible and other religious books were translated into the Georgian language. A new and more simple kind of letters, used for ordinary writings, was invented about the 10th century. The new alphabet is called by the Georgians Mkhedrölee, or the Military one, and the old one Khootzoor, or the Ecclesiastical. The population of Georgia is divided into the following classes:—1st, the Dedebuli, or sovereign nobles; 2nd, the Tavadis (literally heads), who constitute the higher nobility; 3rd, the Asnanri, or nobles; 4th, the Mokalak, or citizens (from Kalakh, a town); and 5th, the Glekha, or peasants. The Russian government in taking possession of Georgia gave to the Tavadis the title of princes, and to the Asnanri that of nobles. Both these classes have in Russia the same privileges as the nobles of that country, and have the same right to possess serfs. Before

the Russian dominion was established, the Tavadis were divided into three classes, distinguished by the sum of money paid for the murder of an individual belonging to their body. Thus the sum paid for the assassination of a Tavadi of the first class was double of what was paid for one of the second: and the penalty for the murder of a Tavadi of the second class was double of that for one of the third class. The Asnanri were likewise divided into three classes, which stood in the same relation to each other as those of the Tavadis. The Mokalak, or citizens, live in the towns, chiefly at Tiflis, and are generally engaged in trade. The peasants are serfs in Georgia, and belong either to the crown, the church, or to the princes and nobles.

The other towns of Georgia are, Signakh or Syknaq, the chief place of the district of that name, with about 3000 inhabitants, who are regarded as the bravest of the Georgians; Telav, a well-built town in the Oriental style, with more than 3000 inhabitants; Doochet, a fortified place, with about 1500 inhabitants; Goree, a commercial town, with about 3500 inhabitants; and Elizabethpol, or Ganjah, formerly the capital of a Khanat, and the residence of a vassal prince. Elizabethpol is a large town, which contains even now, in its dilapidated state, above 6000 inhabitants, and several fine mosques and other public buildings. The town is fortified, and has been frequently exposed to the calamities of a siege and capture. All the towns enumerated are capitals of districts, which are called after them. In the vicinity of Goree are the singular ruins of the rock-town of Uplax Zichi, which consist of a number of dwellings which as well as numerous roads are carved out of the solid rock: the works are of unknown antiquity, but the natives generally assign them to Queen Thamara, though another tradition accounts for the name by ascribing the entire work to Uplax, a grandson of Noah. There is another of these troglodyte towns at Vardisic near Zeda Tmogui on the Kur, which, like that of Uplax Zichi, contains what is called a palace, as well as some other caves, evidently of a superior character; and smaller collections of similar caverns are found at two or three other places.

Imiretia, borders north on the main ridge of the Caucasus, and is separated on the east by a branch of it from Georgia Proper; on the south it borders on Akhalzik; and on the west on Mingrelia. Its area is about 5000 square miles; the population about 100,000, consists chiefly of Imiretians and a few Armenians. Being sheltered from the northern winds by the Caucasus, its climate is mild, and in many parts the trees blossom and produce fruit twice a year. The large forests with which the country is overgrown prevent the free circulation of air, and engender a kind of malaria. The soil is exceedingly fertile, and the climate favourable to the cultivation of all the products of warm countries. The Imiretians speak a dialect of the Georgian language, and are politically divided into the same classes as the Georgians. Their manners and customs are also the same. The lower classes are very laborious, and remarkable for their physical strength. Many of them go to Tiflis to gain a livelihood by their labour. Kootais, on the Rion, the metropolis, and the only town of Imiretia, was formerly the residence of its kings, and is now the seat of the provincial government. It is the capital of the district of the same name, as well as that of the whole country. The place is divided into the old and new town, the former of which is of great antiquity, and contains a church built in a splendid style of Byzantine architecture. The new town is constructed in the European manner, and its streets are planted with nut, fig, and other trees. The number of inhabitants, exclusive of the Russian garrison, is about 2500. In the neighbourhood of Kootais is the monastery of Ghelat, which is surrounded by mountains containing sulphur springs, naphtha wells, and also a kind of black amber.

Akhalzik, or Akhaliz.—By the treaty of Adrianople Turkey ceded to Russia a part of the pashalic of Akhalzik which now forms the Russian province of that name. On the north it borders on Gorgia, Imiretia, and Mingrelia; on the east, on Georgia; on the south, on the pashalic of Kars; on the south-west, on the part of Akhalzik which has remained under the Turkish domination. The area is above 4000 square miles; the population is about 70,000, and consists of Armenians, Georgians, Greeks, Kurds, Turks, Jews, and Gipsies. The country is generally hilly, but very fertile, and the climate is healthy. The mountains contain numerous mineral springs, many of which have medicinal properties. The country is divided into ten sandjaks, or districts, some of which are governed by Russian officers, and others by natives called sandjak-begs. The principal town is Akhalzik, the capital of the province, a fortress supposed to have been built by the celebrated Queen Thamara. It contains 14,000 inhabitants.

The *Armenian Provinces* are composed of the khanates of Erivan and Nakhichevan, ceded to Russia by Persia in 1828. The area is about 7000 square miles, a great part of which is hilly, besides the mountain of Ararat. There are however many plains with a very fertile soil. The products of Erivan are the same as those of Georgia, but with the addition of a kind of cochineal, called by the natives red worms. The population is about 140,000, of whom 60,000 are Mohammedans, and the rest Armenians. The Armenians are principally engaged in agriculture and gardening. They grow wheat, barley, maize, millet, and a little flax; and pay considerable attention to the cultivation of the vine. The Tatars inhabit large villages, and are chiefly engaged in breeding horses, cattle, and sheep. Besides the town of ERIVAN the most remarkable places of the province are,

the important fortress of Sardar Abad, and the convent of Echmiadzin, the residence of the Armeniau patriarch and the head-quarters of the Armenian Church.

The province of *Nakhichevan*, which forms the south-eastern part of Russian Armenia, is divided into two districts—Nakhichevan and Ordoobad. The climate of the hilly part of Nakhichevan is healthy, but in the plains it is exceedingly hot and unwholesome. It contains some valuable salt-mines. The town of Nakhichevan, situated in 38° 59' N. lat., was in ancient times one of the most important cities of the Armenian empire, and the Persian historians relate that it then contained 40,000 houses. It has been many times captured and sacked, yet when it was visited by Sir John Chardin, in the 17th century, it contained 2000 houses, besides numerous caravanserais, baths, and other public buildings. Extensive ruins attest the former grandeur of that city, which has now less than 4000 inhabitants, although the circumference of the town is about 4 English miles.

Not far from Nakhichevan is the fortress of Abbasabad, constructed on the left bank of the Araxes by some French engineers in the Persian service.

The district of Ordoobad contains about 6500 inhabitants, of whom two-thirds are Mohammedans, and the rest Armenians. This district being very fertile and enjoying a particularly healthy climate, has been named 'the earthly paradise.' The chief place of the district is Ordoobad, which contains about 600 houses.

A large tract of land extending along the shores of the Caspian Sea, and containing the present provinces of Baku, Derbend, Shirvan (*Chamaka*), Kooba, Sheki, with the peninsula of Apshevan and the island of Salyan, once formed a part of Alhania, which belonged to the powerful monarchy of Armenia till the 6th century, when being conquered by the Sassanide monarch of Persia, Khosroo Nooshirvan, it assumed the name of *Shirvan*. For some time afterwards it had its independent sovereigns, who took the title of shah, but were obliged, towards the end of the 9th century, to acknowledge the supremacy of the kalifs. The rulers of Shirvan long continued powerful, and had frequent wars with Persia. In the beginning of the 15th century Emir Ibrahim of Shirvan conquered Azerbaijan, took Tauris, and even Ispahan, the capital of Persia. But the terrible revolutions which agitated that country towards the end of the 15th century, brought it under the dominion of Persia, and Shirvan never recovered its independence. Divided among several rulers nominated by the shah, it remained under the dominion of Persia until it was gradually invaded and finally subjugated by Russia. Shirvan borders on the province of Kooba on the north; on the east on that of Baku and the Caspian Sea; on the south on a bay of the same sea, and the provinces of Talish and Karabagh; and on the west on the province of Sheki. The surface of the whole province, including the island of Salyan, is about 8000 square miles: the population is about 140,000. It contains many plains, and, except in the mountainous part, is exceedingly fertile.

The bulk of the population of Shirvan consists of the Tatar, or, to speak more correctly, Turkish race, with some admixture of Arabs and Persians. It may be divided into several classes; as the begs and agas, or nobles, the clergy, the maafs, the maaf-nookers, and the peasants. All these distinctions originated under the former native governments, and are rather connived at than maintained by Russia. The peasants are all free, and there are no serfs among the Mohammedans of the Caucasian provinces. Besides the Mohammedans, who form the mass of the population, there are many Armenians, some Jews, and a few Gipsies. The prevalent language of Shirvan is what is there called *Toorkee*, or Turkish, which is also used in Azerbaijan.

The principal products of Shirvan are rice, silk, wine, some cotton, and tobacco. The climate, particularly of that part which is called the Island of Salyan, and which is in fact the delta of the Kur, is so warm and so fertile that it would produce in the greatest abundance many tropical plants, but its natural advantages have hitherto been turned to little account. This island has also rich fisheries. The industry of Shirvan consists chiefly in the manufacture of silken stuffs, which are concentrated in the town of Chamaka and some villages in its vicinity, and which occupy about 700 looms, each requiring the co-operation of four individuals. There are also some cotton manufactures, as well as a few tanneries, in the same place. The district of Laguish, which is situated in the mountains and in a very cold and barren region, is inhabited by a population entirely distinct from that of the rest of Shirvan, who are exclusively employed in the fabrication of arms, copper vessels, and sundry metal wares, from which they derive considerable profit, as is apparent from their condition being superior to that of the rest of the inhabitants of Shirvan. The commerce which is carried on with Persia by the Caspian Sea, and with Astrakhan and Tiflis overland, is not considerable.

The chief place of the province is the town of Old Chamaka, or Shamahkee, which was celebrated for its trade during the middle ages. It continued to be an important city until the beginning of the 18th century, when it was sacked (1717) in the most barbarous manner by the highlanders of Daghestan. Since that time Chamaka has never recovered its ancient splendour, and it has now only about 5000 inhabitants.

The khanat of *Talish*, being situated between 38° 31' and 39° 31' N. lat., is the most southern possession of Russia. On the north it borders on the Steppe of Moghan, which makes part of Shirvan; on the east on the Caspian Sea; and on the south and west it is inclosed by the Persian dominions. This province is entirely mountainous, with the exception of one great plain which runs between the mountains and the sea. Its soil, with few exceptions, is a black loam capable of producing the most luxuriant vegetation. Its situation along the sea-coast affords great facilities to its commerce. It has two ports, or rather roadsteads: Lenkoran, which is so shallow that vessels cannot approach the coast nearer than one mile, and are frequently obliged to anchor even at a greater distance; and Sara, which is the best port in the Caspian Sea. Sara is situated on the north-western side of a little island of the same name, and is about 2½ English miles from the shore. Vessels drawing 14 feet of water can come within 150 fathoms of the coast. It is the usual station of the Russian war flotilla. The industry of the district is in a very low state, and limited to the production of some silk, rice, honey, &c. The manufactures supply a few silk and cotton stuffs. The chief and only town of the province is Lenkoran, a wretched place with about 500 houses.

The province of *Karabagh*, which is separated on the south by the Araxes from the Persian dominions, and inclosed on all other sides by the Russian provinces of Shirvan, Sheki, Elizabethpol, Nakhichevan, and Erivan, has an area of about 7000 square miles, and a population of about 60,000. From its extensive forests it has received the name of Karabagh, which signifies, in the Turko-Tatar language, 'a black garden.' Many parts are covered with hills; the highest, called Saree Dara, is 5000 feet above the level of the Caspian. These hills are generally covered with wood or fine grass, and barren rocks are very rare. There is a vast plain, which has a soil almost universally fertile. The climate in the high parts is rather cold. The plains are hot and unhealthy. Besides the Kur and the Araxes, the province is drained by numerous small rivers and mountain streams, which afford great facilities for irrigation. The products of Karabagh, owing to the hilly character of the country, are those of a moderate rather than a warm climate, and the forest-trees are of the same description as those of Europe, and supply timber of the best quality. The mineral products consist of a small quantity of naphtha, copper, and salt, collected from lakes.

The population of Karabagh is very mixed, but consists principally of Mohammedans, who mostly lead a nomadic life. There are also numerous Armenian families, besides some Nestorian Christians and Gipsies. The Armenians of Karabagh have a nobility, consisting of some families to whom Shah Abbas the Great granted the title of 'melhks,' or princes, which is enjoyed by their descendants. They have a numerous clergy, comprising two archbishops, many bishops, abbots, and several convents, besides the secular clergy. Both clergy and laity are very ignorant, and their religious observances are much relaxed. Many Mohammedan, and even Pagan, rites and customs are intermingled with their religion. The Nestorians have emigrated into Karabagh from Persia since the treaty of Toorkmanchay.

The only town in Karabagh is Shooshee, population about 6000, situated on a high rocky mountain, about 4000 feet above the level of the Caspian. It is fortified by nature and a little by art.

The province of *Sheki* is situated between 40° 10' and 41° 16' N. lat., 45° 56' and 48° 7' E. long. On the north it borders on a part of the Caucasian ridge called Salvat-dagh and Shak-dagh, by which it is separated from several independent tribes of the Lesghis; east on the province of Shirvan, south on that of Karabagh, west on the territory of the sultan of Elisooy and the district of Elizabethpol. Its length from north to south is something more than 70 English miles, and its breadth in the northern part about the same; but it narrows towards the south. The population is about 100,000, of whom about 80,000 are Mohammedans, 17,000 Armenians, and 1000 Jews. The country is generally mountainous, but there are also some level tracts; the climate is temperate, except during the few summer months, when the heat becomes oppressive in the plains. The products consist of different kinds of grain, which are cultivated in the hilly part. Silk is produced to some extent in the plains, where some cotton is also cultivated. Some silks of a good quality are manufactured by the women in several villages. Great flocks of sheep and cattle are reared in the province.

Nookha, the chief place of the province, contains about 6000 inhabitants. It is in a valley, inclosed on all sides by mountains, a circumstance which prevents a free circulation of air, and accounts for the unhealthiness of the place. Sheki, which is now a small village, must have been a considerable place, since it has given its name to the whole province. Fit-dagh, a little fortress situated on a mountain of the same name, has naturally a very strong position, and in former times served as a place of refuge to the khan, when he was defeated by his enemies.

Baku is on the shores of the Caspian Sea, between 48° 9' and 50° 12' E. long. A great part of this province is formed by the peninsula of Apshevan, which juts into the Caspian Sea. The population is about 30,000. The soil is generally poor, and the climate, although hot, is not unhealthy. Among the natural productions of the province, the most remarkable is naphtha or petroleum, which is

found in great quantity close to the shores of the Caspian. It is drawn from wells dug in the ground. There are many salt lakes on the peninsula of Apheron, which furnish a great quantity of salt. The inhabitants are generally Mohammedans; they are more industrious than the other Mohammedans, and are in a comparatively better condition. At Atesch-Dja is a remarkable temple belonging to the sect of the Ghebirs, the Atesch-perust, or Fire-worshippers of the Persians. Here are naphtha springs, from which the gas escaping is conducted through the five hollow pillars of the temple, and issues as a bright flame to the height of 4 feet. Devotees visit this temple from the Panjab and other parts of India, as well as Persia. An active commerce is carried on by Baku on the Caspian Sea. [BAKU.]

The province of *Kooba* borders on that of Baku on the south. The western part of the province is hilly; but there are extensive plains of the most fertile soil along the shores of the Caspian. The climate is rather cold in the mountains, but warm in the plains. The country produces in abundance every kind of corn, with some rice, cotton, silk, and tobacco. Numerous flocks graze on the rich pastures. The population, amounting to about 90,000, are Mohammedans. *Kooba*, the capital, and the only town of the province, contains about 650 wretched houses, built in an irregular manner.

Derbend has already been described. [DERBEND.]

We shall now give a brief sketch of those countries which, having preserved their national rulers, acknowledge the supremacy of Russia, and are dependent on the governor-general of Georgia.

Mingrelia.—This principality, which extends along the banks of the Rion, or Phasis, was well known in antiquity under the name of COLCHIS. Mingrelia lies between 42° and 43° N. lat., 41° 19' and 42° 19' E. long. It borders north on the Caucasian range, west on Abkhasia and the Black Sea, east on Imiretia, and south on Gooria. Its greatest breadth is 80, and its length about 75 English miles. The soil, climate, and productions are similar to those of Imiretia. The population is about 100,000, and consists of Mingrelians and Suanets, with a few Abkhasians, Armenians, and Jews. The Mingrelians speak a dialect of the Georgian language, and profess the Greek religion. They have an archbishop and three bishops, subject to the spiritual supremacy of the catholicos of Georgia. The Suanets, who are a highland tribe professing partly the Mohammedan religion, are divided into three classes—princes, nobles, and peasants. The little town of Sennakh is the chief place of the country, and the residence of the sovereign who is called Dadian. Russia possesses on the coast the fortresses of Redout-Kale and Anaklia.

The principality of *Gooria* has long been governed by its own sovereigns, who are descendants of the Georgian dynasty, and were vassals to the Ottoman Porte from the 16th century until 1810, when its ruler became a vassal of Russia. Gooria lies between 41° 40' and 42° 5' N. lat.; it is bounded N. by Mingrelia, W. by the Black Sea, E. by Imiretia, and S. by the Turkish possessions. The country is very hilly, and covered with large forests, containing excellent timber for ship-building. The soil is the most fertile in Georgia; the products are the same as those of Imiretia and Mingrelia. The population, which consists of Georgians, and some Armenians, is about 40,000, and is divided into classes of princes, nobles, &c. as in Georgia Proper. The religion is Greek, and the church establishment consists of an archbishop and two bishops, under the spiritual superintendence of the catholicos of Georgia. The most important place is the Russian fortress of Poti, at the mouth of the river Rion.

A notice of Daghestan has already been given. [DAGHESTAN.]

We add a few particulars about the petty states which acknowledge the supremacy of Russia, and are considered as part of that empire.

The possessions of the Shamkhal of Tarkoo, which contain about 50,000 inhabitants, extend along the Caspian Sea. The Shamkhal, although a vassal of Russia, governs his possessions with unlimited power. Tarkoo, the capital of the Shamkhal's dominions, situated near the Caspian, contains about 8000 inhabitants. Near it is the fortress Boornaya, which is garrisoned by Russian troops. The supremacy of the Shamkhal is nominally acknowledged by the Leughian tribe of Acoosla, which is a kind of republic composed of about 10,000 families, who are much addicted to predatory habits, and are ready to enter the service of anybody who will pay them. They never attack the Shamkhal, on whose pastures they are permitted to graze their flocks. Having revolted, they were defeated by the Russians in 1819, and since that time have remained tranquil.

The other vassal princes of Russia in those parts are the Ootsey, or prince of the Karakaydans, who rules over a population of about 70,000; and the Cadee of Tabasseran, having a population of about 50,000.

Leughistan, or the country of the Leughis.—The Leughis inhabit a

country situated between Daghestan, Georgia, the Caucasus, and the provinces acquired from Persia. Klaproth is of opinion that the tribe of Avars, which is the most important among the Leughis, is descended from the ancient Avars, who were a branch of the Huns. There is a great admixture amongst the Leughis of Arabian blood, from the colonies which were settled there in the 9th century by the kalifs of Baghdad. Like all the Caucasian tribes, the Leughis are of a savage character, and given to robbery. They are exceedingly brave, and capable of enduring the greatest hardships. They are most accomplished horsemen, but fight equally well on foot; and are always ready to sell their services to the highest bidder. The majority of the Leughian tribes profess the Mohammedan religion of the Sunnite sect.

The highland tribes of the Mitsdjegi, or Kistes, are divided into four branches—1, the Kistes Proper; 2, the Ingooshes; 3, the Karaboolaks; 4, the Chechenzea. The amount of their population is very uncertain.

The Ossetes, who inhabit a large tract of the Caucasus, and constitute a population of about 33,000 families, are entirely distinct in language and physical constitution from the other Caucasian tribes, and appear to bear a remarkable affinity to the ancient Germans. A great part of this nation, occupying the southern slope of the Caucasus, was reduced to subjection by the monarchs of Georgia. They profess the Christian religion of the Greek Church; and although they have preserved their own language they resemble in many respects the inhabitants of Georgia, of which their country now forms a district. The Ossetes who inhabit the northern slope of the Caucasus have preserved their independence, although they are nominally subject to Russia. They were early converted to the Christian religion, which however they have abandoned; and, except some obscure traditions and superstitious observances, and a great veneration for the ruins of ancient churches, they have scarcely any religion whatever. The Ossetes are a laborious and sober people. They are chiefly occupied in hunting and in rearing flocks, the produce of which they exchange for different objects of necessity.

The Abases, or Abkhases, occupy Abasia Proper, which extends from Mingrelia along the shores of the Black Sea, a distance of nearly 70 English miles, and contains a population of about 50,000, under the nominal dominion of a prince who acknowledges the supremacy of Russia. The Abasian population is not however confined to that little district. It is intermingled with the Circassians all over the country that extends along the coast of the Black Sea as far as the banks of the Kooban. Their number may be about 150,000.

The great and little Kabardahs are inhabited by Circassians who have submitted to Russia. Their population is composed of about 15,000 families.

History.—The countries on the eastern shores of the Black Sea appear, from the history of the expedition of the Argonauts, to have been known to the early Greeks, and several Greek colonies, such as Dioscurias and others, were established here at an early epoch. The Romans became acquainted with the Caucasian regions during their wars with Mithridates and with the kings of Armenia. Towards the end of the 14th century they were invaded by Tamerlane, when they suffered even more than under Geugis Khan. After the death of Tamerlane the kings of Georgia expelled the Mohammedans and resumed their power; but the unfortunate division of the country which Alexander I., king of Georgia, made among his three sons in 1424, plunged it again into a miserable condition. From the 16th century the czars of Moscow have endeavoured to establish their influence in the Caucasian regions, and by degrees the chiefs became subject to them. In 1810 the chief, or sovereign, of Imiretia made an unsuccessful attempt to shake off his yoke; but he was obliged to flee to Turkey, and his principality was converted into a province of Russia. Several other petty states fell successively under the same power, whose conquests were extended during her last wars with Persia and Turkey, and confirmed by the treaty of Turkmanchay in 1828 with Persia, and that of Adrianople in 1829 with Turkey. Since that time Russia has been chiefly occupied in endeavouring to subjugate the semi-independent highland tribes, to consolidate her power, and to assimilate the education, laws, and government to that of the rest of the Russian empire. In this the Russian government appeared to be steadily working out its purpose, but the events of the war now in progress has already produced some, and may produce many more, changes in the condition of this country.

(Sir Robert Ker Porter, *Travels in Georgia*; Klaproth, *Reise in den Caucasus und Georgie*; Eichwald, *Reise in den Kaukasus*; Gamba, *Voyage dans la Russie Méridionale*; Baron von Haxthausen, *Transcaucasica, Sketches of the Nations and Races between the Black Sea and the Caspian*, Lond., 1854.)

