



THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES

THE

GOLD FIELDS:

OF

ST. DOMINGO:

WITH

A DESTRIPTION OF THE AGRICULTURAL, COMMERCIAL AND OTHER ADVANTAGES OF DOMINICA.

AND CONTAINING

SOME ACCOUNT OF ITS CLIMATE, SEASONS, SOIL,
MOUNTAINS, AND ITS PRINCIPAL CITIES, RIVERS, BAYS, AND
HARRORS

BY W. S. COURTNEY, ESQ.

NEW-YORK: PUBLISHED BY ANSON P. NORTON.

114 Nassau Street.

1860.

Entered according to the Act of Congress, in the year 1860, by Anson P. Norton, in the Clerk's Office of the District Court of the Southern District of New York.



7901 C83g

CONTENTS.

いることできる

PREFACE	Е,	-	-	-	-	-	-	-	-	5
Introdu	CTOR	y Re	MARKS	,	-	-		•	-	7
Section	I.—	Geogr	raphy	and	Topo	grapl	ıy,	-	-	17
Section	II.—	-Brief	f Hist	ory o	of the	Spar	nish I	art,	-	26
Section	III	_The	Princ	eipal	River	s and	Bay	s,	-	47
Section	IV	—The	Prin	cipal	Cities	s and	Tow	ns,	-	59
Section	V.—	The	Clima	te, Se	asons	and	Temp	eratı	ıre	, 73
Section	VI	-The	Soil.		-	-	-	-	-	88
Section	VII.	—The	e Stap	les, I	Expor	ts and	d Pro	ducts	3,	94
Section	VIII	.—Tl	ie Fru	iits a	nd Ed	libles	,	-	-	104
Section	IX	-The	Gold-	-Field	ls of I	Domii	niea,	-	-	108
SECTION	х.—	-Conc	lusive	Sum	mary.	,	-	-	_	131



PREFACE.

The following pages have been written with a view to interest the American public in the Mineral, Agricultural, Commercial and other resources of Dominica. For the last two years the Author has been familiar with the subject, and from information derived from the early Histories and Colonial accounts, from much and continual converse with gentlemen long residents of the Republic, from visitors and explorers recently returned hence, as well as from the voluminous correspondence of citizens of the United States at present engaged in explorations and mining enterprises there, he now lays the result of his researches and inquiries before the Reader, who will please excuse the manner for the sake of the matter.

W. S. C.

NEW YORK, MARCH, 1860.

SANFORD'S PATENT

Anti-Friction Korse Power,

ESPECIALLY DESIGNED FOR

DRIVING COTTON GINS, MILLS, SAWS, THRESHING MACHINES, ETC.

This valuable invention is a great improvement on the Horse Powers now in use; it is being extensively introduced in many of the States South, and is giving the greatest satisfaction.

PRICE, \$125 00 and \$150 00.

EXCELSIOR

PLANTATION AND FARM MILL.

MADE OF THE BEST FRENCH BURR STONE.

This unique invention is now acknowledged to be the best Mill in the market. It is in use in most of the Southern States, and winning golden opinions; as a Feed Mill, no other will compare with it, and it does as much work as the flat stone mill, with only one-half the power! no gearing is required to set it up, simply a belt connecting with the Horse, Water or Steam Power! it is compact and perfectly simple; no skill is required to keep it in order, and it will last a life time.

Agency, No. 45 Gold-Street, New-York.

Circulars of Horse Power and Mill sent by

J. A. BENNET.

1901 C832

INTRODUCTORY REMARKS.

The main object of the following pages is to disclose to the view of the American reader, a field of vast and useful enterprise, as unsuspected as it is inexhaustible, and which is within the easy reach of the energies of the people of the United States. No selfish, pecuniary or ambitious motive induces the writer to lay this enterprize before the United States public, unless it be the ambition to do the greatest possible good to the greatest possible number of his fellow men.

No thoughtful and well informed person, will at this day deny that an inherent virtue of our people is the unwearied determination with which they apply themselves to exploring new fields of industry, trade, commerce, manufactures, art and skill, and the tenacious perseverance they display in actualizing them when ascertained to be practicable. There is a cause behind this, unceasingly prompting its exercise. There is now, and has been for years past, among the people of the United States, a surplus of mental and physical energy seeking a proper market, outlet, or theatre of activity, and which, in many individual instances, from the mere lack of such a theatre, has reacted and consumed itself, or lapsed into indolence and inactivity. When Texas was first thrown open to this energy it drifted thither until it supplied the demand there. The Mexican war drew off a large mass of it, which, however, soon returned upon us. Then California supplied the demand but for a brief period. Then the settlement of Kansas operated as a safety-valve for it a few years more. The amount of this surplus energy we have now on hand is evinced by the throngs which crowded to Pike's Peak, a year ago, when its captivating promises were first held out. But, as is often the case, in our eager and hasty search after new Eldorados or area, in which to expand this energy, we have incautiously overlooked what the writer is profoundly convinced is far the most feasible, certain, safe and remunerative of any which for years past, has been providentially opened to the industry and skill of our people. It consists in the development of the vast mineral, agricultural, manufacturing and commercial rescources of the Spanish part of the Island of Santo Domingo.

It seems scarcely credible that such vast wealth, and especially mineral wealth, should have lain there so easily attainable, for so many years and almost within the suburbs of our great commercial cities, without exciting at least the cupidity, if not the enterprize of the Yankee. The immense mineral resources and deposits of the place, scarcely tapped or "prospected" by the early Spaniards, although they took thence millions in gold, is now an almost forgotten tradition, and the agricultural capabilities of the island, although proverbial and soliciting the industry of the Anglo Saxon, has excited as little regard. There is perhaps no explored and settled district in the New World, in regard to which such gross ignorance prevails among the masses of our population. They have, it is true, a general idea of the locality; they are somewhat familiar with the name, and have some dim and confused notions touching the government and the people. They have a tradition that the climate is unhealthy; that deadly fevers and various forms of eruptive diseases prevail there to an enormous extent; that the people are semi-barbarous; that the mines have been for ages exhausted, the cities depopulated and in ruins; that there are great devastating earthquakes there, and hurricanes and floods, and fires, crocodiles, serpents, scorpions, noxious insects, robbers, outlaws, brigands, etc., etc. They have little accurate and definite information in regard to all these particulars, in the absence of which their imaginations and the exaggerated accounts of travelers, have peopled the terra incognito with all these frightful and forbidding details. Add to this the notion which has been extensively propagated in the States, that the Government and people are jealous of foreigners, especially from the United States, coming among them; that they have restricted and even prohibited emigration thither; that person and property are there unprotected and insecure; that there are no inducements held out to the people and Capital of the United States to go thither, etc., etc., and the enigma of its teeming savannahs, fertile plains, and mountains, rich in all the valuable minerals, lying waste and undeveloped by Yankee industry, ingenuity and skill, is measurably solved.

But the course of political, social and industrial events in the Spanish part of the Island, for a series of years past, have been tending to the inevitable issue of the introduction of American capital and industry there, and so obvious is now the fact, that it is not only conceded by the authorities and people as unavoidable, but they look forward to the realization of it with the greatest cheer. They now look to the energy and enterprise of the people of the States to redeem their part of the Island from the waste and comparative desolation into which it has fallen, and would not only cordially welcome any effort that would lawfully be made by us in that direction, but would themselves afford every facility to, and cooperate with us in carrying it out.

The fact has become palpable of recent years, that if the colossal resources of the Dominican part of that Island, are ever fully developed, and rendered subservient to the interests of humanity as well as to the certain and abundant opulence, of those who undertake it, it must be done by the Anglo-American. He alone possesses the boldness, the perseverance, the genius and the skill adequate to the accomplishment of such a purpose. His restless, active spirit, and his tena-

cious resolve to succeed when success is possible, peculiarly fit him for the undertaking. He possesses the ways and the means, but hitherto lacking the knowledge of the facts, he has lacked also the will. Besides, he has not to traverse oceans and mountains, and sandy plains, thousands of miles, to reach these new fields of enterprize, but he is almost within hailing distance of them. They are but a few days sail from New York, and he passes them a hundred times during the year, in going to and from California.

It is true that the Government has hitherto been somewhat unstable, and subject to occasional insurrections and revolutions. But ever since the Spaniards of this part of the island, in 1844, freed themselves from the yoke of the Black Emperor of Hayti, Herrard, none of these insurrections and revolutions have been at all destructive of life and property, and what is notorious, the private rights of the resident foreigners there, during these intestinal commotions, unless they have imprudently involved themselves in the political troubles, have ever been sacredly respected. When the people of the United States become truly acquainted with the social and political

cal relations of the people of the Dominican Republic, that information will dissipate all apprehension of insecurity as to their persons and property there. These insurrections and revolutions are almost exclusively confined to the few politicians, government officials and hired soldiers, and scarcely ever involve the masses of the people. The revolutionary changes from one set of political rulers to another, rarely affect the moral, civil and social conditions of the masses. No radical change is wrought by them in the civil status of the citizen, and they do not at all affect the condition of the foreign resident. Throughout them all his property and his person are intact. There is a vast conservative social element among the old Spanish residents of Dominica, which operates as an effectual restraint upon any official or revolutionary spoliation, by either the de facto or de jure authorities. This element of the population is habitually honest, conservative and orderly. The old Spanish blood, proverbially honest and honorable, flows in their veins, rendering the social and civil relations of the people permanent and secure; so that the real Government of Dominica—the common law of the land—is the social habits, the customs and character of this class of her people. There is not an instance on record, or within the recollection of any inhabitant since the Republic began, of a theft or robbery having been committed within the limits of the State; and even in times of revolution, remittances of thousands, contained in saddle-bags, slung over mules, with a single messenger, continue to be sent from Port Platte and Santiago, to Santo Domingo City, without the loss of a single dollar. The writer has been assured by one of these messengers himself that he has often, in passing by the army, camped in the tents with the soldiers, laying his treasures down beside nim on the ground, and that at the inns and peasants' huts he would simply hang his bags over a pin or pole in the public room during night! Travelers, utter strangers to each other, meet at the inns, lay their money, watches and other valuables together on the table, swing their hammocks in the same room, retire, some rising to pursue their different journeys, while others sleep, and a single instance of a larceny under such circumstances of temptation, has never been known. If an article of any value is found, it is

posted and published and religiously kept for months and even years, for the true owner. Recently, a stranger amongst them died at an obscure country village; he was decently interred, and all his personal effects, down to the most trifling article, were sacredly kept, and months afterwards returned to his relations. Covetousness, or the desire to obtain and possess unlawfully the property of others, even to the most insignificant article, never seems to enter their heads. What a commentary these facts are upon our Courts of Sessions here!

In treating more at large upon the subject which it is the design of this little work to unfold and discuss, we will divide the work into sections, indicating under separate headings the specific matters contained in each; and, of course, we shall begin with



SECTION I.

The Geography and Topography of the Island.

Santo Domingo, lying at the entrance of the Gulf of Mexico, is the second in size of the leeward group of the West India islands, and has been aptly denominated the "Queen of the Antilles." It lies between the eighteenth and twentieth parallels of North latitude, and between the third and ninth parallels of longitude, East of the meridian of Washington. The nineteenth parallel of North latitude intersects it through the middle. Its area, including the islands of Tortuga, Gonaives, &c., is about 27,690 square miles, or nearly as large as Scotland, or about as large as North Carolina; its extreme length being about 400 miles and its greatest width about 150 miles. The Eastern part, comprising about three-fifths of the whole island, is occupied by the Dominican republic; and the Western part by the Negro empire of Hayti. It is of

irregular outline, in consequence of being deeply indented by bays and inlets, with corresponding projections, the greatest of which is to be found on the South-Western portion, constituting a promontory or headland about 150 miles long, and from 18 to 40 miles wide. It is intersected from West to East by three lofty and irregular chains of mountains, connected or interlocked at various points by branches or offsets, forming extensive and exceedingly fertile plains or savannahs, of various hights and depths, between them.

The central and principal chain of mountains, and which includes the loftiest peaks, of which the Ciboa Mountains (7,200 feet) are the highest, commences West at Cape St. Nicholas, and, running in an E. S. Easterly direction, terminates at Cape Eugaño, the extreme Eastern point of the island. Nearly parallel with this range, and beginning West, in the neighborhood of Monte Christi, another chain of mountains ranges nearly along the North coast, until it terminates abruptly East, as it approaches the peninsula of Samana. There then follows a low, swampy and marshy district, the hights re-appearing on the other side and terminating at Cape Samana. It is

evident that, in former times, the water ran through here, so that what is now swamp was once a channel or inlet, and what is now the Peninsula of Samana was once an island.

Between these two ranges of mountains, beginning near the town of Santiago, and extending to the Bay of Samana, lies "La Vega Real," or the Royal Valley, 200 miles long, and varying in width from 15 to 30 miles, furnishing extensive pasture lands and fabulously rich savannahs. This magnificent valley, as the sequel will attest, for fertility of soil, salubrity of climate and its exuberant productiveness of all tropical fruits, flowers and vegetation, is, perhaps, not equalled by any in the world.

The third and South range of mountains, commences West at Cape Tiburon, the extreme Western end of the long headland above mentioned, and running East along the whole of said headland until it slopes off and terminates at the river Neiva, about eighty miles west of the ancient city of St. Domingo. From these principal chains of mountains, which observe a general direction from East to West, a number of secondary chains, as before observed, shoot off, which, running in different directions, divide the

land between them into valleys as various in depth as in extent and figure. These valleys are sometimes again divided by hills and tertiary ridges as various as are the valleys they divide. Those of the secondary chains or offsets, which run toward the sea coast, divide the intermediate space into plains of various figure and extent. The Northern and middle chains of mountains rise in hight and magnitude from the East of the island, Westward for about eighty miles, when they preserve about the same hight for about eighty miles further, widening as they approach the West, until, about the middle or two-thirds of the distance East to West, the mountains seem piled upon each other in confused but grand sublimity. Their peaks, some of them sharp, some round, some smoothly conical, and others rough and irregular, pierce the clouds. At a distance they appear crowded and close together, but when explored, extensive valleys, savannahs, and plains separate them in all directions. This is the reason why when approaching the island, especially from the North or West, it appears rugged and mountainous beyond all description, impressing the spectator with the belief that it is a mountainous waste, utterly destitute of any agricultural susceptibilities, while it is, in fact, thickly interspersed with the richest valleys, plains, slopes and savannahs, where the vegetable kingdom perennially reproduces itself in a thousand forms, and in riotous profusion, the mountains themselves being covered with the darkest forests, and the greenest foliage, to their very tops.

These chains of lofty mountains, with their branches and offshoots ramifying in different directions, are, indeed, the causes of the transcendant fertility of the soil. In the early geo-. logical ages of the world, this island was peculiarly volcanic and eruptive, which satisfactorily accounts for its lofty Sierras, its various and immense mineral deposits, and the unparalleled richness of the soil, which, being the debris of these limestone and lava mountains, tempered by the decaying vegetation of centuries, is unsurpassed by any soil in the world. These mountains and upland valleys, plains and savannahs, are also the immense reservoirs of those waters. which, by innumerable limpid springs, cascades, waterfalls, rivulets and rivers, are afterwards borne in every direction. They also break the

violence of the storms, temper the rays of a scorching sun, purify the atmosphere, and in a thousand ways multiply the resources of natural wealth.

From the river Neiva, on the South side of the island, where the Southern range of mountains slopes off and terminates, to the neighborhood of St. Domingo city, the coast, being a formation of minute shells and coral, is high and rocky, with the occasional exceptions of the mouths of some streams, and some inlets and bays. The land rises from this rocky coast to a considerable distance back or northward, when it slopes off toward the base of the central chain of mountains, forming extensive plains and savannahs, divided or intersected by the secondary ranges branching off in a Southern direction from the central chain. The country around about St. Domingo city, extending Eastward from it to the coast, a distance of eighty miles, is comparatively level, but yet sufficiently hilly and undulating to render it picturesque and inviting, and to prevent the soil from either becoming too dry or too wet. district is called "los llaños," (i. e. "the plains") and, although in former times it was occupied by

a number of sugar and tobacco plantations, it is now used almost entirely as cattle ranges. The coast from St. Domingo city Eastward to Cape Eugaño, is flat and marshy. At the Cape, the Eastern terminus of the central range of mountains, it however rises somewhat, but not abruptly, and continues to preserve thence the same characteristics round to the Bay of Samana. The coast around the Peninsula of Samana is somewhat high, and at places abrupt, as is also the case still Westward to Port Platte. Those abrupt points are caused by the terminations of the branch ranges of mountains that run off Northward to the sea-coast.

The mountains of St. Domingo differ almost as much in their geological formation as they do in their locations, and a multitude of other causes and circumstances also render them different from each other. Sometimes those separated by very narrow limits differ so radically as to be truly striking. Some are granite, some limestone, some lava of various strata and kinds, some quartz, and some even of salt. The summits of some of them are of hard sandstone or granite; some are covered with layers of mould of differ-

ent colors and density, sometimes mixed with stones of different degrees of hardness, and more or less calcinable, and some of them of various vitrifiable substances. But general observation has proved that the uniform base of all these mountains is of granite or quartz. There are many mountains of the island which, by the confused mixture of the materials of which they are composed, and by the singular manner in which their layers are placed, incontestibly demonstrate that they have undergone, in some remote period, the most violent telluric agitations. The different inclinations of the strata; their confused and wedged-up position; great openings in the earth; yawning chasms; mountains evidently rent asunder; lofty and sharp ridges, with abrupt terminations and cliffs; enormous masses fallen down, displaced or turned upside down, present this cause to the mind of every one who reflects upon these terrific disturbances.

In this synoptical *resumé* of the geography and topography of the island, the writer has purposely omitted any particular mention of the nature and constitution of the soil, the rivers, bays and inlets, the fauna and flora, and the

mineral deposits, except so far as mention of some of them was necessarily involved in the treatment of the subject under review, intending to treat them more fully under their appropriate sections.

SECTION II.

Brief History of the Spanish part of the Island.

Santo Domingo was discovered by Columbus, on his first voyage to the New World, on the fifth day of December 1492, and from him received the name of Hispaniola (i. e. "Little Spain"). It was afterwards called Santo Domingo (i. e. "Holy Sabbath,") from the town of that name on the South side of the island, which was one of the first settlements made on the island. The name of Hayti was afterwards given to it by the black Emperor Dessalines, after he had expelled the French in 1803, and while the whole island was united under one rule. Hayti is said to be the original name of the island, given to it by the natives, and which signifies "Mountainous." At Isabelica, on the

North coast of the Island, the discoquer founded the first Spanish colony of the New World.

When the island was discovered, it was inhabited by the aboriginal tribes, a weak, simpleminded, hospitable and kind-hearted people, and was divided into five different kingdoms, each of which had its sovereign, who was called a Cacique. The first kingdom was bounded on the North and East by the sea, from Cape Raphael to Isabelica. Its capital was situated where the Spaniards afterwards built the city of Conception de la Vega. The kingdom was called Maqua, and comprised what is now known as the Ciboa country. The second kingdom, called Marien, was bounded on the North and West by the sea: on the East by the kingdom of Magua, and on the South by the kingdoms of Maguana and Zaraqua. Its capital was situated near Cape Francios. The third kingdom was called Hiquey, and was bounded on the East and the South by the sea, from Cape Raphael to the mouth of the Jayna: on the North by the kingdom of Magua, and on the West by the kingdom of Magnana. Its capital was at Higuey, which still preserves its ancient name. The fourth kingdom, called Maguana, was bounded on the South by the sea: on the North by the central range of mountains and the kingdom of Magua, and to the East by the river Jayna, and on the West by the mountains running South-West to the hights of the river Artibonite. Its capital stood where now stands the ancient Spanish town of St. Juan de la Maguana. The fifth kingdom, called Zaraqua, comprehended the long strip of headland which runs out West from the main land on the South-West. Its capital was situated on the spot where the French afterwards built the town of Cul de Sac.

This genial and hospitable though feeble and simple race, lived for ages, perhaps, in quiet ease and plenty on the island, subsisting mainly upon the superabundant spontaneous productions of the country, although cultivating some gardens and fields, until the Spaniards planted colonies among them and subsequently subjugated them to their iron rule, compelling them to toil by thousands in the mines, to satisfy their ferocious cupidity, until, by their long oppression, the entire race, numbering some 900,000 when the island was first discovered, was almost wholly exterminated, the last of them dying out towards the end of the last century. After their exter-

mination, the Spaniards introduced African slavery to cultivate the soil and work the mines. The reader who is interested to pursue the history and cruel fortunes of this oppressed people, may consult Washington Irving's Life of Columbus.

The first Spanish settlement on the island was, as before observed, at Isabelica, on the North coast, which was made by Columbus, in 1493. The next colony was at Santo Domingo city, at the mouth of the Ozama, on the South side of the island, and was made by Bartholomew Columbus, (Christopher's brother,) in 1496, and the little colony at Isabelica, not flourishing, was carried over to St. Domingo city, in 1496. Within a few years afterwards, settlements were also made at Monte Christi, where there was a garrison, at Conception de la Vega Cotuy, at Port Platte, at Santiago, at Samana, at Azua, at Hinche, Banique, at San Juan de Maguana, Higuey, Seybo, Dajabon, Neyba, and at various other places.

The colonists brought with them of course, the Spanish customs, laws and religion, and each colony or settlement was governed by officers, appointed by the Spanish Crown, and in subor-

dination to the sovereignty of the mother country. They were prosperous through a long series of years, and the tide of emigration thither from Spain, during the next sixty years, was immense. They built palatial residences, immense cathedrals and monasteries, instituted colleges and schools of learning, cultivated sugar and tobacco plantations, started some manufactories, built prodigous warehouses, several assay buildings and offices and worked the mines on a grand but unscientific scale. They imported thither horned cattle, sheep, hogs and horses, and eventually reached a degree of civilization and prosperity not surpassed by the mother country. An approximate idea of their thrift may be acquired by the quantity and value of their exports during the prosperous years or generations of their colonial existence. The writer has not now the official statistics before him to refer to, but it is stated in some of the old works on the subject, that the average exports in gold alone to Spain, amounted to five million pésos (dollars) per annum, being only the one-fifth of the yield of the mines, payable to the Spanish Crown. exports in sugar and other productions of the island bore a corresponding relation to the ex

ports in gold. The harbors were filled with shipping, and the trade and commercial marine of the colony corresponded to the prosperity and productiveness of the island.

The French, who had settled a colony at St. Christopher, were driven from thence by the Spaniards in 1630, and established themselves on the West end of the island, which, by a treaty with Spain, in 1773, was guaranteed to France. From this period the French colony prospered, and the Spanish began to decline through a succession of generations subsequently. The Principal Causes of that decline were—

1st. It has been before observed, that the native Indian population enslaved by the Spaniards, was compelled to work in the mines and on the plantations. The Spaniards and planters themselves living in opulence and ease, and being averse to any manual labor, the entire burdens of toil were put upon this defenceless people. The insatiate avarice and cupidity of the Spaniards, obliged these Indians to work by thousands daily in the mines and on the plantations, and not being constitutionally adapted to labor, they became sickly and pined and died in great

numbers. In this overtasked and enfeebled condition, epidemic and contagious diseases, such as small-pox and yellow-fever, broke out among them which carried them off by thousands. It is related that 300,000 died in a single year. This diminished the products of the Island, and seriously affected the immense revenues it had been annually paying to the mother country. The planters and miners, and the agents and superintendents of Spanish capitalists in the old country, became dissatisfied, and many of them abandoned their mines and plantations and returned to Spain.

2d. Just about this time, Mexico, Peru and Brazil were discovered and explored, and the most glowing and captivating accounts went forth of the incalculable wealth in silver and gold of those countries. Under the leadership of bold and unscrupulous adventurers, immense multitudes abandoned their homes and haciendas and flocked thither, hoping there to realize in a short time untold wealth, and to be enabled to again feed the all-devouring appetite for gold, that had been created in old Spain, by their success in St. Domingo. It was necessary in the first place to conquer these countries, and here Cortez and

other Spanish chiefs, organized and recruited their armies for that purpose. Plantations and mines that had been producing immense revenues, were abandoned to waste and desolation, and the population of the sland was reduced, by this cause alone, nearly one-half. Much of the original Spanish population of Mexico and the Spanish main, went thither at this time from St. Domingo.

3d. After the extermination of the native race, the remaining Spaniards introduced African slaves to take their place. With this slave labor, they were able to recover somewhat of their ancient thrift. But soon after, the rising of the slaves in the French Colony against their masters, drew off great numbers of these slaves, who escaped from their proprietors to join the standard of their revolted brethren at the French end of the Island. The army of French slaves was recruited daily by the fugitive slaves from the Spanish Colony. Moreover, when the French Royalist armies would drive the negroes back into the mountains, and cut off their supplies, the latter would enter the Spanish territory, foray upon the haciendas, plunder the inhabitants, carry off their cattle and crops, their arms and amunition, and in fact, supply themselves with everything they needed; and if the Spaniards resisted, as they sometimes did, they ferociously butchered them, burnt down their habitations and cities and destroyed their plantations. One of these negro armies under Dessalines, entered the Spanish territory and laid waste the country for leagues, burning the cities, destroying the plantations, murdering the inhabitants and carrying off with him the remaining slaves of the Spaniards. The Spanish residents, in view of these repeated attrocities, and fearing further for themselves and their property, collected what moveable wealth they had, and left the island, some for Mexico. some for Peru, while many returned to Spain.

These causes with others that might be mentioned, operating through a long period of time, will afford some adequate explanation of the reason why the populous Spanish Colony in the Island of St. Domingo, from a condition of splendid opulence and prosperity, little if any transcended by the most enlightened nations of Europe at that day, declined to a condition of comparative desolation and insignificance, when it threw off entire-

ly the Spanish yoke. This decline is not referable to any inherent natural incapacity in the island itself to abundantly supply all and every want of civilized life. The mountains are stored with wealth, the soil fertile and inexhaustibly productive, the forests abounding in every species of valuable and useful lumber, the climate as healthy and salubrious as any in the world, the rivers capable of being rendered as navigable as the Ohio or the Alabama, the bays and harbors as safe and deep and wide as the bays and harbors of England and Scotland, and everything that beneficent nature can furnish to the genius and hand of civilized man. The Anglo-Saxon race would in a few years transform that gem of the Western seas into an earthly Paradise. The elements of material wealth and prosperity are there in unlimited and inexhaustible abundance. There is no spot on the globe where the labor of the husbandman, the industry of the mechanic, the skill of the artificer, and the capital of the manufacturer would yield greater returns, and we may say, that there is no climate on the face of the earth, where, if these exuberant savannahs, crystal streams and palmy groves were reclaimed to

modern Anglo-American civilization, man could enjoy this preliminary, physical existence of ours better. But this is a digression.

In 1821, the Spanish part of the island declared itself independent of the mother country, and assumed the name of Spanish Hayti; but it was shortly afterwards subjugated by Boyer, the President of the Haytian republic. In 1842 a revolution broke out in the Haytian republic, and Boyer was compelled to flee, and Riviere assumed the Presidency, but in 1844 was overpowered by the Spaniards of the East portion of the island, who, on the 27th day of February 1844, formed themselves into a republic under the name of Dominica, with a constitution based upon that of Venezuela, the main features of which are, that each district or canton chooses electors according to its population, who meet in Preliminary Electoral Convention, and elect for four years, the President and the other administrative officers, and a certain number of councillors, who constitute the Congress. After the constitution was framed, the Provisional Junta elected Pedro Santana the first President. He was followed in 1848, by General Jimenes. Solougue, then President of the Republic of

Hayti, attempted in 1849 to reconguer the territory with an army of 5,000 men, but was signally defeated at Las Carreras, April 21 1849. by General Santana, who had only 400 men under his command. For this great victory, Santana received the title of "Libertador de la Patria," and pecuniary votes from the Congress. Upon his recommendation Señor Buenaventura Baes was soon after elected President. He succeeded in entering into treaties for the recognition of the republic and reciprocal commerce, with Great Britain, France and Denmark. Several other European Powers have since recognized their independence and entered into treaties with them, as have also Venezuela, New Granada, Brazil and Mexico. But the Haytian President Solouque still strenuously refused to recognize their independence, and continued to harrass and menace the republic after his defeat, until in 1854, when a suspension of arms was agreed upon between the republies, to extend for five years. Before, however, the truce had expired, a revolution compelled Solouque to flee, and Geffrard was proclaimed President, who renewed the truce at its expiration in 1859, for

five years longer, at the same time giving the Dominicans every assurance that he would eventually recognize their independence.

The perpetual fears and apprehensions of descents upon and invasions of the Dominican ter ritory by the Haytians, during the long incumbency of Solouque, tended strongly to depress their remaining industrial energies, to restrict their trade and commerce and render it insecure, to diminish their agricultural products, and to exhaust their already depleted treasury, by laying them under the necessity of being constantly prepared with arms, amunition and soldiers to resist the threatened aggressions. The citizens of the republic were often called upon short notice, from their shops and fields, to muster and defend the State from the incursions of the Haytians, real or apprehended, Solouque, on every public occasion, avowing it as his determination to march into the territory and reduce by force, the Dominicans to the Haytian rule.

But this fixed purpose of Solouque to again subjugate the Dominicans, had also a mischievous effect upon the internal political relations and affairs of the republic. Disappointed factions, cliques and parties, either through revenge

or ambition, were often found unscrupulous and treasonable enough to secretly or openly betray the government, or court the influence and power of the black Emperor to overpower their successful opponents, or to reinstate themselves in official dignities. The reader will readily understand how this menacing purpose and attitude of Solouque towards the Dominicans, requiring them to be constantly prepared and incessantly on the alert,-to sustain a hired soldiery and keep up a navy to the extent of their resources, and ever and anon call away from his plantation and his shop the citizen, to do military dutytended to unsettle the internal industrial and mercantile interests of the little republic, to diminish the crops and the exports, to exhaust their pecuniary resources, destroy their financial eredit, to overflow the country with a ruinously depreciated government currency, and precipitate the necessity for enormous impost duties. However, since the disastrous defeat of Solongue at Las Carreras by General Santana, but a small portion of the negro population of Hayti really sympathized with him in this scheme of territorial extension; but, possessing arbitrary and absolute power, the expression of this popular sentiment was suppressed, or hazardous in the extreme. But, upon the accession of Geffrard to the Presidency, the populace demanded pledges from the latter that he would not any longer pursue the policy of his predecessor in this regard. It is now not at all probable that any organized attempt of the Haytians to recover possession of the Dominican territory, will ever again be made. So that from henceforth all disasters and annoyances from this source will terminate.

Pedro Santana, the present President, is a man about sixty years of age, a Spaniard with a trace of the native Indian blood, a native of the island, a man of much integrity of character and beyond all question habitually honest and sincere. He is sagacious, and although without many educational acquirements, yet possessed of strong good sense and a fair share of administrative abilities. He is cool and deliberate at all times, and is very popular with the masses and the old Spanish inhabitants of the island. Although not large, he is of a robust and healthy constitution, and bears a striking resemblance to the late General Taylor. The seat of government is at present at Santo Domingo city, although recently an attempt was made to transfer it permanently to Santiago, on the North side of the island, which attempt occasioned some internal dissentions and a change in the administration. The President is strongly favorable to the United States, as are also, as the writer is informed, a majority of his cabinet and councillors, and have made several attempts to negotiate a treaty of amity and commerce with our government. A few years ago a very favorable treaty, drawn up by General Cazanau, was proffered to the United States by the Dominican republic, but the exchange of ratifications never took place, from the sheer neglect, as the writer is informed, of our government. The Dominican authorities have been willing to concede us a naval station in the important Bay of Samana, but having been treated with such neglect on our part, they seem discouraged. If they were asked or invited, they would, no doubt, renew the offer. It is undeniable that our trade to the island suffers in consequence of not having a mutual understanding with them by treaty, as have England, France, Holland, and other European Powers. We have two Consuls there-Mr. Arthur Lithgow, at Port Platte on the North side of the island, and Mr. Jonathan Elliott, at Santo Domingo city on the South side; these two cities being now the only ports of entry on the island, the exports of all the other seaboard cities having to be brought thither by coasters. The French code of the Restoration has been adopted in legal proceedings and for the maintenance of order.

Before concluding this section and to avoid the multiplicity of headings, it might be as well to advert briefly in this connection to the law regulating the landed titles and estates, and the mining privileges of the Dominican domain. The land, and what grows thereon, as well as all the minerals beneath, belonged originally and by right of eminent domain, to the Spanish Crown, and since the days of the republic to the Dominican government. In the days of the colony, when the Crown conveyed it conveyed only the surface or usufruct of the soil, "as deep as the plough goes," together with all that grew on the surface, reserving the right to all beneath the soil, and the right to take it thence. So that the planters and land-owners who took titles thus had no right to the minerals beneath. These titles or leases, were either in perpetuum or for terms of years, and were of course, assignable

or alienable, and descended lineally or collaterally, as the case might happen. The Crown also granted by deed, mining privileges in perpetuum or for terms, which were also transferable and descended, the Crown reserving one-fifth of the products thereof. The Crown also owned all the navigable and other rivers and streams, and in like manner, made grants of the use of them. In this way, during the course of three or four generations, almost all the lands and mining franchises in the territory were disposed of and held by individuals, families and companies. But during the troubles and decline of the colony, as before stated, thousands abandoned their plantations and claims, the landmarks disappeared and were forgotten, and the grantees and their heirs and representatives died out, or were scattered through the earth. The cattle, hogs and horses, which had been brought to the island, began to run wild in the mountains and on the plains and multiplied in such abundance that, in a few generations they covered the savannahs and filled the forests in immense herds. These herds became afterwards a source of great emolument to the remaining residents, who began to claim them here and there, according to the places where they were accustomed to range. In this way titles to the herds and the cattle-ranges, which is now a part of the common law or custom, took their rise, so that one man or family owns the *privilege* of ranging cattle here, another there, and so forth.

Upon the organization of the republic, the Dominican government assumed the right of eminent domain that formerly attached to the Spanish Crown, adopted the same code of laws, and observed the same customs that obtained under the colonial regimé, ratified the grants that had been made, and passed an edict that all the heirs and descendants of the original proprietors or their grantees, who would return to the island and prove their claims, should be put in possession of and enjoy their inheritance. Under and by virtue of this just and equitable legislation, many returned and claimed their estates and grants. But those who did not return within a limited period were debarred of their right, and the land and franchises reverted to the government. I am informed however indirectly, upon the authority of the President himself,

that the government now owns but little of the land and the mining franchises (except the reservation of one-fifth of the mineral products), and that little confined almost exclusively to the region around the Bay of Samana. Almost all the usufruct of the soil, and the timber that grows upon it, together with the mining franchises, are held by private parties, families and individuals, resident there or elsewhere, and who, scarcely without an exception, are anxious to dispose of them, either in whole or in part, and on favorable terms and conditions to those who would develope their resources. The greatest difficulty in acquiring what we would call a fee simple in a definitely described tract, arises from the mode by which the land is now generally held and conveyed. It is a sort of commonable right that is conveyed. Individuals and families own large districts, the outlines or boundaries of which are not very well defined, and for a certain consideration they convey certain commonable rights to it, the price depending upon the situation and advantages or value of the tract. For instance, for the sum of say twenty-five pésos, you acquire a right to settle on a tract any place where

it is not already occupied, cultivate as much as you require, range your cattle on the whole tract, and cut as much timber as you need for your own use (except mahogany), but not to sell; for fifty pésos, you acquire a right to settle, cultivate, range, and cut and sell all kinds of timber, except mahogany, and for one hundred pésos, you acquire the right to settle, cultivate, range, and also to cut and sell anywhere on the tract, all kinds of timber. The mining privileges are generally held and conveyed in the same way. But this difficulty could be easily obviated by the purchase of the whole tract, as each of the owners are uniformly ready and anxious to sell out part or the whole of his or their tract, with all the commonable franchises, at prices varying from six cents to four shillings per acre, depending upon its location and value. Neither the real or personal property, either of the citizen or foreign resident is taxed, the revenue of the republic being raised exclusively by import and export duties.

SECTION III.

The Principal Rivers and Bays.

The rivers and streams of a country partake of of course, of the topographical and other peculiarities of its surface. In level, low or flat countries, or sandy and rolling districts, the rivers and their branches are few, dull and sluggish, while the drainage of a country so mountainous, abrupt and hilly, so covered with forests and vegetation, and so interspersed everywhere between the hills and mountains with valleys, savannahs and plains of every degree of elevation or depression, as is the Island of St. Domingo, requires innumerable streams, rivers and rivulets. Such we find to be the case in St. Domingo. The branches and the ramifications of the principal rivers are well nigh innumerable. The repeated and heavy rains that fall during the rainy seasons, are lodged in

these prodigious mountains, thick forests and the numberless valleys and basins contained in the interior of the country, between the ranges of mountains, between their branch ranges, and then between the hills. Many of these valleys or basins lie high up in the mountains, at a great elevation above the level of the sea. In fact, some of the mountain tops themselves form plateaus or basins, and the abundant rains being lodged in these numberless reservoirs, give rise to innumerable springs, that gush from the mountain sides, and often pitching and tumbling in cascades and running in rapid rivulets down the mountains, uniting their waters, augment in volume as they cut like so many canals the lower plains and savannahs, in their course to the principal rivers. Some of these mountain streams are deep and rocky, and flow through long and gloomy chasms, while others skim the surface, pitching over the rocks into holes below, then pursuing their course on a level, and again falling over precipices, until they reach the main rivers. They are of great diversity of strength and volume, and before they reach the main rivers, and especially during the dry seasons, are crystalinety pure and clear. Some of them are subject in

the rainy seasons to sudden rises, when they teem down the mountains, and rush over the valleys and plains with great volocity, while others are not so subject to those rises, the rains being collected and preserved in reservoirs and mountain lakes, and only slowly drained off by them. The reader will readily conceive what tremendous power these streams would furnish, when utilized by scientific application to manufacturing interests.

The principal rivers of Dominica are the Monte Christi or Yaque, the Ciboa and the Yuna rivers and their tributaries on the north side of the Island; the head waters of the Artibonite on the west; and the Higuey, the Ozama, the Niazo, Jayna and the Neiva and their tributaries on the south side.

The Yaque rises about the centre of the Island high up in the Ciboa mountains, and first flowing nearly in a northern direction, turns to the West-North-West before it reaches the town of Santiago, and then through its meanderings, preserving the same general course, flows through the rich and lovely valley of the Monte Christi and empties into the bay of that name. It

is fed by a number of tributaries, flowing into it principally from the South, which take their rise in the central range of mountains. It varies much in width at different points, being at its widest point about three hundred yards and its narrowest about fifty. Its bed and shores from its scources four-fifths of the way down, are formed of gravel and boulders large and small; from thence onward to its mouth it assumes a muddy and alluvial bed. It is incumbered at its mouth with sandbars, as are all those rivers, the reason of which is, as will suggest itself to the reflective reader, the great quantity of soil, mud and loam that the rains bring down from the mountains and plains and which the rivers carry down and deposit at their mouths. From its rise down to about fifteen miles below the town of Santiago its current is swift and there are some shoals and rapids, but from thence to its mouth it is navigable in its present condition for boats and barges of light draft which carry down the mahogany and other freight to Monte Christi. It is susceptible of being rendered navigable for steamers of light draft such as run on our Western waters, with very little outlay of labor and capital.

The Ciboa also takes its rise in the Ciboa mountains near the centre of the Island and separated from the waters of the Yaque only by a lofty sierra, but it flows in a contrary direction at first, pursuing a zigzag course among the mountains towards the East, and then bending around in a great semi-circle to the North and West empties into the Yaque about twenty miles above the town of Santiago. It is a rough and rocky stream, at times widening out and flowing smoothly in great curves and then contracting as it passes through narrow dark and rocky defiles between mountains, and often tumbling over falls and forming deep holes below. It is not navigable nor could it be easily made so. The scenery on this river is remarkably picturesque and grand.

The Yuna takes its rise in the northern and middle range of mountains near Santiago, and flows between these ranges, fed by innumerable tributaries from both sides, through the Royal Plains in an East-South-Easterly course, and empties into the magnificent bay of Samana. From its rise to La Vega it is much like the Yaque above Santiago, somewhat swift and en-

cumbered with shoals and rapids; but from La Vega to its mouth it is smooth and placid. The sugar and tobacco planters about La Vega and Cotuy formerly took down their crops on flatboats to Samana on this river, and as may be conceived, it could easily be rendered navigable for steamers of light draft. Its bed and shores down to within about sixty miles of its mouth, are gravelly, when it, like the Yaque, becomes muddy and alluvial.

If the reader will consult the map of the Island and observe these two rivers, the Yaque and the Yuna, both taking their rise in the neighborhood of Santiago, and both flowing in opposite directions between the northern and central chains of mountains, the former flowing West through the rich and fertile valley of Monte Christi, and the latter East through the magnificient and equally rich and fertile valley of La Vega or the Royal Plains, he will be at once struck with the feasibility and cheapness with which a Rail Road could be constructed, almost straight and with easy grades through the whole length of these valleys from Monte Christi to the bay of Samana, which could transport the colossal products of

those valleys if cultivated by scientific industry to these ports.

The Higuey is a stream rising on the highlands of "los llanos" to the east of St. Domingo City, and flowing East-South-East into the Carribbean Sea. Its characteristics partake of the district of country which it drains. Its current from the town of Higuey down is sluggish and slow. Its bed below the town is muddy and it is navigable for flats only a few miles from its mouth.

The Ozama rises in the central chain of mountains, where they begin to fall off in hight and abruptness towards the east end of the Island and flows a little West of South into the Carribbean Sea. It is a fine stream fed by a number of tributaries and navigable for vessels of heavy tonnage some distance up its wide mouth, and for vessels of light draft about fifty miles up. The ancient city of St. Domingo stands near its mouth on the west bank.

The river *Niazo* rises on the South side of the central range of mountains, and, pursuing a somewhat devious course Westward, turns in an immense curve a little East of South, and empties into the Carribbean sea, about twenty miles

West of the mouth of the Ozama. It is not navigable.

The Jayna also rises in the same range, flows South and empties into the sea about forty miles West of St. Domingo city.

The Neiva also rises in the Southern sierras of the central chain, runs nearly West for a distance of about fifty miles, to the ancient town of San Juan de la Maguana; then makes an immense curve to the South and flows into the long Bay of Neiva, about eighty miles West of St. Domingo city. Above San Juan de la Maguana it is rough, rocky and rapid, but below it is tranquil and easy in its current, and navigable for floats from San Juan down. At its mouth it widens out into the bay of the same name, in the apper portion of which are many sandbars and alluvial islands, bearing a strong resemblance, although on a smaller scale, to the mouths of the Mississippi. It is one of the most beautiful and picturesque streams on the island, the scenery, especially on its upper portion, being wonderfully grand and sublime.

The Artibonite, on the West end of the island, has its sources in the lofty central sierras of the

West, and first flowing in a South-Westerly direction, turns to the West and flows through the Haytian territory into the Bay of Gonaives. That portion of it which lies in the Dominican territory is precipitious, rocky and abrupt beyond description, running now in deep and rocky channels through enormous chasms and openings between the mountains, now in wide curves through valleys and along the base of the sierra ranges, until it enters the Haytian dominions. Its scenery, for grandeur and sublimity, is not surpassed by that of any river on the island. It is not navigable in its upper or Dominican part.

In briefly describing the principal bays of Dominica, the first of importance is the far-famed and magnificent Bay of Samana, at the North-Eastern end of the island, at the month of the Yana river. It is about fifty miles from East to West, and varying in width from fifteen to twenty miles, and of a great depth. The entrance to it is at the East end and is about a mile wide, as beyond that there is shoal water to the South side, some little islands and bars appearing above the surface. An old fort, erected long since on the high bluff on the North

side a few miles above its mouth, and before it widens out, commands its entrance. The hills and mountains on either side of the bay rise back from it to a great hight, their sides being covered with beautiful slopes, plateaus and benches. The coasts are here and there indented with minor bays and inlets, the most important of which is at the town of Samana, about twentyfive miles up the Bay on the north side. It is a large land-locked harbor and very deep, as are all the inlets. The view of the bay from either side across to the opposite shores, covered as it is with swarms of ducks and swan and other water-fowl; and the coasts and hills and moun tains, covered with flowers and verdure and fruit is truly beautiful and sublime, equalling, if not surpassing in beauty and magnificence the bay of Naples, and is obviously the key to the Gulf of Mexico. Here all the navies of the world could lay at anchor in safety. There are no heavy swells or high seas or strong winds in it, and the region around the Bay and on the hights is said to be remarkably healthy.

The Bay or Harbor of Port Platte on the North side of the island, is a wide egg-shaped inlet about one mile long and three-quarters wide at its widest part. There is shoal water at its entrance through which there is a channel, rendering it necessary for the vessels entering to have a pilot acquainted with it. The landing at the town of Port Platte is shoal, so that vessels have to anchor out some distance and land their cargoes by means of lighters. All the entries on the north side of the island are made here.

The Bay and Harbor of Monte Christi at the mouth of the Yaque, is second only to the Bay of Samana. The Monte Christi Bay is properly the harbor at the town of that name, the great bay being called the Mancenilla. The Harbor is a wide land-locked inlet or bay within the Mancenilla Bay, with a narrow and good entrance, a group of islands called "The Sisters" coming round and forming a semi-circle within the Mancenilla. It is proverbially healthy, and will some day be an important point of shipment and trade for all the produce of the extensive valley of the Monte Christi.

The principal bays and harbors on the south side of the Dominican part of the island are the Bay of Cavalieros, the Harbor at St. Domingo City, the Bay of Ocoa, overlooking which the town of Azua is situated, and the Bay of Neiva As may be judged from the topographical survey of the island, these bays are generally deep and their coasts high and rocky, with the exception of the Harbor of St. Domingo City at the mouth of the Ozama, which although sufficiently deep is not rocky, nor is the coast for some distance east and west of it.

SECTION IV.

The Principal Cities and Towns.

The cities and towns of Dominica with scarcely a single exception are of ancient date, running back in the history of the island to the earliest days of the Colony, and in fact some of them far beyond them. The earliest histories of the island mention them under different names. Indeed the oldest cities of the New World are to be found here. As is natural, therefore, each has its ancient legends, traditions and associations. From the year 1494 to the latter part of the eighteenth century, perhaps no spot in the world of equal dimensions was every so full of vicissitudes, incidents and epochs, and I may also say so full of revolutionary, insurrectionary and predatory violence and bloodshed. Scenes have been transacted on that island so unspeakably

sanguinary and inhuman, that were they to be perpetrated now in any quarter of the globe, their iniquity would bewilder the head, convulse the conscience and send a thrill of horror to the heart of universal man! But let us hope that the time for these inhumanities has forever past. Let us hope that they were the price paid by Spanish St. Domingo for a long exemption from such troubles and cruelties and that she will now rise from her ruins the "Paradise Regained" of the New World.

In giving the reader some account of the principal cities and towns of the Republic, we must be necessarily brief, as to descend into details would not consist with the plan of this little work. All we design is to give him some general idea of their origin, situation and present condition. We will begin with—

Monte Christi situated on the north side of the Island, at the mouth of the Yaque on the Monte Christi bay, which is within the Mancinilla bay. The Harbor as before observed, is one of the best on the island, deep and affords ample protection to all the vessels entering it. The site of the town is high, dry and exceedingly airy and salubrious. The town overlooks the Monte Christi bay, which

is about fifteen miles long by two wide. The soil is rather poor compared with the valley of the Yaque, being a sandy loam. The principal public building is a Catholic Church recently creeted. It has at present a population of about 500 who almost all follow grazing cattle for a livelihood. The town sprung from a small garrison originally planted there by Columbus.

Guyabin, twenty miles further up the Yaque, is situated on its left bank where the Guyabin river empties into the Yaque, and seventy miles below or to the westward of Santiago. The Monte Christi valley is here about fifteen miles wide. There is also a Catholic Church at this place. The soil and climate are good and the place considered very healthy. The population is about 1500 whose chief business is grazing and raising cattle.

Santiago (St. James) is beautifully located in a savannah on the right bank of the Yaque, commanding a view of the river and part of the Monte Christi valley. It is situated on the highlands at the head of both the Royal Plains and the Monte Christi valley, having partial views of both. The streets are laid out at right angles, with a public square in the centre, upon which the public buildings, namely, the Government House, the Jail, the Cathedral 200 feet long and 60 wide, the ancient Assembly Room and many beautiful private residences front. Its population, numbering at present about 8000, is made up of merchants, planters, mechanics, cattle grazers and others. There are several tanneries and brick yards here. The soil is good and the climate very healthy. It is perhaps one of the finest sites for a city to be found anywhere on the island. The soil is pretty well cultivated about the city and indeed all the way to Moca 15 miles east of it. Santiago was founded as early as the year 1500 by the Hidalgos who followed Columbus to the New World in his third voyage, and has been several times pillaged and burnt. ancient site of the city was several miles from where it now stands. It was sacked and its inhabitants inhumanly massacred by the Haytians under Dessalines on their march against the French who had taken refuge at St. Domingo City, which was the last infliction of the kind it has suffered.

Port Platte is situated on the harbor of that name on the north side of the island, fifty-five miles north of Santiago. It is situated on the

base of the slope of a mountain which rises to a considerable hight right back of the city, and is laid out nearly at right angles. It is now the only port of entry to the Dominican Republic on the north side of the island, which renders it quite a place of trade and commerce. The public buildings are an old Fort at the east side of the entrance to the harbor, the Custom House and offices, a Cathedral and a Methodist Church. The buildings are of wood and brick and it contains many very fine private residences. Its population is now about 4000, chiefly merchants, shippers and planters. It is regarded as very healthy.

Moca, fifteen miles to the eastward of Santiago, is situated on the north side of the Royal Plains which are here about fifteen miles wide. Its site is somewhat elevated, commanding an extensive view of the Plains. Its streets are laid out at right angles and are paved. Its buildings are generally frame and it possesses many fine private residences. It is healthy and the air around it pure and invigorating. Its population numbers about 1500 and is increasing, their chief occupation being grazing cattle.

La Vega is situated on the south-side of the

Royal Plains, twenty miles east of Santiago, on the right bank of the Comou river, fifteen miles above its junction with the Yuna. Its site is somewhat elevated and it is dry and healthy. Its streets though not paved are wide and straight and are laid out at right angles. Its buildings are of brick and wood. Its population at present is about 3000 who chiefly follow grazing eattle for a livelihood, although there are some merchants, traders and mechanics in the place. The ancient city of Conception-de-la-Vega which was on the left bank of the Camou six or eight miles above the present site, was founded by Columbus in 1495, by the erection of a Fort and some out houses there, after his first great battle with the Indians, when it is related that he defeated a hundred thousand of them. A few miles from this spot and standing alone on the plain is the "Santa Sierra," (Holy Mountain) which Columbus with his followers, on their first visit there in 1493, ascended. The view was so magnificent from this mountain, and Columbus and his companions were so charmed with the prospect stretching out in its hallowed and pensive bloom before them as far as they could see, that they erected a cross on this mountain, called it Santa Sierra and the valley "La-Vega-Real" or the Royal Plains. He subsequently built the Fort above mentioned, on the very site where the Cacique of the ancient kingdom of Magna had resided. It became a city of great importance afterwards, in consequence of the rich mines in the neighborhood, but was in 1564 laid in ruins by an earthquake. Some years afterwards it was rebuilt on its present site. The city of La-Vega, from its location, from its proximity to one of the richest mining districts, and many other natural advantages, is destined to become one of the most important towns on the north side of the island.

Pedrigal is a small place fifteen miles from La Vega, East, located on a beautiful site on the borders of a fine valley. The population, numbering about 300, chiefly follow grazing for a living.

Harbocoa, located most beautifully in the mountains at the head of the Yaque, three miles distant from Pedrigal, is also in the rich mining district. It has a population of about 500, chiefly grazers.

Macare is situated on the south side of the Royal Plains near the river Yuna, forty miles east of La-Vega, and where the river crosses the plain to Cotuy. Its site is healthy and beautiful. Its present population numbers about 1500. The banks of the river are low here, and in addition to corn, rice and beans are also cultivated and transported on mules to Santiago market. Some tobacco and sugar is also raised, but the chief vocation of the population is raising cattle and hogs. The soil in the valley here is exceedingly rich. The houses are of brick and wood and the city well laid out.

Cotuy is situated on a little low savannah surrounded with wood. It is situated near the right bank of the Yuna about fifty miles from La-Vega. Its houses, built generally of wood, are small and scattered, which gives if a very irregular appearance. It has a Cathedral and some rather fine private residences, and its population numbers about 300, the breeding of animals and particularly hogs being their almost exclusive occupation. There is some tobacco and a little sugar cultivated in the neighborhood. In consequence of its low situation it is not regarded as very healthy. Cotuy was founded in 1505, and was originally called "The Mines" from the rich gold and other mines in its vicinity, and was once a place of great importance. Like all these ancient towns,

it has undergone many vicissitudes and suffered many disasters.

Samana, a town of about 500 inhabitants, is located on the north side of the bay of that name, about twenty-five miles from its entrance. It is beautifully located on a little bay or harbor of great depth, and about a mile wide. The hills and mountains rise just back of it to a great hight on the peninsula of Samana, which is here about fifteen miles wide. The small vessels and coasters that trade to the Pay of Samana, touch at this place, which makes it a point of considerable importance. Savanna la Mar on the opposite side of the bay is also a place of some importance.

St. Domingo City, the capital of the Dominican Republic, is situated on the south coast, at the mouth of the Ozama river, on its right bank. It is nearly in the form of an oblong square, and inclosed by a wall about one mile on its longest side and about three-quarters on its shortest. These walls were in ancient times flanked with bastions. It is regular and spacious, the streets being nearly at right angles, some paved and others not. It is pretty compactly built up within the walls. The houses are of stone and wood

generally one story in hight, with flat roofs and projecting lattice windows. The chief public buildings are the Cathedral, commenced in 1514 and finished in 1540, the Custom House, the Government Buildings, a College, a Citadel, and a Hospital, and a number of Churches and Chapels. The ashes of Columbus and his brother Bartholomew reposed in the vaults of the Cathedral here for nearly two hundred and fifty years, when, during the French occupancy of the island, they were removed to Havanna. The Convents, of which there were formally seven, are now in ruins, as is also the Jesuits' College, and many other ancient structures. It is the most important commercial port of the Republic. Its population numbers about 10,000. Although it is still a large and magnificent city, yet the visitor as he walks through its streets is forcibly struck with the traces and relies of its ancient splendor. It was founded in 1496 by Bartholomew Columbus, on the left bank of the river. In 1502 it was laid in ruins by a hurricane, when it was rebuilt on its present site and in a few years afterwards advanced so rapidly that it was equal in beauty, refinement and opulence to any

eity of Old Spain. Sir Francis Drake took it by assault, pillaged and nearly destroyed it in 1586. The earthquakes of 1684 and 1691 destroyed most of its magnificent buildings, and the spoliations of the Haytians during their occupancy of it from 1822 to 1824, deprived it of many of its most interesting monuments.

Manuel about fifty miles west of St. Domingo City, is situated on the highlands back some distance from the coast, and is a place of some importance from the fact of more sugar plantations being under cultivation in its neighborhood than other towns on the south coast. Its site is elevated and dry and peculiarly healthy. Its population is about 500, chiefly engaged in sugar manufacturing,

Azua about seventy miles west of St. Domingo City, is also located on the highlands that rise here back from the rocky coast, and about three miles northward from it. Its situation is exceedingly elevated, being in the centre of a high plain or plateau that rises from those elevated plains. It is regularly laid out in broad streets that intersect each other at right angles. Its population numbers about 400, who are princi-

pally engaged in the sngar culture. It is a very ancient city, being founded in 150 t, and soon grew into importance on account of the rich mines in its neighborhood. A Mint and an Assay Office were established here during the prosperous years of the Colony. Here Cortez was a Public Notary. Its ancient Public Buildings are now in ruins. It has been several times sacked and nearly destroyed by French pri ateers and free-booters, and in 1751 was seriously injured by an earthquake. It is remarkably dry and healthy, little or no rain ever falling during the entire year, but instead, heavy dews every night.

San Juan de la Maguana, is situated on the right bank of the river Neiva, where it bends round from the West to the South, and has a most beautiful and picturesque site. Its population at present numbers about 500. It and the region around it are remarkably healthy. It was anciently of great importance, being situated in a rich mining district. It was founded in 1503. It is built upon the site of the Capital of the ancient Indian Kingdom of Maguana, and has been several times overran, pillaged and destroyed.

Banica and Hincha, both situated on the head

waters of the Artibonite, about twenty miles asunder, are of comparatively recent date, when compared with San Juan and Azua. The population of each is about 300.

It must not be supposed that the foregoing comprises all the towns and cities of Dominica. There are a number of others, and some perhaps of equal size and importance to some of those already mentioned, but to advert to them all in this connection would not comport with our present purpose, and besides it would prove of but little interest to the reader. It may be remarked generally however, that they nearly all partake of the same general characteristic of decay and ruin, when compared with their former greatness. The reader can gain no proper idea of their ancient splendor, population and opulence by contemplating them in their present condition. A singular fact however is, that by far the greater part of the present population of Dominiea, resides in these cities and towns, and in their immediate vicinities. The areas for greater or less distances around the towns are somewhat settled and cultivated, more highly about one town and less around another, as it affords greater

or less advantages and the inhabitants are more or less thrifty. The interior of the country is comparatively a desolate waste, the valleys, savannahs and meadows being made use of for grazing purposes by those who live in the cities and towns or their vicinities. The traveler in going over the island, frequently passes through large districts without meeting with any indications of settlement and cultivation. The towns are the nucleii or centers of the population, from whence it shades off, with some more and with some less, until it almost entirely ceases. With the exception of the Monte Christi Valley from Guyabin up to Santiago, and from thence eastward through the Royal Plains to Cotuy, this is pre-eminently the case. In passing over the main roads, the little settlements are often a day's journey apart. It is easily imagined what a population would be required to fill up these interspaces with a thrifty and energetic people. What gave almost all these towns their original importance was their various proximities to the mines. The mines in a measure located and built the cities and gave them their first impetus much as the cities of California and other mining districts owe their population and thrift chiefly to the mining interests in their neighborhood.

SECTION V.

The Climate, Seasons and Temperature.

The peculiar formation of the island, its lofty and irregular ranges of mountains, its high and low valleys and plains, its dense mountain forests and open savannahs, its high and rocky and sometimes low and flat coasts, its deep inlets and bays with their corresponding promontories and projections, besides a multitude of other local circumstances, cause a great diversity of *climate*. This variety is augmented by the winds and breezes which constantly prevail there, varying however in direction and intensity as the seasons vary. In

the absence of any countervailing causes to balance the action and influence of a vertical sun which darts its rays almost perpendicularly on the island during three months of the year, the temperature would be almost insupportable. But by an immutable order, fascinating to the contemplative mind, nature has beneficently established a sort of equilibrium in her forces here, by which the otherwise too seorehing beams of the torrid sun are mollified, toned down and temper ed to a coolness and freshness that is really delightful. The mountains, piereing the upper and cooler strata of the air, break up the uniformity of the aerial currents, and disperse them through the valleys and over the plains. The upper currents and regular trade winds being often thus broken up by the mountains, sweep at times gently and at times strongly, in every direction through the valleys, according to the course in which they are turned by the various and diverse ranges of mountains. During these storms the sea and land breezes are suspended. The abund ant rains and showers and dews which fall, together with the almost equal length of the days and nights, moisten the atmosphere and the soil,

and drench the forests and the vegetation, fitting them to absorb the rays, producing evaporation and cooling and salubrifying the air.

The competent reader, who is somewhat familiar with meteoric phenomena, will readily apprehend that after the mountains, valleys and plains are cooled and refreshed during the night, the coolest temperature being centered in the island and shading off towards the coast, as the sun rises in the morning heating the expanse of the eastern waters, this cool air begins to move in gentle breezes out from the centre of the island to the sea, increasing in intensity until the sun reaches his meridian, a few hours after which it begins to abate and ceases about sunset. This is called the land or day breeze, and agitates and cools the air during the day. Then again soon after sunset, the interior mountains and valleys, retaining their ingathered heat during the day, and the sea cooling, the direction of the breeze is changed and the wind begins to blow back from the sea to the interior valleys and mountains, increasing in intensity until about two or three o'clock in the morning when it abates, and ceases a little before sunrise. This is called the sea or

night breeze, and agitates and cools the air during the night.

The effect of these two breezes forms a very curious contrast. That of the sea coming from the circumference (chiefly however from the East) towards the centre, advances in that general direction, (although its direction is modified somewhat by the courses of the valleys and ridges,) agitating the leaves and murmuring in the forests, while the land breeze has an effect exactly opposite, and the more the situation approximates the centre of the island, the sooner does it manifest itself. It must not however be imagined that the alternation and succession of these breezes are so uniform as not to be affected by other and extraneous causes. At certain times of the year, particularly during the equinoxes and solstices, the sea breeze becomes very strong, sometimes even impetuous, and during several days blows without interval or with very brief cessations, during which the land breeze is not felt at all. At such seasons the sea breeze usually augments at the rising of the sun as if encouraged by his presence. At other times the land-breeze predominates, particularly during the tempestuous

season in April, May and June. As almost all the thunder storms are formed and come from the interior of the island, as soon as they begin to overspread the sky the sea breeze is beaten back and dies away, leaving the empire of the horizon to the land. After the storm is past, the land breeze often continues predominant during the night, when in the morning the sea breeze drives it back to its retreat in the mountains. It is only during those seasons that the reciprocal alternation and combination of these breezes are inverted and they are forced to contend, for it must be well observed, that in the season of excessive heat, when nature most requires its benignant agency, the sea breeze seldom fails, and even when it does so, its absence hastens the return of the equally beneficent land-breeze. "These refreshing and exhibarating breezes," observes an English writer, long a resident in the island, "give to the whole body a halcyon sensation of calm, in which the soul soon participates. In the evening the sea-breeze invites sleep and renders it restorative, and in the morning the landbreeze invigorates the body, strengthens the fibres and even prolongs life."

The seasons of the island are not distinguish-

able into Winter and Summer as they are in the middle and northern zones. Although there are four plainly marked seasons there, corresponding to our four seasons here, they are not discriminated into hot and cold, but into the rainy and dry seasons, of which there are two of each. They are not always uniform either in their commencement, return or duration, some of them varying in this respect several weeks and even a month. Nor indeed are they uniform all over the island, the dry or rainy season commencing or ending at one locality weeks and even months before it commences or ends at another. In fact in some localities the changes of the seasons are not at all observable, as is the case with the high region or table land around about Maniel and Azua on the south side of the island, where it is said to scarcely ever rain, a heavy dew like a drewling shower falling every night. But as a general rule, we may say that the first rainy season begins, especially on the north side of the island, about the first of October, and continues to the latter part of December, during which it rains every day. This is the first season for planting tobacco, corn and other native or indigenous products, as there are two crops of tobacco and sometimes three of corn and sugar cane grown and cut per annum. The first dry season begins about the first of January, and lasts until the last of March, during which little rain falls. This is the season for gathering the first crops. The second and short rainy season begins about the first of April, and lasts until about the second week in June, during which time the second crops are planted. This is the period when thunder-storms most prevail. The second dry season begins about the middle of June and lasts until the close of September, during which time the second crops are harvested.

During the rainy season, rain falls every day and sometimes five or six times a day. From three to five inches of water has fallen during twenty four hours. Sometimes, and particularly during the thunder storm or second rainy season, it will be raining on the mountains and dry on the plains or vice versa, and often raining on one mountain range or in one valley, and clear in another at no great distance. But usually, and particularly during the first rainy season, these daily rains come on and cease about the same hour

every day, so that if a journey is to be made, the people are accustomed to take into account these periodical rains and make their calculations to arrive at their journeys end, or reach such and such a shelter before the rain comes on. If the rain begins earlier in the day it lasts longer; if later it sooner ceases, thus growing less in amount and duration as the dry season approaches, when it ceases. From this cause the rains do not prevent travel and out-door labor as much as one would be apt to expect. Frequently these rains are exceedingly violent and copious, and coming on suddenly, instantly the streets are impassible, in a few moments more the brooks surcharged and overflowing, and in a very short time after the larger streams and rivers foam up and roar and boil as they carry their liquid burdens to the seas and bays. However, the rainy seasons there are not precisely what we would infer from a rainy season in the northern latitudes. There are no long continual and general rains such as we sometimes experience in this latitude, but they consist for the most part of short and frequent, light and heavy showers, which drenching the hills and mountains, run of rapidly, and the

sun coming out immediately afterwards, dries up with its torrid rays the previous shower. The frequent and heavy showers and thunder storms, that fall oftentimes in this latitude during an otherwise bright and sunny April or May day, measurably typify the rainy seasons in St. Doming. These rains, together with the alternating warm and fructifying rays of the sun upon a most genial and fecund soil, bring forward the vegetation, unfold the leaves and flowers and mature the fruits and crops almost like the touch of a magician's wand!

The temperature of the Island differs, though not very sensibly, at different points and localities. It is cooler and drier, of course, on the mountains and upland valleys and plains than on different parts of the coasts and lowlands. Although at Port Platte, the northern Port of Entry, and at Monte Christi, it is almost always cool and pleasant. In the mountains and upland plains and valleys, the thermometer rarely rises above 75° Fahrenheit, while on the plains of Monte Christi and La Vega (the Royal Plains), it rarely rises above 90°. The nights are sometimes cold enough to render a quilt or a blanket

not uncomfortable, and on the highlands and mountains a fire is very often agreeable in the evenings. Not that the cold is ever very con siderable up there, since the range of the ther mometer is from 30° to 75°, but the contras of this temperature with that of the day, produces a sensation to which the terminology of hot and cold is not to be applied as in these latitudes. On the tops of some of the highest mountains, such as the Ciboa, during the season improperly called cold, a still more chilly sensation is felt, and the water has often a thin pellicle of ice on its surface. About St. Domingo City, and on "los llaños," to the East of it, and around the South-east coast, the hottest and most sultry temperature is found. In the region about Maniel and Azua, about sixty miles West of St. Domingo City, which is high rolling and table land, it is perpetually mild and pleasant. It is a fact, I dare say, within the experience of every one who has visited and sojourned on the island any considerable length of time, that they have not, and do not suffer from the heat, even in the hottest seasons, near so much as they have at times in the Summer in the northern and New

England States. There is very little general change of temperature throughout the year, in any part of the island.

From what has been already observed in regard to the climate, seasons and temperature, the reader may legitimately infer the sanitary condition of the island. Notwithstanding the highly exaggerated and almost wholly fallacious belief to the contrary, which unfortunately prevails pretty extensively in the United States, St. Domingo is as healthy as any country in the New World. Some districts are peculiarly healthy and conducive to longevity, among which may be mentioned Monte Christi at the mouth of the Yaque on the Monte Christi Bay, and which is even a place of resort for invalids to reeruit their health: the Monte Christi Valley, Santiago, Moco, La Vega, and the Royal Plains on the North portion of the Island, and San Juan de la Maguana, Manuel, Azua and Banica on the South portion, and even at Port Platte cases of sickness rarely occur, and there is not now a physician in the place, although it numbers over 4,000 inhabitants. The valleys and plains high up in the mountains are unexceptionally and uniformly healthy and salubrious, the air being as fresh and bracing and pure as that of the mountains of Scotland.

It is true that yellow fever is indigenous, and occasionally in some localities prevails much as fever and ague prevails in miasmatic and swampy districts in the States; but it is by no means so fatal as when it breaks out in epidemic forms here. It is regarded there as comparatively harmless, when not the result of gross imprudence. The destruction of the French and Spanish armies there in years or rather ages past, was referable to their ignorance concerning it, the means of avoiding and the mode of treating it, and the culpable imprudence of the troops in feasting indiscriminately and immoderately on the luscious and abundant fruits of the island, and exposing themselves to the chilly night air after the heat and fatigue of the day. It then assumed epidemic forms and carried off thousands in brief periods of time. But of late years no such mortality has been known, and even in former times none to equal its fatality in New York and Philadelphia towards the end of the last century, and at Norfolk, Va., a few years ago.

causes that produce it are now ascertained and fixed almost as accurately as mathematics. For the benefit of those who may hereafter visit the island, I will briefly signalize the chief of those causes here. They are, too much exposure by those predisposed to gastric and biliary difficulties to the meridian sun without an adequate covering to the head, such as an umbrella or broad shady hat, too much exposure by the same class to the night air and cold mists of the coast and lower valleys and plains, and eating too abundantly of the fruits in the afternoon and evening or retiring to rest and sleeping with a stomach loaded with undigested fruits. For these reasons the dispeptic and unacclimated should wear light flannel next the skin, avoid the unshaded heat of the noon and eat no fruits in the afternoon and evening. In case of an attack, the timely administration of anything that will quicken the action of the biliary and gastric processes will speedily carry it off. It is not contagious, and when a case occurs there, it creates no more panic among the neighbors and inhabitants than a case of ordinary bilious fever does here.

Before concluding this section, brief mention

should also be made of the gales and hurricanes on this Island, as also of the earthquakes, The former do not differ essentially from those which blow on the other islands of the An tilles, particularly on the recurrence of the equinoxes and solstices. When they rise it is always towards the close of the day, and when the at mosphere is in a perfect calm, or between sun set and sun rise. They come on with little premonition, and frequently rage violently accompanied with rain, thunder and lightning for five or six hours, when they cease almost as suddenly as they began. The previous calm of the atmosphere, or the lulling and stoppage of the sea and land breezes, are the chief indications of their approach. They are sometimes very destructive to the shipping in the harbors, and are more violent on the South side of the island than on the North. The writer is assured however, that the injury to the shipping interests from this cause, is as much occasioned by the present condition of the harbors, especially on the north side, as from the gales themselves. The vessels entering the harbor at Port Platte cannot, on account of shoal water, get within half a mile of

the shore, and are obliged to anchor out and discharge their cargoes by means of lighters, and when a gale occurs, if its violence is such as to drag them from their anchors, they go ashore and are lost.

Shocks of earthquakes are frequent on the island, indicating the original volcanic character of the place. No serious loss of property and life has occurred from this cause however, for many generations; although the shocks sometimes crack the walls of the buildings and do other immaterial damage to property. For this reason the inhabitants, especially on the North side of the island, when they build of brick or masonry, support their walls by incorporating with them a frame-work of timber. The lightning sometimes strikes the trees and the more elevated buildings as it does in this latitude, but is by no means a serious source of annoyance or danger.

SECTION VI.

The Soil.

It has already been remarked, that the soil of the island of St. Domingo, is constituted of the debris of the mountains and hills and the decayed vegetation of past ages. When we reflect that these prodigious mountains differ remarkably and essentially in their geological constituents and that the contrast is truly striking, sometimes between mountains and even hills in juxtaposition, it will appear how endless would be the task of speaking definitely and particularly of all the various kinds of soil that are to be found on the island. The soil of the valleys, slopes and plains, partaking of the characteristics of the hills and mountains on, beneath, beside and betwixt which they are found, varies as they vary. In one place we find it a rich vegetable mould, in

another a mixture of this mould with pebbles or sand, in another a light, loose spongy loam, in another a loose marl, in another a clayev marl, in another a soil formed of dissolved or pulverized coral and shells, and in another of pure clay or sand. It differs also in color and depth as much as it differs in constitution and quality. Sometimes it is yellow, though still retaining its productive qualities; sometimes it is red, sometimes of a bluish cast, sometimes of a dark, muddy or lava color, but most generally it is black, and its depth varies from ten feet to six inches. In the valleys and slopes, in and on the mountains, and on the savannahs and plains it is generally a rich black loam, varying in depth from three to ten feet. In the lowlands on some of the coasts, it is a salt meadow or quagmire, without any solid bottom except where the roots of the mangrove ramify and interlace so as to retain the vegetable portion of it carried there by the streams, while further back it is formed into a solid earth, bearing abundance of marine-figs, flags, sea-rushes and tall grass. The deepest and richest soil is found in the valleys at and near the mouths of the principal rivers, and is made up

of the alluvial deposits brought down by these streams.

So variable are the nature and characteristics of the soil, that it often radically changes in passing from one side of a valley to another or crossing a stream, and sometimes differs essentially on the opposite banks of the rivers; and often in passing along the road, it will be observed to change in the course of a few rods or even feet. In the larger valleys and plains, especially some distance from the mountains, it is more uniform, and more uniform on the South side of the island than in the interior and on the North side. llaños" to the east of St. Domingo city, and the district of country West of it as far as the river Neiva, are less variable in the nature of their soils than perhaps any other districts of the same extent, "los llaños" being formed of a rich vegetable mould, and the coast region west of St. Domingo city until beyond Azua, being constituted of dissolved coral and crustacea, of which indeed almost all the South side of the island is formed. The soil of Monte Christi valley, the Royal Plains, savannah Eglesia, the valley of Constance, the upper valleys of the Neiva, and

in fact almost all the valleys lying between the centre and North and the centre and South range of mountains and their secondary branches, is formed of a deep and exceedingly rich black loam, sustaining a varied and enormous vegeta-On some of the mountains and their elevated slopes, the soil is good and the grass and other similar undergrowth, grows dense and rank to their very tops, while the elevated portions of others sustain only broken and ragged forests of pitch pine, interspersed with palm and many hard and durable woods. Others of these mountains are again bald and sterile on their tops and around their summits, peering up through the green and heavy foliage below like naked cones.

An analysis of the soil at different places, attests the fact that it is highly impregnated with the minerals peculiar to the mountains, which probably accounts for its variety in color in different localities. It has been found to contain iron, sulphur, copper, antimony, mercury, gold, cobalt, manganese, salt and other minerals, in various combinations and conditions at different points. The gold is of course found pure and

diffused in the soil almost all over the island, in some places being only very slightly traceable and in others palpably so, concerning which we will speak more at length in the sequel. In regard to the productiveness of the soil, but little more may be added to what has already been said. Suffice it to say, that notwithstanding its diversity and variety, it is prolific beyond anything found in the Antilles, and not excelled by that of the Italian peninsula or Sicily, to which it bears a strong resemblance. The sugar-cane grows the year around, and so fast and thick, that by the time the laborer has cut over and exhausted a ten acre field, it is ready again to cut where he began. The corn, which is cultivated now by simply making a hole in the ground and dropping in the seed, with no further care or labor, grows to the height of from eight to fifteen feet, bearing three to five ears to the stalk. The tobacco, which is cultivated with as little scientific skill and care, spreads out the broadest and sappiest leaves found anywhere in the Antilles. Other crops indigenous to the climate grow with equal rapidity and strength. It is said that in some districts the melon, pumpkin and the squash

ripen in six weeks from the seed. The northern cereals (except the corn,) such as the wheat, rye, barley &c., do not grow there, if we except the region around about Azua, where they can be cultivated to advantage, together with many of our northern fruits, such as the apple, peach, cherry and pear.

Such a thing as a fertilizer, an article of such extended traffic and so necessary to the agriculturalist here, is not known or thought of there, nor will it I apprehend ever be required. The fertility and strength of the soil, containing all the elementary constituents required to produce and mature the various vegetable growths, could not be exhausted even without any return to it, for generations. Besides the mountains themselves are the great fertilizers of St Domingo, and will remain so until they are devoured by the tooth of time and sink away in distant ages. The debris of these mountains, together with the decaying vegetation on their sides and tops, brought down by the frequent rains, supply the soil in the valleys, plains and savannahs with abundant and incessant recruits. Its fecundity is a marvel to the husbandman of these latitudes.

SECTION VII.

Staples, Exports and Products.

The chief products of the Dominican part of the island are now, mahogany, tobacco, indigo, sugar, hides, beeswax, cocoa nuts, oranges, lemons, some coffee and some fustic, satin and many other kinds of wood, but the trade in those articles now is not very considerable. There is a vast quantity of mahogany in the territory, standing in groves on the mountains and the plains, and seattered over the valleys and along the rivers and streams. The best mahogany in the West Indies grows on this island. Some of these groves and trees are truly magnificent, growing straight and to a great hight. The best is now found inland, as it has been nearly all already stripped off the coasts and cut away from near the mouths of the principal rivers and around the bays, where it

was more accessible and of easier and cheaper carriage to market. It has been extensively used for building purposes by the inhabitants of the cities, more especially by those of the interior, the lumber now used in the coast cities being carried thither from the States, and exchanged for mahogany and other products. It is only of ate years that the best mahogany cuts have begun to come to this market, as heretofore they were carried to Europe where they brought a better price.

Tobacco is now one of the principal exports. But little of it however finds its way to this market. There is a large quantity of it raised by the residents on the Spanish part of the island, particularly about Santiago, on the Royal Plains and in the neighborhood of Maccrere. It is brought down in bales or ceroons on mules to Port Platte, and shipped on board Dutch bottoms to Holland and the Germanic States. There is also some cultivated about St. Domingo City and around the Bay of Samana. But the cultivation and traffle in this commodity compared with what it might be, were those fertile plains and rich savanahs settled by an industrious and enterprising

people, is scarcely as a drop to the bucket. There are regions in the territory where tobacco can be grown equal to the best Havanna brands, and on account of the fecundity of the soil with even much less labor.

There are still some good sugar plantations in the Dominiean territory, chiefly about St. Domingo City and to the West as far as Azua, but they are "few and far between." The best sugar is now produced in the region about Azua and Manuel, and is of a very superior quality. The country people cultivate and manufacture, each on his own account, and in his small way, pack it in ceroons and earry it down to the coast on mules. Indeed the term "eultivate" is not appropriately used in this connection, as the cane grows up wild and spontaneously from season to season, and from year to year in many places, and the inhabitants have nothing whatever to do but cut and grind it in wooden mills and boil day after day. The writer is not informed that they use the sugar mills in use in other sugar-growing countries in their operations. It is easy to conceive what a source of incalculable wealth the culture of this staple there would become, if in

the hands of a skillful and enterprising popula-

The trade in hides compared with other products is quite important, which arises from the fact that a majority of the population pursue grazing for a livelihood, and the rapidity with which stock increases and the little care required in preserving it. It has been before observed, that after the depopulation of the Colony had commenced from the causes already mentioned, the cattle, hogs, &c., began to run wild on the mountains and plains in countless herds. A prescriptive right to these herds was, in later times acquired by the remaining residents. The herds multiplied far beyond the wants of the few inhabitants, and a trade in hides afterwards springing up and becoming lucrative, the cattle were pursued and slaughtered in great quantities for their hides alone. The vocation was congenial to the inhabitants, requiring little or no labor, and the monotony of their ease being relieved by the excitement of the chase. In time, individuals and families claimed the herds that were accustomed to range in certain valleys, so that the property in these herds and their ranges afterwards became fixed and defined. Owing to the heat and abundant oxygen which the atmosphere contains, the flesh of the beef unless properly salted and cured, keeps but a day or two, so that the inhabitants are obliged to kill almost every other day. This now, keeps up and supplies the traffic. Perhaps three-fifths of the population of the interior country and towns are now engaged in grazing.

Compared also with other staples, the trade in beeswax is considerable. The island producing the greatest quantity and variety of flowering plants, shrubs and trees, bees exist there in incalculable and immense swarms. The prairies of the West in June furnish no parallel to the flowers that perpetually unfold on these mountains, plains and valleys. The writer has been informed by a gentleman who recently visited Dominica, that so strong and rank was the odor from the flowers in passing over the Royal Plains, that it so jaded his olfactories as to cause his head to ache, and almost made him sick. The swarms build in the rocks, in the trees and logs, under the branches and even on the ground. Those who pursue this branch of business, collect the

deposits in tubs, wash out the honey in the brooks by squeezing the combs, and afterwards melt the wax into cakes or run it into vessels preparatory to carrying it to market. Those engaged in this vocation are chiefly women. The trade in this article however, bears no proportion to its production and abundance. They have recently begun to save some of the honey, and small quantities of it has found its way to this market. The reason why it has not been hitherto saved, is owing to the great cost of vessels to collect it in, as wooden-ware of all kinds has to be taken there from the States.

There are some exports of cocoa-nuts, oranges, lemons, limes and other fruit, all of which are ooth cultivated and grow wild in vast abundance on the island, and are not excelled by any in the Antilles, or on the Spanish main. The labor necessary to collect them, prepare them for shipment, and carry them to the ports is not there. From this cause indeed, the whole Spanish end of the island languishes in sloth, and its transcendant wealth goes year after year incontinently to waste.

There is some coffee, which grows wild in

abundance through the island and on the moun tains, collected and shipped. After the abandonment of the coffee plantations, the trees continued to grow thick on them and finally spread into the woods and on to the mountains, where they now grow wild in great quantities. Lacking the proper culture its quality is not the best, but the climate and soil is capable of producing it unexcelled by any in Porto Rico or any of the West Indies or Brazil. The writer is informed however, that there are a few coffee plantations under culture about St. Domingo City. The labor of cultivating coffee and sugar in Dominica, with all the modern appliances of civilization, would be absolutely insignificant, compared with the rich returns it would bring the planter.

In addition to the staples and exports above mentioned, the island produces a vast number of other valuable commodities, among which we may make notable mention of its lumber and different varieties of valuable wood other than mahogany. The pitch or yellow pine grows in vast abundance at the head of the streams and on the mountains, dark and apparently impenetrable forests of which cover their sides and tops. This

lumber, with very little expenditure of labor and eapital, could be brought down the streams during their rises almost any month in the year, to the principal cities. When the reader is made acquainted with the stubborn fact, that all the lumber used on the North side of the island except the little mahogany that is sawed there and at and about St. Domingo City, is carried there at great eost from the States, and sold at a price fabulous to our lumber dealers here, he will measurably comprehend the undeveloped resources of Dominica in that interest alone. Pine lumber sells at Port Platte for \$60 per thousand feet. It has then to be carried back to Santiago, Moco and La Vega on mules, where it sells for \$100 per thousand, while those mountains and the banks of their streams stand thickly elothed with it, in its majestic and sublime abundance! There is but one saw-mill on the Spanish end of the island near St. Domingo City, and that not now in operation. They saw by hand a little mahogany at a cost of 80 eents a cut 10 feet long, and when an individual wishes to build a house at Santiago, Moco, La Vega, Cotuy or any of the interior towns, he has to begin to collect his lumber a year before hand!

It is not that machinery cannot be transported to any of these towns. There is a good harbor and landing at Monte Christi, and nearly a level road up the valley to Santiago, and good roads in the dry seasons for heavy carriage thence to the other interior towns. Nor is it because there is no market there for the lumber, not yet because the inhabitants of these towns lack the capital necessary to start and complete such an enterprise, for many of them are vastly wealthy, but because of the sheer lack of enterprize, energy and skill in the people. They live in the same old way, selling their merchandize from their century-old shops, trafficking in hides, mahogany cuts, tobacco and wax, and hoarding their doubloons from generation to generation, without ever venturing a "pésos" in any nseful and nesessary enterprise of the kind. A house-builder of Santiago recently informed the writer that a year ago he erected a frame and brick house for a merchant there, 90 feet long by 40 wide, two stories high, with porticos and verandah and finished inside and out in the ordinary plain style, costing him \$25,000! consequence of this scarcity and cost of lumber, those of smaller means build their floors of brick and flags and roof their houses with the same material or with the leaf of the palm tree. Besides the pine, there is the oak, the fustic and satin woods, compache and an indefinite variety of others. Some of the hardest and most durable vegetable fibre in the world is to be found on the island.

SECTION VIII.

The Fruits and Edibles.

To describe all the fruits and edibles of Dominica would encumber this work and carry its volume much beyond what was originally designed. It is familiar knowledge to the reader that the fruits and edibles of the tropics far transcend, both in variety, quality and abundance those of the temperate zones. But nowhere within the tropics, is this fruit and succulent bearing capacity found in greater perfection than in the island of St. Domingo. There are fruits and roots there of delicious and valuable varieties of which few of the North ever heard. We must however, content ourself with alluding only to a few of the more important and valuable.

The *Plantain* is the principal bread of the inhabitants, and is used and grown in all parts of

the island. It is planted from the root or shoot. grows to the height of from S to 12 feet, and matures its fruit in nine months from the time of transplanting. It then yields the year round from new shoots thrown out, and produces continually for fifteen or twenty years without transplanting. It is so prolific, that one acre will abundantly supply a large family with bread. It will grow without any cultivation save transplanting, but will produce more abundantly when cultivated. This fruit grows from S to 14 inches in length and 2 in diameter, and in bunches as large as a man can carry. The fruit is used when green as we use green apples or potatoes, and is prepared in various ways, but chiefly by boiling and baking. When ripe it is very luscious and is used for pies, desert and puddings.

The Banana, another fruit of the same species and resembling it in appearance, is cultivated in the same way by transplantation, matures in about the same time and produces through the year and for fifteen or twenty years without transplanting. It is only used however when ripe, when it is very delicious, nutrimental and wholesome.

The Mango grows on a beautiful large tree in great abundance on the mountains and plains through the island, producing its fruit somewhat like the apple, and in equal abundance. It resembles our peach, but is much larger and is regarded by the inhabitants as the most delicious fruit of the island. It produces the year round.

The Alligator Pear is indigenous and grows in great profusion throughout the island. The tree that yields it resembles our pear tree as does also the fruit in shape, only about four times as large. It is eaten when ripe and also with meats and is often used on the plantains instead of butter, and produces the year round.

In addition to these might be mentioned the Orange, Lemon, Lime, Fig, Pine-Apple, Saffadilla, Highmeat, Mamma-Apple, Sugar-Apple, Custard-Apple, Cocoa-nut, Sour-sop, Plum, Grape and Guava, all of which grow, some of them in extensive groves, both cultivated and wild throughout the island.

Touching the edibles the most important is the Yam, of which there are several varieties. It is abundant throughout the island, and is used there instead of our potato, growing, however, much

larger and sometimes to the weight of 50 lbs. It is cooked much as our potatoe is, and keeps sweet several days. This root is one of the most valuable as food to the inhabitants.

The Palm is also a valuable product of the island, growing up with a straight trunk from 20 to 50 feet high, then shading out its broad leaves all around like a vast umbrella, from the centre of which shoots up a straight stalk which bears the fruit. The fruit is used for food for the hogs and cattle, and the inside of the soft trunk is cooked like our cabbage which it resembles.

The Sweet-Potatoe is a native of the island and is spontaneously produced in prodigious quantities. It grows wild in the woods and in the valleys, to the weight of 10 lbs. It is not however, as extensively used as the Yam. Besides these, the Carrot, the Beet, the Raddish and the Onion grow there in great abundance and also to a prodigious size, as do also the Melon, the Citron, the Cantaloupe, the Pumpkin, the Cabbage and the Squash.

SECTION IX.

The Gold Fields of Dominica.

Since the discovery of the island, the fact of its being a gold-bearing district has been undisputed. Almost the first thing with which Columbus was presented by the native Chiefs when he landed on the island, was their rudely made trinkets and images in gold. When asked where the gold was obtained, they pointed inland to the mountains. Under their direction, search was made in the streams and mountains with but lit tle success at first, because they expected, as almost all gold-seekers at first do, to find it in such abundance that it would require little or no labor to gather it, but subsequently with more success, when they ascertained better the nature of its deposits. Specimens of the gold thus gathered and obtained from the natives, were

carried back by Columbus to Spain on his return, with the most rapturous accounts of the country and its auriferous abundance. Spanish cupidity and adventure were thus excited, and first hun dreds and then thousands crossed over, as well to settle in the new Elysium, as to enrich themselves by the gold.

Some little idea may be formed of this stampede by the numbers that crowded to California, when its gold resources and abundance were first opened up. But the Spanish adventurer had another excitement besides that of gold-hunting, in the new and surpassingly beautiful country, abounding in all that could charm the senses, sate the appetites and supply every material want. Still further returns of gold, and further accounts of the country fed the excitement, and brought over still other thousands and tens of thousands to live in ease and affluence, for they had by this time enslaved the native races and compelled them to seek and gather the gold in the streams and the mountains. These causes alone are sufficient to explain why the island was so soon colonized and settled and reached such a degree of populousness and prosperity, long before the Puritans landed at Plymouth, before Manhattan Island was settled or Jamestown built. But unlike the latter colonies, the former was founded in rapacity, avarice and bloodshed.

Auriferous science was very little understood at that time, as it indeed was for over a century afterwards. They were ufterly ignorant of the many and varied useful and skillful appliances we possess now in the mining art, and knew very little about the source and nature of auriferous deposits. The writer is unable to find in any history or account of that period, and the mining interests of the Colony, that they worked the gold from the quartz or even traced it there, while the base of almost all the mountains of St. Domingo is formed of sand-stone and gold-bearing quartz. The Spaniards themselves did little or no work. They put these burdens on the inoffensive race they found there. They at first taxed each native a "hawks-bell" full of gold each moon; then two "hawks-bells," then three, until finally they compelled them to work exclusively in seeking and gathering gold.

Some of the accounts describe the mode by which

these poor natives gathered full their "hawksbells." They laid smooth flat stones in sloping positions in the brooks, the sand washing over which left the golden particles deposited below and beneath: they dug holes in the streams into which the gold was washed: they collected it in their hands and in shells: they dived into the deep holes in the streams and scraped up the sand, and afterwards washed out the partieles, and in a variety of other ways collected their tax. After they failed to pay their tax in this way, mines were opened under the direction of the Spaniards at the bases of the mountains, and they dug down to the bed rock and collected the deposits there, and washed them out in the nearest brooks. The writer is unable to find that they worked by "flumes" or "long-toms," or by daming or turning the streams, although there is some mention made of their dragging or dredging the deep holes in the mountain streams for nuggets. They also turned up the soil in the valleys and on the plains to get at the deposits beneath. The traces of these mining operations are there yet, and it is wonderful the prodigious amount of labor they performed.

In some of the mining districts, veins of gold were discovered, uncovered and followed up until they penetrated the mountain so deeply, that the labor was too immense for their unscientific heads and unskillful hands. Many of these long trenches are still visible, and there are traces where they have pursued the cleft or fissure deposits by quarrying in the sides of the mountains. They worked these natives thus nearly a whole century, during which time the Colony produced immense revenues to the mother country. Mints and Assay offices, were established at St. Domingo City, La Vega and Azua, and about five million dollars were shipped annually to Spain, being the one-fifth of the products of the mines reserved to the Spanish Crown. A writer however observes, that it could not have been over onetenth, as vast amounts never found its way to the registery offices, being concealed and kept back by the proprietors to such an extent, as to necessitate a Royal decree making it highly penal to render false returns. When the natives began to die out, the revenue began to diminish, and the mining interests to languish, when they finally fell into comparative neglect. From all the writer

can gather, he is satisfied it was not the exhaustion of the mines that caused this decrease and neglect, but the gradual extermination of the natives and their final fatal mortality caused by small-pox and yellow fever.

The natives, under the overseership of their Spanish taskmasters, first explored the beds and shores of the brooks and streams and washed and gathered the gold thence, long before they betook themselves to turning up the soil in their search, and before working in the mountains. The deposits of unrecorded ages, washed down from the mountains and worn off from the quartz, had settled in those innumerable brooks and streams as well as beneath the soil when the valleys and plains were in course of formation. The early writers uniformly describe these brooks and streams as "washing down sands of gold." After it began in time to grow scarce in the brooks and streams, then, as before stated, they commenced to turn the soil at the base of the mountains and in the ancient beds or places where the streams ran in former times. Recent explorations there, however, attest the fact, that they did not exhaust the deep holes and rocky chasms in the beds of the streams, because in many places in these holes and chasms, especially along the Ciboa river, the gold is yet found in considerable quantities, by sinking deeply into their sandy or gravelly bottoms and bringing up the deposits. This may however have been the accumulations of subsequent ages. There are no indications of their tunnelling into the mountains and working there the veins or the quartz, except as before observed.

After the native labor had failed, attempts were made to work the mines by negro slaves, and through their agency, they were resuscitated and worked for sometime longer, but never with the same results. The slave-revolts in the French Colony again depleted the mines of this labor, and the discovery of Mexico and Peru, with the alluring accounts of their wealth, caused a stampede thither, in a short time after which the mines were abandoned altogether and have not since been opened or worked.

It is impossible at this distant date to fix with any degree of accuracy, the boundaries of the aucient mining districts of St. Domingo. The richest appear to have been in the Ciboa group of mountains in the central range and a little to

the northward of the centre of the island, although some mines equally rich were found in other districts. The Ciboa mountains are the loftiest, and perhaps this may explain the reason why their deposits, by washing and wearing away. abounded more in gold than some others. Otherwise it is difficult to conceive why other mountains and districts, formed in the same general way and of the same geological constitutents were not equally prolific in this mineral. But the Ciboa group occupying the foreground in almost all the descriptions of the writers on the subject we have been able to obtain, we will begin with that district. An English writer about the close of the last century, observes of the Ciboa region that

"These mountains contain besides an infinite number of mines of all sorts. Every one is acquainted with the high reputation of the mountains of Ciboa, in the bowels of which Spanish avarice has buried so many thousand Indians, condemned to toil in search of that gold which has covered the earth with every species of crime."

Again he remarks

"One thing is certain, the word Ciboa awakens the remembrance of very rich mines, celebrated every since the discovery of America, by their abundant produce and the purity of their gold. Hence were dug the first lumps of this metal presented by Columbus to Ferdinand and Isabella, who were then far from suspecting how many tears and how much blood this gold would cause to be shed. These mines are generally in that part of the group lying to the north and near a river called by some the Janico and by others Ciboa. During the first years, it was suffleient to dig there to draw thence immense pro-"The neighborhood of Ciboa also has gold mines and Valverde says 'the mountains dividing the site of Constance are known to be altogether mines so abundant in gold, that in digging the earth it runs in sand and grains in every direction of the waters.' This is not the only metal furnished by the mountains of Ciboa. I have already mentioned other mines which are found in the prolongation of these mountains, in the territory of Cotuy, and in this the Canton of Harabacoa has a mine of silver which was worked formerly."

In speaking of the territories about La Vega and Cotuy, into which the "prolongations" of the Ciboa group penetrate, the writer further remarks.

"The name of 'Mines' was first given to it (Cotuy) because there were mines in its territory and many gold ones were working at the time. (1505). But from the year 1520 workmen began to be wanted here as at the mines of Bonnaventura. In the mountains of Maymon there is a very abundant copper mine. In this mine there is an excellent lapis lazuli, and a sort of chalk which some painters think preferable to bole for gilding. Two mines of load-stone are found adjoing the last mentioned one. Not far from this is a mountain called the 'Emerald,' because it contains of that precious stone. In the neighborhood there is also pure iron of the very best quality."

"Eight years after it was founded (i. e. in 1505) it was already a city of importance. Sometimes during the year there were two hundred and fifty thousand crowns minted here. This gold was part of the products of the mines of Ciboa, at a time when metallurgy was in no great

perfection and consequently when the loss was excessive. The persons concerned in the operation, hid a great deal of the gold and did not count that in grains and scales, but only that in lump."

This writer in describing the territory above Santiago, into which also the Ciboa mountains penetrate, observes further.

"The territory of Santiago is very fertile in mines. In the first place the Green river has grains of gold among its sands, and there was on one side of this river a mine of gold, the principal vein of which was three inches in circumference of gold, very pure and unmixed with other matter. It was closed up by order of the President, because the Alcade of La Vega wanted to seize upon the mines that were working along the Green river. Much superficial gold was formerly collected on the hights near this river also, and which came from very abundant mines never yet opened. Originally the town of Santiago was peopled almost altogether with goldsmiths, which circumstance alone is sufficient to show the abundance of the mines."

"The sand of the Yaque is also mixed with

gold, and according to Mr. Buttet, there was found in 1708 a lump of nine ounces. Almost all the rivers that fall in from both banks of the Yaque, wash down gold from the mountains, which are as yet hardly known. Twelve leagues to the south of Santiago at Bishops-stream and that of the stones, there are many mines of silver. To the West, in the counties called the Tunci, the abundance of such mines caused these cantons to be looked upon as a second Potosi. Lastly at Yasica, twelve leagues from Santiago, on the bank of the river, there is a little hillock abounding in silver. There is copper also in the territory of Santiago, and mercury at the head of the river Yaque."

"The canton of Port-de-Platte greatly abounds in mines of gold, silver and copper. There are also mines of plaster."

But the riches of the mines opened in the southern and western portion of the island were, if at all, surpassed only by those of the Ciboa region. The same writer in speaking of the region around St. Thomas and San Juan-de-la-Maguana to the South-West of the Ciboa country remarks.

"The country we are at present describing has in divers places mines of different sorts. In the district of Guaba there are some very abundant: among others the Gilded Hill, which Valverde says may be called the 'Golden Hill.' Many persons he adds, have there enriched themselves clandestinely by the labor of their own hands and those of a single negro; for, fearing to take more assistance for fear of a discovery, they acquired fortunes without the necessary talents or knowledge—a strong proof of the abundance of the metal."

So again in speaking of the territories of Azua and Manuel on the South side of the island he says:

"Azua contains also many gold mines which were formerly worked, but are long since abandoned."

"In the region above Manuel everything seems to be peak mines of gold, and gold sand is seen in the waters of the streams."

"Between the rivers Nizoa and Jayna (on the South side of the island, West of St. Domingo City) lies an extensive and fertile plain, which was originally a most abundant scource of wealth

to the colonies. The quantity of gold that was dug from its cavities, with its sugar, cocoa and indigo, paid duties to a greater amount than that now paid by all the Spanish part of the island put together. On the banks of the Jayna near Guayabel there is a rich silver mine, which they had begun to work, but which was given up in consequence of eighteen negroes having been killed by the falling in of the earth. There is another mine of the same metal near St. Michael. It was on the river Jayna near Bonnaventura that was found the famous lump of gold, spoken of by the Spanish writers, and especially Oviedo, who says that it weighed three thousand six hundred Spanish dollars; without mentioning many others which were also of a remarkable size. There were annually run at Ponnaventura as many as two hundred and thirty thousand dollars.

"A number of poor inhabitants there, now find employment in washing gold, the standard of which is about twenty-three carets and a half. Valverde even says on this subject that in 1764, it was asked at the central-office whence came the gold of the buckles that were brought thither to be weighed, and that it was asserted that none

had ever been seen so fine. This gold he adds is not found on the surface, but is borne along by the water in grains or lumps in detaching it from the great mass which was first worked, and the excavations of which are yet visible "

Without multiplying extracts on the subject from this and other writers who have treated of it, we will conclude with the following

"The Indians now became the victims of the most atrocious avarice, fled to the continent or some propitious island; others died of the smallpox, a distemper unknown among them since the discovery, and which destroyed more than three hundred thousand in a very little time. Ac customed to an easy, free and independent life, and being all at once reduced to servitude, and that of the most rigorous and laborious sort, many other disorders, equally destructive made their appearance among them, and completed the extirpation of this race of men, whose only crime was possessing a land, the bowels of which contained treasures that they alone had the happiness to despise! With the extinction of the Indians came that of the products of the mines; the fifth of which had yielded to the public treasure as much as six millions annually."

If we carefully examine all the histories now extant and accessible of the colony during its prosperous mining years, and attentively consider the geological and topographical characteristics of the island, we cannot fail to be duly impressed with the fact, that the island of St. Domingo is one immense gold field from one extremity to the other. There is searcely a district of any extent or a mountain of any magnitude where gold has not been and is not now found, and so far from its auriferous resources having been exhausted by the early Spaniards, they searcely began to be developed. It is somewhat difficult to account for the manner in which the idea of their exhaustion got current to such a degree with modern civilized Europe and America. None of the accounts that the writer has been enabled to consult mention their exhaustion, but uniformly ascribe their abandonment to the extinction of the native labor, the subsequent failure to work them by negro slaves, the stampede of the population to new Eldorados, the incessant and insensate pillages and spoliations carried on between the Spanish and French colonists, incited and embittered by unmitigated national hatred, and the murderous civil strifes and commotions by which they were periodically rent.

We may add to these causes, the prevailing ignorance in regard to mineralogical science, the nature and scource of auriferous deposits, and the grossly unscientific manner in which their mining operations were carried on. They were unacquainted with all the ingenious devices and admirable modern appliances for mining, washing and collecting the gold, had no adequate machinery like the steam engine adapted to the work, but toiled on without any systematic order in their operations. A hundred thousand ignorant, feeble and docile Indians, laboring under these disadvantages, were incapable of accomplishing as much as a well organized company of one hundred and fifty or two hundred men, aided by the skill and all the modern labor-saving devices would now be. As might be expected, and as the author from whom we have above extracted observes, the loss in their mining operations "was excessive." The Californian miner going over the same "diggings" to-day, would make them "pay" perhaps equally as well as they originally paid his awkward predecessor.

Concerning the *present* aspect of the gold fields of Dominica, and the demonstrative evidences of the existence of gold there, our information is derived from much personal conversation with gentlemen now and long residents of the island, as well as from others who have recently visited it, and from the voluminous correspondence of some citizens of New York, there at present, engaged in explorations. From these scources we gather the following summary of facts.

The gold is still found in the Ciboa regions as of old. In prospecting up the Ciboa river and its tributaries, the "colour" was everywhere found, as it was also in their beds and rocky crevices and deep holes. The quantity thus taken out in prospecting, and working only with the prospecting implements, amounted sometimes to two dollars per hand per day. Some deep holes made by the current washing over shoals and rocks were found, the deposits of which, perhaps undisturbed for ages, yielded palpable evidences of the mineral, when tested by putting down a pole split at the end or with a sperm candle inserted, and bringing up the adhering sand. The Spanish and Creole women are in the habit of ob-

taining the gold from these holes in the dry season, by a very rude and singular device. They plunge down, their boys holding them by their heels while they grab up and clutch the sand at the bottom. These women are really the only native miners in the country now. After the frequent and heavy rains they pass along the brooks and streams, and gather the gold from the crevices in their rocky beds, and from below the stones where it collects, and afterwards wash it out in wooden bowls. They also follow up the mountain rivulets and collect it where the rains newly wash the surface, and pick it from the rocky and abrupt sides of the streams. There is scarcely one of them to be found in this region, who has not a number of specimens out of which rude ornaments are made, which she wears on her person. They frequently pick up nuggets of a considerable size.

Some years ago a Friar at savannah Eglesia, about twenty miles from Santiago, discovered a rich deposit in the mountains near the head of the valley, whence he secretly took a large fortune. Marking the place, he returned to Spain to enjoy his wealth, where he afterwards wrote

and sent out a description of the locality. Search was then made, as it has been several times since but without success. At the rocky bases of the Ciboa mountains and in the streams that drain them, quartz rich in the mineral and often containing large specimens of it, are frequently picked up or knocked off from the projecting rocks. The gold is also found in the clay banks on some of the streams and at the base of the mountains, particularly in a valley and at the base of a range of mountains some eighteen or twenty miles East of La Vega. Here an earthen bowl manufactured of this clay was exhibited by a Curate, and which was thickly impregnated with gold particles shining in its material. But the gentlemen to whom it was exhibited being then on a hasty visit to a different place could not visit the locality whence the material was taken.

Near the village of Tabarras on the Yaque, forty miles South-West of Santiago, extensive gold fields are found. There is some evidence of their being worked by the early Spaniards. The gold is found in the bed of the river, in the small streams and in the soil whereever it is disturbed. The native inhabitants obtain it in considerable

quantities without much exertion, and bring it to Santiago for sale A gentleman resident in Santiago relates, that he has seen nuggets weighing an ounce brought thither from that region, and that all the jewelry manufactured at Santiago is made of this native gold. Further down on the western end of the Ciboa range, about 70 miles West of Santiago, gold in equal quantities is found and brought to Santiago. On the South side of the same range, where there is scarcely any population, the gold exists in equal abundance. But little however is brought thence, as the region is comparatively a wilderness. It is doubtful whether even the gold in this district was worked by the early Spaniards; at least the same indications are not found.

It is a fact notorious throughout these gold bearing regions, that the Priests and Friars scatered throughout the country and in the little towns and country places, collect the gold gathered by the natives, and in this way amass fortunes after which many of them retire to Spain and other countries. Hence, when strangers visit the different gold producing districts, they are accustomed to hunt up the Priest, always the most

important and influential personage of the place, to obtain information from him and see the specimens in his collection. They are very hospitable and communicative and neglect nothing to render their guests' visits agreeable and instructive. No trace of that stolid bigotry which often deforms the clerical office in other countries is found amongst them.

The project of damming or fluming the Magua river and some of its tributaries has already been agitated by some gentlemen from the States, and to that end preparations and explorations have been made. From recent information from the island we are advised, that the undertaking is progressing. They labor under great disadvantages from the lack of a population in the immediate neighborhood, and from the difficulty of obtaining the requisite labor, that of the native inhabitants not being efficient or reliable. mineral resources of the island can only be adequately developed along with its agricultural and commercial interests. So true is this, that no considerable and permanent progress can ever be made in the former without the latter. What the country wants to develop and bring into

market all its superabundant scources of wealth, is a thrifty and industrious population. The attempt to monopolize any of its resources, either by cautiously concealing them from the world for selfish purposes, or by isolated and selfish efforts, is manifestly suicidal and short sighted. Thoroughly impressed with this conviction, the writer has undertaken in these pages to unfold and throw open to his fellow-citizens all the information he is possessed of on the subject.

SECTION X.

Conclusive Summary.

In reviewing the foregoing pages preparatory to handing them to the printer, the writer is reminded of several other matters germain to the subjects discussed in this little volume, and to which it is proper he should advert. In perusing these pages many inquiries will undoubtedly suggest themselves to the reader, which now either escape the writer's attention, or of which it is impossible for him within the limits assigned to satisfactorily treat. All he can reasonably hope to do, is to give the interested inquirer some general notion of the many rich resources of Dominica and beget in him a sincere desire to profit by them, to the end that those resources should not be hereafter, as they have been for ages

heretofore, given over to desolation and waste.

The population of Dominica numbering now only about 120,000, is made up of Spaniards, Spanish Creoles and some Africans and people of color, by far the largest number of which reside in the cities and towns and their vicinities. The country is very sparsely peopled, large and fertile districts possessing scarcely a single inhabitant. The district of country known as the Ciboa or Northern portion of the island from Monte Christi to Samana, is the most thickly settled. Almost all the wealth, intelligence and influence centre in the cities and towns. The few country people properly so called, although habitually honest, hospitable and sincere, are poor, uneducated and inoffensive. In the cities and towns we find many highly educated, opulent and refined families. The mass of the population wholly lack that thrift and industry necessary to their own material well-being, and the redemption of their country from the desolation into which it has fallen. They are not progressive, but from year to year live on precisely as the generations before them lived, adopting no improvements in their mode of life-in new systems of industrial, do

mestic or social economy. Their manners never change from generation to generation. Families are hereditarily merchants, traders, mechanics or grazers. If their door-step rots down or the floods carry away their crossings, they rebuild them, if at all, precisely as they were before-not an inch higher or lower, broader or narrower. The roads are the same they were three hundred years ago, changed here and there however, by the changing of the streams and the encroachment of the vegetation. They preserve the fashions of their Spanish ancestors of past centuries. For instance, in the days of the colony it was the custom to bear arms on the person and so arms they still bear. No one thinks of going even a short journey without some sort of arms, such as a sword, gun or horse-pistol, even should the sword be pointless and the gun or pistol lockless and rusty. They dress cleanly but still in the ancient style. They are uniformly polite, courteous and affable, even the country people and peasantry retaining all the civilities and social amenities of their refined and urbane Spanish ancestors. But nevertheless they are emphatically a stereotyped people.

Although uniformly honest, hospitable and sincere, they are notwithstanding exceedingly shrewd and sharp at a bargain, and will entertain you without charge at their boards a month, before they will give in a shilling in a trade. They are a frank, outspoken and open-hearted people, and are captivated with those virtues in strangers. To attempt in any manner to deceive or circumvent them, meets with their unqualified and universal condemnation. A belief extensively prevails that they are individually and nationally jealous and suspicious of strangers, that they are full of duplicity and deceit, and that all intercourse and negociations with them to succeed have to be carried on by means of a subtle, overreaching or covert diplomacy. That they must be taken off their guard and deceived and misled into measures before they will accord. But this is a gross libel upon their individual and national names. They like nothing better than frankness and open and fair-dealing. Having little or no intercourse with the great world outside, seeing and meeting with few strangers, they are naturally curious, especially in the interior towns, when a stranger arrives among them. Upon the happening of such an event, it is customary and

in fact even required, that the visitor should forthwith search out the chief personage of the place and the Government officials, and frankly make known who he is, where he is from, where he is going and what his business is. This mark of confidence and respect never fails to ensure him their utmost hospitality, assistance and good-will. Every one instantly becomes satisfied, and is anxious to see him, make his acquaintance and furnish him all the information he can. They will then make every sacrifice for his sake, vieing with one another to make his visit interesting and agreeable. They are universally favorable to the sojourn and settlement of persons from the States amongst them.

The prevailing religion is the Roman Catholic, although some Methodist Missions and Churches are there and in St. Dominga City there are some other Protestant Churches. The Priesthood of Dominica forms a very large and influential class. It is generally intelligent and educated and very hospitable towards and communicative with strangers. Perhaps more than any other Catholic country, Dominica abounds in feast and fast and other holy-days. The people are strict in the

observance of these days, and rarely fail to attend the church to say mass and chant Te-Deums. We may also add to the religious festivals and holy-days, a great number of civic observances and jubilees, which they observe with equal fidelity. The projectors of the enterprize before mentioned found this no inconsiderable objection to the employment of the native labor. Their religious and patriotic zeal however, is not by any means of an indurated, bigoted or evangelizing charater. They are tolerant and liberal, observing their festivities and holy-days as much because it comports with their indolent and easy habits, as from civic and religious sentiments.

There are four newspapers published in Spanish in Dominica, two at Santiago, and two including the Government Organ at St. Domingo City. They have some private schools and academies and the towns and cities, attended by the children of the wealthier families, but the cost of tuition a enormously high. Some of the wealthier people send their sons and daughters to France, England and other countries to be educated. Although some of the more educated and opulent possess tolerably good libraries, yet their litera-

ture is of the most meagre, old-fashioned and obsolete kind.

Their carriage and travel between the towns and sea-ports are carried on by means of packhorses and cargo mules, over the roads in the valleys along the streams and trails leading over and along the ridges and up and down the precipitous hights. The mules being very sure-footed cautious and practiced, and bearing enormously heavy burdens, pass over these hights in comparative safety. There are some wheeled carriages drawn by oxen over the roads in the valleys, which are generally level and in the dry seasons good. There are two brigs now running regularly from New York City to Port Platte, and a number of other brigs and schooners trading there occasionally, the fare on which for a single passenger ranges from twenty-five to forty dollars. The passage for a sailing vessel is from ten to twenty days.

The question has been often asked the writer why, if the country so abounds in mineral wealth do the people not mine and collect it themselves? To which he has invariably replied by adverting to the character and habits of the people. Not

the best promises of the most princely opulence will stimulate their energies beyond the immemorially beaten track of their fore-fathers. They are averse to labor, and seek to gain their livelihood in as easy a way and with as little outlay of industry and toil as possible, and as the richness of the soil and the spontaneous products of the climate enable them. They vegetate in an incurable apathy. No allurements of wealth will arouse them from their indolence and lethargy. They will sit by, smoke their pipes or cigarettas, and look on without covetousness and with supine indifference while the man of industry and aplication mines the gold or cultivates the soil, enriching himself at every stroke; and what is anomalous, they are pleased and excited upon witnessing any enterprize of the kind going forward.

It has been objected that the climate is dissolving and enervating to northern constitutions, and that under its influence the northern races in a few years would lapse into the sluggish indolence and drowsy apathy peculiar to the people who inhabit those tropical regions. However this may be the case with other countries, it does not properly apply to St. Domingo, where the air is pure and invigorating, the country mountainous

and abrupt, and the climate healthy and salubrious. Besides, the writer is not informed by history or otherwise, that the energies of the Anglo-Saxon race has ever yet succumbed to the effeminating influences of climate. The climate of New Orleans, far more sultry and dissolving than that of St. Domingo, has never yet depressed the energies and stifled the industry of our people there. After all, it is the race and not the climate upon which this charge should be made. Under an equitable civil and political rule, even the Italian would disclose an energy unsurpassed by that of his race centuries ago.

Again it has been objected, that the country is redolent with crocodiles, scorpions, centipedes, lizards, gnats, mosquitoes, fleas and other noxious insects; an objection about equal in magnitude to that of the Irish peasant, who fears to emigrate to America on account of the snakes here! A few harmless crocodiles are to be found at the mouths of the principal rivers; a few innoxious scorpions and centipedes, which the native children are not afraid to crush with their feet; some innocent, good-natured lizards; gnats and mosquitoes are found in abundance on the

lowlands and marshy coasts, swarming in the mangroves; fleas abound. The winged insects of a troublesome nature are however, periodically destroyed and carried off by the winds and rains which prevent their excessive multiplication.

Should these brief pages excite an interest in the mind of the American public, sufficient to induce individuals and companies to resort thither, either for business or to reside, all insubordination to the authorities, laws and customs of the Dominican Republic should be indignantly and persistently repressed. A strict observance of their civil and international codes and polities will insure the foreign resident not only every protection for his person and property, but every advantage the native citizen possesses. He will be hospitably treated by both government and people, and every assistance afforded him in effectuating his peaceable purposes. Insurbordination to their civil rule, disregard of their customs and habits of social order, and contempt for their religious and social prejudices, will as surely arouse the belligerent spirit of a people, otherwise free, frank and friendly, as the organized aggression of their domain by banditti incited by the lust of

empire and the love of plunder, and enforced by bloodshed and butchery.

The necessity that the Republic has been under for so many years of maintaining a little army and navy to repel the Haytians should they attempt to carry out their threats, together with the repeated civil troubles among the rulers, have sunk the state deeply in debt, to pay the interest on which and maintain their credit as far as possible and meet the current expenses of their administration, heavy import and export duties (their only mode of raising a revenue) are necessarily imposed. This causes every article of provision such as flour, beef, pork, hams, salt-fish, &c., imported from the States, to retail at a very high price compared with their cost here; the more so as the consumption, on account of the paucity of the population, is limited. No duties are however imposed on articles imported for one's own use or not to sell again. Those resorting thither should therefore provide and earry with them supplies sufficient to last them, until they can begin to realize from their own labor. Was there a sufficient population there, and of course an augmented consumption of these imports, the duties no doubt would be decreased by timely legislation, and adjusted proportionately to the increased imports and exports. Machinery and all agricultural implements and workmen's and mechanic's tools, are free of duty.

The writer regrets his inability to introduce into these pages a translated copy of the Fundamental Law of Dominica adopted in 1844, as he has unfortunately lost or mislaid the pamphlet containing it in Spanish, with which a resident of the island had kindly furnished him. The chief features of it are however given from memory, in the section containing a brief "History of the Spanish part of the island." It is very liberal and equitable in its provisions, and we see no grounds to doubt, if it is justly and conscientiously administered as we have every reason to believe it now is, that the rights of the citizen and the foreign resident are as jealously guarded and amply protected, as they are under our own. Slavery has not existed in the Spanish part of the sland since 1808, and by the constitution of 1844 it was forever prohibited in Dominica.

To the Anglo-Saxon race more perhaps than to any other, we must ascribe the grand results

in civilization, in the industrial economies, in commerce and finance, in machinery and inventions, in knowledge and free institutions and in the arts and sciences, of the nineteenth century. Through its agency more than that of any other race this tide of progress has so covered Christendom and arisen to its present hight. The day and the hour forbid that its herculean energies and its inherent genius and skill, should any longer exclude the wastes of Dominica from its theatres of enterprize. In the dimly discerned grand Moral and Divine order of the Universe, by which the Almighty weighs the actions of men, balances the destinies of nations and over-rules their iniquities, Spanish St. Domingo has already done a long and cruel penance for its cities founded in cupidity and bloodshed, its immolations of the innocent on the altars of avarice and its plains drenched with fratricidal carnage. The equities of Heaven's Chancery have been meeted out to it in sore afflictions for generations. That this gem of the Western Seas will sooner or later, through the enterprize of the Anglo-American be rescued from desolation, its valleys and plains transformed into elysian gardens and blooming fields, its

mountains made to yield their golden stores and its now solitary rivers and pensive bays thronged with commerce, is inevitable—So concludes a book designed to further that consummation, and written exclusively in the interests of humanity.

dil sal sq. ni sd' other things, of the form of heaven in general and in particular, of the innumer. societies of which the whole heaven consists, and of the correspondence between the things of heaven and those of earth; of the Sun of heaven, and the light and heat thence proceeding; of representative appearances in heaven, and of the changes of state experienced by the angels; of their garments and habitations, their language and writings, their innocence and wisdom, their government, wor hip, and state of peace; of the origin of the angelic heaven, and its conjunction with the human race opened; of the origin of the angelic neaven, and its conjunction with the luman race of means of the Word; of the state of the Heathen and young children, of the rich and poor, and of the wise and simple, in heaven; of the occupat one of the angels; of heavenly joy and happiness; and of the immensity of heaven. It also treats of the World of Spirits, or first state of man after death, and the successive changes which he has to pass through subsequently; of the nature of hell, and the true scripture significants of the death, and the race scripture is the first of the death, and the processing of the party of signification of the devil, satan hell fire, and the gna-hing of teeth; of the appearance, situation and plurality of the hells; and of the dreadful wickedness and direful arts of infernal spirits :- presenting altogether a rational and complete system of Pneumatology, and one in perfect harmony with the teachings of Holy Scripture.

The True Christian Religion, containing the Universal Theology of the New Church, foretold by the Lord in the Apocalypse xxi. 1, 2, (with the Coronis and a copious Index. 1 Vol. pp. 982. Price, \$1.25. Postage, 52 cts.)

is volume-the last that Swedenborg wrote-contains a summary of all the cipal doctrines of the New Church, signified by the New Jerusalem in the Apoca-

ripal doctrines of the New Church, signified by the New Jerusalem in the Apocase. It is divided into fourteen chapters, which treat of the following subjects in a simple and lucid style, and with convincing argument. I.—God, the Creator. II—ao i.ord, the Redeemer. III.—The Holy Spirit and the Divine Operation (treating also the Divine Trinity). IV.—The Sacred Scripture or Word of the Lord. V.—The necalogue explained as to its external and internal sense. VI.—Faith. VII.—Charity and good works. VIII.—Free Will. IX.—Repentance. X.—Reform tion and According to the Age, the Second Coming of the Lord, the New Heaven and the New Charab.

In addition to this, there are upwards of seventy Memorable Relations, a Supplement concerning the spiritual world, and a copious Index to the whole work of about 100

Angelic Wisdom concerning the Divine Providence. (1 Vol. pp. 274, with Alphabetical Index. Price, 45 cts. Postage,

This work treats of the nature and operations of the Divine Providence, and unfolds the laws of order according to which God's moral government is regulated. It shows that the Divine Providence has for an end a heaven of angels from the human race; that it works not at random, but according to certain invariable laws which are here disclosed; that it is universal, extending to the least things as well as to the greatest; that in all it does, it has respect to what is eternal with man, and to things temporary only for the sake of what is eternal; that the laws of Permission are also among the laws of the Divine Providence; that evils are permitted for the sake of the end, which is salvation; that the Divine Providence is equally with the wicked and the good; that every man may be reformed, and that there is no such thing as predestination; that the Lord cannot act against the Laws of his Providence, because to act against them, would be to act against his Divine Wood his Divine Wisdom, consequently against Himself.

These and other topics of a kindred nature are treated in an exhaustive, and at the

same time lucid and masterly manner, in this volume.

Conjugial Love and its Chaste Delights; also Adulterous Love and its Sinful Pleasures, (1 Vol., with Alphabetical Index. Price, 75 ets. Postage, 31 ets.)

A work which treats of the relation of the sexes, and the Indissoluble nature of true marriage; of the nature and origin of love truly conjugial; of the marriage of the Lord and the Church, and its correspondence; of the conjunction of souls by marriage, so that they are no longer two, but one flesh; of the change of the sate of life with both sexes by marriage; of the causes of disaffection, separations, and di-- vorces in marriage; of the causes of apparent love, friendship and favor in marriages; and of iterated marriages. To which is added a treatise on Adulterous or Scortator'
Love in its various degrees, showing it to be in its nature the very opposite of Con gial Love-as opposite as the natural man is to the spiritual, or as heaven is to he

angelic Wisdom concerning the Divine Love, and the Divine Wisdom. (1 Vol. pp. 180, with Index. Price, 35 cts. Postage, 16 cts.)

This work contains the wisdom of the angels concerning the operation or outworking of the Divine Love and the Divine Wisdom in the creation of the universe, including man as the chief end of creation. It explains the nature of the Divine frinity, also of the trinity in men and angels and all things finite, which images the Divine. tunfolds also the Doctrine of Degrees, and explains the three discrete degrees of the buman mind, showing when and by what means these are opened, and what is effected by their opening. It further reveals the origin of evil uses, also the origin, design, and tendency of good uses. It is of this work or of the 'Doctrine of Degrees' nerein discussed, that the author of the 'Forgleams of Immort with 'Says': "When the reader gets the pith of its philosophy, he sees the amaging sweep of the principle set forth, and its constructive power in theology, and that by missing it every school of materialists has stuck fastio the earth."

Miscellaneous Theological Works; containing The New Jerusalem and its Heavenly Doctrine; Brief Exposition; Intercourse between the Soul and the Body; The Last Judgment, and Continuation; The White Horse, and Earths in the Universe, (making a Vol. of 526 pp. Price, 75 cts. Postage, 36 cts.)

The first of these contains a summary statement of the doctrines of the New Church with copious references to the Arcana where the same doctrines are more fully unfolded. The second exhibits some of the more important of these doctrines in contrast with those of the Former Christian Church. The third treats of Influx showing how the spiritual flows into the material, and the manner in which the soul operates upon the body. The fourth explains the nature and manner of the Last General Judgment, which occurred in the World of Spirits in 1757, when also the New Dispensation known as the New Jerusalem, commenced. The fifth unfolds the spiritual meaning of the White Horse mentioned in the Arocclypse, and contains copious references to the Arcana where the subject is further elucidated. The sixth describes the appearance, character, and mode of life of the inhabitants of o her earths, with whom the author became acquainted through his intercourse with spirits from those earths.

The Four Leading Doctrines of the New Church—viz., Concerning the Lord; the Sacred Scripture; Faith; and ! ife. Also Answers to Nine Questions chiefly relating to the Lord, the Trinity and the Holy Spirit. (1 Vol. Price, 45 cents. Postage, 21 cents.)

Note—The foregoing list comprises all the Works published by Swedenborg himself during his lifetime. The prices affixed to each, burely cover the cast of paper, printing and blading; and the Society, therefore, neither gives credit nor makes any descount on its sales. Persons buying to sell again are entitled to charge an advance sufficient to reimburse them for their trouble and expenses.

COLLATERAL NEW CHURCH WORKS

FOR SALE,

AT ROOM NO. 20, COOPER INSTITUTE, NEW YORK.

The following is a list of some of the collateral writings of the New Church, which are thought to be among the most useful in explaining its doctrines to minds hitherto unfamiliar with them. We are compelled by our narrow space to omit many works which we should like to include.

Noble's Appeal in behalf of the Doctrines of the New Church. Price. 88 cents.—A work generally regarded as the cheapest, ablest, and best ever written in defense of the Doctrines of the New Jerusalem.

Noble's Plenary Inspiration of the Scriptures Asserted, and the Principles of their Composition Investigated. With Appendix, illustrative and critical. Price, \$1.50.

UNIVERSITY OF CONTORNIA

LOS AN W

UCLA-Young Research Library F1901 .C83g yr

1

PLEASE DO NOT REMOVE
THIS BOOK CARD



University Research Library

F 1901 C836

P

