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GENERAL VIEW
OF THE
AGRICULTURE
OF THE COUNTY OF
NORTHAMPTON,
WITH
OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

DRAWN UP FOR THE CONSIDERATION OF

The Board of Agriculture and Internal Improvement.

TO WHICH IS ADDED,

An APPENDIX, containing a Comparifon between the ENGLISH and SCOTCH Systems of Husbandry, as practifed in the Counties of Northampton and Perth.

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DUNDEE.

EDINBURGH:
PRINTED BY ADAM NEILL AND COMPANY.

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A D V E R T I S E M E N T.

THE following valuable communications, respecting the present state of husbandry in the county of Northampton, and the means of its improvement, drawn up for the consideration of the Board of Agriculture, is now printed, merely for the purpose of its being circulated there, in order that every person, interested in the welfare of that county, may have it in his power to examine it fully before it is published. It is therefore requested, that any remark, or additional observation, which may occur to the reader, on the perusal of the following sheets, may be transmitted to the Board of Agriculture, at its office in London, by whom the same shall be properly attended to; and, when the returns are completed, an account will be drawn up of the state of agriculture in Northampton-shire, from the information thus accumulated, which, it is believed, will be found greatly superior to any thing of the kind ever yet made public.

The Board has followed the same plan, in regard to all the other counties in the united kingdom; and, it is hardly necessary to add, will be happy to give every assistance in its power, to any person who may be desirous of improving his breed of cattle, sheep, &c. or of trying any useful experiment in husbandry.

INTRODUCTION.

NORTHAMPTONSHIRE is an inland county, situated within the 53d degree of north latitude, and near the centre of England. It is bounded on the east, by the counties of Cambridge and Huntingdon; on the south, by Buckingham and Bedford; on the west, by Warwick and Oxford; and on the north, by Leicester, Rutland, and Lincoln.

This county is of an oblong form; its greatest length from the south-west corner near Aynhos, to the north-east boundary at Crowland, is 65 miles; its greatest breadth from Higham Park on the east, to Stanford on the west, is 32 miles; but its mean breadth may be reckoned at 14 miles, making a square superficies of 910 miles, or 582,400 acres.

Surface.—The surface of this county is as peculiarly advantageous for cultivation, as it is delightful and ornamental. In no other part of the kingdom, perhaps, are more agreeable and extensive landscapes to be seen. Here, there are no dreary wastes, nor rugged and unsightly mountains, to offend the eye, or to intercept the view. The surface is no where so irregular, but it can be applied to every purpose of husbandry and tillage. Every hill is cultivated, or may be kept in a profitable state of pasturage, and every inequality in the surface contributes to its ornament and beauty.

The upper and middle parts of this county are richly ornamented with extensive woods, which are intersected with numerous vistas and beautiful

lawns. The various avenues of trees, extending in many parts for miles together, the rivers and streams winding along the vales, and answering the necessary purposes of machinery, agriculture and trade,—the many beautiful villages and populous towns, with their churches and lofty spires, (20 of which may be seen at a time), when viewed from an eminence, present a prospect beautifully diversified, and highly picturesque, and which cannot fail to delight the eye, and enliven the heart of every spectator.

Soil.—There is great variety in the soil of this district, and several very distinct kinds are found in almost every parish or lordship. These may be classed as follows :

1st, Strong, deep stapled soil, chiefly consisting of clay, free from any mixture of stone or gravel.

2^d, Light, thin, reddish soil, chiefly consisting of loam 6 or 8 inches deep, on a bed of stone, here called Kealy, or Scaley rock.

3^d, A rich loam of 8 or 10 inches deep, with a mixture of gravel, the under stratum being clay, mixed with small pieces of red or white stone.

4th, A thin, staple, light clay, very retentive of water.

5th, Fen and meadow land.

Climate.—The climate of this county is very favourable both to health and vegetation, and this may be accounted for from its situation and other natural-advantages.

It is abundantly supplied with excellent water. The surface of the ground is no where so elevated, as to confine the foggy and unwholesome vapours (which at times arise in this and in every country) from being speedily dispersed. As there are no high hills here, it is in a great measure exempted from
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deep falls of snow, and long continued rains, which are so injurious to farmers in the vicinity of mountainous regions; and as the seasons change gradually, the health of the inhabitants is little affected by them, and the operations of husbandry are seldom long or unexpectedly suspended by the inclemency of the weather.

Rivers and Waters.—There are perhaps few districts better supplied with water than this, while the inconveniencies which so often happen from enjoying that advantage, are here felt but in a very inconsiderable degree. In almost every part, it abounds with fine springs, which being very plentiful in the upper part of the county, form numerous small brooks and rivulets, several of which uniting in their course towards the sea, at length become navigable rivers.

There are five rivers which take their rise in this county, the *Nen*, *Welland*, *Ouse*, *Leam*, and *Charwell*; and what is very remarkable, considering the different courses which they take, the sources of the former and of the two latter are said to spring out of one hill, near Catesby and Hellidon, in the hundred of Fawley.

The *Charwell*, after running for several miles along the western boundary of this county, enters Oxfordshire, and joins the Thames at the city of Oxford.

The *Leam* joins the lesser Avon near Warwick, and afterwards joining the Severn, falls into the western ocean.

The *Nen* is the most considerable of these rivers. After taking its rise, as above mentioned, it is quickly joined by a number of other small streams and brooks in the vicinity of Daventry, and continues its course from thence to Northampton, where it becomes navigable, and forms a considerable

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able river, extending its course along the east side of the county, it passes Wellingborough, Thrapston, Owndle and Peterborough, and from thence, by a new cut, (called Morton's Leam), to Wisbech, below which it discharges itself into the German Ocean.

The *Welland* takes its rise near Hawthrope, in the hundred of Rothwell, and winding along the north boundary of the county, it passes by Rockingham and Stamford, where it becomes navigable; from thence to Spalding, below which place it communicates with the sea.

The *Ouse*, which is one of the principal rivers in the kingdom, takes its rise from a spring called Ouse-well, near Brackley, in the hundred of Sutton. It quickly leaves this county, and after taking a circuitous course through part of Buckinghamshire, touches again upon it at Stoney Stratford; from whence it passes to Newport-pagnel and to Bedford; from which last place it is navigable to the sea at Lynn.

These are the most considerable rivers; but there are a great many small streams and brooks, which, after taking various windings through different parts of the county, discharge themselves into one or other of these rivers; and besides the convenience and advantage which the inhabitants enjoy from such an abundant supply of water, these rivers and streams, are not only useful for supplying the mills for grinding wheat and corn, of which there are great numbers erected upon the banks, but great advantages are also derived from the navigation of the *Nen* and the *Welland*, particularly the former, as it passes through the greatest part of the county, and by means of which the inhabitants are supplied from the ports of Lynn and Wisbech with coals, fir-timber and other articles, while considerable quantities

quantities of oak, bark, and grain are sent back in return.

TOWNS, POPULATION, AND MANUFACTURES.

This district is divided into 20 hundreds*, comprising now 316 parishes, or townships, though on the first division of the county into parishes, the number was 330; but several of them have been united of late years. The principal market-towns are Northampton, (the county-town), Peterborough, Wellingborough, Kettering, Owndle, Higham-ferrers, Towcester, Brackley, Daventry, Rockingham, Rowell or Rothwell, Weldon and Cliff. Though it was not possible to ascertain the number of inhabitants with any great degree of correctness, yet from the information received of the population of particular parishes in different parts of the district, the number of inhabitants may be reckoned at 400 in each of the country parishes or townships, and 3000 in each of the market-towns, making in all 167,600,

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* England was first divided into tithings and hundreds by King Alfred, about the year 900. The ancient tithings consisted of 10 men and their families; and as by the original institution, 10 of these tithings were directed to meet once every 2 or 3 weeks, in order to inquire into the state of the country, such meetings were therefore called hundreds. By this law, the honest inhabitants of every village or township, became answerable in their own private fortunes and property, for all the house-breakings, robberies, and other depredations committed within their respective districts, and were also compelled to associate with their neighbours in arms, in order to suppress every act of violence, and to maintain peace and public order. And it is worthy of remark, that the damages sustained by individuals, in consequence of the very alarming riots which happened in London in the year 1780, were levied on the inhabitants at large, on the principles laid down in this very ancient institution.

of which by far the greater proportion is employed in agriculture.

The principal manufactures carried on in this district, are, shoes, bone lace, and woollen stuffs, principally tammys, callimancoes, and everlastings.

In Northampton, and some of the neighbouring towns, upwards of a thousand hands are employed, in making shoes for the supply of the army and navy, and the shops in London, and also for exportation to different parts of the world. About 7000 or 8000 pairs are manufactured weekly in time of peace; but at present, (July 1794), in consequence of the war, from 10,000 to 12,000 may be manufactured in the same period. The price runs from 3 s. 6 d. to 5 s. and upwards the pair. The medium price may be reckoned at 4 s. 3 d. of which about 1 s. 6 d. is paid for labour.

The leather is purchased partly in this and the neighbouring counties, but chiefly from the London market. A journeyman earns from 7 s. to 14 s. the week; but from 9 s. to 10 s. may be considered as the general average.

In Wellingborough, and the neighbourhood, and towards the south-west corner of the county, from 9000 to 10,000 persons, mostly young women and boys, are employed in lace making. They earn from 2 d. to 1 s. 6 d. the day, generally, however, about 6 d. nearly one seventh part of which must be deducted for materials, in the proportion as 3 s. to 20 s. and consequently 17 s. in the pound of the value of the article are paid for labour. The price varies from three halfpence to 15 s. the yard; and what seems very extraordinary, rises regularly one halfpenny the yard. The greatest demand is for that quality which sells from 2 s. to 3 s. *per* yard. All the thread of which the lace is made, is imported from Flanders, and the goods, when *finished, are partly exported to America, the West India islands,
and

and Ireland, but by far the greater proportion is used in Britain.

The woollen manufactory is principally confined to Kettering, and its neighbourhood. This manufacture was in the highest perfection it has ever attained at the beginning of the present war. A very considerable number of persons were employed, in the different branches of it, at that time. It is difficult to form any probable guess at the number; but perhaps from 5000 to 6000 would not be an extravagant calculation. At present, not more than one half of the number of persons are employed in it. The wool, in the first instance, is bought by the manufacturers of the growers, or farmers in the neighbourhood. It then undergoes a very minute assortment; and the different kinds of wool, which are found in every fleece, are appropriated to supply the proper markets, in the different parts of the kingdom where they are respectively manufactured. Thus, for instance, the coarsest, or long-stapled wool, is sent into Yorkshire, where it is made into broad cloths and flannels; the finest, or short-stapled, is reserved for the home manufactory, for the purpose of being made into tammys; and some of the most inferior of the last described wool, is likewise consumed here in making calamancoes and everlastings. After the wool is sorted, and the different kinds are assigned, to the respective purposes for which they are best adapted; that which is intended to be manufactured at home, is combed, and then delivered out, in small quantities, to the lower class of people in the neighbourhood, to be spun and reeled, for which they are paid so much *per* pound, according to the fineness of the thread into which it is converted; it is then returned home to the manufacturer, who has it wove into such kind of stuff as the quality of the thread will best answer. As soon as the goods are completed, they
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are immediately sent to the London and the Yorkshire markets, where they are purchased by persons who dress and dye them, and prepare them either for the supply of their retail customers, or for exportation to foreign markets. The spinning and reeling are chiefly performed by the females, and boys from 10 to 14 years of age. The price allowed, is from 10 d. to 1 s. 6 d. *per* pound. A tolerable spinner, who is industrious, earns, upon an average, 6 d. *per* day. Sorters are paid at the rate of 6 d. *per* tod of 28 lb.; combers receive 2 s. for every 13 lb. of wool. A good hand will make 9 s. or 10 s. *per* week. A weaver from 5 s. 6 d. to 6 s. 6 d. *per* piece for tammys, consisting of 32 yards in length, by 22 inches in breadth; and for everlastings, from 5 s. to 17 s. *per* piece of the same size, according to the fineness; and a good weaver will earn 1 s. 6 d. *per* day.

STATE OF PROPERTY.

There are many very considerable estates in this district, and by far the greatest part of the landed property is in the possession of noblemen and gentlemen, who reside at least some part of the year in the county.

There are few estates, the rentals of which exceed L. 10,000 *per annum*; there are a great many others under that sum, down to L. 1000 a-year, and the remainder of the property is either possessed by those whose rentals amount to from L. 500 to L. 800, or by that respectable class of men who have been long known in England under the denomination of *Yeomanry*, who either occupy their own estates, of the value of from L. 100 to L. 300,

or

or who, besides their own estates, rent extensive farms from the landlords in their neighbourhood.

EXTENT OF FARMS, LEASES AND RENT.

There are no very large farms in this county; for although great progress has of late years been made in inclosing the open fields, yet the lands have been in many instances parcelled and let out again to the former tenants, who occupied them in the open field state, and to such extent as it was supposed their abilities and circumstances would enable them to manage properly; so that it is only in the old inclosed parishes, where there are farms of any considerable extent; and even there, the rent of one farm seldom exceeds L. 500 a-year. In the new inclosed parishes, the farms are generally from L. 100 to L. 300 *per annum*, and in the open field lands, the rents run from L. 50 to L. 150.

This county may be said to be principally occupied (with a very few exceptions indeed) by tenants at will, the few leases that are granted are of no longer endurance than for 7, 14 or 21 years; and the general conditions contained in them are, that the tenants shall pursue a certain rotation of cropping; that they shall not break up any old pasture ground; that they shall not dispose of hay or straw off the farm; and that they shall keep the houses, buildings and fences in proper order. The terms of entry are either at Ladyday or Michaelmas, the former being the period for entering upon a grazing farm, and the latter on an arable farm. The rent is paid half yearly, and in equal portions. The first payment is usually made twelve

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months

months after the term of entry, and so on half yearly during the currency of the lease.

The average rent of the inclosed lands, which are generally exempted from tithes, may be accounted at 20s. the acre, that of the open field lands, which are subject to the payment of tithes in kind, may be reckoned at 8s. The tithes may be reckoned at from 3s. to 3s. 6d. *per* acre over the whole open field farm, including even that part of it which is annually under fallow.

MODES OF TILLAGE adopted for raising the different Species of Crops.

In every part of this district, plowing is performed by a man and a boy, with 3, 4, and sometimes 5 horses in a single length; and though the soil (as has been already observed) is of very different qualities, yet the same expensive mode of plowing, with a few exceptions, universally prevails.

Wheat.—A certain proportion of the tillage lands is regularly under wheat, perhaps about one third of the whole. It is generally sown in the open fields after fallow, but on the inclosed farms also, after beans or clover stubble. When intended to be sown on fallow, the land is first plowed late in the autumn, and a second time in the course of the summer, before which dung from the farm-yard, without any earth or other mixture, at the rate of 12 or 14 cart loads *, is laid on the acre; and the
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* Dimensions of the ordinary dung cart.

Length at top,	7 feet 6 inches.
Ditto at bottom,	5 feet 9 inches.
Breadth at top,	3 feet 9 inches.
Ditto at bottom,	3 feet.
Height of sides,	2 feet.

third plowing (for more than three plowings are seldom given) takes place in the end of September or beginning of October. About 3 bushels of seed are sown on the acre, the average returns may be reckoned at 26 bushels. The species cultivated here are the Hertfordshire white, the Essex down, and the red Lammas, or common red. This mode of husbandry, however, is more peculiar to the open fields. A different mode of preparing the land for wheat is practised in the inclosed farms, where meliorating crops can be produced.

Beans and Peas are generally cultivated separately, the former in considerable quantities. They are commonly sown after wheat, though beans sometimes are sown on lands broke up from grafs. The land is once plowed, sometimes in winter, but generally early in spring, according to the season; and in the end of February, or beginning of March, seed, at the rate of 5 bushels, is sown on the acre. This crop is in general very uncertain, especially on the light lands; but may be estimated, for a course of years, and including all the various soils on which they are cultivated, at 14 bushels *per* acre, on the open fields, and 20 bushels on the old inclosed lands. The kind in use here, is the common horse-bean.

Oats.—There is but a small quantity of oats cultivated, compared with the other species of grain; not so much indeed as is sufficient for the consumption of the ordinary working cattle, which are principally fed with beans. Oats are here sown after wheat, barley, and grafs. In every case, one plowing suffices, which is generally given in the spring. And about the beginning of March, seed, at the rate of 5 or 6 bushels, is sown on the acre. The average returns may be accounted at 36 bushels *per* acre,

acre, on the open fields, and 40 bushels on inclosed land. The species most cultivated, are what are here called the short small, and the Polish oat.

Barley is cultivated nearly in the same proportion with wheat. It is generally sown after turnip. The land is once plowed, commonly about Lady-day, and seed at the rate of from $4\frac{1}{2}$ to 5 bushels, is sown on the acre. The return may be reckoned at 34 bushels the acre. The common long-eared barley is the only kind cultivated.

Rye is seldom cultivated here as a crop, though frequently as spring food for sheep; it is generally sown after oats or barley; the land is plowed, and the seed sown immediately after harvest, and the sheep are folded upon it about Lady-day. This is considered, and justly, as a great improvement, as the rye is ready to be folded upon by the time the crop of turnip is eat off, and the sheep by this means are kept on in good order, till the beginning of the grass season. It may also be observed, that it is an additional crop gained, because the rye is eat off in such time as to give an opportunity to prepare the land for a turnip-crop; indeed, all the preparation necessary is plowing, as in consequence of the sheep folding, the field must be well manured for the succeeding crop, whatever it may be.

Rape or *Cole* is also cultivated as winter and spring food for sheep. The land is plowed three times, and generally manured before the last plowing with yard-dung. About one-eighth of a bushel of seed is sown on the acre. The time of sowing is in the month of June, or the beginning of July. The sheep are folded in the same manner as on rye or turnip, and continue till about the end of February; and if the winter is favourable, and not very

very wet, the cole is sometimes allowed to stand for seed, when 30 bushels on an average is produced from the acre. This article varies very much in price, from L. 18 to L. 35 *per* last.

Turnips are cultivated in considerable quantities on every farm under tillage. The land is generally plowed four times; the first time, after harvest; the second time, in April; the third time, in the end of May, or the beginning of June; and the land being then manured, they begin sowing turnip in the end of June, and finish about the middle, or end of July. The seed is always sown broadcast, and very soon after the turnips appear with the rough leaf; they are handhoed, by way of thinning them, which operation is repeated once, or oftener in the course of the season, as occasion requires. The turnip-crops are always eat off by sheep, and principally by lambs; though a great number of wedders are fatted for home consumption, and for the London market, particularly about Northampton, and the higher parts of the county. The sheep are penned on the turnip-field in square folds, according to the number, about 100 commonly on an acre. These pens, or hurdles, are made of the underwood fold in the forests; they are made 2 yards long, and cost about 6 d. each.

Very few cattle are fatted on turnip here; when that is done, a few of the largest turnips are drawn from the field, and given to the cattle in the stall. They are also occasionally fed on hay, at least once or twice a-day. An ordinary crop of turnip sells at from L. 3 to L. 5 *per* acre, the price depending greatly on the season, and on the price of wool.

Potatoes are not cultivated here to any extent, the quantity necessary for the consumption of the inhabitants being very trifling, and the distance from the London market too great, to allow the farmers to send them there with advantage.

Meadows.—There is a very great extent of meadows in this district, not less than 40,000 acres. They are in general of a rich fertile nature, owing to the frequent overflowing of the waters, and possibly, no artificial means, in the present state of matters can be devised for their improvement. Indeed, the system of watering meadows, or any other kind of land, is seldom practised here; and it is but in very few instances, except along the banks of the rivers, where the lands are capable of that improvement. The most considerable track of meadow is that, on each side of the river *Nen*, beginning several miles beyond Northampton, and, extending down to Peterborough, which, from the circuitous direction, and various windings of the river, between these two points, may be supposed to pass through a country of more than 60 miles in extent.

In the few instances where artificial means have been used in watering these meadows, this mode of improvement has exceeded the most sanguine expectation of the farmer, not only in producing a quantity of grass greatly more abundant than in former years, but also in improving the quality. But unfortunately for those occupying these meadows, they are in general not only debarred from using the river, as a means of ameliorating the soil, but when extraordinary floods take place, the crops of hay are so much damaged as to be comparatively of little value. This happens in a great measure in consequence of different persons having separate and opposite interests in this river.

The persons here meant are the proprietors of the navigation, and those having right to erect mills, between whom, and those interested in the preservation of the meadows at large, many disputes arise. If an arrangement could be effected, by which a more uninterrupted course could be procured for the

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the river, these extensive meadows would certainly advance in value to the extent of several thousand pounds a-year. It must also be observed, that the mills are generally built in the worst possible situations; for in place of being erected on the sides of the meadows, and supplied by a *lead* or *cut* from the main body of the water, they are built on low ground, and every miller has the command of the whole river, by which means an obstinate man has it in his power, in time of flood, to injure his neighbours with impunity, and that too without, in any degree benefiting himself.

Artificial Grasses.—The kinds of artificial grasses usually sown in this district, are broad or red clover, at the rate of 20 lb. the acre. When the lands are intended to be broken up, after one or two years, the quantity of red clover is sometimes diminished, and 4 lb. or 5 lb. of trefoil are added.

When the lands are intended to lie in grass for a number of years, the seeds sown are, 4 lb. red clover, 16 lb. white ditto, and one-half bushel rye-grass.

Saintfoin is sometimes cultivated, but not generally.

Chicory.—The only experiment made of this plant, is by Mr Martin, on his farm of Janfor Lodge, near Oundle. He has planted about 2 acres; and in the end of July it had a very promising appearance. He will, if desired, cheerfully communicate the result of this experiment to the Board of Agriculture.

HARVESTING THE CROPS.

The mode of harvesting the corns, which is universally adopted in this district, is as follows:—The wheat

wheat is reaped with the sickle : This work is either performed by people hired for the harvest, (which generally continues about a month), or by undertakers, who reap, bind, and set it up in shocks ; for which they receive from 6 s. to 9 s. the acre, according to the bulk of the crop. And, when this operation is performed, and the wheat carried home, and put into the barns, the stubble is mowed with scythes, and raked together in heaps, which, when done by the great, or piece, costs about 2 s. the acre. The stubble is carried home to the stack-yard, and is used in thatching houses, and as litter for the cattle.

The other species of crops are all mowed by the scythe, either by men employed for the whole harvest, or at a certain price *per* acre, which varies from 1 s. 3 d. to 2 s. Oats and peas are seldom mowed out of the swath, in good weather, till ready to be carried home. Barley and beans are repeatedly turned over, before they are in a condition to be built, either in the barn, or in the stack-yard ; and when the waggons are employed in carrying home the crop, all hands, that can be spared, are engaged in raking the grounds, which is done with long headed rakes, made for the purpose. The hay harvest operations, are carried on in the same manner here, as in all other parts of the kingdom.

Having been favoured with an account, of the particular days on which harvest commenced on a farm near the centre of the county, for the last seven years, it is here subjoined.

1787.	13th	August.
1788.	4th	ditto.
1789.	18th	ditto.
1790.	16th	ditto.
1791.	8th	ditto.
1792.	13th	ditto.
1793.	1st	ditto.

MANURES.

 MANURES.

Lime.—This county abounds with limestone in almost every corner, and considerable quantities are manufactured for the purposes of building, yet very little is used as a mean of improving the soil; although, where it has been properly applied, its effects have been abundantly conspicuous. One great reason why it has not come into more general use, may be owing to many injudicious experiments having been made, where the quantity used has been too small to produce any beneficial effects. There can be no doubt but lime applied in a proper manner, and, in sufficient quantities, from 300 to 400 bushels of powdered lime to the acre, would operate very powerfully on most of the soils in this district; and it is to be hoped, those proprietors who pay so laudable an attention to the improvement of their estates, and of the country at large, will make such experiments on their own farms, as will be the means of introducing the general use of this valuable manure, which has in other countries been productive of such great improvements. Lime-shells sell at from 6d. to 7d. the bushel at the kiln, though it might be manufactured on much lower terms, in kilns properly constructed.

Marl is not used here as a manure, though there is rich shell-marl in different parts of the county, particularly on his Grace the Duke of Buccleugh's estate of Boughton, and Sir George Robinson's estate of Cranford. The effects of this manure, in producing great crops both of corn and grass, are well known in many parts of Scotland, and it would no

F doubt

doubt operate as powerfully here, if properly applied*.

Woollen

* The marl which has been discovered upon the Boughton estate, was found in a low, and, rather wet situation in Boughton-park, at about 20 inches from the surface, which consists of a dark rich loamy soil; a white loamy earth presents itself, mixed with a great quantity of fine small shelly substances, which, when perfectly drained and dried, either by the sun or fire, adheres together in lumps, and becomes extremely light. Upon immersing a piece of it in common vinegar, it causes a great effervescence. The shelly particles in a great measure dissolve, and the whole soon becomes a smooth liquid plaster. This stratum of white earth is from 12 to 18 inches in thickness, when another stratum is found, consisting of a darker coloured earth, with a large mixture of blue clay, and a much smaller quantity of shells than the white kind. This last stratum continues about the same depth as the former, when the strong clay makes its appearance.—The following valuable information, respecting this marl, has been given by an ingenious and learned chymist in Scotland.

“ I have assayed the two marls; one of them is almost white and chalky; the other, of a yellowish colour, and darker, and more plastic, like clay. The first is as rich a marl as ever I assayed. It is, when perfectly dry, very nearly equal in value to the first chalk, or best limestones; the difference is not more than 2 or 3 *per cent.*; and it has the advantage, as a manure, of not needing to be burnt. But when newly taken up from its bed, it must contain a considerable quantity of water, and its value will be the less by this quantity of water, whatever it is. If, for example, one ton weight of the wet marl contains a quarter of a ton of water, it will be equal in value to three-fourths of a ton nearly of the best unburnt limestone. The quantity of water is easily learned, by weighing a quantity of the wet marl, and then drying it thoroughly, and lastly weighing it again.

“ The yellowish and more clayish marl is of little value in comparison with the former. It contains only when perfectly dry, one part of calcareous or lime earth in ten of marl; the nine parts being clay and sand. Marls, however, not richer than this, are valuable in some places that are at a distance from lime, and in using them, a greater quantity is laid on the soil, to make up for their defect in quality.”

From the above chymical experiment, it appears, that the white earth contains a much larger proportion of calcareous matter, than the darker coloured. There cannot be the smallest doubt of both proving a very valuable manure, particularly for grass-ground; but a much smaller quantity will be required for that purpose, of the former, than of the latter. It is presumed a considerable quantity of this marl might be found in the neighbourhood, but chiefly in low and moist situations. The same stratas of earth here mentioned having been found, by digging in many other places, near to which this has been discovered. White earth of the same kind, has been found at the bottom of a pond in a low wet part of the park, at the distance of near 300 yards from the first situation, from
which

Woollen Rags are the only artificial manure used in this district to any extent. Besides, what are procured in the county, considerable quantities are purchased from Leicestershire, and the other neighbouring counties. They cost about 4 s. the hundred weight, besides 2 s. for chopping. Six hundred weight is generally applied to an acre. This kind of manure is generally used as a preparation for a crop of barley, and is found to answer well.

Compost Dungbills are seldom made, the dung being in general carried direct from the straw-yard to the field.

When composts are made, they consist of farm-yard dung, and the scourings of ditches, or soil collected on the sides of roads, together with a certain quantity of lime. The farmers who follow this practice, consider the extraordinary expence, and trouble, as fully compensated, by the benefit, which the lands receive, from the addition of the rich earth, and rotten vegetables, which are thus procured, and which operate more powerfully in consequence of the lime, with which they are mixed.

PRE-

which it is conceived, there must be a continuation of the different stratas of earth before described; though instances have been known where marl of this kind has been bred, and produced, by the continual accumulation of putrified vegetable substances, particularly in low swampy situations covered, or, surrounded by trees, and wood, which is the case with the pond here mentioned.—An experiment is intended to be made this autumn in Boughton-park, by laying various proportions of the two marls upon different kinds of soil, and in different situations; the effects of which, at any future time will be very willingly communicated to the Board of Agriculture, should such a circumstance be thought worthy of notice. If this kind of dressing is found to exceed, or even to equal the effects of common manure, it may prove an important circumstance, as no doubt great improvements may be made upon meadow and pasture ground, where such assistance can be procured. It would certainly be worth while, to procure a *marl boring iron*, to examine the strata of all the meadows, and low spots in the county.

PRESENT STATE of the COUNTY, in regard
to AGRICULTURE, and, the Modes of Manage-
ment.

It has already been stated, that there are 316 pa-
-rishes in the district, 227 of which are in a state of
inclosure, and 89 in open field; besides which,
there are many thousand acres of woodlands, and a
large track of rich valuable land, called the Great
Peterborough Fen, in a state of commonage; so that
supposing the inclosed part of the county at present
under the most approved modes of management,
there is above one third of the whole, by no means in
the best state of cultivation of which it is susceptible.

In describing the present state of the county, it
may be proper to class it under the five following
divisions, *viz.* old inclosure, new inclosure, open
field, commons, and woodlands; and to give a par-
ticular account of the different modes of manage-
ment practised by the tenants who occupy the lands,
under all these various divisions.

Old Inclosures.—Perhaps one half of the inclosed
parishes, may be denominated old inclosures, at least
that proportion may be said to be occupied as gra-
zing farms, which is the use to which old inclosed
lands in this county is generally applied.

STOCK and MANAGEMENT of a FARM used
for BULLOCKS, and SHEEP grazing, or fat-
ting for the Butcher.

One hundred and seventy acres old pasture, 70
acres meadow, rent L. 300, poors rates, and other
parochial taxes 5 s. 6 d. in the pound of rent, lands
exonerated from tithes.

Soon

Soon after Ladyday, the farmer begins to purchase bullocks, and the breeds of Shropshire and Herefordshire are preferred. In the course of the summer a few Scotch and Welsh cattle are bought in. The stock never exceeds 70 bullocks and heifers. He begins felling off in September, and by the beginning of February the whole is disposed of.

From the end of October hay is given twice a day in the field. The cattle are consigned to a saleman in London.

The expence of sending them there, including the saleman's commission, amounts in summer to 6s. 6d. and in winter to 7s. each. The buying-in price of Shropshire and Herefordshire cattle is from L. 13 to L. 14, and the felling price from L. 17 to L. 18. About 100 ewes with lamb (generally of the Shropshire breed) are purchased in the month of September, at about L. 21 the score. Sixty wedders of one year old, here called Shearlings, also of the same breed, are purchased about the beginning of winter. The price about L. 26 *per* score. Begin felling off the lambs (many of the ewes have two lambs) in May. The average price L. 22 the score. The ewes are fold from September to December at about the same price with the lambs. The wedders, after they are shorn, are fold in May and June, about L. 36 the score. Expence of sending to London 1s. to 1s. 2d. each. A few young horses are generally reared.

SERVANTS.

1 shepherd, at 8s. *per* week.

A man or boy, at 5s. *per* ditto.

No work-horses or implements of husbandry.

Dairy Farm.—Extent 200 acres pasture, and 50 acres meadow. — Rent L. 280.—Tithe free.—Poor rates, &c. 3s. Milk from 45 to 55 cows; prefers the short horned Yorkshire. Plows none of the land,

but makes as much meadow-hay as serves for provender in winter, and on which the cows are wholly maintained during that season. Purchases straw for litter, which generally costs about 30s. the waggon load. A few breeding mares are kept, and 5 or 6 young horses, but no young cattle. From 8 to 10 cows with calf, and fattening for the butcher. The calves are sold to Essex and other counties, where they are fed for veal. Keeps about 20 hogs in summer, and about half that number in winter. The buying-in prices from 20s. to 25s. They are kept 4 or 5 weeks, and fed entirely on milk. They are sold in London at from 30s. to 40s. each. The expence of sending there 1s. 4d. each. About 120 sheep are regularly kept as a breeding stock. Butter, and milk for the hogs, are the only produce of the dairy. The butter is sent twice a week to London by the stage-waggon. The price from May to November is 8d. and from November to May 10d. *per* pound. There is nothing particular in the manner of managing the dairy.

NUMBER OF SERVANTS.

2 men.

1 shepherd.

1 boy.

2 women.

No work-horses or implements of husbandry.

There are several farms, where a small portion of the lands are in tillage, and which properly falls to be described under this head. The mode of management, however, is so nearly similar (except in that particular) to the one before mentioned, as renders it only necessary to state, that on these farms, a breeding stock, to a certain extent, is regularly kept; and that it is principally on such farms, where attention has been paid to the improvement of the different breeds. The Dishley or new Leicester breed
of

of sheep, which is considered as the best yet known, is generally introduced on all these farms.

New Inclosures.—In what is called the new inclosed townships or parishes, a system of alternate corn and grass husbandry is adopted; a certain portion of meadow is generally allotted to each farm, where it is practicable; and some particular fields are kept in constant pasturage.

PARTICULARS of a Farm, containing 220 Acres, besides 40 Acres of Meadow.—Rent L. 400.—The Lands Tithe free,—Poors Rates, &c. 3 s. 6 d. in the Pound.

ROTATION OF CROPPING.

1st year, fallow, part turnip, the land dunged.
2d year, wheat, barley after the turnip. .
3d year, beans or pease. .
4th year, barley, with 18 lb. red clover to the acre.
5th year, clover.
6th year, ditto.
7th year, part beans and part oats.

NUMBER OF SERVANTS.

2 plowmen.
2 boys.
1 shepherd.
2 women servants.

STOCK.

9 horses.
2 or 3 young horses.
8 cows.
20 hogs, old and young.
A breeding stock of sheep, consisting of about 200.

PARTICULARS of a Farm, containing 200 Acres of Tillage-land, and 100 Acres in a State of Pasturage.—Rent L. 300.—Tithe free.—Poor-rates 3 s. in the Pound.

ROTATION OF CROPPING.

Oats.

Turnip.

Barley.

Wheat, with 20 lb. white clover, one-half bushel rye-grass, and 4 lb. red clover.

Grass made into hay.

Ditto, pasture.

Ditto, ditto.

Ditto, ditto.

NUMBER OF SERVANTS.

4 plowmen.

4 boys.

1 shepherd.

2 women servants.

STOCK.

13 horses.

3 or 4 young horses.

20 cows and young cattle.

A breeding flock of 200 sheep on an average.

15 hogs, old and young.

N. B. By the above rotation, fallow is excluded, one half of the farm being under corn and turnip, and the other half under grass. Though it may be proper to observe here, that no general rotation of cropping is established in the county, each landholder or his agent, fixing on that, for which the soil and situation of the farm is considered as best adapted.

Open Field Lands.—Without entering into a particular detail, of the wretched system of husbandry, universally adopted in the open field parishes in
this

this part of the report, it is only necessary to state simply what the system is.

PARTICULARS of a Farm in the Open Field State, containing 100 Acres arable, 20 Acres Meadow, and 150 Acres Ley or Pasture.—Rent, L. 118.—Tithes payable in kind.—Poor-rates, and other Parish-taxes, 5 s. in the Pound of Rent.

ROTATION OF CROPS.

1st year, fallow, part turnip, the land dunged or folded with sheep.
2d year, wheat, barley after the turnip.
3d year, beans, and a few acres under oats.

SERVANTS.

2 men.
2 boys.
2 women servants.
1 shepherd takes care of all the sheep in the parish.

STOCK.

7 horses.
9 cows.
6 or 8 hogs.
130 sheep of all ages.

Commons.—Though there is not one acre of waste lands in this county, properly so called, yet there are many thousand acres in the open field lordships in a state of common pasturage, which, under proper management, might be made to produce abundant crops both of corn and grass, while at present they do not yield pasturage, which can at the highest computation be estimated at 5 s. the acre. Indeed, if the calculation was fairly made, the occupiers are not benefited to the extent of half that sum, as the stock which they send to depasture upon

H these

these commons, is liable to so many diseases and accidents, as one year with another, nearly counter-balances any advantages which can be derived from possessing this right ; while, on the other hand, the keeping such extensive tracks of land in a state of commonage, is attended with one very great disadvantage to the farmers in the neighbourhood, because, while these rights of commonage are continued, no attention whatever will be paid to the improvement of the breed of stock ; for it is not to be supposed, that a farmer who depends on the scanty food which these commons afford for the maintenance of his cattle, horses and sheep, will ever be at much expence or trouble for the improvement of the different breeds. Without enumerating all the various commons of small extent, situated in different parts of the county, or the nature or extent of the common rights of pasturage, possessed by those who reside in the neighbourhood of the forests and chases, it may only be necessary here to mention particularly that of

THE GREAT PETERBOROUGH FEN.

A track of fine level land, containing between six and seven thousand acres, of a soil equal to any perhaps in the kingdom of Great Britain, and susceptible of the highest cultivation. It is situated between Peterborough and Crowland, towards the north-east bounds of the county, and is subject to the depasturage of the cattle, horses and sheep of 32 parishes or townships in the neighbourhood, which comprise what is commonly called the Soke of Peterborough. The farmers who live in the townships immediately adjoining, consider their right of commonage as of no value to **them** ; and it may therefore be supposed, that those who live at the distance of 8 or 10 miles cannot be much benefited thereby. Indeed, considering the **present** mode of management,

ment, it is impossible that any advantage can arise to the persons having right therein. That it is a valuable track of land, however, if under proper cultivation, is fully ascertained from the following circumstance. The annual expence of keeping the drains, bridges, &c. in proper repair is considerable; and the means adopted by those concerned, for raising a fund for this purpose, is to let a certain number of acres to some tenant in the neighbourhood for a course of corn cropping, for 3 or 4 years, when it generally rents at from L. 3 to L. 5 *per* acre. From this account, it may be safely stated, that if these six or seven thousand acres were converted into private property, and divided into farms of a proper size, the whole might be rented on leases of moderate endurance, at from 20 s. to 30 s. *per* acre; and it may further be observed, that the produce of these lands, under that system, would exceed what they now yield, to the extent of many thousand pounds a-year, while the additional number of hands which would be requisite for the cultivation of these farms, could not be short of 1300 or 1400. The advantages, therefore, both of a public and private nature, which must necessarily result from a division of this common, are so obvious, as to require no illustration.

The person who is most materially interested, is Earl Fitzwilliam, though a great many others are, to a certain extent, concerned. From the truly respectable character of that Noble Lord, there can be no doubt, that a proper application made to him, from all those having interest in the division, would be attended with the best consequences, as, from his disposition to be serviceable to those who reside in his neighbourhood, he would cheerfully embrace so favourable an opportunity of materially promoting their interest. But as the whole inhabitants of these 32 parishes, may be said to be in some degree concerned,

cerned, and as it would answer no good purpose, to call together so numerous a body of people, it might therefore be proper, that a meeting should be held in each parish, and powers granted to one of the most respectable of the inhabitants, to meet a person deputed by each of the other parishes, in order to make the application, and procure his Lordship's consent to the measure; and if obtained, of which there is no reason to doubt, application might then be made to Parliament, who would no doubt agree as to the propriety of the division, and pass a bill, appointing commissioners to negotiate the business in common form.

Among the various important objects, which naturally fall under the consideration of the Board of Agriculture, there are none, which, in their consequences, will prove more extensively beneficial in a national point of view, than their giving every possible aid to those spirited proprietors, who are anxious to promote the improvement of the country, by bringing the commons and waste lands under cultivation, as nothing will so certainly promote or maintain an increased population.

With respect to what are the best means to be pursued in regard to the common in question, it would be improper in this report to determine. It appears only necessary to repeat, that the improvement of it, would give regular employment to a great number of hands, and furnish the public markets, with an additional quantity of several thousand quarters of grain annually; all which can be effected, without being attended with any bad consequences whatever.

Woodlands. — There are several very extensive tracks of woodlands in this district; they consist either of forests, chaces, or purlieu woods. The most considerable forest is that of Rockingham, which is situated in the northern parts of the county, beginning

ning near the village of Wansford, on the great north road from London to Edinburgh, extending for near 20 miles towards the centre of the county, and forming almost a continued chain of woodland country : There are two other extensive forests, *viz.* Whittlebury and Salcey, lying towards the south border of the county ; the chaces are those of Ged-dington and Yardly ; the former in the neighbourhood of Rockingham forest, and the latter in the vicinity of Salcey forest.

The purlieu woods, are both extensive and numerous, particularly towards the lower parts of the county, and upon the borders of the forest of Rockingham ; and besides these, there are several small tracks of woodlands, very advantageously and ornamentally situated, in many other parts of the county.

The whole of what are now considered to be forest woods, are subject to the depasturage of the deer, and at a stated time of the year, to the depasturage also of the cattle belonging to those who reside in the adjoining townships, and who claim to be possessed of a right of commonage ; on these accounts, the profit arising to the proprietors of these woods, from the cutting of the timber, and underwood, is small, compared with that arising from regular well managed purlieu woods, which are not subject to the annoyance of the deer and cattle.

The underwood in the forests and chaces, principally consists of black and white thorn, ash, fallow, maple, and a small proportion of hazle. They are generally cut at from 12 to 18 years growth ; the different woods are divided into as many parts or sales, as the number of years growth at which the underwood that is cut may amount to, so that a regular rotation in cutting takes place every year.

The proprietors of the underwood in the forest woods, are empowered by the ancient laws and customs of the forest, to fence in each part or sale, as

soon as it is cut, and to keep it in *band*, as it is here termed, for 7 years, except against the deer, which are let in at the expiration of 4 years; but the cattle belonging to the commoners, are not let in till the end of 7 years from the time of cutting; so that there are always 7 parts or sales constantly in *band*, and in which the cattle of the commoners are not permitted at any time to depasture. But from the depredations to which the young underwood is subject, by so early an invasion of the deer and cattle, even at the regular and stated times before mentioned, besides the great damage frequently sustained from inattention to the repairs of the fences, during the time it should be kept in *band*; the heavy expences attending the making a new fence in the first instance, and the continual expence incurred in keeping it in repair, during the time it should stand, make the profit arising from the underwood, very inconsiderable to the proprietor, compared with any moderate rent that might be expected from the land. The forest underwood, through the whole *sale*, or part which is cut, does not in general bring above L.4 the statute acre, though sometimes it is sold as high as L.6 the acre upon an average of the whole sale; but this depends entirely on good management in keeping the fences in proper repair, so as to prevent the deer and cattle from breaking in before the limited periods, as well as in suffering the underwood to stand to a greater age than usual.

At the time the underwood is to be cut, it is parcelled out into small regular sized lots, generally consisting of about a statute rood of ground; the divisions of the lots are made by cutting a number of small passages or openings called trenches, which intersect each other at regular distances, and these trenches are just cut wide enough to admit of a passage between each lot; the underwood is valued and sold standing,

standing, and the purchasers cut it and carry it away at their own expence. A considerable part of it is made into hurdles for folding sheep on turnip; the remainder is applied to other purposes, and used as firewood, there being no coals in the county, but what are brought up the rivers *Nen* and *Welland*.

A fall of oak timber* is generally made at the proper season in that part, or *sale*, in which the underwood has been cut; and this fall consists of the most unthrifty and unimproving trees, but the quantity and description of timber, must depend of course upon the state of the wood, as to the stock of timber.

It is a general custom in the forest-woods, to value and fell the trees standing. Distinct and separate valuations are generally put upon the timber, the top, and the bark respectively. And it sometimes happens, that these three articles are sold to three different purchasers; but it is more usual to fell the tree and the top together, reserving the bark, which is sold to one purchaser, previous to the fall of timber being made. The conditions and prices vary in different parts of the country; they run generally, however, at from 7 s. to 9 s. in the pound of the value of the tree.

The Prices of Timber in this District are as follow:

Oak,	from	1 s. 4 d.	to	2 s. 6 d.	<i>per</i>	foot.
Ash,	from	10 d.	to	1 s. 6 d.	<i>per</i>	ditto.
Elm,	from	9 d.	to	1 s. 4 d.	<i>per</i>	ditto.
Poplar,	from	6 d.	to	1 s.	<i>per</i>	ditto.

Every

* There is a very small quantity of the oak timber taken out of the forest woods consumed in the country. It principally consists of timber of a large size, and more fit for the use of the navy than for country purposes. It is therefore generally bought in large bargains, by contractors for the navy, who come into the county regularly every year, during the season for felling the oak timber. But if no speedy and effectual means are taken for the better management and preservation of the forest woods, in order to procure a regular succession of oak timber, the navy will, in a short time, be deprived of this valuable resource.

Every other kind of white wood, such as beech, chefnut, lime, &c. fell at something more than the price of fire-wood.

It is a certain truth, and well worthy of the serious consideration of Government, that the depredations committed in the extensive forests and chafes in this county, by the deer and cattle, in destroying the young trees at a very early period, prevent the possibility of obtaining any considerable succession of oak-timber, as scarce any saplings or young oaks are to be seen, although there are undoubtedly a great number of seedlings produced by the falling of the acorns; yet, when the number of destructive enemies, to which they are exposed in their infancy, is considered, it is a wonder how any of them escape their devouring jaws.

If the forests in the other parts of the kingdom are under the same management, there is no man who wishes well to his country, but must be alarmed at the prospect of the deficiency, which, in process of time, must take place in regard to that valuable article, oak-timber, for the supply of the navy of this kingdom. The evil certainly requires a speedy and effectual remedy to be applied. What that may be, the wisdom of the Legislature can best determine; but, as particular attention was paid during the survey on which this report is founded, to the state of these forests and chaces, compared with those woods which are private property, it may be proper to add, that the difference is obvious to the most cursory observer. In the one, a young thriving oak-tree is scarcely to be seen, whereas, in the other, a regular succession appears in every quarter. The miserable state of the Royal Forests does not originate from any want of public spirit in those who have at present the charge of them, but necessarily arises from the errors of an ancient system, which had in view more the preservation of deer than of timber;

timber; and consequently sacrificed the preservation of the latter, for the purpose of securing food for the former.

Perhaps the best plan that could be adopted, would be to disforest all these woody lands, under severe restrictions; however, in regard to certain proportions of them being continued as forests for the production of oak timber. Those having right to the timber and underwood, being also bound to give a compensation in land to the commoners, having a right of commonage in these forests and chafes, and according to the nature and extent of their different rights. Were some such plan adopted, certain considerable portions of these forests and chafes, might be devoted solely to the purpose of growing oak-timber, and one person only having interest in them, there is no doubt proper attention would be paid, in order to bring on a regular succession of timber, which could be effected, whilst at the same time, a considerable improvement might be made in the growth and value of the underwood.*

FARM

* I am indebted to Mr EDMONDS of Boughton-house, for the following very interesting Observations, and for many others scattered in various parts of the Report.

Purlieu woods are those woods which are situate immediately in the vicinity of the forest, and which, at one time, formed a part of it; but the respective owners having at some former periods, obtained grants and permission from the Crown to disforest them, and to consider them as their own private property, they are not now subject to any of the laws and regulations to which forest-woods are subject.

MANAGEMENT OF PURLIEU WOODS.

THE management of what are called purlieu woods in this district, differs materially from those of the chafe and forest woods. These woods being entire property, of course there is no obstacle to prevent the proprietors of them from pursuing the best mode of cultivation and management in their power; but this advantage has been in very few instances taken; and little improvement towards rendering them more productive and profitable to the respective owners has been made. The underwood in these woods principally consists of hazle, ash, fallow, white and black thorn, and some maple; it is generally cut from 11 to 14 years growth, when the season for cutting arrives.

FARM BUILDINGS.

In this county, as well as in the greater part of England, the farmers still live crowded together in villages,

arrives, which is as soon as the leaves are completely off. That operation is performed under the direction of the owner of the woods or his agent. The part intended to be cut is parcelled out for the convenience of the purchasers into regular sized lots, consisting of 20 statute square poles each. The whole of the underwood growing upon each lot is indiscriminately cut, and laid in one direction, on the ground from which it is produced; and in some instances care is taken to select such ash poles, as are of a larger size and proper to be converted to more valuable purposes, than those which are indiscriminately sold with the underwood. So soon as the operation of cutting is completed, and the wood parcelled out as above described, a valuation is put upon each lot or parcel, according to its quality, and what it may consist of; and the whole is then sold to such persons as may be inclined to purchase the respective lots or parcels, who, over and above the price of the underwood, repay the expence of cutting it, which is proportioned at so much *per* pole upon each lot according to its quantity. Such as the present mode of management is in these woods, their produce is much more considerable to the proprietor than forest or chase woods; but it is believed it is by no means equal to the produce of well cultivated woods in other parts of the kingdom. The average price of underwood, cut from 11 to 14 years growth, is about L. 6 *per* statute acre; but it is sometimes sold so high as L. 8 *per* acre.

The underwood of the purlieu woods, as well as of the other woods in this district, (the management of which is exactly the same as that of the purlieu woods), is principally bought by bakers, who consume it as fuel. A considerable quantity of the smooth wood is manufactured into sheep-hurdles, which are used for temporary fencing: but in all cases, a reservation is made by the purchasers of the ash and fallow poles which are used for various useful purposes in husbandry. A fall of oak timber is usually made in that part or quarter from whence the underwood is cut; the quantity of which, of course, depends upon the state of the wood, as to a stock of timber.

The oak timber in the purlieu and private woods, on account of there being so good a succession, as well as on account of there being a great deal of underwood, seldom attains to so large a growth as that found in the forest and chase woods; it is therefore much more fit and convertible for country uses, and for all purposes of building and husbandry, and is principally bought by carpenters, joiners, wheelwrights, and other artificers in the neighbourhood.

Chase Woods.—There are two chases in the county, *viz.* Geddington and Yardly. The former was once a part of Rockingham forest; but permission was given by the
 Crown

villages, or townships, as was the practice in the most remote ages, and when the system of open,

or

Crown many years since, to the ancestors of the Montagu family to disforest it, and to convert it into a chase; the latter, it is presumed, was once a part of Salcey forest, and has been disforested likewise.

Geddington Chase, is supposed to contain about 1400 acres, of which perhaps 1200 acres are woodland, the remainder consists of lawns, plains, ridings and viftas. The whole is now the joint property of his Grace the Duke of Buccleugh, and the Right Honourable Earl Beaulieu, subject to a commonage at a stated time of the year, *viz.* from May-day to about Martinmas, for the adjoining townships. Deer are kept in it; and it is in every respect managed like the forest woods, as to fencing out the deer and commoners cattle from that part which is annually cut. The woodland is divided into 18 parts or sales; in one of which the underwood is cut, and a fall of timber made every year. It is afterwards fenced in for 7 years, (*viz.* 4 years from the deer, and 7 from the cattle); so that there are always 14 parts out of 18 open to the former, and 11 parts out of 18 open to the latter, besides the plains, ridings and viftas, a small part of which only are at any time included within the fence of the parts which are cut. Although there is at this time a valuable stock of oak timber in this chase, principally consisting of trees of a large size, and which have been the growth of ages; yet perhaps this extensive and valuable track of woodland exhibits at this moment the most striking and lamentable instance of the evil and pernicious consequences that must inevitably attend property circumstanced as the forest and chase woods are. The depredations and ravages committed by the deer and cattle upon the young sprigs and coppices, at so early an age, not only prevent even the smallest possibility of obtaining a regular succession of oak timber, but cause a daily diminution in the growth of the underwood. The injury sustained by the deer being admitted into the young spring wood in the first instance, is very considerable; but that injury is small indeed, when compared to the destructive havoc made by the devouring jaws of a herd of hungry cattle, admitted into the young coppice just as the leaves have begun to appear, and at a season of the year when it some times happens they have just survived a state of famine, the consequence of a want of sufficient fodder, in a hard and severe winter. All the townships using a commonage in these woods (except one) are in an open field state, and no attention is paid by the occupiers to the description of cattle bred and reared, which are of the most inferior kind, and which, in consequence of the inability of the occupier of an open field farm to procure a sufficiency of food for their support in the winter season, are reduced to an extreme state of leanness and poverty at the time they are turned into the woods, when whole herds of them rush forward like a torrent, and every thing that is vegetable and within their reach, inevitably falls a sacrifice to their voracious and devouring appetite. Under these circumstances it is not at all surprising that contagious maladies are frequently the fatal consequence; to which cause a considerable

or common field husbandry univerſally prevailed.
 Though theſe crowded ſituations might no doubt
 be

conſiderable number of cattle fall victims; and the loſs ſuſtained by the owners not only deprives them of any profit or emolument from thoſe that are fortunate enough to ſurvive the malady, but prevents their deriving any advantage from the commonage that year, and probably for many years to come. Such are the inconveniences which muſt ever attend property held under a mixture of intereſts, ſo extremely inimical to each other as thoſe of the commoner and the proprietor of the timber and underwood are, in woods of this nature. Can there, at this time, be a ſubject to which the wiſdom of the Legiſlature ought more ſpeedily to be directed? The great and alarming decrease of oak timber in this country is univerſally acknowledged and lamented by every individual; and it is preſumed there is not a Briton but who muſt be ſenſible how much that invaluable article tends, at this moment, to the preſervation and defence of his country, againſt a neighbouring nation, frantic with zeal to propagate their diabolical ſyſtems throughout the civilized world. Thoſe who are in the habit of managing woods, no doubt feel a very ſenſible reſpect for ſo fine and venerable a production of nature as that of an oak tree arrived at its full perfection, both in ſize and growth; it is truly a living monument of the works of the Creator; and no one can direct the fatal axe to be applied to its root, without reflecting that he is about, in a few minutes, to deſtroy what whole ages have been employed in producing; but it would, it is conceived, be ſome conſolation to ſuch a perſon, could he diſcover in looking round this venerable trunk, ſome companions left to ſurvive its loſs, and who, in a young and thriving ſtate, might receive additional vigour by the removal of their neighbour. But this, alas! in the preſent ſtate of things, is a conſolation that cannot be obtained; for it muſt be next to a miracle indeed, if a young oak tapping eſcapes the numerous enemies to which it is expoſed in its infancy. And if the ſyſtem now practiſed in theſe woods, with regard to cutting down all ſuch timber trees as appear mature, and in an unthriving ſtate, is long purſued, the reſult muſt be, that in a very few years, there will not be a ſingle oak tree large enough for the uſe of his Majesty's navy left in them.

It is preſumed, the ſame facts and circumſtances here ſtated, will apply to many thouſand acres of woodland in this county, as well as to many very conſiderable tracts of the ſame deſcription in the kingdom. Muſt it not then be a ſerious, important, and very lamentable reflection to the mind of every man who wiſhes for the preſervation of his country, that the Legiſlature do not immediately take ſome active and effectual meaſures to avert the impending evil that muſt otherwiſe inevitably take place?— Before thoſe advantages that will attend an improved ſyſtem of management in the foreſt and chaſe woods are enumerated, it will be neceſſary to take the liberty of ſuggeſting the mode by which they may be attained. An incloſure of all the open field pariſhes having a commonage in the woods, muſt undoubtedly be the firſt and principal

be attended with considerable advantages in ancient times, and though the system of open field husbandry, where

pal object to be obtained. That inclosure should extend to such parts of the forest and chafe woods as are situated within those parishes respectively. The act of Parliament to be obtained for the purpose, should contain proper powers for the commissioners therein appointed, to ascertain the value of the whole commonage in the woods, and to divide and proportion the value of that commonage among the several townships or parishes, according to the number of persons who may be found by them in each parish or township, to be entitled to any share or proportion of such commonage, and according to their respective rights and interests. The commissioners should also be empowered to set out so much land, being part of the estate which the proprietor of the woods may be possessed of in each parish or township, to every commoner, as they may judge equal in value to the proportion of the commonage to which such commoner may be entitled, and which they may judge to be a full and adequate compensation to such commoner, for his right and interest in the forest or chafe woods. The land so to be given in compensation to each commoner, as aforesaid, to be added to the allotment of land which each commoner may be entitled to, in right of his estate and interest in the open fields and commons, which allotment should be laid as contiguous to the dwelling-house or homestead of the commoner as possible. It is presumed this mode might be adopted in all cases, where the proprietor of the woods is possessed of an estate and property in the open fields and commons, or of any old inclosed lands belonging to the parish or township in which the woods may be situated, to enable the commissioners to set out a sufficient part of such property as they may judge equal in value to the whole of the commonage of such parish or township; but instances may occur where the proprietor of the woods may not be possessed of either of those advantages; in that case, a sufficient quantity of the woodland might be grubbed up and cleared, and considered as part of the land intended to be inclosed, and might be valued and allotted by the commissioners accordingly.

The present state in which the forest woods are held, it is feared, will nevertheless, in a great many instances, make it impossible for the system above prescribed to be generally adopted; the remaining interest still reserved to the Crown, with respect to the deer and other matters in these woods, will prevent the proprietor of them from being able to accede to any measures that may be suggested for their advantage and improvement, until some previous arrangement takes place. It is hoped the commissioners of the land-revenue, who, it is understood, have now these matters under consideration, will devise some means by which so formidable an impediment as a mixture of interests must inevitably be to the improvement and advantage of landed property, may be done away, and by which the respective owners and proprietors of the forest woods may be enabled to pursue the best possible system of management in the cultivation of them.

The advantages resulting from such measures being adopted as have been suggested, in regard to the forest and chafe woods, would not only be very sensibly felt by the indivi-

where practised, precludes the possibility of placing the farm-houses in central situations; yet it appears surprizing that the buildings belonging to the farms in a state of inclosure, should still remain at such a distance from the farms; there being but very few instances where the houses are properly situated in the centre of the farms. The inconveniences which the farmers must labour under in consequence of residing at so great a distance from their farms; and the loss of time and consequent extra-expence, of bringing the produce from the extremity of the farm to their home yard, (as it is here called), and of carrying the manure to the distant fields, are so obvious, as to require no explanation.

The farm buildings are in general as badly constructed, as they are improperly placed. It being only on such farms where the houses have been recently built, and under the direction of the landlord's steward,

duals immediately interested, but would be so extensive as materially to affect the nation at large.—*First*, In respect to the individuals interested. Upon the deer and cattle being totally excluded from the woods, no interior fences would be required, and the proprietor would be at liberty to continue such parts of his property as he might think fit, in a woodland state, and would be enabled to introduce such a system of management in the cultivation of those parts continued in wood, by means of which their produce might be very considerably increased. The remainder of the parts not continued in wood, might be cleared and grubbed up, and converted to some useful purposes of agriculture. The commoner, instead of depending upon the precarious and uncertain advantage arising from turning his flock into the woods, would become the possessor of a portion of land, the produce of which, when properly cultivated, would be a certain and valuable resource in contributing towards the maintenance of himself and his family. *Secondly*, In regard to the national advantage. Upon the inclosure of the fields and commons, an improved system of management in the cultivation of the arable lands would take place, by which means an increased quantity of corn and grain would be brought to market. The pasture land might be very much improved by the aid of meliorating crops and artificial grasses, which would be the means of producing an improved breed of cattle and sheep. And, *lastly*, Property, in however small portions it might be divided, would become entire, and free from those inconveniences that must ever attend it when held and enjoyed by a mixture of interests so extremely inimical to each other.

steward, where any attention has been paid either to regularity or convenience.

It is the practice for the proprietor, to furnish materials, (except straw for thatch), and the tenant to be at all the expence of other repairs. And therefore, considering the uncertainty of the tenure on which he holds them, it is no wonder that he should allow the houses to fall into a ruinous condition. Upon the whole, it is certain that the farm-houses in this district, are not kept in that tenantable state of repair, which is for the mutual interest of the landlord and tenant.

The farm-houses are built either of stone or brick, and covered with slate or straw. The barns, which are very large in proportion to the farm, owing to the practice which here prevails of housing as much of the crop as possible, are either built wholly of stone, and clay used as cement; or partly of stone wall, on which a house framed of wood (generally oak) is erected, and plastered over the sides with clay. They are commonly thatched with straw. The byres, stables, &c. are generally built of stone, and covered in the same manner, and with the same materials as the barns.

IMPLEMENTS OF HUSBANDRY.

The waggons, carts, rollers, and other implements of husbandry, are so similar to those in use in the neighbouring counties, and which have been fully described in some of these reports, particularly in that of Leicester, that it is deemed unnecessary to fill up this report, with what would have so much the appearance of repetition.

The

The principal implement, the plough, is a clumsy piece of work, with a long massy beam, and an ill formed timber mould-board, better adapted as a machine for 4 or 5 horses to pull along, than for the purpose of turning over a neat clean furrow. And it cannot admit of a doubt, but that with a well constructed light plough, with a cast iron mould-board, (such as are common in many parts of England and Scotland), a man with two horses abreast, and without a driver, would do as much work, and to better purpose, than is here done by a man and a boy, with 3, 4 or 5 horses; indeed by the practice of the county, this is clearly admitted, as a double furrow plough, of a similar construction with the other, is pretty generally used, and which does double work with the same number of horses.

LABOURERS, AND THE PRICE OF LABOUR.

As there are no large manufacturing towns situated in this district, the variations in the price of labour are not considerable; and it is, upon the whole, more moderate than could well be expected.

The wages of a ploughman by the year, are from L. 8 to L. 10, with board and washing.

A young man or boy, from L. 4 to L. 5.

A female servant, about L. 4, 10s.

A labourer in summer, receives 1s. 4d. without board, and in winter 1s.

In hay-harvest, a man earns from 9s. to 10s. *per* week, and a woman 4s. without board; though each is allowed a certain quantity of beer.

In corn-harvest, a man hired by the month, receives about L. 2, 10s. besides board; a woman is paid at the rate of 1s. the day without board.

Wheat

Wheat is threshed at 2 s. 6 d. oats, 1 s. 4 d. barley, 1 s. 9 d. and beans, 1 s. 3 d. *per* quarter.

A carpenter by the day, has 2 s. 4 d. in summer, and 2 s. in winter.

A mason 2 s. 4 d. without board.

A blacksmith charges 5 d. for a horse-shoe.

Wrought iron, such as is used in mounting ploughs or carts, costs $4\frac{1}{2}$ d. the pound.

Inclosing land, which is here always done with ditch and hedge, costs 1 s. 6 d. the running yard, and includes the price of the quicks, casting the ditches, a double row of post and rail, and keeping the hedges clean, and the fences in repair for 5 years.

Labour commences in summer at 6 o'clock in the morning, and ceases at the same hour in the evening; during hay and corn harvest, labour begins at 5 o'clock in the morning, and ceases about 7 o'clock in the evening; and in winter, the operations of husbandry go on from day-light to dark.

A man and a boy with 3 or 4 horses, and a one furrow plough, will plow one acre in the day. This is done in what is here called one journey: In summer they are at work by 6 o'clock in the morning, and go between 7 and 8 hours without interval; after which the men are principally employed during the remainder of the day in providing food for the horses.

The maintenance of the servants is here a very expensive article to the farmer. The breakfast consists of cold meat, with cheese, bread and beer. For dinner, roast or boiled meat with pudding, and for supper the same as at breakfast; and besides ale, allowed on extraordinary occasions, they have small beer at command at all hours. The luxury in which this class of people live, accounts

in a great measure for the necessity of levying such immense sums annually for the support of the poor in England. While it is perfectly certain, that a person living in Northumberland, or North Britain, on ordinary fare, will do fully as much work, and to as much purpose, as a Northamptonshire ploughman, who is maintained at a much greater expence.



POOR-RATES.

The poor-rates vary greatly in this district; in the country villages they run from 2 s. to 5 s. in the pound of real rent, paid by the tenant to his landlord, and in the towns much higher, particularly at Kettering, where, owing to the late decline in the woollen manufacture, they are advanced so high as 12 s. in the pound.

It might justly be deemed presumption in the writer of this Report, were he to enter fully into the discussion of a subject so complicated as that of poor-rates; in the investigation of which, so many able pens have been employed. He cannot however avoid remarking, that the evil appears to be getting to such a height, as will render it soon necessary to adopt some measures more effectual than any that have hitherto been attempted, in order to keep this heavy tax within any reasonable bounds. And what is of still more importance, to curb that spirit of licentiousness, which so generally reigns within the walls of a parish work-house, from whence shame and honest pride seem to be for ever banished.

MARKETS

 MARKETS and FAIRS.

Besides the weekly markets which are held in all the principal towns, for the sale of butcher-meat, and other articles of provisions, there are several stated annual fairs for the sale of cattle, horses and sheep.

The price of provisions are as follow :

Beef and mutton, $4\frac{1}{2}$ d. <i>per lb.</i>		A goose, 3 s.
Lamb, 5 d. to 6 d. <i>per do.</i>		A turkey, 3 s. 6 d.
Veal, 4 d. <i>do. do.</i>		A duck, 1 s.
Pork, $4\frac{1}{2}$ d. <i>do. do.</i>		A hen, 1 s. 3 d.
Butter, 8 d. to 10 d. <i>do.</i>		A chicken, 6 d.
Cheese, 4 d. to 5 d. <i>do.</i>		Eggs, 6 d. <i>per score.</i>
Bread, $1\frac{1}{2}$ d. <i>do.</i>		

The quantity of wheat and flour annually exported from this county is very great ; but it was not possible, by any means, to ascertain the amount, as the greatest proportion is transported by land-carriage. The wheat is sold by the farmers to the millers in their neighbourhood, who convert it into flour, and dispose of it in the neighbouring counties of Leicester, Nottingham, and Warwick, and great quantities are annually sent down the Nen to Wisbech. A great proportion of the barley crop is made into malt, and consumed in the county. The oats, and a great part of the beans, are consumed by the horses ; a small quantity of beans are, however, annually exported to Wisbech and other places.

Having been favoured with an account of the prices at which the bushel of wheat, barley, oats, and beans was sold on a particular farm in this district

strict for the last six years, it is here subjoined, and may be depended upon as correct.

AVERAGE price, *per* Bushel of Wheat, Barley, Oats, and Beans, from the year 1787 to 1792 inclusive.

	1787.		1788.		1789.		1790.		1791.		1792.		General average.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Wheat,	5	5 $\frac{1}{4}$	5	8 $\frac{1}{4}$	6	4 $\frac{1}{2}$	6	6 $\frac{1}{2}$	6	3 $\frac{1}{2}$	5	10 $\frac{1}{4}$	6	0 $\frac{1}{2}$
Barley,	2	6 $\frac{1}{4}$	2	6 $\frac{1}{4}$	2	7 $\frac{1}{4}$	3	3	3	1 $\frac{1}{2}$	3	4 $\frac{1}{4}$	2	11
Oats,	2	0 $\frac{1}{4}$	1	10 $\frac{1}{4}$	1	8 $\frac{3}{4}$	2	4	2	5 $\frac{1}{2}$	2	6 $\frac{1}{4}$	2	2
Beans,	3	7 $\frac{1}{2}$	3	8 $\frac{1}{4}$	3	6	3	11	3	10 $\frac{1}{2}$	4	1 $\frac{1}{4}$	3	9

ROADS and BRIDGES.

There are few districts which can boast of a greater number of handsome, well built stone-bridges; every brook and rivulet is made passable by means of a stone arch; and the bridges on the larger rivers do credit to the public spirit of the inhabitants.

It is to be regretted, that as much cannot be said in respect to the roads. These, it must be acknowledged, display no great ingenuity either in the engineer who planned, or in the undertakers or overseers who executed the work. The great roads leading through the county are all turnpike, and are supported, partly by the money collected at the different toll-bars, and partly by the statute-labour imposed by act of Parliament. Each tenant who occupies a farm of L. 50 of rent being bound to perform 3 days labour of a cart with 3 horses, and 2 men yearly, on the turnpike-roads within the parish, and the same on the private or parochial roads; and where there are no turnpike-roads within

In the parish, the whole 6 days labour is applied to the repairs of the parish-roads.

From this account it might be supposed, that the roads in this district would be kept in a proper state of repair ; but the contrary is the case, particularly in regard to the private or parish roads, which are in many places in a very ruinous situation, and, in general, so narrow as to admit of only one track. It is true indeed, that the country is but indifferently supplied with metal proper for road-making, the stone being very soft, and apt to grind into powder ; —but it is equally true, that, in place of breaking the stone properly, and laying it on carefully to a proper depth, it is generally laid on the roads in the same state in which it is raised out of the quarry ; and in place of being broke with hammers, that operation is only performed in the course of time by the cart-wheels.

In place of employing contractors who do not reside in the neighbourhood, and who, for the most part, execute the work in a very slovenly manner, it would be for the interest of all concerned, to farm both the public and parochial roads to active and intelligent farmers in the neighbourhood, who would be induced by a spirit of emulation, and a regard for character, to perform the work properly. Till some such plan as this is adopted, there is little chance that the roads in this district will be put in a proper state of repair.

L I V E S T O C K .

On the first view, it will appear surprising, that, in this district, where so great a proportion of the lands are in a state of pasturage, little or no attention has been paid, till of late, to the improvement

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of

of the different kinds of stock ; yet, when reference is made to the manner in which the farms are occupied, as before mentioned ; and when the vicinity of the great London market is considered, it will not be thought extraordinary. Of late years, indeed, the improvement of the breed of sheep has become an object of the first importance with many of the most respectable and intelligent farmers.

Black Cattle. There are very few of this species of stock reared in this county, a few in the open field lordships excepted ; and these are so crossed and mixed with the breeds of other counties, which are often improperly chosen, and are so stinted in their food, as to render them comparatively of little value.

In the few instances where attention is paid to the breed of cattle on the inclosed farms, the long horned are the kind generally preferred, and are far superior to the original breed of the county, both in size and shape, as well as in the other advantages which ought to be attended to by every farmer who occupies a breeding-farm, namely, their extraordinary disposition to fatten, and to lay the greatest quantity of flesh and fat on the rump, loins, and other parts of the body, which always sell highest at market.

The dairy farmers in the south-west part of the county, however, prefer the short horned Yorkshire cows, from which county they are principally supplied. And, as they never rear any calves, they sell them when a few days old, to a set of men who make a trade of carrying them to the markets of Buckingham, and other places, where they are purchased by dairy farmers from Essex, to be fattened for veal for the London market*.

It

* Considering the distance which these calves are carried, from this county to Essex, being from 70 to 80 miles, it may be proper to give some account of the extraordinary manner

It is proper in a report of this kind, to mention the names of those gentlemen, and farmers, who have been most instrumental in introducing better modes of husbandry, and improvements in the breed of stock ; and though little has hitherto been done, comparatively speaking, in introducing a better breed of neat cattle, into this county, yet, Mr Pearce of Chapel Brampton, and Mr Robinson, at Wellingborough lodge, deserve to be mentioned, as having been at considerable expence and trouble in this respect.

Mr Pearce bought a bull calf of the late Mr Fowles of Rollright, in the year 1790, at one hundred guineas ; and having sold part of his stock in the year 1793, was abundantly compensated for this outlay of money, from the very high prices which he received for what he disposed of ; as a proof of which, it may be mentioned, that he sold a bull-calf of this breed, only ten days old, at 40 guineas ; and, that a bull and four cows were sold for L. 331 : 5 : 6.

Horses.—There were very few work horses bred in this county formerly, though, of late years, considerable pains have been bestowed in improving the breed of this useful animal ; and from the increased demand, and the consequent high price, the attention of the industrious farmer, will, no doubt, be more generally turned to this important object. The horses used in the operations of husbandry,

manner in which they are transported. Sometimes 10, 15, or 20, are put into a cart, being laid on their backs on straw, and their feet tied. They are maintained frequently for 8 or 10 days together on nothing but wheat-flour and gin, mixed together, which are here called gin-balls. In this manner, most of the calves bred on the other farms in the county are disposed of ; such a number only being reared, as are necessary for keeping up the ordinary stock of milk-cows.

bandry, are for the most part purchased in the counties of Derby, Lincoln, and York ; they are bought in at two or three years old. The object of the Northampton-shire farmer being to purchase horses, which are likely to answer either for the coach, the army, or large waggons, he keeps them two, and sometimes three years, and generally disposes of them at a profit of from L. 7 to L. 10. A horse proper for the coach, sells for about L. 40 at five or six years old ; a horse of the same age for the army, at about L. 25 ; and a dray or waggon horse, at about L. 30.

Some years ago, it was the practice here, to rear blood horses ; but experience has proved, that these animals, however valuable they may still be in the estimation of the gentlemen, are unprofitable to the farmers, because the least blemish renders them altogether unsaleable ; and if they should not meet with any accident, they must remain so many years on the farm, before they can be sent to market with advantage, as to render the profit precarious, and trifling. Such horses as are now bred are fit to go into the team at two years old, and after two or three years service on the farm, they are generally sold for one or other of the purposes above mentioned. It is worthy of remark, that a few days ago a horse of the last description, with only one eye, was sold for forty guineas, while it is well known that a blood horse, with such a blemish, would scarcely have been worth notice.

Some of Mr Bakewell's best horses have covered in this county some years, though at a very heavy expence to the individuals who subscribed for procuring them. There is nothing, perhaps, that would tend more to the general improvement of this species of stock in the county, than if a number of the proprietors were to purchase some of the best
stallions

stallions that could be found in the neighbouring districts, so that the tenants might be accommodated without any great expence or trouble. It was by this means that the breeding of blood horses came into such general practice here. And therefore, if the proprietors were to adopt this plan, it would induce their tenants to turn their attention to the breeding of such horses as are useful in the operations of husbandry, as well as for various other purposes; for which the county is peculiarly well situated, the distance from London being so great as to prevent the farmer from experiencing a rise of rent, or an additional charge for labour on that account; while he is, on the other hand, within the reach of the best market which this or any other kingdom can afford for the sale of draught horses.

Sheep.—There are here three different breeds of sheep, which may be classed as follows, *viz.* The original breed of the county, the old improved, and the late improved, or new Leicester breed. About 50 or 60 years ago, when this district was in general in the open field state, no attention was paid to the improvement of the breed of sheep. The points which marked a good sheep, in the opinion of the people of those days, were, the wool thick set on the back, an open rump, loin wide, legs open, and bones clean from wool, opposed to what is now called *gum or coarseness*. They were generally sent to market from $2\frac{1}{2}$ to 4 years old, and weighed on an average about 18 lb. the quarter. This breed, however, are now very rare, being confined to those parts of the county where commons abound.

About 25 years ago an improvement was attempted, by crossing the ancient breed with tups from Warwickshire and Lincolnshire, the breed of Warwickshire being noted for great bone or size, and that of Lincolnshire for the quantity of wool.

With the success of this experiment the farmers seemed perfectly satisfied, as a general opinion prevailed that the animal would feed in exact proportion to the size of bone, and that an additional quantity of wool might be produced, without any detriment to the carcass. This practice, therefore, went on for many years. The new breed improved greatly in size, and the farmers gave themselves no trouble to ascertain whether the increase in size and weight could be accounted really beneficial or not. And so fixed and rivetted were they in the opinion of the good choice they had made, that it was not without much difficulty they could be persuaded of the possibility of introducing any additional improvement. This, however, has of late years been effected, and the new Leicester or Dishley breed (which form a complete contrast to the former) are pretty generally introduced, owing principally to the following circumstance: Mr Bakewell, whose name stands unrivalled in this line, about the year 1788, instituted a society, consisting of himself and 15 or 16 other respectable farmers in Leicestershire and the neighbouring counties*. This society had for its object the improvement of the different breeds of stock, particularly of sheep. And by almost every account, they seem to have succeeded beyond their most sanguine expectations.

To follow them through all the experiments which they have individually made, or to detail the proofs which they are ready to produce, in regard to the difference of bone, ossal, wool, &c. in order to ascertain the advantages which the new Leicestershire breed possesses over every other, would be an endless

* Of this number, the following members reside in this county :

Messrs. J. and S. Robinsons, Wellingborough; Mr John Tomlins, Rockingham Park; Mr John Bennet, Watford; and Mr John Manning, Arflingworth.

less task. And though these experiments seem to have been fairly and candidly made, yet, as none have been attempted, in order to prove the superiority of any other breed over this, it appears a matter of more general importance, to state fully in what respects this breed is said by those more immediately interested, to excel all others; and then leave it to the impartial public to determine whether they have succeeded, and to what extent.

1st, It is said, that this breed will, on a given quantity and quality of food, produce a greater profit to the farmer than that of any other.

2^d, That they are extremely handsome or well made, and therefore more disposed to fatten.

3^d, That they carry more flesh and fat on the same weight or size of bone.

4th, That they will thrive on such pasture as other flocks would fall off upon.

5th, That an acre of land will maintain or fatten a greater number of them than of any other breed which bear the same proportion in size of carcass.

6th, That though the quantity of wool is about one fifth less than that of the old Northamptonshire breed, yet the value by the pound is about one tenth more; and that, for the reason last mentioned, both the quantity and quality of the wool, if the return is calculated by the *acre*, must be in favour of this breed.

7th, That this breed are ready for market in April or May, whereas the others cannot be offered for sale before September or October; and that, therefore, not only a greater number can be kept on an acre, as above mentioned, but a summer's grass is saved in the one case, which is used in the other.

8th, That the mutton of this breed, in consequence of the closeness of its texture, will keep several hours longer in warm weather than that of any other of the same size.

These

These are the most valuable properties which this breed of sheep is said to possess over all others; and if they really do possess them, it is not to be wondered at that their superiority should be so strenuously maintained.

On the other hand, it is asserted by many, that all the boasted superiority consists more in the high prices at which the members of the society dispose of their tups, than in any real improvement in the shape or constitution of the animal; and therefore they affirm, that this superiority must fall to the ground, as the breed comes to be more generally introduced.

It is perfectly clear, that high prices given for any species of breeding stock, certainly does not, *in every instance*, prove the intrinsic value or superiority of the breed; and therefore, if the new Leicester breed of sheep have nothing else to recommend them, they will not long keep up to their present character; but those who seem anxious to depreciate this breed, ought to come forward with something more likely to carry conviction to the mind, than bare unsupported assertions, which they cannot expect will meet with much credit.

The particulars above stated, in which this breed are said to excel all others, (and which have been inserted here, in order to bring the question fairly to issue), may be proved *true* or *false*, by every intelligent farmer in the neighbourhood; but as no attempt of this kind has hitherto been made, it is but fair at present to suppose that the superiority really remains unquestionable. The writer of this Report pretends to no particular knowledge in regard to the different breeds of sheep, and is one of those who would be ready to suppose that the size alone is what stamps additional value on either a sheep or a bullock; and, therefore, what is here stated, is
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the substance of what he learned in the course of his survey, rather than his own private sentiments. It is, however, the general opinion over the kingdom at large, whether it be *well* or *ill* founded, that the new Leicester breed of sheep is superior to every other. Though it is not intended to state that they have attained the highest possible degree of perfection to which it is practicable to bring the species, it is presumed that even Mr Bakewell himself, deeply interested as he is, will not maintain this point ; and therefore, in place of with-holding that degree of praise to which this society seems so justly entitled, it would be fortunate for the community at large, if some men, equally knowing and attentive, would endeavour to prove the possibility of improving the breed to a still higher degree of perfection ; in the prosecution of which attempt, every well wisher to his country will be anxious for their success. It may be added, that one great objection to the new Leicester breed of sheep, is *their disposition to fatten to an extraordinary degree*, and that they are not so *delicate eating* as those sheep which require longer time to be ready for the market. It is believed, that the warmest advocates for this breed of sheep, will not hesitate to allow their disposition to fatten, though they may dispute the other point, which depends in a great degree on the taste of the consumer ; but if it is certain, that a quarter of this mutton, weighing upwards of 30 lb. will only have 2 lb. weight of bone, while a quarter of *the old improved Northamptonshire breed*, of the same weight, will have about 5 lb. the improvement of the breed is at once determined, so far as the opinion of the *great body* of the consumers can go ; as a mechanic, or labourer, who has a large family to support, by his earnings, if sensible of the fact, will be ready to agree, with the new Leicester society, that an improvement has really been effected, at least to the

extent of the value of 3 lb. of meat, in a quarter of mutton, compared with that of an equal weight of bone. It has been calculated, that every inhabitant in the kingdom eats a sheep in the year. The calculation does not seem to be extravagant, and therefore the great question in a national point of view, whether the breeds of these animals are improved, or reduced, to the value of 1s. the head, appears of very great importance, and no doubt merits every degree of attention which the Board of Agriculture can bestow, the difference either way being nearly equal to L. 400,000 a-year. The manner in which this species of stock is managed, and the prices, and conditions on which the tups are hired out, are so particularly mentioned in other reports of this nature, that it is judged proper to avoid a minute detail here, as not tending in any degree to promote the object in view.

OBSTACLES TO IMPROVEMENT.

The obstacles to improvement may be classed under the following heads :

The continuance of open field lands ;
 Tithes payable in kind ; and,
 The want of leases.

Open Field Lands.—The management of the open field farms is governed by the established customs which have prevailed in the parish for ages. An open field parish may be classed into three divisions, *viz.* tillage, meadow, and pasturage.

The tillage lands are cropped in the manner before mentioned, and the several occupiers must conform to the ancient mode of cultivation of each division or field in which their lands are respectively situated ; from which it will appear, that one obli-

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ate tenant (and fortunate must that parish be accounted, where only one tenant of that description is to be found) has it in his power to prevent the introduction of any improvement, however beneficial it may appear to the other inhabitants of the parish. The tillage lands are divided into small lots, of two or three old fashioned, broad, crooked ridges, (gathered very high towards the middle, or crown, being the only means of drainage that the manner in which the lands are occupied will admit of), and consequently the farmer possessing 100 acres, must traverse the whole extent of the parish, however large, in order to cultivate this small portion. The great additional expence of cultivating lands, so situated, must be obvious to every farmer of common understanding; while the never-ending rotation of corn-crops, to which the lands are subjected, must render them incapable of producing any tolerable returns.

The meadows are kept in a state of common pasturage from the time the hay is carried off till Lady-day, by which means the crops of hay are very indifferent, compared with those produced on inclosed lands properly managed.

The leys are generally divided into three fields; one is allotted for the pasturage of the sheep, another for the cows, and, on the third, the shameful practice of *tethering* the horses is still continued. And by every information that could be procured, it appears that the flock is not kept with a view to any profit that can possibly arise from the sales, but merely as the means of cultivating and manuring the soil. Indeed, long experience has evinced, that no species of flock kept in these open fields, can be carried to market on terms nearly so advantageous, as the same articles reared by those farmers who occupy inclosed lands; nor is it to be supposed, considering the manner in which the stock is treated, that the owners will pay much attention

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to the improvement of the different breeds. While the numerous inconveniencies attending the occupation of land, so dispersed and intermixed, as open field lands always are, will remain for ever a bar to the introduction of any improved system of husbandry; the greatest, indeed the *only* objection against inclosing is, the depopulation of the parish, which, it is said, generally takes place in consequence thereof: While it may be admitted, that the inhabitants of a parish must undergo a very material alteration in their situations, in consequence of its being inclosed; yet it does not follow of course, that depopulation must be the consequence; as, though several of those who occupy small farms, must necessarily be removed, in order to enable the proprietors to class the lands into farms of a proper size; yet it is equally clear, that a new set of people must be introduced, such as hedgers, ditchers, road-makers, and labourers of every description; and therefore, this may rather be called a shifting of population from one village to another, than an expulsion from one particular parish: And were it clear, that depopulation was the consequence of inclosing a parish, that depopulation does not arise from the inclosing, but from the total alteration of system which commonly takes place in the management of the lands. For if, in place of laying down the lands in grass, which but too generally happens on these occasions, they were cultivated in an alternate course of corn and grass husbandry, the number of hands necessary for the cultivation, and carrying on the various improvements, which would in such a case be immediately introduced, would be at least equal to the number of inhabitants in the open field state.

The average rent of an acre of open field land in this district, including the value of the tithes, which may be reckoned at 3 s. 6 d. *per* acre, may amount
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to 11 s. 6 d. while the average rent of an acre of the inclosed lands, which are generally exempted from tithes, may be accounted at 20 s. which makes the difference of 8 s. 6 d. *per* acre; and as there are 89 parishes in this county, in the open field state, which may contain nearly 150,000 acres, the rent which the proprietors of these parishes lose by keeping them in an open field state, may be estimated at upwards of L. 60,000 a-year; while at the same time the introduction of improvements are precluded, and consequently an increase of rent on rational principles. It may, however, be proper to add, that humanity, as well as strict propriety, should induce those who act as commissioners under an inclosing bill, to give a compensation in land in every case where possible, to those having a right of commonage in the parish, in place of a consideration in money, by which means those people, in place of being obliged to remove, would be induced to build small cottages upon their own property.

One great obstacle to the inclosing of parishes, seems to be the very great expence to which the proprietors are subjected, in procuring the act of Parliament, and carrying it into execution. As this complaint is general all over the kingdom, it is to be hoped, that some plan will be devised by the Legislature for obviating this difficulty, and for enabling proprietors to effectuate this great improvement with more facility, and at less expence. There is not perhaps any one circumstance regarding the agriculture of England, that deserves the serious attention of the Board of Agriculture more than this.

Tithes.—The collecting of tithes in kind is very generally complained of, and in those parishes where that mode is adopted, it certainly operates very powerfully against the introduction of improvements in husbandry; while at the same time it is attended with very disagreeable consequences, both

in a religious and political point of view, as it is often the means of creating such divisions between the clergyman and his parishioners, as renders the religious instructions of the former of little avail, while it loosens that chain of intercourse and connection which it is considered of so much importance to keep united. It has happened, (though to the credit of the clergy of this district be it said, the instances are very rare), where the tithes have been let to a layman for the purpose of oppression, he has been known to exert that authority with which he was invested, and has not only taken the tenth shock of corn, and the tenth cole of hay, but also the tenth lamb, pig, hen, egg, &c. nay has even gone into the garden, and taken not only the tenth part of the fruit, but also the tenth of the produce of the kitchen-garden. Under such circumstances as these, it may be asked, who is the farmer who would not feel himself aggrieved?

Many plans have been suggested, in order to bring about an arrangement of tithes, and to place them on some permanent footing. It has been proposed, that the proprietors should farm the tithes in each parish, or that a corn-rent should be fixed by the average price of grain for a number of years past; but that which appears most likely to meet general approbation, and which seems best calculated to do justice to all parties, is to give the clergyman a compensation for his tithes in land, because the depreciation in the value of money has been so great, as to render any arrangement which is to be founded on it as a medium by which the value is to be ascertained in future times, very uncertain; whereas the produce of land must always bear reference to the value of money at the time.

Whether the open field parishes are to be inclosed, or allowed to remain in their present state, still it is humbly supposed, that a general arrangement might be made respecting the tithes, by giving a
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compensation in land; and that upon the same principles, in which those who act, as commissioners under inclosing bills, determine these matters, which is generally by finding the clergyman entitled to one fifth or one sixth of the tillage land, and one ninth of the pasture, or two thirteenths of the whole parish.

Were this desirable object by any means obtained, improvements in agriculture, and the different breeds of stock, would no doubt take place; and instead of the clergyman and his parishioners living in a state of contention, or warfare, we should see them living as one great family, in harmony and peace, and the clergyman considered as the parent and preserver of that bond by which they are united.

Want of Leases.—Next to the modes of culture, and the management of stock, which *must* according to the present system be universally practised in the open field lands, and the collecting of tithes in kind, nothing can operate so powerfully against the spirited exertions of farmers, in regard to the introduction of better modes of cultivation, and greater attention to the improvement of the different species of stock, than the *want of leases*.

Every farmer who possesses a farm from year to year, must feel *that kind of dependence* which must tend in a greater or less degree to damp his spirit for improvement, and must prevent him from doing that justice to his farm, which would enable him to pay the highest possible rent to his landlord, or to procure that *fair profit to himself*, to which the extent of capital sunk in carrying on the operations of the farm, and his own industry, are entitled.

In such a situation, the *prudent* farmer must be restrained from any spirited expenditure, however much he may be satisfied that the improvements which might thereby be introduced, would, under
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other circumstances, prove beneficial both to his landlord and himself.

In every country where improvements have been successfully and extensively carried on, leases have been granted, and every proper and reasonable encouragement given to the tenants; and where this mode of letting lands on lease has been introduced, the proprietors have in every instance found it for their interest to pursue the same plan; because they saw that the tenants, feeling themselves possessed of an interest in the improvement of the soil, bestowed every degree of attention on that object, and the landlord, at the expiration of the lease, considering himself justly entitled to derive some advantage from the exertion and industry of the former tenant, to whom he had given this assurance, demands and receives an additional rent. The best proof, in this case, that granting leases is the most probable means of securing the improvement of farms, is to refer to the particular district now under review, where it will be found, that it is only on these farms where leases are granted, that improvements are carried on to any extent.

It is true indeed, that few instances have occurred here, where the proprietors have not behaved to their tenants with that honour and good faith becoming their rank and fortune. Yet there are instances where tenants have been obliged *repeatedly* to agree to pay an advance of rent, rather than remove, while, from the uncertainty of the tenure on which they held their farms, they were debarred from making these exertions, which an advance of rent demanded, and which always happens in such cases when leases are granted.

While the proprietors remain satisfied with the rents which they receive, (which in general are high enough under the present circumstances), it is not probable that any material alteration will take place, either in regard to the manner of letting the land, or
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the system of agriculture. But if a general rise of rent should take place, it will be necessary to secure the tenant that permanent interest in the farm, which will entitle him, with propriety, to adopt those means of improvement which will enable him to do justice both to the landlord and himself. It may be added, that if leases were granted on a reasonable advance of rent, and for 19 or 21 years, the community at large, as well as the individuals more immediately interested, would be benefited thereby; and this particular district, which is so favourably situated, would, in a few years, be one of the best cultivated in the kingdom.

IMPROVEMENTS SUGGESTED.

From the preceding account of the modes of cultivation adopted in this district, it appears that about one third of the tillage lands have been for ages, and are still continued, under a constant course of corn-cropping. It is not necessary to point out at greater length the impropriety of an adherence to this system, nor to recapitulate the reasons stated for recommending so strongly an alteration in the management of the commons and woodlands. What has been already stated, will, it is to be hoped, induce the proprietors, and those immediately concerned, to turn their attention to those objects, and their own good sense, more than any thing that can be stated in a report of this kind, will enable them to adopt such measures, as are most likely to promote the improvement of the country, in these respects.

There is a very small proportion of what may be called the old inclosed lands at present under the plough, and whether it is owing to that universal prejudice which has long prevailed among landlords, against the breaking up of old pasture fields, to want of activity in the occupiers, or to the improper manner in which they were at first laid

down to grafs, it is not neceffary here to determine ; but it muft be obferved, that thefe lands are not at prefent devoted to the moft profitable purpofe to which they might be applied, being in many places greatly over-run with ant-hills, and producing a coarfe and unwholefome fort of herbage. Thefe lands would, no doubt, be made much more productive by plowing, artificial manure, and other means of improvement that might be adopted. Two objections naturally occur in the mind of the landlord againft plowing up thefe old inclofures, as they are called : The 1ft is, That the tenant would receive a great additional advantage by the luxuriant crops of grain which he would reap, and without making any additional acknowledgment to the landlord ; and the 2d is, The risk which the landlord runs, that the tenant will not beftow due pains in laying down the fields again into grafs. But, if the fyftem is a good one, (and the praftice of almoft every other country proves that it is), thefe two difficulties may be eafily obviated, as the landlord may ftipulate with the tenant, for an advance of rent during the period when the lands are in the courfe of corn-cropping, and he has it completely in his power to punifh the tenant for any aét of impropriety he may be guilty of, in regard to the manner of laying down the lands into grafs.

The new inclofed lands are in general well managed ; and where the foil is of a reddifh colour, with a fmall mixture of gravel, (of which there is a confiderable extent, particularly towards the middle and upper parts of the county), the rotation of cropping praftifed, that of the one half in grafs, and the other half in corn and turnip, feems the beft adapted for keeping it in a high ftate of cultivation, and the alternate courfe of corn and grafs husbandry, is probably the moft advantageous that can be introduced, both for landlord and tenant ; as, from the great number of fheep which can be kept upon the artificial

artificial food, produced on a farm, consisting of a proportionable quantity of this kind of land, the occupier is enabled to relieve and assist his natural pasture grounds, as circumstances and the seasons may require. And this mode of management seems also best calculated to enable the tenant to pay the landlord the greatest possible rent, while it prevents him from suffering those inconveniencies which must necessarily happen by the fall of prices, to that farmer who can carry to market one species of commodity only.

To a person acquainted with the best modes of cultivation adopted in all the more improved parts of Scotland, where every kind of soil, from the light lands of Norfolk, to the strong clays of Lincolnshire, are to be met with, it must appear surprising to see a man and a boy, with four or five horses, employed for the greatest part of a day, in plowing an acre of land, while in almost every part of North Britain, the same operation is performed in less time by a man and two horses, without a driver.

If neat light ploughs, with cast-iron mould-boards, were introduced, there is no doubt but a man with two horses, would do the same work which they now perform with double the number, and to as good purpose. It is, therefore, worthy of the attention of those proprietors who take a pleasure in cultivating a farm on their own estates, to make the experiment; for it is a well known fact, that by lessening the expence of cultivation, the tenant is enabled to pay a higher rent; and a great proportion of what is saved in this respect goes ultimately into the landlord's pocket.

For the same reason, it may be proper to recommend the introduction of the machine now so generally used in Scotland for threshing grain; and which, from several years experience, has been found to execute the work to much better purpose than can

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be performed by manual labour. It is worked either by 2 or 4 horses, where water cannot be procured ; and it will thresh from 20 to 40 bushels in an hour, and separates the corn from the chaff at the same time ; while the ordinary servants on the farm are sufficient to put the unthreshed corn into the machine and carry off the straw. The expence of these machines, on an average, does not exceed L. 80 ; and the interest of money, and annual tear and wear, may be reckoned at L. 10 a year. In a country where the threshing of 120 quarters of grain costs that sum, the introduction of such a machine as this must be a great improvement.

C O N C L U S I O N .

In the preceding Report, every degree of pains has been taken, in order to give a faithful account of the present state of husbandry in this county ; and while, on the one hand, the defects in the modes of cultivation, and the manner in which the operations of husbandry are in general conducted, have been freely mentioned ; on the other, such as appeared to be the great outlines for improvement, have been pointed out ; and after stating that a spirit for improvement is certainly introduced among all ranks in this country, and which, if properly encouraged, by the removal of those obstacles which must ever operate as a bar against the general introduction of spirited agriculture, cannot fail to be attended with the most beneficial consequences, in every point of view. It therefore remains only to make those acknowledgments which are so justly due, for the assistance received from many respectable Noblemen, Gentlemen, and Farmers, whose polite attention, and friendly manner of communicating their sentiments on every subject connected with the survey, rendered the employment in every respect satisfactory and agreeable.

A P P E N D I X.

COMPARISON between the ENGLISH and SCOTCH Systems of Husbandry, as practised in the Counties of NORTHAMPTON and PERTH.

HAVING been directed by the President of the Board of Agriculture, to draw up a comparative statement, of the different modes of husbandry, practised in the county of Northampton, which is situated nearly in the centre of England; and that of Perthshire, lying near the centre of Scotland,—it may be necessary to state, for the information of an English reader, that the county of Perth is the Yorkshire of Scotland in point of extent, and pretty similar to the West Riding of Yorkshire, and Westmoreland, in respect to surface and general appearance, there being many bleak barren mountains, and extensive lakes, in each of these countries.

The Carse of Gowrie, which may be very properly denominated the Garden of Scotland, is situated in Perthshire. This is a track of rich deep clay land, containing about 30,000 acres, superior in fertility to any in Scotland, and not to be surpassed by any of the same extent in England.

In order to form a correct idea of the rural economy of the two districts, prior to the introduction of improvements in the modes of Agriculture in either, it may be proper to observe, that previous to the year 900, the state of society in England and Scotland, appears to have been pretty much the same.

About that period, King Alfred divided the kingdom of England into tithings and hundreds; and the honest inhabitants of every village or township, became by that law answerable, in their own private fortunes and property, for all the house-breaking, robberies, and other depredations, committed within their respective districts, and were also bound, to associate with their neighbours in arms, in order to repress every act of violence, and to maintain peace and public order. In Scotland, before the laws came to be properly respected, or the executive government possessed that power and authority, necessary to prevent the great feudal Barons, and their dependents, from harassing and distressing their less power-

fal neighbours, it was common for the farmers, who then lived in villages, to enter into an agreement, called a *bond of good neighbourhood*, in which all acts which could be construed into bad neighbourhood were narrated, and certain penalties annexed to the commission of each, and from the joint manner in which they occupied the lands, (which was the same as is still practised in the open field parishes in England), as well as from the conditions contained in these bonds, they were induced to turn out in arms, on any general invasion of their property.

This being the ancient state of both countries, and it being well known that a regular Government, together with the arts and habits of civilized society, and improvements in Agriculture, were much earlier introduced into England than into Scotland, it may appear difficult to account for the manner in which both countries are now inhabited. In England the farmers still living crowded together in villages, as in former times; whereas, in the cultivated parts of Scotland, every farmer lives in the centre of his own farm, as if the feudal system had never existed. But that difficulty will be removed, when, on the one hand, the manner of cultivating the open field lands in England is considered, and that inclosing has only come into general practice of late years; and, on the other, that there does not appear to have been any commonable lands in Scotland; that since the year 1560, the payment of tithes in kind (except in a very few instances, and these where the tithes are in the possession of lay proprietors) have been abolished, and that the lands were in general possessed by great proprietors, who, when ever they were inclined, had it in their power, for the reasons just now mentioned, to divide their lands, and make such arrangements with their tenants as they judged most likely to promote the improvement of their estates; and that where a township was possessed by two or more proprietors, in place of a tedious negotiation with the Clergyman, and those having right of commonage, and an expensive application to Parliament for an inclosing bill, which is the case in England, the division of such lands, was effected by an action or process before a Court of law, (which was attended with little expence), or amicably settled, by a reference to some man of respectable character in the neighbourhood.

In the following statement, attention has been paid to reduce all the articles therein mentioned, to the standard of the weights and measures generally used in England, and the rents and returns in both countries, are calculated by the English acre, and by the Winchester bushel of 8 gallons.

gallons. It may be necessary, however, to mention, that the English statute acre contains 4840 square yards, and the Scotch statute acre 6150 square yards. A quarter, or eight Winchester bushels, contains 17,203 cubic inches. The boll of barley or oats, Linlithgow measure, (which is the standard of Scotland), contains 12,822 cubic inches, and a boll of wheat or beans measures 8789 cubic inches.

L E A S E S.

NORTHAMPTON-SHIRE.

In this county, there are scarcely any lands held by tenants under leases, except those granted by the Bishop, Dean, and Chapter of Peterborough, which are for 21 years, renewable every 7.

The tenants, in general, possess their farms only from year to year. There are, however, written agreements entered into between the landlords and tenants, in which the mode of cropping the lands is specified.

The farm-house and offices, are generally kept in repair, at the joint expence of the parties; though, in a great many instances, the whole expence rests with the tenant.

The tenant, is, on all occasions, expressly debarred from breaking up any old pasture-grass, and from felling hay or straw.

The term of entry, to a grazing farm, is at Lady-day, and to tillage lands, at Michaelmas.

The size of the farms is much the same in both counties.

PERTH-SHIRE.

There are few instances in this county, where lands are now possessed without lease. The common term of endurance is for 19 years, though sometimes the lease is granted for the lifetime of the tenant, if he should survive after the expiration of that period.

The terms contained in the lease are, that the tenant shall receive the houses in a complete state of repair on his entry, that he shall keep them in proper order during the lease, and leave them equal in value at his removal.

Particular modes for cropping the lands are specified, and certain penalties or additional rents are stipulated, for every deviation from these rules.

The tenant is generally bound to reside with his family on the farm, and is debarred from subletting or assigning his lease, and from felling any straw off the farm.

The tenant enters to the houses at Whitfunday, and to the lands, at the separation of that year's crop from the ground. The outgoing tenant has a liberty of felling his last crop before it is reaped, and it is generally disposed of in this way, which prevents any interference between the outgoing and incoming tenant.

O B S E R V A T I O N S.

There is nothing that has tended so much, to the general introduction of improvements in Agriculture, which have taken place in Perthshire, within these 50 or 60 years, as granting leases for a considerable number of years, to substantial, intelligent, and enterprising tenants.

By this means, artificial manures, such as lime and marl, have come to be very commonly used; for in consequence of receiving a lease for 19 or 38 years, the tenant thereby acquires a permanent interest in the farm, and on that consideration, commences his operations in the most active and spirited manner, and always drains, and limes, or marls, that portion of the farm, which is in fallow, during the first course of the rotation prescribed in the lease.

But a farmer in Northamptonshire, who holds his farm from year to year, must possess great faith indeed in the honour of his landlord, if he expends L. 400 or L. 500 on that kind of artificial manure, (which, though sure, is yet slow in its operation), or on any other means of improvement, from which immediate returns cannot be expected. And it is a certain fact, that a Perthshire farmer would rather pay 3 s. or 4 s. *per* acre of additional rent for a farm of tillage land in Northamptonshire, on a lease of 19 or 21 years, than the present rent, and hold the farm on such an uncertainty, as should prevent him in prudence from cultivating it to the best advantage.

R E N T A N D T A X E S.

NORTHAMPTON-SHIRE.

The rent of inclosed lands, runs from 17 s. to 25 s. *per* acre, exclusive of tithes, from which the inclosed land is generally exempted. The average may be reckoned at 20 s. to which may be added 3 s. in the pound for poor-rates.

The open field lands run from 6 s. to 10 s. *per* acre, medium about 8 s. besides about 3 s. 6 d. *per* acre for tithes; the poor-rates the same as above mentioned.

The rents are paid in money by half-yearly instalments. The first half year's rent being payable 2 months after the tenant's entry to the farm.

PERTH-SHIRE.

The rent of lands in the Carse of Gowrie is from 30 s. to 45 s. *per* acre, average about 35 s.

For lands in the open field state, from 10 s. to 16 s. medium, about 13 s.

For inclosed lands, which are all cultivated in an alternate course of corn and grass husbandry, 22 s. *per* acre may be reckoned the medium rent.

The rents in the Carse of Gowrie are paid partly in money, and partly in wheat and barley.

In other parts of the county the rents are paid in money, and either at Martinmas, (about the 22d of November), after reaping the crop, or, the one half at that term, and the other half at Whitunday following.

O B S E R V A T I O N S.

The difference of rent in favour of the Perthshire proprietor, may appear surprising to those, who do not know, that in Scotland there are no tithes, poor-rates, or other taxes which affect the tenant in his character of farmer. The clergymen in Scotland are all paid by the landholders. On the abolition of Popery in that kingdom, in the year 1560, the proprietors possessed themselves of the church-lands, and a certain quantity of money and grain was then allotted to each *Protestant Clergyman*, which generally bore a proportion, to the state of the cultivation of the parish, and the consequent value of the tithes at the time.

The poor are in general maintained by the voluntary contribution of the inhabitants, which takes place every Lord's day, either immediately before or after divine service. There is, however, an old Scotch act of Parliament still in force, by which the proprietors and tenants are liable to be assessed *equally* in such an additional sum, as may be judged necessary to support the poor of each parish; but this act is seldom put in force, and it only happens in those parishes in the neighbourhood of the mountainous parts of the country, where the greatest number of the poor people reside.

The sum necessary to maintain the poor in any particular parish, amounts only to a few pounds in the year, which may be accounted for, by the simple manner in which they live, oat-meal and potatoes being their principal food; and that when reduced by unforeseen accidents or old age, to have recourse to this mode of procuring a maintenance, they are satisfied with a very small sum, *asking in charity*, what their neighbours in the same class in England, *demand as a matter of right*. Indeed, few only, but such as are destitute of relations able to support them, make the application, it being considered disgraceful both to themselves and their relations, to have their names entered on what is called the *poors roll*.

Another reason, why the rents have got so high in Perthshire of late years, is the practice now universally established of granting leases for a certain number of years, by which the tenants are enabled to cultivate the lands better, and consequently to raise greater crops; to which may be added, the great saving which has taken place by ploughing with a man and two horses without a driver, instead of the former practice, when a man and a boy, and four horses, were considered indispensably necessary. For it is a well known fact, that a great proportion of what is

gained by the tenant, from his superior management of a farm, as well as of what he saves, by lessening the expence of cultivation, sooner or later, finds its way into the landlord's pocket.

C L I M A T E.

Periods at which seed-time and harvest commenced in the different counties, for the six preceding years, from 1788 to 1793 inclusive.

NORTHAMPTON-SHIRE.

THE periods at which seed-time and harvest commenced on a particular farm in this county for the six preceding years, from 1788 to 1793, will be found in the following Tables :

PERTH-SHIRE.

Below is an account of the periods at which seed-time and harvest commenced on a particular farm in the Carle of Gowrie, from 1788 to 1793, inclusive.

Years.	Wheat.	Spring Corn.	Barley.	Harvest commences.	Years.	Wheat.	Spring Corn.	Barley.	Harvest commenced.
1788.				4th - Aug.	1788.	11th Sept.	7th April.	6th May.	25th Aug.
1789.				18th ditto.	1789.	11th ditto.	6th ditto.	9th ditto.	27th ditto.
1790.				16th ditto.	1790.	13th ditto.	3d March.	6th ditto.	27th ditto.
1791.	5th Oct.	5th Mar.	11th Mar.	8th ditto.	1791.	14th ditto.	7th ditto.	4th ditto.	18th ditto.
1792.	6th ditto.	1st ditto.	15th ditto.	13th ditto.	1792.	4th Oct.	9th April.	7th ditto.	29th ditto.
1793.	27th Sept.	28th Feb.	21st ditto.	1st ditto.	1793.	10th Sept.	25th Mar.	3d ditto.	28th ditto.

O B S E R V A T I O N S.

By the above statement, it appears, that there are about 15 days difference in the commencement of harvest, in favour of Northamptonshire, on an average of these six years.

The climate in the Carle of Gowrie, may be considered as equal to that of any other part of Scotland. And that of the other parts of Perthshire, as superior to the northern counties of England.

ROTA-

ROTATION of CROPPING, most generally approved of and practised, in each of the Counties, for raising the different Species of Grain.

NORTHAMPTON-SHIRE.

The old inclosed lands are generally kept in a state of pasturage.

The open field lands, at least that part of them which is considered proper for tillage, is under a constant course of cropping, as follows, *viz.*

- 1st year, fallow or turnip.
- 2d — wheat, part barley.
- 3d — beans, with a few acres in oats.

The new inclosed lands are principally employed in the cultivation of grain, and cropped in the manner under mentioned, *viz.*

- 1st year, fallow, part turnip.
- 2d — wheat, barley after the turnip.
- 3d — beans or pease.
- 4th — barley, with 18 lb. red clover.
- 5th — clover.
- 6th — ditto.
- 7th — part beans, and part oats.

PERTH-SHIRE.

On the rich lands in the Carse of Gowrie.

- 1st year, fallow.
- 2d year, wheat.
- 3d year, beans or pease.
- 4th — barley, with 20 lb. red-clover, and 1 bushel rye-grass.
- 5th — clover.
- 6th — oats.

On the lands adjoining, the following rotation is adopted.

- 1st year, pease, or other green crop.
- 2d — wheat.
- 3d — barley, with grass-seeds, as above mentioned.
- 4th — clover.
- 5th — oats.

On the inclosed lands.

- 1st year, turnip.
- 2d — barley, with 8 lb. red-clover, 8 lb. white, 4 lb. rib-grass, and 1² or 2 bushels rye-grass.
- 3d — grass, generally made into hay.
- 4th — pasture.
- 5th — ditto.
- 6th — ditto.
- 7th — oats.
- 8th — barley.

OBSERVATIONS.

Without asserting that the rotations for raising the different crops of grain cultivated in Perthshire, or on the new inclosed lands in Northamptonshire, are the best adapted to the different soils, or superior to any other

other that can be introduced, it may be proper to observe, that the lands under such management, are much more likely to produce valuable crops, both of grain and grafs, than if they were allowed to remain always in grafs, or kept in a constant state of tillage. Experience has indeed proved, that the best land in Northamptonshire, when allowed to remain long in grafs, is apt to be over-run with ant-hills, and to produce but very indifferent crops. And it is presumed, it will not require much reasoning to prove, to the satisfaction of every intelligent farmer, that lands which are kept constantly under a course of corn-cropping, must be worn out and exhausted, to such a degree, as to render the crops of little value, compared to what might be expected on the same lands, if managed according to any of the rules above mentioned.

=====

AVERAGE RETURN *per* Acre, of the different Species of Crops, in the different Counties, for the same number of Years, from 1787 to 1792, inclusive.

NORTHAMPTON-SHIRE.

PERTH-SHIRE.

Years.	Wheat.	Barley.	Oats.	Beans.	General average by the acre of all these grains.	Years.	Wheat.	Barley.	Oats.	Beans.	General average by the acre of all these grains.
	Bush.	Bush.	Bush.	Bush.	Bushels.		Bush.	Bush.	Bush.	Bush.	Bush.
1787.	28 $\frac{2}{3}$	28 $\frac{2}{3}$	43 $\frac{2}{3}$	20	30 $\frac{1}{4}$	1787.	21 $\frac{1}{3}$	32 $\frac{2}{3}$	42 $\frac{1}{3}$	25 $\frac{1}{3}$	30 $\frac{1}{4}$
1788.	28	29	33	21	27 $\frac{1}{2}$	1788.	22 $\frac{2}{3}$	41 $\frac{1}{3}$	54	21	36
1789.	21 $\frac{1}{3}$	34	55 $\frac{1}{3}$	26	33 $\frac{1}{4}$	1789.	29 $\frac{1}{3}$	32 $\frac{2}{3}$	45 $\frac{1}{3}$	18 $\frac{2}{3}$	31
1790.	22 $\frac{2}{3}$	35 $\frac{2}{3}$	48	22 $\frac{1}{3}$	32 $\frac{1}{4}$	1790.	21 $\frac{1}{3}$	39 $\frac{2}{3}$	53	22	34
1791.	22 $\frac{1}{3}$	31 $\frac{1}{3}$	39	20 $\frac{1}{3}$	28 $\frac{1}{4}$	1791.	24 $\frac{1}{3}$	48	48 $\frac{1}{3}$	35	39
1792.	28 $\frac{2}{3}$	27 $\frac{1}{3}$	35	20	27 $\frac{1}{4}$	1792.	24 $\frac{1}{3}$	24 $\frac{2}{3}$	37 $\frac{2}{3}$	16	25 $\frac{1}{4}$
Div. by 6.	152	186	252	130	180	Div. by 6.	144	224	279	138	196
General average,	25 $\frac{1}{3}$	31	42	21 $\frac{1}{3}$	30	General Average,	24	37 $\frac{1}{3}$	46 $\frac{1}{4}$	23	32 $\frac{2}{5}$

OBSERVATIONS.

By the above table, it appears, that the returns by the acre of the different species of crops, except wheat, is in favour of Perthshire, or rather

ther the Carfe of Gowrie ; for the calculation is formed from the returns on a particular farm in that diftriãt, though it fhould be obferved, that that farm is not cultivated agreeable to the rotation above mentioned, confiderably more than one-fixth of it being annually under wheat, fome part of which is fown after peafe, or clover stubble ; and therefore the crops muft be fupposed inferior to what might be expected, or what is really reaped, from lands regularly fallowed and dunged, either on that or any other farm in that corner of the county.



AVERAGE PRICES by the Bufhel, at which Wheat, Barley, Oats, and Beans, were fold off a particular Farm in each of thefe Counties, for the Years above mentioned.

NORTHAMPTON-SHIRE.

PERTH-SHIRE.

	1787.		1788.		1789.		1790.		1791.		1792.		General average.		1787.		1788.		1789.		1790.		1791.		1792.		General average.		
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.			s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.		s.	d.
Wheat,	5	5 $\frac{1}{4}$	5	8 $\frac{1}{2}$	6	4 $\frac{1}{2}$	6	6 $\frac{1}{2}$	6	3 $\frac{1}{2}$	5	10 $\frac{3}{4}$	6	0 $\frac{1}{2}$	Wheat,	5	5	5	4	5	9	5	5	5	0	5	5	5	4 $\frac{1}{2}$
Barley,	2	6 $\frac{3}{4}$	2	6 $\frac{3}{4}$	2	7 $\frac{1}{2}$	3	3	3	1 $\frac{1}{2}$	3	4 $\frac{1}{2}$	2	11	Barley,	2	5	2	3 $\frac{1}{2}$	2	9 $\frac{1}{2}$	2	7	3	0 $\frac{1}{4}$	3	3 $\frac{1}{4}$	2	7 $\frac{1}{4}$
Oats,	2	0 $\frac{1}{4}$	1	10 $\frac{3}{4}$	1	8 $\frac{3}{4}$	2	4	2	5 $\frac{1}{2}$	2	6 $\frac{3}{4}$	2	2	Oats,	2	5 $\frac{1}{2}$	2	3 $\frac{1}{2}$	2	8	2	5 $\frac{1}{2}$	2	6 $\frac{1}{2}$	2	10	2	6 $\frac{1}{2}$
Beans,	3	7 $\frac{1}{2}$	3	8 $\frac{3}{4}$	3	6	3	11	3	10 $\frac{1}{2}$	4	1 $\frac{1}{2}$	3	9	Beans,	3	1 $\frac{1}{2}$	2	7 $\frac{1}{4}$	3	7 $\frac{1}{2}$	3	5 $\frac{1}{4}$	3	1 $\frac{1}{2}$	4	6 $\frac{1}{2}$	3	5

O B S E R V A T I O N S.

It appears that the price of oats is higher in Perthshire than in Northamptonshire, but that all other kinds of grain, fell higher in the laft mentioned county. That the price of oats fhould be higher in Scotland than in England, will not be thought furprifing, when it is confidered, that there, the great body of the inhabitants live principally on oat-meal, whereas in England, the bread generally ufed is made of wheat flour. The difference in the prices of the other fpecies of grain in favour of Northamptonshire, may be accounted for, by obferving, that Northamptonshire is perhaps more clofely inhabited than any other county in England, where no great cities, or large manufacturing towns are fituated, and that therefore the farmers in general find a market for their grain at home, or in the immediate neigh-

bourhood ; and that though the Carse of Gowrie, properly so called, is as closely inhabited as Northamptonshire, yet the inhabitants of Perthshire bear no proportion to those of Northamptonshire, when the extent of the two counties are compared, and therefore the Perthshire farmer, must look to a distant market for the sale of his surplus grain, which he generally finds at Leith or Glasgow, and which he avails himself of by means of the Frith of Tay, and the inland navigation which is opened between the Forth and Clyde, by which grain is transported from this last mentioned county, to Glasgow, which is the best market in Scotland. But the farmer in Perthshire, must be at an expence greater perhaps than the difference above stated, in conveying his grain to the best market ; or, which is the same thing, must sell his grain on terms so much lower, as to enable the merchant to transport it with advantage to himself.

DIFFERENCE of the Value of the returns by the Acre, in each of the Counties.

NORTHAMPTON-SHIRE.	PERTH-SHIRE.
25 $\frac{1}{3}$ bushels wheat, the produce of one acre, at 6 s. 0 $\frac{1}{2}$ d. L. 7 13 0 $\frac{3}{4}$	24 bushels wheat, the produce of one acre, at 5 s. 4 $\frac{1}{2}$ d. L. 6 9 0
31 bushels barley, at 2 s. 11 d. 4 10 5	37 $\frac{1}{3}$ bushels barley, at 2 s. 8 $\frac{3}{4}$ d. 5 1 11
42 ditto oats, at 2 s. 2 d. 4 11 0	46 $\frac{1}{2}$ ditto oats, at 2 s. 6 $\frac{1}{2}$ d. 5 18 2
21 $\frac{1}{2}$ ditto beans, at 3 s. 9 $\frac{1}{2}$ d. 4 1 6 $\frac{1}{4}$	23 ditto beans, at 3 s. 5 d. 3 18 7
Total average <i>per annum</i> , L. 20 16 0	Total average <i>per annum</i> , L. 21 7 8

OBSERVATIONS.

From the two first tables the above one has been formed, in order to shew the extent and value of the returns by the acre, in each of these counties, for a number of years, and by which it appears, that the balance is in favour of the Carse of Gowrie, to the extent of 11 s. 8 d. on four acres, or 2 s. 11 d. on each acre.

It was not possible to ascertain correctly, the weight of the crops of hay raised on the acre in Northamptonshire ; but from the information received, 18 cwt. may be considered as the full average of meadow-hay, and about 25 cwt. that of artificial grass.

On the farm in the Carse of Gowrie, above mentioned, the average crop of hay by the acre, for 6 years, is nearly 29 cwt. There are no natural

natural meadow-fields in this district, nor indeed in any other part of Perthshire, except in the valleys, and along the sides of the streams and rivers in the Highlands, where, owing to the lateness of the climate, and the great falls of rain to which that country is subject, the crops of meadow-hay are often very precarious.

L A B O U R.

The PRICE of LABOUR and PROVISIONS.

NORTHAMPTON-SHIRE.

Butcher-meat, from 4 d. to 5 d. *per lb.*
 Poultry, from 1 s. 2 d. to 1 s. 4 d. each.
 Eggs, - 6 d. to 8 d. *per score.*
 Butter, - 8 d. to 10 d. *per lb.*
 Cheese, - 4 d. to 5 d. *per do.*
 The wages of a ploughman, from L. 8 to L. 10.
 A young man or boy, from L. 4 to L. 5.
 A female servant, from L. 3, 10 s. to L. 4, 10 s.
 Day labouring in summer, without board, from 1 s. 2 d. to 1 s. 4 d.
 Ditto in winter, 10 d. to 1 s.
 A man for the harvest month, from L. 2, 2 s. to L. 2, 10 s.
 A woman by the day, 1 s. without board.
 Grain is threshed at from 1 s. 3 d. to 2 s. 6 d. *per quarter.*
 When the ploughmen receive board-wages, it is generally at the rate of 6 s. the week all the year round; but they are more commonly maintained in bed, board and washing in the farmer's family.
 The ordinary breakfast and supper is cold meat, with bread and cheese, and for dinner, either roast or boiled meat, with pudding. Ale is allowed them on many occasions, and small beer they have always at command.
 Labour commences about the same hour, at the different seasons, in each of the counties.

PERTH-SHIRE.

Butcher-meat, from 3 d. to 4 d. *per lb.*
 Poultry, from 1 s. to 1 s. 4 d. each.
 Eggs, - 6 d. to 8 d. *per dozen.*
 Butter, - 6 d. to 8 d. *per lb.*
 Cheese, from 2½ d. to 3½ d. *per lb.*
 The wages of a ploughman, from L. 8 to L. 10.
 A young man or boy, from L. 3 to L. 5.
 A female servant, from L. 3 to L. 4.
 Day labourer in summer, without board, 1 s. to 1 s. 2 d.
 Ditto in winter, from 8 d. to 10 d.
 A man for harvest work (which is generally finished in 20 working days), receives about L. 1, 5 s. and a woman about 17 s.
 Grain is threshed at from 1 s. 4 d. to 1 s. 8 d. *per quarter.*
 When servants are boarded in the farmer's house, the ordinary fare is for breakfast and supper *pottage* made of oat-meal, salt and water, which is eat with milk. For dinner soup, or, as it is provincially called, *broth* made with pot-barley, vegetables, and butcher-meat. But the more general practice is to give each ploughman a certain allowance of oat-meal, (about 36 ounces a day), and three pints of sweet-milk, or double that allowance of butter-milk. They lodge and eat in a house disjoined from the farm-house, and cook their own victuals.

OBSERVA-

OBSERVATIONS.

From the above statement it appears, that the odds in the price of labour and provisions is much less than could have been expected. The only material difference being in the maintenance of the farm-servants.

A Northamptonshire farmer considers 6 s. *per* week as a reasonable allowance for the board of a ploughman, which, for 52 weeks, amounts to

L. 15 12 0

The Perthshire farmer furnishes his ploughman with that quantity of oat-meal, which, on the average price of meal for a number of years, amounts to 2 s. *per* week, to which, if 10 d. *per* week is added for milk, makes the whole expence for the year

L. 7 7 4

For coals, bed-cloaths, &c. &c. may be added, 0 9 8

----- 7 17 0

L. 7 15 0

Thus, in consequence of the different modes in which the farm-servants are maintained in the different counties, the Perthshire farmer saves about L. 7. 15 s. a-year for each of his servants, which the other must expend. There is no probability, however, that the Northamptonshire farmer can avail himself of any information he may receive in regard to this particular, as his ploughmen will not be disposed to give up their roast beef and pudding, and betake themselves to oat-meal and milk. But it is humbly submitted to his consideration, whether he might not lessen the expence of cultivating his farm, by reducing the number of servants and horses. The practice of plowing with a man and 2 horses, without a driver, is general, not only in Perthshire, but all over Scotland. Whereas, in Northamptonshire, a man and a boy, with 3, 4, or 5 horses, are employed to plough an equal quantity, which, for the sake of calculation, may be reckoned at an acre a-day in both counties; and let it be supposed also, that these men and horses are employed in plowing the whole year round, in which period they will each have plowed 313 acres,—in that case the different accounts of the expence would stand as under.

NORTHAMP-

NORTHAMPTON-SHIRE.		PERTH-SHIRE
Ploughman's wages, L. 10 0 0		Ploughman's wages, L. 10 0 0
Boy's wages, - 5 0 0		
Boy's board, at 4 s. <i>per</i> week, 10 8 0		
Maintenance of 4 horses, at		Maintenance of 2 horses at
L. 15 each, - 60 0 0		L. 15 each, - 30 0 0
L. 85 8 0		L. 40 0 0

By the above account, including only the wages of the servants, and the maintenance of the horses, which are alike in both counties, the expence of plowing an acre of land in Northamptonshire amounts to about 5 s. 6 d. while the same operation is as well performed in the Carse of Gowrie, or in any other part of Perthshire, for 2 s. 6 d. leaving a difference of 3 s. *per* acre; but as a greater number of acres are annually plowed on every farm, in a state of tillage, than the farm *really* contains, (some fields being repeatedly plowed) the additional expence of plowing a farm in Northamptonshire, (and which it is certainly in the power of every farmer in that county to save), may be estimated at 4 s. 6 d. *per* acre. *N. B.* It is hardly necessary to observe, that the above calculation includes only such articles as are the same in both counties, and not the *whole expence* of plowing an acre in either. It may also be remarked, that the total annual expence of *cultivating* an acre of tillage-land in either county, is very different from what is above stated; for a particular explanation of this, reference is made to the table in the report of the Carse of Gowrie, where it appears, that the expence of cultivating a farm of 272 Scotch acres, exclusive of rent, amounts to L. 657, 6 s. 4 d. or L. 2 : 8 : 4 *per* Scotch acre.

WOODS and PLANTATIONS.

NORTHAMPTON-SHIRE.

In this county there are very extensive woods, and forests, though, as has been observed, they are not under the best modes of management, nor by any means so profitable as they would be, if they were converted into private property.

There are no young plantations, or any means used, (but in particular cases), to preserve a proper succession of young trees.

PERTH-SHIRE.

This county cannot now boast of forests or woodlands. Though from the great number of large oak and fir trees which are found in all the moles and swamps in the higher parts of the country, it is perfectly certain, that at some remote period, a great part of the district has been covered with trees; the only vestiges of which that now remain, are several extensive tracts of copse-wood oak, along the sides of the different rivers and lakes, which are generally cut every 25 years.

The present landholders, however, seem extremely anxious to make up for the deficiency of their predecessors in this respect. And many thousand acres (not susceptible of cultivation), are now covered with useful and ornamental plantations. As one instance of which, may it be proper to observe, that the Right Honourable Lord Kinnaird, a few years ago, paid L. 800 for planting 200 Scotch acres. The plants consisted of oak, ash, beech, elm, plane, spruce, and Scotch fir, and to the number of 5000 to the acre.

O B S E R V A T I O N S.

If more attention is not paid to the woodlands in Northamptonshire, it is impossible that any succession of trees can be preserved, and the forests must in time fall into decay. The ancient forests in Perthshire, though they still retain the name, are now destitute of trees. And indeed there are few old trees to be seen in the county, except the ornamental plantations around the castles, and houses, of the proprietors.

If, however, no pains is taken to preserve a succession of trees in Northamptonshire; and if the spirit for planting, which has become so general among the Perthshire proprietors of late years, should continue, the
contrast

contrast in this particular (which is at present so much in favour of Northamptonshire) will not long continue to be so striking.

L I M E.

NORTHAMPTON-SHIRE.

There is abundance of limestone in almost every corner of the county; yet, except for the purposes of building, very little is manufactured in the district. Though in kilns properly constructed, it can be burned on terms so low as to enable the manufacturer to sell it at the rate of 4 d. or 5 d. *per* bushel.

PERTH-SHIRE.

There is no limestone but in the remote parts of this county, and that is of so hard a nature, as not to be reducible to powder, but by means of coal. The distance and expence of the carriage of which is so great, as to amount almost to a prohibition. Limestone shells, after being burned in the east coast of England, and the south of Scotland, is imported here by sea, and costs about $4\frac{1}{2}$ d. *per* bushel.

O B S E R V A T I O N S.

The value of lime as a manure is well known in Perthshire, and its effects in producing great crops both of corn and grass (after an experience of upwards of 50 years) have been ascertained to the satisfaction of every farmer in the district.—The quantity of powdered lime laid on the acre in general (reckoning that every bushel of shells will produce 3 bushels of powdered lime) is about 380 bushels the acre; and consequently the cost *per* English acre is about L. 2 : 7 : 6.—Lime is generally laid on the land in the course of a fallow, as a preparation for wheat;—it is generally done in the month of July, or beginning of August, and plowed in with a very shallow furrow; and before the last plowing is given, (which is generally in September), about 24 loads of dung from the farm-yard, is also laid on the acre. The dung-carts used in the Carfe of Gowrie, are nearly as large as those used in Northamptonshire.—In the narrow district of the Carfe of Gowrie alone, which, as has been observed, does not contain above 30,000 English acres, lime, to the value of L. 1800 *per annum*, has been imported for the last 7 years;—and has been principally, indeed almost wholly, used as manure.

In Northamptonshire, though lime can be procured in almost every parish, it has hitherto been but partially used as a manure.—And whether

ther it is that the experiments which have been made, have not been judiciously conducted, or that the farmers, from the want of leases, are prevented from expending money in the purchase of a manure, from which no immediate return can be expected; certain it is, that there does not appear any great probability of its being soon introduced into general use, without the united exertion of the landlords.

COMMONS and WASTE LANDS.

NORTHAMPTON-SHIRE.

It is only in those parishes in this county which have been inclosed that the lands are held in severalty. The open field townships are held both by proprietors and tenants, in the same manner as was the practice at the time they were first cultivated. And there, what in Scotland is called *run-ridge*, or *run-field*, universally prevails. To the preceding report reference is made to an account of the manner in which the commons and woodlands are occupied.

PERTH-SHIRE.

In this county the lands are all held in severalty; and commons, or what was formerly known by the name of *run-ridge* property, is scarcely known; even in the rocky and mountainous parts of the country, where the surveyor cannot drag his chain, every proprietor knows the bounds of his own estate; and where artificial boundaries cannot be fixed, natural ones, such as streams of water, or the summits of mountains, are made use of to ascertain the marches.

OBSERVATIONS.

The abolition of *run-ridge* or *run-field*, may be reckoned the first dawn of a spirit for improvements in Agriculture that appeared in Scotland, and which, added to another excellent plan adopted by the landlords, which has been already taken notice of, *viz*, that of granting leases, accounts in a great measure for the very great improvements which have lately taken place in that kingdom; and it cannot admit of a doubt, that were the open field parishes in Northamptonshire divided and inclosed, and the commons and woodlands converted into private property, in the manner in which the lands in Perthshire now are, the most substantial improvements would of course be introduced; and the produce of the lands, under such superior cultivation, as would in that event take place, become greatly more abundant.

HARVESTING

HARVESTING THE CROP.

NORTHAMPTON-SHIRE.

In this county the wheat is reaped with sickles, and the barley, and oats, and beans are mowed with the scythe, and after being turned over are put up in coles in the field, like hay, where they stand some time, and are afterwards carried home, and either put into the barns, or built and thatched in the stack-yard.

The wheat is cut very high from the ground, and being bound up in sheaves, is allowed to remain in shocks in the field till it is ready to be housed; and after that is done, the stubble is cut with scythes, and carried home to the straw-yard, where it is either used for litter, or for thatching houses.

PERTH-SHIRE.

In this county, and indeed almost every where in Scotland, the corns are all cut with sickles, in the same manner as wheat is reaped in England. And after having remained some time in shocks, or what is here called *shocks*, it is carried home, and built up, and carefully thatched in the stack-yard, from whence it is carried into the barns to be threshed as occasion requires.

O B S E R V A T I O N S.

There is no operation of husbandry in which there is a greater difference than in the manner of harvesting the crops in the different counties, as appears above.—The mode adopted by the Perthshire farmer no doubt requires more hands to be employed to get an equal number of acres cut down in the same space of time.—But whether his getting it done more completely, and all at once, may not in the end put him on a footing with the Northamptonshire farmer in point of expence, (supposing the rate of wages and board-wages to be the same), appears rather doubtful. Certain it is, that were the Northamptonshire plan adopted in this county, it would be attended with great risk, as the climate is so much later, by which means, in bad harvests, the corns are injured by the great falls of rain which sometimes take place, even notwithstanding of the great pains which is generally used to set up the shocks in a manner the best calculated to defend the grain from injury.—It may be well worth the consideration of the farmers in both counties, to consider whether it is not practicable to lay the corn from the scythe in such a manner, as that it could be easily bound up into sheaves. Could this be effected, it is probable that the Northamptonshire farmer would annually save a considerable

quantity

quantity of grain, which is at present lost among the stubble, after every exertion that can be used in raking the field; and, on the other hand, the Perthshire farmer would be enabled to accomplish the work in a shorter period, and to as much purpose, while he would be relieved from the necessity of trilling to people from the remote parts of the country, for cutting down his corns.—Such an invention as this just now mentioned has been found out, and is said to be very simple in its construction, being nothing more than a piece of pliable wood, formed into a kind of bow, one end fixed on the scythe, and the other on the handle.—If it is found to answer in practice, it will certainly be an improvement of real utility.—The scarcity of hands was probably the first cause that induced the English farmer to use the scythe in cutting down his corns;—and that cause has induced some farmers in the neighbourhood of Edinburgh to adopt the same plan this year.

C O N C L U S I O N.

The preceding comparative account of the two counties might have been extended to a great many other articles, such as *farm-houses and offices, roads and bridges, implements of husbandry, &c. &c.* but as no material difference appears in these respects, it was judged unnecessary to enter into a minute detail of the particulars in either county. It may appear surprizing to some readers, that no account is given of the live stock in these counties; but without extending that article to a great length, it was found impossible to state any thing on the subject that would have tended in any great degree to information.—Suffice it therefore to say, that in both counties there is yet great room for the active and intelligent farmer to introduce improvements in the breeds of the different species of stock. Such a spirit has, however, become pretty general among the farmers in both districts, and which, if aided by the landlords, will no doubt in a few years produce very beneficial consequences.

It is only necessary farther to add, that every endeavour has been used in order to execute this commission with candour and impartiality. And the *general description* of the modes of Agriculture and situation of the tenants in each county, will, it is hoped on investigation, be found to be consistent with truth.—The time allowed for making the survey of any particular county, is such as to subject the surveyor to the necessity of
preparing

procuring much of the necessary information from those resident in the district, without having it in his power to inquire minutely into the particulars himself, and which in this case may have been either improperly communicated or not perfectly understood.

If any misstatement of facts should appear in the preceding account, it is hoped the candid reader will attribute it to the causes already mentioned, rather than to any want of attention on the part of the surveyor. Any deficiencies that may appear, will no doubt be amply supplied by the gentlemen, and intelligent farmers, to whom copies of this Report will be transmitted by the Board for their remarks and observations.

