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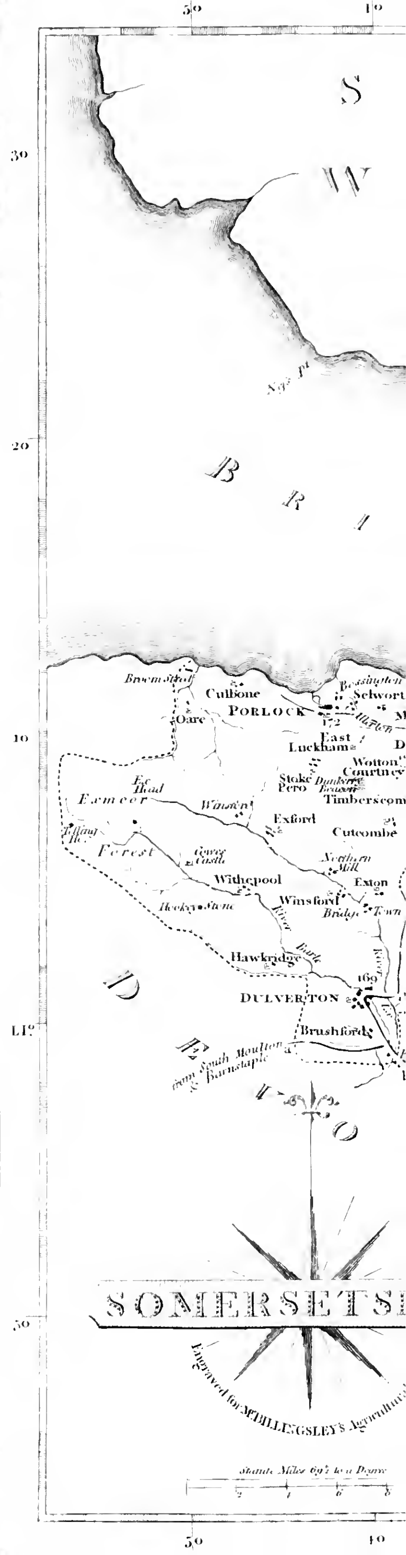
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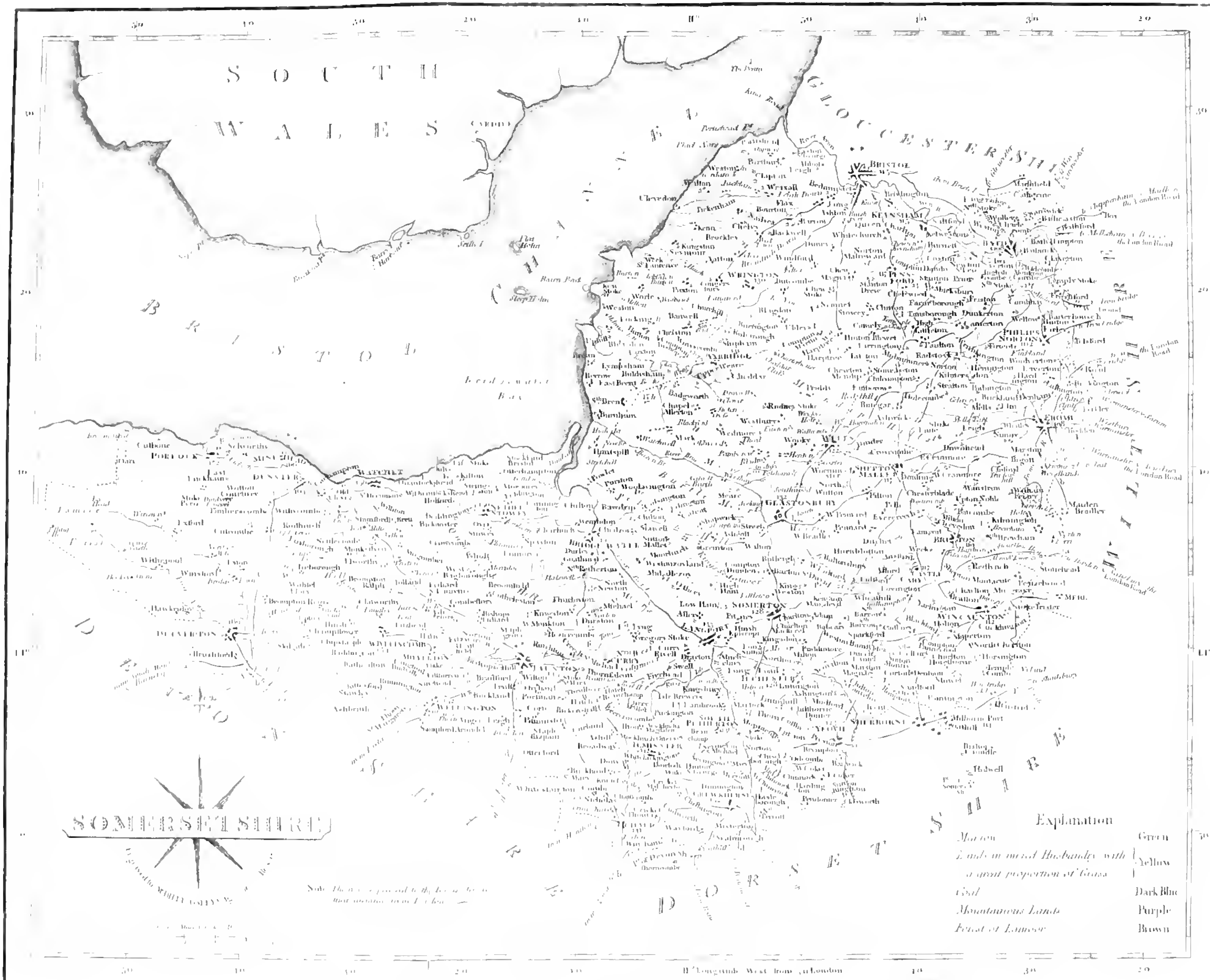
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Explanation
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Yellow
Dark Blue
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Brown

GENERAL VIEW

OF THE

AGRICULTURE

IN THE COUNTY OF

SOMERSET;

WITH OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

BY

JOHN BILLINGSLEY, Esq.

ASHWICK GROVE.

DRAWN UP FOR THE CONSIDERATION OF THE BOARD OF AGRICULTUR.
AND
INTERNAL IMPROVEMENT.

LONDON:

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Entered at Stationers Hall.

TO THE READER.

IT is requested, that this Paper, may be returned to the Board of Agriculture, at its Office in London, with any additional remarks and observations, which may occur on the perusal, written on the margin, as soon as may be convenient.

It is hardly necessary to add, that the Board does not consider itself responsible for any fact or observation contained in this Report, which, at present, is printed and circulated, for the purpose merely of procuring farther information, respecting the Husbandry of this district, and of enabling every one, to contribute his mite, to the improvement of the country.

The Board has adopted the same plan, in regard to all the other Counties in the united Kingdom; and 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.

LONDON, NOVEMBER, 1794.

INTRODUCTION.

IN mildness of climate, fertility of soil, and general produce, the COUNTY OF SOMERSET stands eminently high in reputation.

The richness of its pastures furniſhes not only a ſufficiency for its own conſumption, but also a conſiderable ſurplus for other markets.—London, Briſtol, Salisbury, and other parts of the kingdom are annually ſupplied with fat *Oxen*, *Sheep*, and *Hogs*, together with *Cheeſe*, *Butter*, and many other articles in great quantities.—Nor are its *internal* riches of leſs importance—From its bowels are dug *Lead*, *Copper*, *Iron*, *Lapis Calaminaris*, *Coal*, *Fullers Earth*, *Marl*, *Lime Stones*, *Paving*, *Freeſtone Tiling Stone*, &c. &c. in great abundance.—In ſhort, it may juſtly be denominated a *highly productive county*.

Its dimenſions are about 80 miles by 36, and its circumference about 200 miles. In ſuch an extent of ground, it may naturally be ſuppoſed, that the ſoil and climate are various. Near the ſea coaſt winter is ſcarcely felt; and from Minehead and Dulverton on the weſt, to Milborne Port and Wincaunton on the eaſt, the climate (Quantock Hill excepted) is temperate, and the ſoil, for the moſt part, rich and fertile. As you approach the northern diſtrict and aſcend Poulden Hill, the climate changes, and becomes more cold and boiſterous; and when you proceed farther northward, and gain the ſummit of Mendip Hills, you feel yourſelf comparatively in Lapland. The perpendicular altitude of Mendip Hills, compared with the town of Taunton, I conceive to be at leaſt three hundred yards.

For the ſake of perſpicuity, I ſhall divide the county into three diſtricts. The firſt comprehending that tract included between the ports of Uphill and King Road on the weſt, and the towns of Bath and Froome on the eaſt. This I ſhall call the *North Eaſt Diſtrict*.

The next diviſion I ſhall call the *Middle Diviſion*: and is that portion of land which is bounded, by the Mendip Hills on the

north, Bridgwater Bay on the west, and the town of Chard on the south.

The *South West Division* will occupy the remainder.

NORTH EAST DISTRICT.

THE surface of this district being very irregular, and intermixed with lofty hills, and rich fertile plains, the climate is consequently exceedingly varied. On the western side, including the hundreds of *Winterstoke* and *Portbury*, the soil is, for the most part, a deep, and rich mixture of clay and sand; being originally a deposit by the sea, which, in ancient times, flowed up a considerable way into that part of the county. These Moorlands, as they are called, are at the present time subject to frequent inundation; and sometimes, in rainy seasons, are covered with water for four or five successive months. The luxuriant herbage produced by these lands, when cleared from stagnant water, is such as to induce, in the mind of a man fond of national improvement, an ardent wish to see them completely drained.

This I think might be effected in the following way. Let a sluice or dam be built at the outlet of the river Yeo or Yow, the apron of which should be placed near low water mark. It is not necessary to describe these sluices or outlets, as they are common to most counties bordering on the sea. Suffice it to say, that these buildings are furnished with folding doors, which shut at the influx of the tide, and open on its retreat. From a sluice thus erected, let the bed of the river be lowered to an inclined plane of one foot in a mile. This is sufficient to produce a current, and it will prevent any great deposit of sediment. Let the bottom be contracted in its breadth, so that the water in time of floods may run with sufficient rapidity to cleanse it of mud. In regard to the dimensions and expence of such a main drain, the reader shall be informed when we come to treat of Sedgmoor.

In the parishes of Congresbury, Yatton, Banwell, Winscombe, Churchill, and Puxton, there are not less than three thousand acres subject to frequent inundation. All these lands discharge the greatest part of their waters into the river Yeo, and are under the

inspection

inspection of the Commissioners of Water Sewers; but the powers, vested in these commissioners by parliament, are not sufficient to enable them to divert the course of the river, or to effect a radical cure.

The tide flows nearly seven miles up the river Yeo: and at six miles from the mouth of the river, the spring tides flow five feet above the level of the adjacent lands.

This would be effectually prevented by the dam before mentioned; and by cutting proper lateral drains, the whole district might be advanced in value 10s. or 15s. per acre: and all this might be done at an expence which two years profit would reimburse. Nothing is neceſſary but effectual draining to make it as good land as any in the county. It requires no dung or any extraneous manure; but may be kept in good heart by the contents of the ditches.

To the northward of this district lie the parishes of Kenn, Kingston, Seymour, Cleveden, Nailsea, Chelvey, and Claverham, poſſessing near four thousand acres, alike subject to inundation.

These parishes are secured from the sea by a wall, built with stone and lime, and elevated ten feet above the level of the land within. High tides sometimes overflow this wall, and when a strong westerly wind prevails at the equinoxes the wall is frequently broken down by the impetuosity of the waves, and large portions of the land are covered.

Should this happen at the autumnal equinox, little injury is done. But if in the vernal, it kills the best grass, and the crop of the ensuing summer is worth but little. These lands discharge their waters by two rivers called the little Yeo's. At the mouth of these rivers are sluices, such as before described, which prevent inundation *from the sea:* but being not made deep enough at their outlet, and the rivers, by which the waters are conveyed, not being properly bottomed, the country is subject to frequent *land floods.* This level is susceptible of the same improvement, by a complete drainage, as the former.

Proceeding northward from hence you ascend Leigh Down. This is a tract of elevated land, extending from Cleveden to the Hot Wells, near Bristol. It is principally fed with sheep, and consists of about three thousand acres. A large portion of this

Down will not admit of cultivation; the Limestone Rock being within two or three inches of the surface. It is probable that this land will pay more as pasture than any other way. But the chief inconvenience arises from the unlimited right of stocking; by which it is burthened with double the number it ought to have, the breed of neat cattle is greatly injured, and, in respect to sheep, the quantity of wool lessened, though it must be admitted that the quality of such wool is improved in respect to *fineness*. To illustrate this observation respecting over-stocking, I shall state a case in point. A farmer of this district some years since put twenty-five head of steers and heifers into a ———— piece of commonable land. The spring being unfavourable to the purchase of cattle, and a considerable fatality having prevailed the preceding winter, the common was *moderately* stocked; in consequence of which a profit of 2l. per head was made between the months of April and November. Encouraged by this success, and flattering himself with the prospect of similar profit, he purchased the next year 100 *head:* but others following his example, he, to his great mortification, found that, instead of profit, he suffered a loss of nearly one hundred pounds.

From these premises may it not be fairly inferred, that the *inclosing* and *dividing* of commons, even in cases where the plough cannot prudently be introduced, is beneficial both to the individual and the public; as the owner can then apportion his stock to the quantity and quality of his land, and can have them at all times under his eye. But of this subject more by and by.

At *Clapton*, a village lying to the north west of Leigh Down, there is a coal work which possesses the advantage of a land-level of forty-four fathoms. At this pit are landed about 240 bushels daily. The best coal is sold at threepence-halfpenny per bushel, and the small is shipped at Portishead point for Wales, where it is used for burning lime.

South east of Leigh Down is a vale of rich grass land, extending from Bedminster at the north east, to Brockley and Nailsea at the south west.

Under this level are supposed to be inexhaustible veins of coal. At present they land 2500 bushels a day. The best coal is sold at threepence-halfpenny, the middle sort at threepence, and the small

at

at twopence, per bushel. One of the works is under contract to serve the glass-houses, some time since erected in the parish of Nailsea, at one penny farthing per bushel.

These glass-houses consume about 2000 bushels weekly. The deepest work is 42 fathom. The principal vein is five feet thick; sometimes more. The coal takes a south *pitch* or inclination never exceeding two feet in a fathom. Little timber is used; but they are much incommoded with water; for the rock which lies above the coal so abounds with fissures, that there is no method of preventing the *land water* from pervading the bottom of the works.

When the top veins are exhausted and the proprietors are compelled to go deeper, it is a matter of doubt whether any power of a steam engine may be competent to the task of keeping them dry.

A scheme is on foot to make a canal from the city of Bristol through this vale to Loxtone, near Axbridge; and from thence to the town of Taunton: but whether it will be carried into execution, or abandoned, time only can tell.

The lands in this vale are very fruitful; and a considerable part thereof are the property of two gentlemen of fortune and respectability. These gentlemen, from the the beſt of motives, have been long in the habit of letting their estates at the old rents, though the price of the articles of produce has in the course of thirty years advanced one third *at least*.

How far such acts of kindness may be considered as just to a man's family, or conducive to the public weal, I much doubt, from the experience which I have had in the agricultural world, I have invariably found lands so occupied, in a much worse estate, than those of neighbouring farmers, *moderately advanced*.

An equitable partition of the advantages, resulting from an increase of trade and population, cannot by any reasonable tenant be objected to. The one system produces *care* and *exertion*—the other *indolence* and *sloth*.

Let us now return to the south-west, and survey the parishes of Churchill, Hutton, Banwell, Locking, West-Super-Mare, and Uphill, &c. &c. &c.

These

These lands are for the most part occupied by dairy or grazing farmers; and are subject to frequent overflowings of the river which runs through a dam or sluice at Uphill. It is presumed that if the bed of the river at Uphill, and the sluice through which the water is discharged, were deepened three feet, the evil would in a great degree be removed.

Mr. Good, who occupies a large farm in Hutton, has a method of making cyder, which it may not be amiss to describe. The apples are ground by a horse-mill. The pummice is then wrung in hair-bags; after which it is put into a tub and chopt. It is then ground over again, and made into a cheese, which stands in the press all night.

In the morning the press is strained as tight as it will bear by a lever or cap staff: by these means the cheese is made so dry, that it is cut into narrow strips, tied up in faggots, and burnt. He can make one hogshead upon eight more than by the common method. Two men make and tun five hogsheads in a day, and the horse will grind the apples in three hours.

Query. Is not the quality of the cyder injured by such close expression?

As we are now about to quit what is called the North Marsh, I shall advert to the queries proposed by the board.

The soil of this district I have atready described. As to the climate it is rendered so mild and temperate, by the vicinity of the sea, that neither frost or snow are of long duration; and, unless chilled by too much moisture, it may boast a perpetual verdure.

Part is possessed by large proprietors and leased out on lives, part is in demesne and let out for short terms, and no small quantity is the fee of the occupiers, constituting a most respectable yeomanry, whose sway is strongly felt at a contested election.

The farms are not large, seldom exceeding two hundred pounds a year, and accompanied with a very small proportion of arable.

The artificial grasses are broad clover, marle grass, (Trifolium Alpestre) white Dutch and ray grasses.

The stock, partly cows for the dairy, and partly oxen for fatting—both good of their kind.

As

As corn is but little attended to, it is scarcely worth while to take any notice of their course of cropping, or of any thing that relates to tillage.

There are many woods in this district, the largest is Kingswood, which covers about 230 acres. Fences very much neglected, and over many of the woods the cattle freely range.

The timber is chiefly oak, but does not get to any large size; the woods being, for the most part, situate at the declivity of the hills, where there is but little depth of earth. The underwood is cut for wreaths or faggots. The valleys are in general richly laden with elm which grows spontaneously in the hedge-rows, and gets to a good size. The method practised here of lopping off the side branches, to what is called a besom head, cannot be too much execrated. It is destructive to the growth of timber, and by lessening the agitation produced by winds deprives it of what may be deemed its salutary exercise. The effect of cutting off the lower branches is a premature decay which first takes place in the top of the tree, a general check is given to the circulation of the sap, and it reduces the tree nearly to the state of a pollard.

Neither the roads nor farm houses can be boasted of. No manufactures. The poor principally employed in husbandry, fishing, &c.

The principal improvement that can be suggested is that of draining their *low* lands, and folding sheep on the *high* land.

The next portion of the northern district of which I shall treat, is bounded on the west by Bristol and Wrington, and terminates at the eastern boundary of the county; and on the south by the Mendip Hills, (inclusive.)

The soil of this district frequently changes, but the climate can vary but little; and the uniformity of atmospherical influence is preserved considerably by the land rising rather gradually northward and southward, and the western breezes blowing on the vale greatest part of the year. On the whole the region is favourable to vegetation and agriculture in general; under great part is good marle at no great depth: many great proprietors from 2 to 6000 pounds per annum, but still the greatest part is possessed by the middle class, holding from 50 to 500 pounds per annum. It is also principally occupied by middling farmers, few renting

more than two hundred pounds a year, and is in *mixed* husbandry.

The artificial grasses are sainfoine, ray, broad clover, marl grass, white Dutch and hop clover, or trefoil.

The stock—cows, oxen, horses, sheep, pigs. As the cows are all devoted to the dairy, preference is given to that sort which gives the most milk and of the best quality; or, in the farmer's language, to that stock which makes the most *goods*, whether it be butter, or cheese, or both: hence it follows, that in point of carcase they are very deficient. They are mostly of the short horned breed; and though the fine long horned cows of north Wiltshire have been tried, and strongly recommended by some, yet the general run of dairy men are strongly attached to their own breed.

As this is a subject of some magnitude, let us bestow on it a few moments attention.

In the choice of stock, the buyer should principally attend to the purposes for which that stock is designed, and to the nature and quality of his land.

If his principal object be rearing, either with a view to fat himself or to sell to others, the form, or shape of the parent stock should first be regarded.

That frame of body which is accompanied with the greatest portion of valuable flesh, and the least offal, is to be preferred.

An aptitude to fat in youth is also an object of great importance. By an attention to these points, the great farmers of Leicestershire and other counties, have so attracted the notice of emulous breeders, as to sell their stock at a price scarcely credible to a plain old fashioned farmer. But however we may admire their care and ingenuity, does it follow that we are to be led astray by the extravagant ideas which some people entertain of their superiority. A heifer of three or four years old, which discovers a disposition to fat, seldom proves a good milker, and is by our farmers turned out of the dairy. Beside, I have been informed that the great breeders are frequently obliged to have the assistance of Welsh nurses for their calves, through a deficiency of milk in the parent animal. Is this a recommendation of them to the dairyman? As a confirmation of the idea that handsome stock are seldom good milkers, I shall advert to the North Devon breed, and

I believe

I believe in all other respects, there is not a more valuable in the kingdom.

In *that* part of the kingdom little attention is paid to cheese or butter, but if a cow produces handsome stock it is all that is required of her; and it frequently happens that a farmer, with ten or twelve cows, has but little more of those articles than is sufficient to supply his family.

The Somersetshire dairy-men generally keep their *good* cows till they are ten or twelve years old; at which time their value is reduced to four or five pounds each. A long horned cow at that age might be worth eight or ten pounds; (I mean of the middling breed) here is then an apparent deficiency of four or five pounds; but when we reflect that the keeping of one is worth ten shillings a year more than the other, the loss is not so apparent; and if we admit that the short horned will make half a hundred of cheese more per year than the long horned, the ballance of profit is then in favour of the former.

I do not mean by what I have said to detract from the merit of Mr. Bakewel, or other great breeders of the north. I only wish to recommend a discriminating principle, and to deter the credulous farmer from too *hasty* a dereliction of principles and practices, founded in experience, and to which he has been long accustomed. I may be here told that the foregoing premises, from which conclusions are drawn unfavourable to the long horned cow, are delusive; that a north country breeder will laugh at the idea of keeping a cow till she is ten years old; that at six years, or at the farthest at seven, she ought to be in the possession of the butcher. But coolly and calmly; ask a practical cow-keeper at what period of life a cow makes the most goods, and he will tell you between the age of six and twelve years old. I have known cows continue good milkers till they have past their twentieth year.

I beg pardon of my readers for this digression, and will now return to my survey.

When *cheese only* is made, the annual produce per cow is from three to four cwt.

Many dairies, in the vicinity of Bath and Bristol, make butter and half skimmed cheese; in either way the annual produce per

cow is from seven to ten pounds, including the calf and profit of pigs.

From three to four acres of land will keep a cow throughout the year.

The watering of pastures is not much known, though the advantage resulting from that practice in neighbouring counties is not questioned.

The *intermixture* of lands embarrasses the operation of individuals in that respect, and this seems likely to prevent a practice from becoming more general, which numerous springs and rivulets would otherwise favor.

The water issuing from Mendip Hills is unfit for this purpose, carrying with it noxious mineral particles destructive to vegetation.

Grain principally cultivated are wheat, beans, pease, oats, and a little barley: but for the latter, the soil is for the moſt part unfavorable.

In the parishes of Wringtón, Blagdon, Ubly, Compton, Martin, and Hartry, *teasels* are much cultivated. The head of this plant, which is composed of well turned vegetable hooks, is used in dressing of cloth; and the manufacturers of this county and Wilts are for the most part supplied from these parishes.

Large quantities are also sent (by water conveyance from Bristol) into Yorkshire.

As this is a plant not generally known I will describe its culture.

The most favorable soil is a strong rich clay, or what is generally denominated good wheat land.

Sometimes an old ley is broke up, and sometimes a wheat stubble, the seed is sown (after the rate of two pecks per acre) in the month of April.

During the summer the land is worked over three or four times with long narrow spades to destroy the weeds.

In the month of November, if the plants are too thick, they are drawn out to fill up vacancies; and the plants are set at a foot distance. If after this thinning too many plants remain, another field is prepared, into which they are transplanted; but those plants which are never moved produce the best heads.

As

At the next spring and ensuing summer, the land is worked over three or four times with the narrow spades; by which it is kept thorough clean, and the plants earthed up.

In the month of July the uppermost heads begin to blossom, and as soon as the blossom falls, they are ripe. The gathering is performed at three different times. A man, with a knife made for the purpose, cuts the heads which are ripe, and ties them up in handfuls. After a fortnight, he goes over the ground again, and at a third cutting the business is compleated. On the day of cutting they are carried into a house; and if the air is clear they are taken out daily and exposed to the sun, till they are compleatly dry; but great care must be taken that no rain falls on them.

The crop is very hazardous. A wet season rots them, particularly when there is much rain at the time of blossoming.

In the year 1792 there were few worth harvesting. The crop this year is but indifferent. When dry they are separated into three different parts called kings, middlings, and scrubs; and are after that made into packs, containing of kings 9000 heads, and of middling, 20,000. The scrubs are but of little value. The average price is forty shillings per pack; and sometimes the produce is fifteen or sixteen pack an acre, at other times a total blank. There is an amazing inequality in the produce of different plants; some stocks will send forth 100 heads, others not more than three or four.

Should not great attention therefore be paid to the selection of seed, namely by taking it from those plants which appear to be most prolific? This however is not done; but the seed is taken indiscriminately from the whole crop.

As the goodness of the crop chiefly depends on the care taken to keep the land free from weeds, leaving the plants at proper distances, and earthing them up well; and as most of the common workmen will pay more attention to their own, than to another person's interest, it frequently happens that a partnership is formed between master and man. The former finds *ground and ploughing*, and the latter *seed and labour*.

At harvest the crop is divided, and each party takes a moiety. The expence and produce of teazels may be thus estimated per acre.

To

	£.	s.	d.		£.	s.	d.
To two Year's Rent .	3	0	0	By Average Produce			
To Plowing . . .	0	15	0				
To Workmen's Labor	3	15	0	7 pack at 40s.	14	0	0
To making out in bundles, tying together, and teazle bands, 2s. per pack	0	14	0				
	8	4	0				
	5	16	0	Profit			
Tythe and Taxes excepted	14	0	0				

The working with the spade can only be done to advantage by the men accustomed to it, who are become by habit so dextrous in the use of this implement, that they will even thin out a crop of carrots.

The common hoe has been tried, and, though in the hand of a compleat turnip hoer, it was not found to answer.

After the crop wheat is sown on one plowing, and seldom fails of a good produce; so that it may not be quite fair to charge the teazels with *two* years rent.

Few soils will bear frequent repetitions of this crop; and the farmer finds it his interest to devote newly broken up land to this culture.

As the soil of this district is partly clay, red earth, and stone brash, the rotation of crops varies.

ROTATION OF CROPS.

On the CLAY *it is*

1st Beans	or	1st Beans (hoed and kept clean)
2d Summer Fallow . .		2d Wheat . . . . .
3d Wheat		3d Winter Fallow . . .
4th Oats		and
5th Oats and Grass Seeds		Oats with artificial Seeds.

Or

1st Teazels
2d Wheat
3d Beans
4th Oats

On the Red Earth.

1st Oats on the Lay
2d Summer Fallow
3d Wheat
4th Oats
5th Oats
6th Oats and Grass Seed.

Sometimes the grass seeds are sown in the second crop of oats after a winter fallow.

On the Stone Brash.

(That is the land abounding with marl)

1st Wheat
2d Wheat
3d Wheat
4th Barley and clover
5th Clover

Of this soil and its management I shall treat more particularly hereafter.

Fallowing is generally practiced in all these soils; for, as turnips are little known, the farmers are obliged to have occasional recourse thereunto, to clean their land, made foul by successive corn crops.

The common manures are marle, lime, farm yard, and stable dung. In some parts near the turnpike road, which is mostly made with lime stone, the scrapings of it are mixed with dung; and this manure is well adapted to pasture land, bringing a luxuriant carpet of white clover.

The ploughs commonly used are strong single ones; sometimes with one small wheel, sometimes with a foot only. The great length of the mould board occasions too much friction; and it cannot be deemed a good implement: but prejudice is strongly in its favor, notwithstanding considerable pains have been taken to shew the superiority of other ploughs.

The carts are mostly large and strong tumbrels for the uses of husbandry; but the shape varies in different parishes.

The

The waggons are small, compact, and well made: narrow wheeled weighing from 15 cwt. to 20 cwt.: the six inch wheels from 25 cwt. to 30 cwt.: the latter drawn with six horses in pairs.

Some years ago waggons of this description were made 5 or 6 cwt. heavier than they are now. The reduction of the weight particularly to those who are common carriers is highly advantageous, being not less than fifty pounds per year gain by each team constantly employed on the road; and, if made with good materials, a *light* waggon will last as long as a *heavy* one.

Horses and oxen are used for ploughing in about equal proportion; sometimes both are used together: oxen mostly in the yoke.

Usual seed time for wheat, the months of October and November. Beans and oats in February and March, and barley in April.

Wheat harvest in August; barley and oats in September; beans as late as October.

Few farmers agree in opinion respecting early or late sowing; and perhaps no fixed time can with propriety be established. The success, or otherwise, depends so much on fortuitous circumstances, such as the wetness or dryness of the season, the temperature of the air, both at the time of sowing and after, that what is successful one year is quite the contrary the next.

The following rules may I think be safely followed: not to sow wheat before the month of September, nor later than November.

Not to sow till the ground is properly moistened, and made close and firm by rain.

After the middle of February whenever the land devoted to spring crops is dry and healthy; begin planting beans, and sowing oats; and under the same circumstances let all your barley be in the ground before the middle of April.

In this district there are many commons uninclosed; the principal of which are Broadfield Down near Wrington, and Landsdown near Bath. The former contains 2500 acres, and is, for the most part, a good soil deep in earth and easily ploughed.

Surely the inclosing and cultivating a tract like this, situate only eight miles distant from the city of Bristol, could not fail of being a great advantage to the proprietors; particularly as it abounds

abouuds with excellent lime-stone, and the coal-pits are only a few miles distant.

Lansdown comprehends nearly 3000 acres; but as the soil is thin, and the surface perfectly smooth, and remarkable for its excellence in feeding small sheep, to which it imparts a delicate flavour, it might not be prudent to break it up, especially as it affords a luxurious and beautiful ride to the sojourners in Bath.

Inclosing has been of long standing in most of these parts, Many have exemplified an advance of rent more than two thirds. The produce in many instances has been of wheat 30 bushels, barley 40, oates 50, and beans from 30 to 40 per acre.

Increase of population in proportion.

SIZE AND NATURE OF INCLOSURES VARIOUS.

Nature of fencing: quick hedges, with trees at unequal distances. And, where stones are easily got and lie in a flat bed, stone walls, without cement, are built; two feet wide at the bottom, eighteen inches at the top, and five feet high; the total cost of which wall is about one shilling per yard running measure.

I shall bring forward a comparative view of these walls with quick hedges, when I come to treat of the inclosures on Mendip Hills.

The rate of wages in hay and corn harvest is about nine shillings per week, with dinner and beer; other parts of the year about seven shillings, with small beer or cyder.

Time of labour in the summer from six to six, in the winter from day light till it is dark.

Not so much attention has been paid to the draining of land as the object undoubtedly requires; but in some cases, where inclosures have been accompanied with a weeping surface, great improvements have been made by stone draining. The acclivities from the vales are for the most part of this quality and complexion, and if the springs, which issue from the sides of the hills, were taken off at their head by judicious drains, and diverted into a proper channel, the value of the land would be risen at least one third.

Paring and burning but little in use.

The country is but partially wooded, and on account of the demand from the collieries the wood is but very irregularly cut. Systematic plantation is but little studied.

As to the price of provisions, wheat is about six shillings per bushel, barley 4s. 6d. oats 3s. 3d. beef 4½d. per lb. mutton 4½d. pork 5d. butter about 9d. and cheese (six months old) about 40s. per cwt. No particular reason to expect a fluctuation (except in the articles of barley and oats) unless the plague of warfare which defies all human estimate, and deforms the face of nature, should extend its baneful influence to this isle, formed as it is for tranquility and happiness within itself.

Public roads pretty good, considering the traffic upon them. Parochial ones ill managed, and bad; notwithstanding good materials for keeping them in repair are near and abundant. But some examples are beginning to be set of more judicious management, by throwing the sides to the middle, thereby widening the space of passage, and making drains at both sides.

This obvious piece of œconomy cannot be too much imitated.

Farm houses are generally ill built, and situated very improperly in respect to the farms. Estates are frequently let from year to year. Leases in general for seven years, few for fourteen years; clauses mostly favourable to the tenant, but the shortness of the term damps the spirit of improvement.

Commerce and manufactures have but little attention in this district. There are indeed several mills on the Avon for preparing iron and copper, but of late years they have declined in their consequence; most probably from local disadvantage.

Since these works have been declining, sundry others for the spinning of worsted, and the spinning and weaving of cotton, have been established; and seem yet to maintain some importance, though under a temporary depression from political causes. The effect on agriculture in the article of wages has been considerable; the pay of men in time of harvest has been greatly advanced, and that of women and children doubled.

There is one article of cultivation in this district, which, being important as it relates to the woollen manufactory, must not be omitted; it is the plant called woad. It is raised principally in the neighbourhood of Keynsham, and its quality is much esteemed.

The

The farmers who raise it have an opinion, that the parish of Keynsham is particularly favourable to the growth and perfection of it: but this is most likely a vulgar error; for experiments are attested of as good crops elsewhere. The soil must be strong and good where it flourishes; it delights most in a deep fat loam, which must have so much sand as to admit of easy pulverization. As the excellence of woad consists in its size, and the succulency of its leaves, it requires careful management, as well as a rich soil. It is most commonly sown on land fresh broken up; and on narrowish ridges.

The first ploughing should be against winter, the second in the spring, when the ridges should be formed; a third in June, and the last in July, or very early in August, just before the sowing of the seed. In the intervals of the ploughing, harrowing should take place, to destroy all weeds. The seed is commonly sown by the best farmers in drills, for which purpose the surface ſhould be harrowed very fine and level. The plants in a moist season appear in a fortnight, and in two or three weeks after are fit to hoe: they should be hoed out clean to the distance of about six inches at least, some prefer a greater distance. In this neighbourhood hand weeding and thinning are frequently used; and at the employ, women and children earn very high wages, especially since a cotton manufactory has been introduced in the parish. The succeſs of the crops depends much on the hoeing and weeding, so as to keep the ground fresh and clean. Thus managed three or four crops or gatherings will be produced in succession; but the first two are the best. The time of gathering is determined by the full growth of the leaves, and the first appearance of change of colour at the extremities; and this rule of course governs the succeeding crops.

The leaves are cut by hand and gathered into baskets by women and children, who carry them to a very deep large cart at the edge of the field. After two cuttings the crop is suffered to go to seed for the next year, if seed be wanted; but if only one crop is taken the seed will be the finer. When the pods turn of a dark colour the seed is deemed ripe. The stalks should then be reaped like wheat, and spread abroad; and if the weather be favourable the seed will be fit for threshing in four or five days.

When the green crops are carted home, the plant is thrown into a mill, constructed with a heavy iron ribbed roller, something like that which is used for bruising bark and other substances; by this process it is cut and bruised to a pulp. It is then laid in small heaps, pressed close and smooth; and as the crust formed on the outside cracks, it is closed again to preserve the strength of the substance. After lying about a fortnight in this state, the heaps are broken up; the outside worked into the mass, and the whole formed by the hand, and sometimes by wooden moulds, into oval balls; which are then dried on hurdles under a shed exposed to the sun.

They turn black or of a dark brown on the outside when well manufactured; and are valued in proportion to their specific weight and a purplish cast in the inside. Thus they are sold to the dyer; and it is scarcely necessary to add further, that the use of this article in dying consists in forming the ground of the indigo blue. The crop is generally a profitable one. The quantity per acre near a ton and half. The nett profit of course must be governed by the goodness and price of the article. But it seems on an average to be so lucrative a culture, that few farmers who can raise it ever discontinue the practice. It however exhausts the land exceedingly, and more than two years crops must not in general be taken. To this crop succeed wheat and beans.

I shall now proceed to a description of that system of improvement for which this district is remarkable. I mean the marling system.

The parishes of Midsomer Norton, Stratton on the Foss, Kilmersdon, Radstock, Timsbury, Farmboro', High Littleton, Paulton, Stone Easton, and Chilcompton, comprehend a district of land, part of which is rendered remarkably fertile by the application of marl.

The soil consists of an earth more or less loamy, of a mixed colour, between brown and red, with a prevalence of one or the other; very stony, resembling that kind of soil usually denominated corn grit, and naturally so barren, that when in common field at the beginning of the present century the lands were not set at more than 3s. 6d. per statute acre.

By a moderate computation this soil may be said to occupy in the parishes of the district an average proportion of at least one third. At a variable depth from the surface an inexhaustible store of black marle is conſtantly found, which from properties equally singular as to fertility and duration, has advanced the lands from 3s. 6d. to 1l. 11s. 6d. per statute acre; and this too with a very liberal allowance of profit to the occupier.

This valuable manure is raised in the summer, at the average depth of about seven fathom, by sinking a pit or shaft, the sides whereof are secured by timber props, interspersed with wreaths of brush wood.

The first bed of marle perforated is blue, two feet thick, of a stiff consistence, and on repeated trials found altogether useless. Below this lies a stratum of stone, nine inches thick, and of a blue color; next to which is found a bed of marle, from three to four feet of thickness, nearly horizontal, of a color approaching to black, and, towards the lower part, of a shelly substance; the greater predominance whereof is found proportionably to improve its fertilizing property.

The expence of raising it, including that of sinking the shaft, is from six-pence to eight-pence per cart load of twenty-four bushels. That, and carting out, spreading, and brushing in, twelve shillings per statute acre. Forty load is an ample dressing for a statute acre, which at eight-pence per load amounts to

	£.	s.	d.
	1	6	8
Carting, Spreading, &c.	0	12	0
The whole	1	18	8

For which a manure is obtained that secures a luxuriant undiminished vegetation not requiring any further assistance from thirty to fifty years. The generation of moss manifests the declining effects of this manure. It is considered as an indication for breaking up the old sward, which is generally done. This developes a very curious and singular phœnomenon; namely the marle spread on the surface forty or fifty years before has only obtained the depth of between five and six inches, where it forms a regular uniform

uniform consolidated bed. Even at this depth its effects, although not exhausted, are nevertheless so much impaired as to demand its renewal. Will not this fact tend in some degree to elucidate its Modus Operandi?

While it remains within two or three inches of the surface, which is the case in some instances perhaps for twenty years or more, it may be supposed to form a kind of pan or reservoir for the nutritious and fructifying influences deposited by the atmosphere; which being *there retained*, and in *contact* with the roots of the grasses, form such combinations in the laboratory of nature, as are best adapted to give vigor and permanence to the elementary principles of vegetation. These are evidently weakened when the marle, by its descent, gets below the roots of the grasses, and thereby deprives them of the matrix, which seems to preserve the means of their nutrition and support. This may account for the production and increase of moss on the surface, and the necessity of marling afresh, not only to impede its propagation, but to destroy it.

It is observable that when marle is laid on this mossy surface, which accompanies an old sward, to avoid a course of tillage; the improvement is not equal to that of laying it on clover, or marl grass, the second year from the time of sowing.

An inconsiderable portion of these lands is employed in tillage under the following course of cropping.

1st Year—Old sward ploughed up in August.
Wheat—Harrowed in October and the beginning of November on one earth.
Produce from 25 to 30 bushels (8 gallons) per acre.

2d Year—Wheat—Single ploughing harrowed in as before.
Produce from 30 to 35 bushels.

3d Year—Wheat often.
Produce from 25 to 30 bushels.
Sometimes barley with or without fallow.
Produce 56 bushels.

4th Year—Peas with two or three ploughings
Produce from 20 to 25 bushels.
Then winter fallow as a preparation for next year.

5th Year—

5th Year—Barley and clover or marle grass,
Produce 48 bushels.

6th Year—Clover or marle grass.
When mowed, produce from 30 to 40 cwt. per acre.

7th Year—Clover or marle grass fed.

Defective and ruinous to the land as the three first year's rotation of crops may appear, it is nevertheless with little variation uniformly pursued; and with little abatement of produce is renewed for another seven years succession. Even a third is carried through by many farmers, accompanied with fallowing for some of the wheat crops, and assisting the land by a sprinkling of Barton manure. Even a fourth succession, with less wheat and more barley, is carried on by a few considerable farmers in the district; but from the levity of the soil, and the difficulty of keeping weeds under, the crops fail notwithstanding a more liberal use of Barton manure.

A system of cropping, so very perverse and erroneous, carried to such a length on land rented at thirty shillings per acre, must involve the farmer in a yearly loss, and cannot but astonish every one; more especially if it be recollected that this very land is susceptible of restoration to its former vigor and fertility at the moderate expence of 1l. 18s. 8d. per acre.

The farms in this district are from 50l. to 300l. per annum, and pasture in the ratio of five sixths throughout the district. The contiguity of the parishes to Bath, not exceeding a mean distance of nine miles, accessible by good roads, and which affords a market of almost unlimited consumption are circumstances peculiarly favourable to dairies.

Butter there for some years past has averaged the price of ninepence and ten-pence per pound. It is no wonder therefore that dairies engross a great share of the grass lands.

Marle grass is the spontaneous production of the marle land. It was first noticed and collected fifty or sixty years ago by a Mr. James, who lived on a large farm belonging to the Marquis of Bath, in the parish of Chilcompton. By his assiduity in preserving and propagating the seed, in the course of a few years it became common, and has been considered ever since as a valuable substitute for red or broad clover, to which it bears rather a striking analogy,

analogy, with however this difference, that it will continue much longer in the land.

When the marl lands are laid down to grasses, trefoil or white Dutch clover, is sown in the proportion of 7lb. to 20lb. of marl grass or broad clover, which enriches, diversifies, and by its early vegetation and blossoming, produces a carpet the most beautiful and picturesque that can well be imagined.

Marle has been repeatedly tried on the looser red earth lands, and on the freestone grit soil, in different parts of the district, without producing any good effect. It has also been carried some miles out of the district, and applied to the light red earth of the limestone lands, with no better success. Though it may be affirmed of the marl lands, that the luxuriance of the pasturage, the early vegetation in the spring, with little or no suspension (except in severe frosts) during winter, and their vicinity to Bath, equally concur to render dairies a very eligible, as it is a general mode of occupation, yet notwithstanding on the larger farms, if a greater proportion were devoted to tillage, since they produce wheat and barley of excellent quality, and require, under a judicious routine of crops, no manure, but the first marling, for twenty-five or thirty years, both landlord and tenant would derive considerable advantage therefrom.

The landlord might levy an additional rent of ten shillings per acre on the lands so converted to arable, under a lease of twenty-one years; compelling the tenant to dress with marl four years previous to the expiration of the term, by which means they would be left, in the highest possible state of proof.

The tenant would be amply repaid his advance of rent, not only by the general certainty and superabundance of his crops; but by the application of the Barton, and stall manure, arising therefrom to his *red earth lands*; which he may well do without injury to the former, and thereby find an equivalent in *their* improved state for the advanced rent.

Rational and well-founded as this change of management must appear to every intelligent and unprejudiced man, it has nevertheless many formidable obstacles to encounter. The landlord's groundless apprehensions of injury to his lands, under even a well regulated course of tillage, his prepossession in favour of dairies

and grazing, which can neither impoverish nor exhaust the soil, the rich and beautiful complexion of the surface so gratifying to the eye during the greatest part of the year, his reluctance to build or enlarge barns, stalls, &c. The frequency of moduses for cow white, the easy rate of agistment, and the other vicarial tythes, with his rooted aversion to the payment of corn tythes in kind or by exorbitant composition, the smallness of many of the farms, and lastly his dread of innovation on the accustomed practice of his neighbourhood, all concur to diminish the quantity of arable land. It must be admitted that farms under 100l. per annum might not bear the expence of suitable buildings, to accommodate the plan here suggested; but since this, on every scale, would be proportioned to the size of the farm, the advance of the rent, exclusive of interest in money expended thereon, would secure to the landlord an augmentation of income deserving his notice. With respect to tythes the tenant would readily submit to the encreased amount, and would find more than adequate compensation in the abundance of his crops, and the moderate expences of tillage. Yet so revolting is this tax in the full extent and rigor of its application, as to induce the land owner and tenant to forego a positive advantage rather than comply with its exactions.

In the parish of Kilmersdon there is a species of soil usually called a freestone grit, of a light brown color, stiff, clayey, and abounding in stone. Underneath at various depths is to be found a blue marle, which, on repeated trials, has not hitherto been known to communicate any improvement. This marle is not readily soluble when exposed to the air; but retains its clay-like quality, which renders it unfit either to pervade, or incorporate with the soil. These lands are sometimes devoted to tillage; but are soon exhausted, and left to poverty and rest for seven or eight years; when a similar course of management is resumed. Present value from five to six shillings per acre.

COURSE OF CROPS.

1st Year—Lay broke up in the spring.
Summer fallow.
2d Year—Wheat sown early in October.
Produce 12 bushels per acre.

3d Year—Oats.

Produce 16 or 20 bushels per acre.

No Clover—The soil will not support it. If sown, it gradually declines through want of sustenance.

Here ends the cropping without Barton manure. Mr. Walwyn, of Kilmersdon parish, fourteen or fifteen years ago tried sansfoin in this soil. The produce from mowing four or five years successively averaged twenty cwt. per acre. It so far exists now in some of these lands, as to keep up their value to twelve or fourteen shillings per acre. Where totally extinct, on breaking up afresh the soil is found in better proof than in its pristine state. Notwithstanding this experiment, accompanied with effects so obviously beneficial; yet the example has been but very little, if at all, followed in the neighbourhood, although surrounded by a thousand acres of a similar quality. However, a gentleman of large fortune, and proprietor of the greatest part of this barren district in the same parish, has, for two or three years past, attempted its melioration, by summer fallowing and turnips, to some parts of which he gives four ploughings and harrowings. Its texture is already considerably loosened. Barns, ſtalling, and bartons are provided on a large scale, in a situation to command the whole. Within a reasonable distance he can procure a supply of sand: a resource too valuable to be overlooked. With a relish for agricultural improvement, a practical attention to its progress, and the conveniencies beforementioned, there is little doubt, but that in the course of time, he will be enabled, in no trifling degree, by a judicious system of cropping, to fertilife this very intractable soil.

This district abounds with coal, and with respect to this article is reducible to the separate divisions of northern and southern.

The former, including the parishes of High Littleton, Timsbory, Paulton, (with Clutton adjoining to the west, and Camerton to the east of the district) Radstock, and the northern part of Midsomer Norton.

The latter, the southern part of Midsomer Norton, Stratton on the Foss, (Holcombe and Ashwick adjoining the district) and Kilmersdon.

In the northern, the strata of coal form an inclination of the plane of about nine inches in the yard. These are in number nineteen.

teen. In thickness variable, from ten inches to upwards of three feet. If less than fifteen inches they are seldom worked. Coal is now working generally from seventy to eighty fathom in depth. In a few places deeper; and by a late introduction of machinery to raise it by the steam engine, a much greater depth of working will be obtained. Profits of working in the aggregate, by no means equal to the extent and risque of the adventure; to a few works considerable; to the majority very moderate.

The coal is of prime quality; pure and durable in burning; firm, large, and of a strong grain; which ensures its conveyance to almost any distance, without injury to its appearance, or quality; which cannot be exceeded in any part of the kingdom. Bath is the principal market of consumption, to which may be added the western parts of Wiltshire, and the next adjacent parts of Somersetshire. The quantity now raised is from fifteen hundred to two thousand ton weekly. A much greater can be supplied should an increased demand require it. Boys and men to the number of fifteen hundred are employed in working it, with wages sufficiently adequate to procure them a comfortable subsistence.

An application is intended to be made to parliament at the ensuing session, for leave to cut two branches of a canal for the accommodation of the collieries in this northern district, to communicate with the rivers Avon and Kennet. Should the bill pass, a considerable extension of sale may be reasonably inferred. The permanence of the works is amply secured by various contrivances, in preventing the admission of the springs into the deep working.

The number of works, twenty-six. The owners of the freehold, from whence the coal is raised, generally receive an eighth of the gross receipt of sale; but, to encourage the proprietors to greater depths of working, have occasionally complied with a proportionable reduction of this quota, on account of the increase of expences in working; whereby they have derived a profit from coal which otherwise would have been irrecoverably lost. Some through ignorance and stubbornness have withheld this concession, and thereby incurred the loss.

Average price of coal five-pence per bushel at the pits.

The southern district is on a more limited scale of working. The strata of coal form an inclination of the plane from eighteen

to thirty inches in the yard; in some the plane is annihilated, and they descend in a perpendicular direction. There are in number twenty-five; in thickness from six inches to seven feet; seldom worked under eighteen inches; in depth from thirty to sixty fathom at the present working. By the steam engine which is now erecting in this district, a much greater depth will be attained. Profits in the aggregate of working very trifling, if any, owing to the consumption of timber, and the expence of drawing water. The coal of various quality; some nearly equal to that of the northern district; but the greatest part less firm, of shorter grain, and less calculated for distant carriage; but free to burn, wholly divested of sulphureous stench, and durable. The small coal excellent for the forge, and when reduced to a cinder, called *coke*, by a process of very ancient usage, it furnishes a fuel for drying malt, which from its purity and total exemption from smoke cannot be excelled, if equalled. The south western parts of Wiltshire, the northern of Dorset, and the east and southern parts of Somerset, are the markets for consumption. The quantity now raised is from eight hundred to a thousand ton weekly, which, in the course of a few years, might be extended to two thousand ton, if sale could be found. Boys and men employed at present amount from five to six hundred. An improved method of working has been lately adopted in some parts of this district, by which the springs are prevented from inundating the deep working; whereby its extent and duration will be considerably promoted.

A canal to the works in this district, which might be cut at an easy expence, has been for some time in contemplation; and which not only would benefit the proprietors of the works, by extending the consumption; but also reduce the price to the more distant consumers more than half.

The average price of coal in this district is $3\frac{3}{4}$d. per bushel.

Should the works in the northern district be stopped, the probable increase of the poor rates would be 2000l. per annum.

In the southern (much more burthened with poor) to seven or eight shillings in the pound.

It may be said that this district cannot boast of any practices in agriculture which are peculiar to itself; the cultivation of teazles and woad excepted.

Its advances in receiving the improvement of more enlightened agriculturists are very slow, notwithstanding it has the advantage of a very respectable agricultural society, which has been established at Bath for the western counties upwards of sixteen years. From the tardiness before-mentioned it seems difficult to devise any new means to engage a stronger desire of improvement. More frequent marling naturally presents itself as the first object of notice, and it is especially desirable that the practice might become strongly urged if any means could be happily found to do it effectually.

The next SYSTEM OF IMPROVEMENT *to which I shall direct my attention, is the* LIMING SYSTEM, *and in this investigation I am naturally led to a*

SURVEY OF MENDIP HILLS.

THIS chain of mountainous land extended, according to the ancient boundary, from Cottles Oak, near the town of Froome, to a place called the Black Rock, in the Bristol channel near Uphil, being a distance of more than thirty miles. A great portion of this land having been inclosed, divided and cultivated in the course of the last forty years, and nearly an equal portion still remaining in its open uncultivated state, I cannot forward the views of the respectable Board, under whose auspices this report will be brought forward to the public in a better way than by a minute description of the origin, progress, and success of these undertakings.

And first let us begin with taking a view of the *objections* which have been started to this species of improvement, and see if we cannot prove them to be for the most part either false or frivilous.

1st.—Invasion of the rights and interest of the cottagers.

2d.—A supposed injury done to the breeding system.

3d.—The expences attending the act of parliament with those of commissioners, and other subordinate agents employed in its execution.

4th.—The expence of buildings, such as farm-houses, barns, stables, stalls and pools, for the purpose of creating distinct farms, superadded to the expences of cultivation and fencing, altogether constituting an expenditure which the improved value will not reimburse.

5th.—Injury done to the woollen manufacture by lessening the number of sheep, and deteriorating the quality of the wool.

6th.—A supposed diminution of the rent of the old farms, to which such commons are appurtenant.

The foremost of these objections carries with it the appearance of a humane attention to the comfort of the poor, but a brief investigation will refute it.

There are but two modes of inclosing commons. First.—By unanimous consent of the parties claiming rights, who delegate power

power to commissioners, chosen by themselves, to ascertain their validity, and divide accordingly, under covenants and agreements, properly drawn and executed for the purpose. Or secondly, by act of parliament obtained by the petition of a certain proportion of the commoners, both in number and value, whereby a minority sanctioned only by ignorance, prejudice or selfishness is precluded from defeating the ends of private advantage and public utility.

In point of œconomy, the first of these methods is the most eligible, as it saves the expence of an act of parliament, with equal security to the proprietors. But it is seldom practiced, unless in commons, on a small scale, from the difficulty of procuring the consent of *every individual claimant* without which it cannot be accomplished.

In either of these methods it is manifest that the right of the cottager cannot be invaded, since, with respect to legal, or equitable construction, he stands precisely on the same ground, with his more opulent neighbours; and as to his interest, I can truly declare that in all cases which have fallen within my observation, inclosures have meliorated his condition, by exciting a spirit of activity and industry, whereby habits of sloth, have been by degrees overcome, and supineness and inactivity have been exchanged for vigor and exertion. No stronger proof can be given of this than the general reduction of the poor's rate, in all those parishes, wherein such inclosing has taken place.

Upland commons are principally depastured in the summer with sheep, and if a cottager were able to stock ever so largely, the *winter keeping*, and his total inability to furnish them with food between the fifth of April, and the twelfth of May (before which time these commons ought not to be stocked) would be such a drawback, as effectually to exclude every idea of profit.

On the *moors*, cottagers within a moderate distance from the common generally turned out, a cow or two, perhaps a few geese, and I believe the latter are the only profitable stock. Not one in ten rented land to raise winter subsistence. In summer, the moor commons were frequently inundated. The cattle must be removed, and temporary pasturage hired on extravagant terms. On the other hand, should the season be favourable, the redundancy of stock from an unlimited right of feeding, by reducing the produce of

the

the cottager's cow so much below what it ought to be, deprives him of every real advantage.

Proprietors or occupiers of large estates in the vicinity of a common, by turning out great quantities of stock by *day*, and taking them home to feed by *night* have derived the only benefit which an overfed common could afford.

The cattle of the cottager, as well as of the distant commoner under this competition, must unavoidably suffer. The latter may be recruited by occasional removal to better pasturage; the former having none, must hire, or leave them on the common either in a stunted or starved condition. These are facts of general notority, on which it will not be easy to deduce (*communibus annis*) any material benefit to the cottager from stocking; but when the expence of winter support is added, the question is decided, and the presumed *advantage*, is converted into a positive *loss*. For ten or twelve shillings per annum a common might be rented. Nothing gives with greater accuracy the value of a thing, than fair and unrestrained competition, if so, when the privilege of stocking a common for a year, might be obtained for ten or twelve shillings, by a farmer in possession of means to accommodate stocking to every variety of season, what can the value be to a cottager deprived of these? instead of ten or twelve shillings, the annual *neat* value of commons *inclosed* has been raised from 3l. to 20l. per annum, which as an unquestionable fact establishes without scruple, or hesitation, the *private* as well as *public* importance of the inclosing system. Most of the stocking cottagers have rights appendant to their cottages, without land, under the denomination of *auster tenemants*. To these, allotments are made equal in quantity, and quality, as to farms of the greatest extent. Here, the cottage claimant, by relinquishing a privilege, injurious rather than lucrative is placed in a better situation than the proprietor of an extensive farm, who surrenders every advantage of stocking which capital, situation, and convenience might give him, for an equality of allotment with the former, who has no sacrifice to make but ignorance and prejudice, and derives from his allotment a clear undiminished profit.

Besides, moral effects of an injurious tendency, accrue to the cottager from a reliance on the imaginary benefits of stocking a

common. The possession of a cow or two with a hog, and a few geese, naturally exalts the peasant in his own conception, above his brethren in the same rank of society. It inspires some degree of confidence in a property, inadequate to his support. In sauntering after his cattle he acquires a habit of indolence. Quarter, half, and occasionally whole days are imperceptibly lost. Day labour becomes disgusting, the aversion increases by indulgence, and at length the sale of a half-fed calf, or hog, furnishes the means of adding intemperance to idleness. The sale of the cow frequently succeeds, and its wretched and disappointed possessor unwilling to resume the daily and regular course of labour from whence he drew his former subsistance, by various modes of artifice and imposition exacts from the poor's rate, that relief to which he is in no degree intitled.

This description is by no means exaggerated. The parish of Wedmore, abounding with cottage commons, and one of the largest and most opulent in this county, will illustrate its truth and justice. Within twenty years there have been inclosed upwards of 3000 acres of rich moor land, heretofore when in commons rendered unproductive by inundations and their consequences, six or seven months in the year, and when pascible for the remaining months, of little value from being overstocked; which land is now set with liberal allowance of profit to the occupier from ten to fifty shillings per acre. These inclosure are made by ditches, which by annual cleansing and spreading the contents over the surface afford an excellent manure, with a new and extensive source of labour of the most productive kind, whereby the poor's rate have been gradually reduced one third of their former amount, before any inclosure had taken place.

The second objection to inclosing is the supposed injury done to the breeding system.

Few observations will suffice on this head. Commons are in general overstocked. Young cattle abridged of their food become stunted in their growth, and injured in shape and form. To restore them in these respects by better keeping is sometimes impracticable—always expensive. It is more than problematical with many intelligent farmers in the neighbourhood, whether from the circumstances, before mentioned, the breeding system on an average of

seasons and years has yielded any profit. But this is undeniably certain, that the same land when inclosed and improved, will maintain at least three times the stock *breeding*, or *any other*, than it did in a state of nature. Suppose every acre of waste land in Great Britain by inclosure was improved threefold, what would be the consequence? a declension of the breeding system? The very contrary, an extension of it very probably in the same proportion. Without breeding can you graze or make cheese and butter? Are not these different modes of occupation most intimately connected with and dependent on each other? Is not the same land convertible to all and every of these purposes subject to the control and regulation of the market for each? Can young stock be kept too well? Should the breeding of cattle exceed the demand, and from a reduction of price no longer pay the rent of land, will the farmer repine because his land is susceptible of other methods of application no less beneficial? Surely not. Could he hesitate what to do when its high state of culture would direct him either to dairy, or grazing, as attendant circumstances might require. And should the market be glutted with the produce of dairy and grazing farms, the farmer would naturally recur to breeding stock, or raising corn, so that all these articles would find their natural level, which the demand for each, whether inadequate, moderate, or excessive, would invariably regulate, But waste and uncultivated lands being solely appropriated to the breeding of stock, and not convertible to *any other purpose*, is without remedy, whenever the market is overcharged with its produce.

The same reasoning applies to hilly lands in their improved state, by substituting corn instead of dairy or grazing. From the foregoing premises I think it may be inferred, that since commons of every description when inclosed and cultivated, are capable of supporting at least *three times* more stock than they did in a state of nature, no serious apprehensions should prevail with respect to the diminution, or injury of the breeding system. I do not mean to deny that some local disadvantages may occur, but these are too trifling and limited to merit attention, and still less to impede the progress of an improvement of the greatest national importance.—The preceding remarks more particularly apply to the moor, or low lands. In addition thereto I have to observe, with heartfelt satisfaction,

satisfaction, its happy effects on the *health* and comfort of the inhabitants of the adjacent villages. Agues, and low fevers from the humidity of the air, impregnated with exhalations from the stagnant contents of the marshes, prevailed very generally during the vernal and autumnal seasons, and these for the most part were obstinate and more frequently subdued by the drought and heat of summer, and frost of winter, than by the most judicious medical treatment. Inclosing and draining have rendered these diseases as scarce in the *low*, as in the *uplands*, to the prevention whereof advance of wages (from four to six-pence per day) with constant employ arising from the same cause, have not a little contributed, by enabling the poor to *live better*, which is generally accompanied with a growing taste for cleanliness.

The third objection to inclosing, is to the expence attending the act of parliament, with those of commissioners and other subordinate agents employed in its execution.

I do not mean to contend, that rigid œconomy, and expert management have been prominent features in this line of public business. I am ready to acknowledge, that in some instances it has been justly chargeable with profusion, mismanagement, and unnecessary delay. On this subject, truth and justice oblige me to add, that in several instances within my own cognizance, the most enormous expence has been wantonly incurred in obtaining the act, nay double at least beyond the most liberal estimate of a fair and equitable charge.

In these cases the excess arose from the attendance of supernumaries in London, under the pretence of securing and expediting the bill, without rendering the least service in that, or any other way. Charges of this sort are not subject to the control or regulation of the commissioners, since they originate previous to their appointment, and should they refuse payment, a law suit of hazardous issue might ensue, which if unsuccessful, would expose them to reproach from the proprietors. The blame therefore must attach to the latter, for not exercising more vigilance, at the outset of the business. After passing the bill, *delay in the execution* so as to withhold the possession of allotments from the proprietors, for a year, or two, more than necessary has been imputable, and with some color of justice, to the negligence and inattention of the commis-

sioners. It must be acknowledged such conduct is truly reprehensible; since under many inclosures, especially of low lands, of prime quality, the loss of even a year's occupation, if the inclosure be of considerable extent, might be deemed nearly equivalent to a moiety of the expence. In this neighbourhood for some years past this defect has been in great measure remedied; for unless their proceedings have been interrupted by issues at law, or the inclosure has been of great extent, the commissioners have given the proprietors possession of their allotments within a year from passing the act. This dispatch requires a considerable share of judgment and exertion on the part of the commissioners, as well as sufficient leisure and activity on the part of the surveyor. Another error in management relates to the expence of meetings, which heretofore was very improperly augmented by the attendance of some of the principal commoners for purposes of festivity, without being of the least use, rather retarding than forwarding the business. This practice was general, but for some years past has been for the most part abolished, by a very judicious regulation of allowing the commissioners and their agents a certain sum per day as a compensation for attendance and expences.

The public will be enabled to judge in what degree the expence of inclosing ought to affect its determinations under the present course of management, by adducing the following specimens of a moor low land, and a Mendip, or upland inclosure.

Low Land.	£.	s.	d.
Act of Parliament	510	0	0
Roads	450	0	0
Subdivision, Rhynes, or Ditches, 8 feet wide at top, 4 feet at bottom, and 5 feet deep. Price of digging from 1s. 2d. to 2s. per rope (20 feet)	850	0	0
Gates, Bridges	140	0	0
Commissioners (3)	200	0	0
Clerk	60	0	0
Surveyor	140	0	0
Award and other Law expences	110	0	0
Interest of Money borrowed	25	0	0
	2485	0	0

UPLAND INCLOSURE.

	£.	s.	d.
Act of Parliament	300	0	0
Roads	350	0	0
Fences, part wall, part quick sets	850	0	0
Gates, &c.	56	0	0
Commissioners (3)	200	0	0
Clerk	80	0	0
Surveyor	80	0	0
Interest of Money	35	0	0
	1951	0	0

Under the first description the expence of obtaining the act amounted to upwards of 500l. which under proper management would not have exceeded 250l. Near two miles of road; stones quarried and broken at ten-pence per load (eight loads to a rope of 20 feet) hallage, at least one shilling per rope. Two bridges made, rhines made for draining the water and fences by ditching for the subdivision and allotment of upwards of 800 acres. Commissioners attendance, surveyors, solicitors and clerks bills, with every other incidental charge, all of which did not much exceed 3l. per acre. The average value of the land under a moderate computation, may be reckoned at 30l. per acre.

The latter is a Mendip inclosure; quantity of land nearly as the former; a mile of road more; fences partly quick set, partly young living stocks of hazel, black thorn, &c. and dry wall. Allotments not numerous but large, which materially curtailed the expence of fencing; road materials cheaply got. Parliamentary charges reasonable; commissioners and agents as in the moor inclosure, all of which did not exceed 2l. 10s. per acre. The average value of the land as ascertained by the portions sold to defray expences, may be reckoned at 20l. per acre.*

If facts like these be insufficient to appease the clamors of ignorance and selfishness against the inclosing system, or to enforce

* I never before knew an instance of Mendip land in its uncultivated state selling so high; the general price is from 8 to 12l. per acre.

conviction

conviction with the unprejudiced mind, the effects of reason and argument must be altogether fruitless.

That the present mode of conducting the business is susceptible of further improvement, no one conversant with the subject can deny. Yet to accomplish this, many obstacles are to be combated, and perhaps one of the most formidable is that of its having been regarded, more or less, as a *little system of patronage*. The lord of the soil, the rector, and a few of the principal commoners monopolize and distribute the appointments. It is well known that bills of this sort have found their way through parliament without the intervention of a country solicitor, where no opposition was meditated. In such cases, the parliamentary solicitor, and a surveyor have answered every purpose. Here a saving might be made from sixty to a hundred pounds; but this would exclude the friend of one or more of the governing party. In some acts, *five* commissioners have been appointed, in general there are *three*, but *two* would be sufficient with power to nominate a third under the circumstance of difference of opinion, which seldom happens. If a country solicitor be employed he should act as clerk to the commissioners, and save the expence of a supernumerary in that capacity. Hereby another saving of at leaft a hundred pounds would be made, without any injury to the concern. The office of surveyor is by no means inconsiderable in the aggregate of expence. This ought invariably to be disposed of under a fair competition, to the loweft given sum for executing the whole of the business, (after the act is obtained) by advertising for proposals to such effect. This alteration it is probable would save one third, and in some cases nearly half of a bill made out by charges in detail.

In the choice of commissioners, it is of the utmost consequence to appoint *one* at least in the neighbourhood of the inclosure, familiarized with all the varieties of the soil, with the influence of seasons, and with its local peculiarities, whereby its present value, and capacity for future improvement would be ascertained with precision, and the important office of qualifying the land executed with safety and confidence. The next in the scale of utility, fhould be a person conversant with all the forms and routine of the business; well instructed from experience in accounts, and in the prices and different modes of fencing, making roads, bridges, gates, &c. of

general

general and comprehensive knowledge of agriculture, both practical and speculative, and of genius to suggest such modern improvements as are best adapted to the situation and soil. Two persons thus qualified, are fully competent to execute the office with credit to themselves, and justice to the proprietors. But should the concern suffer by the absence of either through sickness, private business, or any other cause, a clause in the act might be inserted impowering them, or the proprietors, to choose a third for the purpose of avoiding delay. Commissioners whose residence is at a great distance, should only be resorted to, as an alternative from the impossibility of getting others properly qualified near home, on account of the extra charges of time and travelling expences.

The office of commissioner is without doubt the first in consequence and authority, under an inclosing act, but with respect to emolument the very lowest. Even the clerks bill of charges, *not* as a solicitor acting in that capacity, but as any other indifferent person did in times past exceed twice, and sometimes three times the amount of the fees of the former. The public have been not a little misled in their conceptions of this subject. The real fact is, that the whole of the responsibility attaches to the office of commissioner, which in pecuniary recompence is by far the most insignificant.

Thus have I impartially stated the defects of the present system with their correspondent remedies. In its most improved state it will retain somewhat of imperfection which perhaps cannot be entirely obviated.

I shall only add, that within a few years past in the neighbourhood of Wells, an inclosure was *farmed* by an attorney of extensive practice, and well known respectability, at a sum considerably less than it would have amounted to in the usual way. The commissioners were appointed by the proprietors; the business executed with singular dispatch, and all parties interested perfectly satisfied. Fences, roads, &c. were made by the proprietors.

When the inclosing system is appretiated by its obvious tendency to increase the produce of land, and the demand for labor, to augment the rate of wages to the husbandman, and to lessen the amount of the poor's rate, it is a subject of regret and astonishment, that so few means have been devised by the legislature, either

either to facilitate, or extend its progress. How much is to be done this way, a general inclosure act, unfettered by tedious and expensive formalities, would speedily manifest. From the very great number of private acts which have passed within the last twenty years, such general principles might be selected, for its basis, as to implicate almost every possible variety of claim, interest, and property. An act thus constituted, might without hazard, or injury, be entrusted to a given number of justices at the quarter sessions, to dispense its powers and controul its execution, and such justices I should conceive perfectly competent to determine on the propriety or impropriety of any propoſed inclosure.

Thus a total extinction of parliamentary expence would encourage inclosing on the smallest scale, and with advantages not to be despised, would accommodate the most extensive.

This measure, however consonant to the principles of individual benefit, and national policy, would notwithstanding have a host of adversaries to encounter.

Fourth objection.—The expence of cultivation and buildings, such as farm house, barn, stable, stalling, pools, &c. for the purpose of creating a distinct farm, &c. &c.

The low land, or moor inclosures being wholly appropriated to grazing, dairy, or feeding young and poor stock, are not within the limits of this objection. It is therefore confined to the upland or Mendip inclosures.

The nature of Mendip soil, its first manure, the mode of cropping, the necessity of spending thereon the whole of its produce of hay, straw, &c. will be severally noticed hereafter, and consequently will not be attended to in this place.

By a reference to these particulars, the necessity and advantage of buildings must be obvious, as not only contributing to the soil its utmost latitude of improvement, but also when obtained, the means of preservation therein. Without a barn, stalling, convenient barton, and pool, neither one nor the other can be accomplished.

But it may be asked, are buildings to be provided for every allotment? By no means. I do not think they are admissible, with the addition of a farm house, on a smaller scale of land than 100 acres.

acres. The expence to accommodate this quantity with a farm-house, barn, stable, stalling, barton, pool, and pig stye, should not exceed three hundred pounds.

The next subject of enquiry, is the additional value communicated to the land by buildings. Should this be answerable to the expence incurred, the whole of the objection must fall to the ground, notwithstanding its apparent plausibility.

Let us suppose an hundred acres of Mendip land inclosed, and divided into four pieces of prime quality, but destitute of buildings; grant a lease of it to a farmer of property and judgment for twenty-one years, (a shorter term would be injurious to the landlord) and I may venture to say, that more than fifteen shillings per acre could not be got for it, accompanied with the usual covenants, and restrictions to guard against wilful impoverishment. With equal confidence, I may assert, the same land *with suitable buildings* would let to the same farmer, for a like term, at one pound per acre, with a subdivision of the four pieces into six. The increase of rent in the latter case will be twenty-five pounds per annum. Allow an interest of $7\frac{1}{2}$ per cent on the capital of 300l. expended on the buildings, which amounts to 22l. 10s. and there will remain 2l. 10s. as interest on the money laid out to make fences under a subdivision, and if quick set, to rear them when made, which certainly could not exceed 30l. Under this plan you do justice to the native qualities of the soil, by giving it a separate, and independent existence as a farm, and with a lease of proper covenants, you need not fear its being exhausted.

A speculative farmer will be apt to exclaim, is it possible that the want of buildings can create a difference of five shillings per acre to the occupier? Most assuredly it is; as will be evident by even a very general statement of the comparative effects of a twenty one year's occupation, *with* and *without* buildings. To begin with the latter; here lime must be chiefly, if not altogether depended on, as a manure. This, even with successive cropping with corn, will maintain its ground tolerably well during the first seven years. Its second application is attended with considerable diminution of its efficacy. From this period, the degeneracy of the soil, is no less rapid, than astonishing: it becomes light; coltsfoot and couch grass abound; clover and ray grasses fail. Intervals of rest of three,

or even four years, seldom recruit its vigor sufficiently to produce even a moderate crop of oats, which, if followed by a second of the same grain, would scarce return the seed. Feed during the two last years of rest, not worth more than nine shillings per acre. No turnips for want of dung; no fold because the land is too much impoverished to maintain it; straw carried off, and clover hay only partially consumed on the premises by reason of the exposed situation. In this unproductive state, the land must remain during the last nine years of the term, reduced to the value of eight or ten shillings per acre, and without the least prospect of melioration.

Painful and disgusting as this representation must be to every judicious farmer, it is nevertheless strictly conformable to fact; and many instances might be adduced, to establish its veracity in every point. Such has been, and most probably ever will be, the situation of Mendip inclosures, *without buildings*, and more *judicious course of crops*. *With* buildings, we have to contemplate effects directly opposite, under a similar term of twenty-one years. Lime, in the proportion of twenty quarters per acre will sustain the land with little abatement of its fertility, for the first six or seven years. During this period, Barton manure will be plentifully supplied, and may be devoted to turnips, cabbage, and potatoes, on a considerable scale, as it will not be wanted either for corn or clover for several succeeding years; it may be appropriated to turnips and clover, assisted by the fold, which a feed of clover and ray grass of the second year will sufficiently maintain. Should these resources be thought inadequate to support the whole of the land, from the ninth or tenth year, piece after piece in succession might be broken up, and limed afresh, with an effect, very little, if at all inferior to that of its first application; as dung and the fold are found excellent preparatives for the repetition of this manure. By the alternate use of lime, dung, and the fold, together with the following rotation of crops.

1st Year . Oats on the Lay	4th Year . Artificial Grass Seeds mowed
2d . . . . Winter and Spring Vetches folded off, and turnips	5th . . . . Ditto Fed
3d . . . . Oats and Artificial Grass Seeds,	6th . . . . Ditto Ditto

which

which the improved husbandry of the last twenty years has suggessed, and which is gradually extending to the mutual interest, and satisfaction of landlord and tenant, it must be evident, that the land under a term of 14 or 21 years, cannot sustain the least injury. By the preceding observations, I trust the propriety and advantage of buildings, erected on a scale of Mendip inclosure of 100 acres, and upwards, are fully established to the conviction of every unbiassed mind. Under this statement, what plan of management should be adopted for smaller inclosures? Separate occupation, at a distance from the barton and farm yard, by the expence of carting, so as to preclude the return of produce in dung, must necessarily impoverish. Must inclosures of this description then be abandoned to the fate of a wretched and ruinous husbandry? By no means. A remedy as a palliative, if not wholly effectual, may be found. In the greater part of Mendip inclosures, either by allotment, or purchase, or both, a sufficient portion of land has been vested in an individual, to induce the necessity of building, with local residence and occupation of the farmer. The smaller inclosures should be let to the tenant or tenants of these farms, for the same term, and subject to the same covenants and restrictions, under which such farms are respectively held, with however a proportionate abatement of rent, by way of an equivalent for the want of buildings. If the lands with the latter, be rented at one pound per acre, the former should at fifteen shillings, or at most at sixteen shillings; and if either price be obtained, smaller inclosures would be provided for, on a footing without buildings, equally, if not more advantageous than larger, with them. Perhaps it may be objected to this plan, that by such additions, Mendip farms would become too extensive, and unwieldy for general occupation. Under an improved system of management, it is now well known, that the most profitable destination of these farms, must be with little variation, to *corn* and *sheep;* and for these purposes, it is no less obvious, that farms cannot be well too *large*, provided tenants can be found of sufficient ability and capital to occupy. This at first may create some difficulty and inconvenience, in letting to farmers in a neighbourhood where the largest farms seldom exceed 200l. per annum. This however can only be temporary; since the quality of the soil, and the situation are favourable to corn, and sheep, and begin to attract the

notice of farmers, who have been accustomed in other counties to occupy farms of this description on a very large scale. These, by a system of management adapted to the foregoing purposes, founded on experience, and prosecuted with vigor, will soon convince those of the neighbourhood, that *Mendip farms*, thus appropriated, of almost any extent, may be occupied with as much safety and advantage as can be reasonably expected or desired.

Having stated 300l. as the sum requisite for buildings to accommodate 100 acres of land, I would observe, that 400l. would accommodate 200 acres, 500l. 400 acres, and 600l. 500 acres; so that this expence decreases by an inverse ratio as the farm is augmented: and in like manner that of fencing, as a large farm requires less subdivision than a small one. Both these circumstances further tend to justify the predilection for *large* farms.

I shall conclude this head, by adducing an instance to exemplify the necessity and importance of raising Mendip inclosures to separate and distinct farms.

About 20 years since near 600 acres of Mendip land were inclosed, the property of a gentleman of large landed estate in the neighbourhood. For situation and quality, it could not be surpassed by any land of this sort. The contiguity to markets with good roads was another privilege; the quantity was equal to a respectable farm, and 700l. was judged sufficient to provide the necessary buildings, in the opinion of those who recommended the measure. A gentleman farmer from Norfolk, of considerable property, was so much struck with the soil, situation, and other circumstances, as to declare, that as a farm he would give 15s. an acre for a term of 21 years; this was refused, nor have any buildings been erected since. The land was let to the proprietors tenants of the adjacent farms in different proportions, at not more than 12s. per acre for the first 9 or 10 years, but since, for not more than 10s. Great expectations were formed on the improvement of *the old farms*, by the produce of the new inclosure being entirely consumed thereon. These however are not realized, for the straw was for the most part sold to the adjacent towns, and during the first 7 years of tillage, it was no unusual practice to crop with oats 3 and 4 years *successively*; yet such was the fertility of soil, and its aptitude for this species of grain, that the produce in favourable

seasons

seasons with a single plowing, has been occasionally 6 qrs. per acre. The consequences of this wretched husbandry, with regard to the soil, are too apparent to particularize, and too absurd and ruinous to need any further comment. I shall only subjoin, had a distinct farm been made in this case, 7 per cent. would have been paid for the buildings, exclusively of *an increase of rent of upwards of* 100*l. per annum*, and the land under a proper lease, instead of its present reduced rent of 10s. or 12s. per acre, would have attained a permanent value of a guinea per acre.

The 5th objection involves two distinct relations:

1st. Deterioration of the quality of wool.

2d. Diminution of its produce by lessening the number of sheep.

With respect to the first, by way of preliminary, it may be necessary to enquire, to what degree has this deterioration of quality manifested itself by a reduction of price on wool from sheep of the *same species*, fed on improved and *cultivated lands*, or on *common* and *waste lands?* Was this point, so essential to the present discussion, ever ascertained by fair and accurate experiment? If not, the objection is wholly hypothetical. If it have, the result ought not only to be known, but established as data to argue from. Nothing of this kind however, has fallen within my observation; I must therefore proceed assumptively, and grant, for the sake of investigation, a deterioration of quality as far as six-pence in the pound by depasturing sheep, which afford the finest English wool on *cultivated* land, instead of waste or *barren*. If the concession as to price be sufficiently liberal, let us enquire how far the public, or individuals, are obnoxious to injury therefrom. The clothier may mix somewhat less of this sort of wool with Spanish, the better to disguise the alteration in quality; or if used by itself, some very trifling difference in the texture or feel of the cloth might be the consequence. But if the alteration be *universal*, in neither point of view, could any particular clothier, nor the trade collectively, be affected by it; and it is at least probable, the public at large would not be endued with sufficient knowledge of the manufacture to detect it, or if they did, would regard it as too frivolous to merit notice. Allow for a moment, the finest English wool to be worth 2s. per pound, from sheep fed on commons or waste land, and 1s. 6d. if fed on cultivated land. In the former case the manufacturer

nufacturer of cloth would be a gainer, by having 4lb. of wool for the same money as 3lb. and he could not complain of a proportional reduction of price; a benefit might therefore, but no possible injury could accrue, to this party in the business. Let us now advert to the farmer, who not only represents himself, but the nation at large as being deeply interested in the increased produce of land, not only in *this*, but in every possible variety of its application. Enquire of the farmer, and he will tell you, that on an acre of cultivated land, by the aid of turnips and grasses, he can keep four sheep instead of one on waste, or land in common, and this too with an undoubted augmentation both of fleece and carcase. He has therefore four fleeces and four carcases instead of one, with a manifest improvement in the value of each. Must he then, from a mere phantom of a grievance which bewilders the imagination of the manufacturer, relinquish advantages of decided and unspeakable importance both to himself and the public? Surely not.

The foregoing remarks apply principally to the small breed of sheep producing the finest English wool; but this sort is apparently on the decline in favor of the improved breeds of Dorsetshire, South down, and other larger sorts, as being more productive in wool, (quality and quantity considered) in size of carcase, and in requiring a less given time to graze. Let it be admitted from these considerations, that in course of time the former breed should become extinct. What then? Should a real degeneracy of the quality of wool, magnified by the fears of the manufacture, be permitted to militate against the solid benefit enumerated as above? The quality of cloth as to fineness is *comparative*. Distinction would vanish, pride and vanity would cease to murmur, if the wool destined to the manufacture of cloth were of the *same* quality, however coarse. The more *opulent* classes of society might still be gratified with cloth made entirely of Spanish wool; the *middle* with a mixture of Spanish and English, and the *lower* with that wholly manufactured of English wool. But all this being uniform in its operation and effect, and being evidently calculated to advance national prosperity, as well as individual advantage, could create no symptoms of mortification or disgust. Let us contemplate the subject under the still more interesting claims of humanity. Can the little farmer and the artificer, the labouring manufacturer, and the husbandman,

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be fed with the fleece? Suppose this valuable species of animal food were confined to the small breed, would there not be a diminution of its quantity so considerable, as might probably advance the price of mutton from 4d. to 6d. per lb.? Let it be remembered too, that in proportion to the increased value of the fleece the farmer will be enabled to reduce the price of the carcase; for his profit is derived from the *whole animal*, not as separated into parts. Therefore the more valuable the fleece the cheaper he can afford to sell the carcase.

The next article under this objection is the diminution of the produce of wool by lessening the number of sheep.

This takes for granted what still remains to be proved, namely, that the inclosing of commons, fed principally by sheep, has a tendency to lessen the breed. I shall consider this objection as applicable to sheep in *general*, and not to any particular description or species. Here I have not only my doubts as to the truth of the position, but I am inclined to think, that the number of sheep will be *increased* thereby, and this too, in a very considerable degree. For perhaps four years after inclosing, an exception may be pleaded, since this portion of time must be allotted to a course of tillage *necessarily* previous to the cultivation of sheep feed. This circumstance as being altogether temporary, should not in the least operate as a deduction from the validity of the opinion. From this period, when turnips and artificial grasses are brought forward, I would date my calculation.

Recurring to a former observation, that Mendip or upland inclosures were most profitably applied as corn and sheep farms, I will suppose one of this sort to consist of 400 acres. In its cultivated state 100 *acres* may be allowed to sustain as many sheep as the *whole* did when in common, and a less proportion of land than this will scarcely be allowed for sheep feed. If this be admitted let me ask, what becomes of the futile apprehension of *lessening the number of sheep*. Let the manufacturer no longer repine, nor the *timid* senator be the victim of groundless distrust: the farmer will have the same quantity of wool provided from a fourth portion of land as was before devoted to the purpose, and the latter will have the consolation to reflect that the other three fourths are raised from

from a state totally unproductive to a capacity of supplying its owner with corn, and pasturage for cattle.

I have some reason to believe that unfavourable impressions have been made on the minds of both houses of parliament against a general inclosing system, and these may have arisen from the magical influence of an expression long sanctified by the public mind, namely that of the woollen manufacture being the *staple trade* of the nation, to which even the land, in all its diversity of produce must ever be subordinate under every kind of parliamentary regulation. A little consideration will serve to detect the fallacy of this opinion.

But to recur. In this farm of 400 acres, suppose 150 should be appropriated to sheep. On the same ground of reasoning this would increase the number by the addition of a moiety. Perhaps this proportion of sheep food, is much nearer to the standard of practice than the former; if so, in any ratio, the manufacturer instead of being abridged of his supply of wool, by inclosing, will have considerably more, and probably too at a reduced price.

Such are the facts relative to wool, the conclusions are simple and obvious. The suspicious and clamorous manufacturer actuated by a spirit of monopoly which the legislature has ever been too much disposed to countenance, may rest satisfied that he can receive no *injury*, but may great *benefit* from the inclosing system.

For arguments sake give me leave to reverse every thing that has been urged relative to the present subject, and allow, contrary to the most ample conviction, that the clothier would be exposed to some loss by a general adoption of the inclosing system. This induces a comparison between the clothier and farmer under their respective formation of *collective* bodies in the great mass of blended society. Let us appreciate by the rule of impartial discrimination the value of each thus united in number, *in the amount of capital employed, in the quantum of labour furnished, and in the supply of means for levying the national revenue.*

First in number. Here accuracy cannot be expected, nor is it necessary, it will be sufficient to observe that the clothing manufacture in coarse and fine articles is principally, if not wholly confined to the countries of *York*, *Glocester*, *Wilts*, *Somerset* and *Devon*. By residing near a considerable clothing town, from which

I derive my data of calculation on this and the subsequent divisions of the subject, and so far as conjecture may assist I should state the number in all those places not to exceed 2000.

In Yorkshire I am obliged to conſider the merchant as the clothier, although in fact the weaver or piece maker is, who ſells his goods by the piece, to the former at a common hall. The latter are ſo numerous, as to defy computation, at leaſt with repect to myſelf, living at a diſtance of 250 miles, but this will make no difference in the concluſions to be drawn, ſince the capital veſts in the merchant, on whom devolves the office of finiſhing the goods from the rough ſtate in which they are purchaſed from the piece maker.

With reſpect to the number of ſheep and corn farmers in Great Britain, it will be impoſſible to ſtate with any kind of certainty without much trouble and expence. There ſeems to be no better general clue to the diſcovery than tracing the landed rental (houſes excluded) of the whole kingdom through its various modes of occupation, and then allot the proportionate ſums to make up the amount.

Let this rental of England be eſtimated at 18,000,000l. per annum, beſtow 6,000,000l. of this ſum on grazing, dairy and breeding cattle farms, the remaining 8,000,000l. on farms for the production of corn, out of which deduct 12,000,000l. for ſuch as raiſe this commodity without the aid of ſheep, and there will remain as appropriated to the corn and ſheep farms 9,000,000l. per annum. In England ſheep and corn farms are for the moſt part *large*; let us ſtrike the average rent of each at 200l. per annum, which to make up the rental of 9,000,000l. will furniſh 45,000 corn and ſheep farms, exceeding in the proportion of 20 to 1 the number of clothiers.

The next ſubject of examination is the *capital employed*. I will allow the clothier who makes all ſuperfines 600l. to each ſcribler; a mixed trade from 12s. to ——— ſuperfines 450l. from 8s. to 12s. 300l. and from 4s. to 8s. 150l. theſe ſums averaged will give 375l. to each ſcribler. I muſt here diſclaim the moſt diſtant pretenſions to *accuracy*; but from the foregoing premiſſes, derived from ſome general knowledge of the manufacture, I have reaſon to believe that the capital employed in the clothing manufactory

does not exceed 14,000,000l. which divided among 2000 manufacturers allots to each 7,000l.

I shall state on a very moderate estimate that 600l. will be required to stock a corn and sheep farm of 200l. per annum, this under the calculation of 45,000 occupants will produce a capital of 27,000,000l. exceeding that employed in the clothing manufactory in the proportion of nearly 2 to 1.

We now proceed to ascertain the quantum of labour furnished by each, hoping that due allowance will be made for the unavoidable intrusion of error and imperfection, which calculation on general principles must be subject to. In Yorkshire, where almost every branch of the manufacture is executed by machinery, manual labour is in a great measure annihilated; or it is no further employed then to regulate the action and application of the former.

The progress of machinery in the *west* is rapid; its adoption there in a short time must become universal on a principle of *self-defence*; without it, the trade *must* migrate from that district to the north. An estimate of the number of persons at present employed in the manufacture, including as a *basis* the almost complete establishment of machinery in the north, with its progreſſive advance in the west, I think cannot exceed 100 to each clothier with a capital of 7,000l. comprehending men, women and children, and this will make the aggregate number 200,000.

It is a received maxim that a farmer should make three rents; one for his landlord, one for the wages of labour, provision and liquor to servants, and implements of husbandry; and the third for profit on his capital. My attention will be limited to that destined for the wages of labour, &c. and after deducting 50l. for implements of husbandry, I shall consider the remaining 150l. as wholly reserved for that express purpose. Allow two weeks of suspension during festivals and holidays in the course of a year, the weekly disbursement will stand at 3l. Men, women and children at an average of 6s. per week to the number of 10 will make up the weekly amount of 3l. 45,000l. sheep and corn farms will therefore employ 450,000 persons.

We are now arrived at the fourth and last article of discussion, namely, the supply of means for levying the national revenue.

With

With the exception of dye-stuffs, oil, and foreign soap, all of which are subject only to custom duties, the clothing manufacture has never been contributory on this occasion.

As forming no inconsiderable part of what is usually denominated the staple trade of the nation, it has hitherto maintained its claim to an exemption from every mode of specific taxation. Not only so, but as a security against an indirect attack in this way, a draw-back of the excise of soap employed therein, is allowed: the policy of this indulgence I do not mean to controvert, since the quantity of soap used being known only to the manufacturer, he might have levied on the consumer in the price of his goods four times its value without risque, or being subject to any other restraint, than what competition might impose.

Thus it appears that the clothing manufacture furnishes but little aid towards levying the national revenue.

How very different with the corn and sheep farm. Sheep furnish duties on parchment, leather, and candles. Corn is a most prolific source of revenue. Barley in malt, beer and spirits, wheat in starch, all which are wonderfully productive, and in amount must be acknowledged to be the very pillars of the great and complicated system of taxation.

Let us now examine how the account stands.

Clothing Manufacture.	*Sheep and Corn.*
Individuals exercising it 2000	45,000
Capital employed . . . £. 14,000,000	27,000,000
Labour to individuals 200,000	450,000
Means of taxation *scarce any*	The *principal.*

It is evident from this statement, which is neither partial nor exaggerated, whether we regard the interest of individuals or that of the empire, under a comparative view, how much the preponderance is on the side of the sheep and corn farmer. I mean not to detract from the importance of the clothing manufacturer;

It is confessedly great, and extensive, *independently* considered. The legislature thinks differently, or else under an almost yearly multiplication of taxes, how comes it to pass, that it has hitherto escaped the vigilance of finance. The *poor* man under the pressure of a numerous family, with circumscribed means of support, is rendered

tributary in the articles of shoes, soap, and candles, which he cannot do without; the *rich* man in his coat of superfine, is indulged with an exemption.

The woollen manufacture comprehends besides the clothing, many other valuable branches of trade, viz. Norwich stuffs, stockings knit and wove, carpeting, camlets, serges, duroys, &c. &c. to all of which I would assign, on the foundation of *conjecture only*, three fourths of the capital, before allotted to the clothing manufacture, and it will stand at 10,500,000l.

In the whole of the woollen manufacture, let the capital be estimated at 25,000,000l. Its distribution in the foregoing trades must be much more extensive than in the clothing; but in what proportion I am not able to to determine; perhaps it may be as that of 5 to 1. To obviate cavilling or misconstruction, I again disclaim all pretensions to accuracy, as having few means of information, either to guide, or regulate my enquiry. I should not only chearfully submit to, but easnestly solicit correction from those who are in possession of means more ample, and documents less confined.

I will therefore state the number of manufacturers at 10,000, capital to each 1000, making in the whole 10,000,000l. Number of persons employed by each manufacturer 30, the aggregate body 300,000; no greater aid, derived from any of those branches of the woollen manufacture to the revenue, than from the clothing.

GENERAL STATEMENT.

Woollen Manufacture in all its Branches.	*Sheep and Corn.*
Individuals exercising it 12,000	45,000
Capital employed . . . . . £. 25,000,000	£. 27,000,000
Labor to individuals 500,000	450,000
Means of taxation *scarce any.*	The *principal.*

Permit me here to observe, that I do not mean to derogate from the importance of any of the foregoing branches of the woollen manufacture, separately considered, or in combination. I will admit it on a very extended scale of interest, both private and public; but *comparatively* with sheep and corn, in both respects, its superiority is not so manifest, if the preceding calculations, approach in any tolerable degree, towards certainty.

Justice

Justice and impartiality compel me to remark, that the woollen manufacture, in almost all its branches, has been for some years past, and is *now rapidly* decreasing in its heretofore most fertile source of national benefit; namely, in furnishing labor adapted to the different periods and stages of life. Machinery *must* and *will* be universally introduced, otherwise the districts, where *it is not* used, must be sacrificed to those where *it is*. Would the legislature interfere to suspend its operations, or limit its progress? This would be incompatible with its wisdom and justice. To allow only its *partial establishment* would be oppressive; to admit of *none*, would be ruinous; because, such machinery, with its appendant branches of manufacture, and a *few individuals* allotted to each, is not only susceptible of, but it is presumed will *shortly* be, in a state of migration. In Yorkshire, where it has received a degree of perfection, and an extent of establishment beyond that of any other part of the kingdom, I have been informed from indisputable authority, that before the present war, the *great demand* for the produce of the manufactures, left but *few* in comparison to resort to agriculture for support. What the *present* situation, may be in this momentous relation to national prosperity, I am not able circumstantially to describe, but general rumor states it as a melancholy reverse.

The sixth objection supposes a diminution of the rental value of estates to which commons are appurtenant.

In *theory* this may appear in some degree specious, because an increased produce without an increased consumption, would more or less countenance such an inference.

But admitting the premises, it induces the necessity of investigating the relative operation of the cause presumed. Let us suppose a farm with common appurtenant to be worth 100l. per year, and that by a deprivation of the common, its value be reduced 5l. per year. If the common *inclosed* be worth 10l. per year, the objection must give way.

This statement however bestows a degree of importance on the objection, which it scarce deserves; for in fact, the inclosing both of the low and uplands, has been uniformly accompanied with an increased produce from *both*; and it is no less true, that scarce an instance

instance can be produced of the least abatement of rent, on the *old estates*, in consequence of the tenants being deprived of their *commons* by inclosing.

The foregoing disquisition will, I fear, appear to many of my readers too diffuse and prolix, but as the subject is of the highest importance, and as it has been the custom of many to decry all improvements of this kind, particularly when applied to lands similar to those of Mendip hills, I trust it will not be thought altogether impertinent.

I shall now proceed to a minute delineation of the general practice of farmers occupying land in this forest; and endeavour to shew how far the general end of improvement has been kept in view, how far it has been deviated from, and in what respects the general system is susceptible of amendment.

It appears by the foregoing statement, that the expences of the act of parliament, commissioners fees, roads, dividing and allotting, fencing, drawing, and inrolling the award, and all other incidental expences, ought not to exceed 2l. 10s. per acre; to this must be added twenty shillings per acre for raising the quick set hedges to maturity; and to avoid objections, I will say fifty shillings per acre for necessary buildings, pools, &c.

Let us now endeavour to state the "*cui bono*" of such speculation.

In its open, uncultivated state, the value of this waste could not be estimated at more than three shillings per acre; indeed it is a matter of doubt, all circumstances considered, if it be worth *any thing* to the possessors. In its inclosed state, and previous to its cultivation, it might be let for eight shillings per acre; and when cultivated and manured with lime, its value will be advanced to fifteen shillings.

Let us state the account both ways.

Dr.				Cr.		
To first value 3s. per acre, and 25 years purchase . .	3	15	0	By value at 8s. per acre, 25 years purchase . . .	10	0	0
To inclosing, dividing, without buildings	3	10	0				
Profit	2	15	0				
£.	10	0	0				

In this instance the profit is not despicable.

OR, SECONDLY,

Dr.				Cr.		
To above cost without buildings .	7	5	0			
To buildings, &c. .	2	10	0			
To sundry plowings, harrowings, and liming, 20 qrs. per acre	4	5	0			
	14	0	0	By value at 15s. per acre, 25 years purchase . . .	18	15	0
From which must be deducted the value of the first crop, exclusive of seed, interest of money, and all other charges	3	12	0			
	10	8	0			
Profit	8	7	0			
£.	18	15	0			

There are few ways in which money or industry can be employed to greater advantage than this, or in which the public good can be more promoted; and yet I have frequently heard men, in other respects

respects of sound understanding, ridicule such speculations as altogether visionary, and absurd.

Were it even admitted that the adventurers in these schemes, are for the most part sufferers, yet it cannot be denied that the community is benefited, inasmuch as the land is made to produce ten times as much as it did in its primitive state; and the amount of labor is nothing but an addition to the capital stock of the nation.

Notwithstanding these improvements on the forest of which we are now treating, have been carried on with unabating ardor and activity, yet it will appear by the following statement, that much is left to be done.

Inclosed		*Uninclosed*	
Parishes	*Acres*	*Parishes*	*Acres*
Leigh	100	Chewton	2000
Ashwick	350	East Hartry . . .	1100
Cranmoor, &c. . .	300	Priddy and Stoke . .	1200
Charterhouse . . .	1000	Cheddar	2500
Hayden	400	Axbridge	300
Ubly	950	Compton Bishop . .	500
Blagdon	1000	Winscomb and Shipham	800
Doulting and Stoke	800	Rowboro' and Churchill	1000
Shepton	800	Berrington	1000
Shuters Bottom . .	600	Charter House . . .	350
Westbury . . .	350	Banwell, Lockstone, Curston, Locking, and Hutton . . .	800
West Hartry . .	900		
Compton Martin .	700		
Blagdon	800		
Old Down . . .	100		
Dinder and Croscomb	800		
Chilcot and Horrington	800		
Wells	2800		
	13,550		11,550

The

The soil of these hills is for the most part deep, loamy, and of a good consistence; and were the climate more genial, could not fail of being highly productive *in all seasons*. Occasionally are to be found spots of land less valuable, being of a light, spungy nature, black in color, and totally unproductive of corn on *first cultivation*.

Nature however has wisely provided a manure within itself, for under the surface, at the depth of a foot, is generally found a strong clay, which being spread after the rate of thirty or forty cart load per acre, gives such a tenacity to the soil, as enables it to produce corn, or any crop in great abundance.

And here let me advise a general investigation of the substrata of all soils, about to be improved; for I verily believe, that in most instances, a manure may there be found, near at hand, and congenial thereunto. Do we not frequently find clay under sand, and sand under clay; under flint, *chalk;* under white lias, or stone brash, *marle;* under red earth, *lime stone;* under peat bogs, sea *mud* or *clay*. Are not these circumstances sufficient indication to the wary husbandman, to examine minutely the interior quality of his land, previous to applying extraneous, and expensive manures.

The climate of these hills is cold, moist, and boisterous during the winter season, and frequently immersed in fogs; but in summer, the air is clear, salubrious, and invigorating. And it frequently happens that potatoes, French beans, and other spring crops, are destroyed in the *vale*, by frost in April or May, when those on the *hill* are in no degree injured.

The favorite corn crop is *oats*, which are produced in great abundance, and of good quality. The wheat and barley are inferior, being thick in the skin, and of a dark color; however the defect in *quality* is amply made up by the *quantity*, for it is no unusual thing after the land is manured with lime, to get from twenty to thirty bushels (Winchester) of wheat, and forty or fifty bushels of barley per acre. As to oats, the usual crop is from forty to sixty bushels.

But the most eligible mode of conducting a farm on lands of this description, is to grow *comparatively*, but little corn, and *that little* in the highest perfection. To have a great breadth of turnips, cabbages, potatoes, vetches, artificial grasses, and consequently to

maintain a great stock. To provide all necessary buildings for shelter in the winter, and for the purposes of making mountains of dung, which the large produce of straw will enable the occupier to do. If sheep be kept, let the choice be of wedders, or wethers, (a breeding flock on such exposed situations is hazardous) and let them be folded every day in the year.

By these means, lands of this description may be carried on in a progressive state of improvement; and if the present price of the different articles of produce be not greatly reduced, neither the proprietor, nor the tenant, will have any reason to complain.

Let us now proceed to a description of the fences, buildings, reservoirs or pools, limekilns, roads, and all other the needful appendages to such undertakings.

There are various modes of fencing, and each has its advocates, but the two principal are *walls* and *quick set* hedges.

WALL FENCE.

In most instances, the *outside bounds* are a wall fence, five feet six inches high, two feet and a half wide at bottom, and fifteen inches at the top, which is covered with a turf of six inches put on in the form of an arch, making together an heighth of six feet. This wall is partly dry, and partly cemented with mortar, or what is commonly called a *list wall.* In some instances where a flat bed of stone can be procured, it is made without cement, and if well built, such a wall is very durable. When the ground is level, the foundation of the wall is laid on the turf, and this is to be preferred, as it will not be so apt to sink as when a trench is dug. The expence of a list wall may be thus calculated per rope of twenty feet running length.

	£.	s.	d.
To quarring or digging 8 load of stone, (25 cwt. each) at 3d.	0	2	0
To halling the same supposing the distance ½ a mile, at 6d.	0	4	0
To building per rope, (20 feet) . . . . . at 3s. 6d.	0	3	6
To 3 bushels of lime . . . . . at 3d.	0	0	9
To covering with turf (if done very well)	0	0	3
£.	0	10	6

DRY WALL.

		£.	s.	d.
To quarring as before		0	2	0
To halling ditto		0	4	0
To building	at 2s	0	2	0
To turfing		0	0	3
		0	8	3

When stones can be got within a wheeling distance, or about sixty or seventy yards, the cost will be reduced about two shillings per rope, and if the wall be *wholly* made with cement, it will be enhanced about 2s. 6d per rope.

QUICKSET HEDGES.

These hedges, if rightly managed and attended to, whilst young, are in themselves, great advantage and profit; they afford good shelter for the cattle, and they furnish fuel and writh for the necessary purposes of the occupier.

The first thing to be done, is to mark out the course of the ditch. The dimensions of the bank on which the quick sets are planted is generally seven feet at the bottom, three and a half feet at the top, and two feet high. On each side is a ditch 3 feet wide, and 2 feet deep; the sides being made sloping, and the bottom not wider than six inches; this is to prevent the cattle from walking in the ditch, and cropping the young shoots. In making the ditch, the men should be particularly careful, not to throw any bad earth from the bottom of the ditches into the centre of the bank. If this be done, the growth of the quick will be greatly retarded. The making this bank will cost nine pence per rope, (twenty feet).

Let the sets be taken from a nursery formed on a good soil; let them be straight in their growth, having been once transplanted from the seed bed, and four or five years old. The shoots should also be smooth on the bark, and well rooted. These sets are worth about one shilling per hundred.

The bank being thus prepared, and the quick ready, let a trench be cut in the middle of the bank, and let the sets be cut off, and laid with the head inclining a little at the distance of about three inches from plant to plant. Let the roots be then covered with a little of the best mould, after which fill up the whole trench with rotten dung, or compost, strewing a little more good mould on the top. The digging of the trench and planting will cost two-pence per rope.

Nothing more is necessary but to secure them from injury. For their defence therefore, and shelter, two dead hedges must be made, about six inches distant from the outside edges of the bank. These hedges are about three feet high, and composed of wreath, or bush wood, with a proper number of stakes; the expence of materials and labor is about 2s. 10d. per rope. Time of planting the quick either in the months of October, February, or March. It is the practice of some to plant *two* rows of quick instead of *one*, but I have not found this plan succeed so well. Some also recommend the planting at greater distance than three inches, under an idea that *thick* planting retards their growth; but I have invariably found that the hedges planted *thick* thrive the best.

Some advise the planting of timber trees in the hedge, but I think it a bad practice, as the dripping from them frequently kills the thorn plants, and makes a vacancy in the hedge.

After this the young quick must be carefully weeded, and hoed twice a year, and particular care must be taken to prevent their being cropped either by cattle or sheep, both of whom are very fond of the tender buds; and if by any accident they have gained access to them, and gnawed them, they must be cut down within 1½ inch of the ground. In cold, exposed situations, *two sets* of dead fences are requisite, to bring the quick to maturity, and the cost may be thus calculated.

	£.	s.	d.
Making the bank	0	0	9
Quick sets 80 in a rope	0	0	9
Planting and dunging	0	0	2
2 Dead hedges	0	2	5
(*N. B.* One waggon-load of writh will cost 17s. 6d. and make about 15 rope of single hedge.)			
Making two dead fences	0	0	5
	0	4	6
Weeding plants for three years	0	0	3
2 Additional dead hedges	0	2	10
	0	7	7

N. B. The old wood will pay for sundry repairs of the hedges injured by sportsmen, &c.

Having now stated the different expence of a *mortar*, and *list wall*, a *dry wall*, and also of raising a bank, and planting *quick*. It may not be amiss to enumerate the comparative advantages and disadvantages.

A wall is certainly the best fence for a given number of years. It covers less ground, it does less injury to the crops than hedges. If part by accident fall, it is easily repaired, cattle are kept more secure, sportmen are excluded. These are the principal advantages, which in a great degree compensate for the want of shelter and durability, and in most instances where stone can easily be got, and I think in all cases, where land is poor and exposed to violent winds, it is no ineligible fence.

On the other hand, quickset hedges are beautiful to the eye, and if the climate, quality, and depth of soil, be such as to throw out a vigorous shoot, and minute attention be paid to them in their infancy, they are less expensive, and at the end of fourteen or fifteen years, will yield a sufficient produce when cut down, and plashed to pay all the expences incurred by the first making, and this cutting may be repeated afterwards every twelve or fourteen years without injury to the stocks: and here let me remind the farmer, that the proper time to cut and plash his hedges, is when the ground is to be ploughed, or if it be pasture, when the crop is to stand for hay; for cattle are very fond of the young branches, and by cropping them in the summer will greatly injure the shoots.

But may not these too modes be so combined, as to reap the advantage of both, that is, by making both a wall and hedge? to this there can be no objection, but the expence.

A dry stone-wall, $4\frac{1}{2}$ feet high, with six inches turf on the top, may be built on a similar calculation with the foregoing, for six shillings per rope, and a low bank may be rose under it, on which quick may be planted. The growth encouraged by shelter and warmth will be rapid, and in four or five years time, the wall may be taken away, and the stones converted into lime, or used on the public roads, or for any other purpose. If this fence be made at the time when the land is converted into tillage, one dead fence will be sufficient, and that need not be an expensive one.

The DISBURSMENT *will be as follows:*

	£.	s.	d.
Building $4\frac{1}{2}$ feet of wall, stones and halling included	0	6	0
Turfing	0	0	2
Making bank and planting quick	0	0	4
Sets	0	0	8
1 Dead fence on the inside	0	1	2
Weeding	0	0	2
	0	8	6
From which deduct the value of the stones at 3d. per cart load	0	1	6
	0	7	0

This I think a more eligible mode of fencing than either of the preceding, but still there is another method which I prefer to all others in situations, such as that on which we are now treating.

This is making a bank four feet high, and planting on it *full grown sloe* or *black thorn*, setting them very thick, and cutting off the top to the height of three feet. The principal objection that can be started to this plant is the running of its roots, which are said to obstruct the plough, but I can declare from long experience, that in banks, such as I describe, accompanied with ditches, $2\frac{1}{2}$ feet deep, no such inconvenience has occurred. In most countries great quantities of this black thorn might be found in coppices, borders of fields, commons, &c. and the owners will be obliged

by your digging them up; one good waggon-load of these plants, will be sufficient for twelve rope, and the cost may be thus estimated.

	£.	s.	d.	
Making the bank	0	1	0	per rope,
Digging up and planting	0	1	0	ditto
Carriage of plants	0	0	6	
	0	2	6	

N. B. The price of carriage must vary according to the distance.

It may be adviceable to mix with the black thorn, some hazle, or withy stocks, together with the *large brier*, and to lay the loppings of the sloe along the summit of the bank, securing them by small stakes, so as to prevent sheep from making a passage through the stocks. This fence requires but little repair; the sloe will throw out so many shoots from its root, and the briar will so intwine its branches with the hedge, as to make it in a few years impervious to cattle of any kind. And though it cannot be expected to grow to a great height, yet it will be as close and thick as the farmer can wish, and together with the bank will constitute excellent shelter and defence, *and withal* will be made at the least possible expence.

After inclosing and dividing, the next object of attention are suitable buildings, such as a dwelling-house, barns, stables, stallings, &c. &c. These are placed as near as possible the centre of the farm, and though not elegant, are for the most part useful and commodious. They are built with stone, and generally thatched, the inconvenience of which is severely felt; for the moisture of the air, and the powerful effects of the wind, render frequent repairs necessary. A roof will require coating every eight or ten years, it is a harbour for vermin; is more dangerous in respect to fire, and every thing considered, is more expensive than tile, to encourage the use of which, our rulers would do well were they to repeal the present tax upon that article (or at least to allow a drawback on such as may be used on farm-houses, barns, &c.) for I think it would not be difficult to prove, that the injury done to the kingdom, in respect to its agriculture, is five times greater than the

produce

produce of the tax. Exempt from duty, the use of tile must, I think, be general, by which means all the straw would be devoted to the purpose of subsistance for cattle, or manure. The expence of a comfortable farm-house, with its neceſſary appendages, is estimated at about 250l. That of a barn, roomy enough for four threshers, and capacious enough to hold twenty or thirty load of corn, 150l. Stables, stalling, pig-styes, &c. 150l. more, making the whole 550l. This expenditure will be sufficient for a farm of five hundred acres. The practice, lately introduced, of placing the barns on a declivity, cannot be too much commended; a warm and commodious stall for oxen, covered by one roof, is thereby gained. The barn floor thus elevated, is rendered more durable, and less subject to vermin; the corn is kept more dry and sweet, than on a ground floor; nor can it slip through the barn floor without discovery, and I know of no possible inconvenience that can accompany this plan. Barns, such as these, are placed with a south-east aspect, and the arches of the stalling front that way. Annexed thereto, is a capacious yard, with proper cribs for hay and straw, where the animals feed, and retire at their pleasure to their comfortable lodging under the barn,

Nothing is necessary to complete the farm yard, but a pond or reservoir of water, and as the situation is on a descent, such pond is soon filled, by the common current of rain, or it may be supplied by shoots from the roof of the barn.

On one farm, situate in the parish of Compton Martin, the proprietor has made a semicircular farm yard, and by building a wall on the *outside*, and round pillars on the *inside*, at the distance of about fourteen feet from each other, and covering the same with strong lugs or poles, has made an excellent *staddle* for corn. To secure it from vermin, he has placed a row of flat stones at a foot distance from the top, both of the wall and pillars inside, and outside. This row of stones projects about eight inches, and shuts so close together, that no vermin can gain access to the corn. On this staddle (as it is here called) he places the whole of his wheat crop, except that portion which he intends to thresh for seed, for the moisture of the air renders the wheat on these hills so damp and cold, that the sale in the winter season is very slack, and should in most instances be avoided. In all my farming excursions, I never

saw

saw a more comfortable covering for cattle, nor a better foundation for a corn mow, and under the supposition of its being threshed in the summer months, no possible inconvenience can attend it, for the staddle is cleared, and ready for harvest to take another burthen.

The next, and not the least important appendage of these farms, are *pools* or *reservoirs of water*; for on hills so elevated, few springs can be expected. Nothing more strongly verifies the truth of the old adage, "Necessity is the mother of invention," than the skill exhibited by the masons of this district in buildings of this nature. Scarely ever do these pools let through the water, and the cost, supposing it to be of the following dimensions forty feet long, sixteen wide, and six feet deep in the middle, may be thus stated.

	£.	s.	d.
Digging out for foundation	2	2	0
N. B. In most instances this will furnish a sufficient quantity of stone for the building			
Masons labour	10	10	0
300 Bushels of lime	3	0	0
10 Load of clay	1	0	0
8 Load of coal ashes	0	8	0
	17	0	0

A pool of these dimensions, if properly situated, will supply 80 or 100 acres with a sufficiency of water for the stock throughout the year; and if well made, may be kept in repair for sixpence a year.

As *lime* is the grand manure of this district, by which the improvements of cultivation are in a great measure brought about, kilns for burning it are numerous, and generally thought well constructed; their form is that of a French bottle, the height 16 or 17 feet, the length of the neck, in which the calcination is wholly effected, 8 or 9 feet; its diameter 4 feet, and the diameter of the belly in the largest part 12 feet. They are built on the side of a hill, by which means the top is on a level with the adjacent *rock*, and the cost is as follows:

	£.	s.	d.
Digging out the concavity	1	1	0
(This will furnish stone for the building.)			
Building	4	4	0
Lime and ashes	1	15	0
Building a shelf-house for the kiln to deposit the lime, and covering the same	3	0	0
	10	0	0

In such a Kiln, may be burnt 480 bushels of lime per week, and this will consume 15 quarters, or 120 bushels of refuse coals, such as is not commonly used for any houshold purposes. The coal costs at the pit twopence per bushel, and the distance being six miles, the carriage is threepence, the prime cost of the lime therefore is fourteen pence per quarter, as the following calculation shews:

Weekly Expence.				*Weekly produce.*
15 Quarters of coal, at 3s. 4d.	2	10	0	60 Quarters, at 1s. 2d. 3l. 10s. 0d.
Limeburner, 4d. per quarter, digging stones and burning	1	0	0	
£.	3	10	0	

The lime produced by one of these kilns, will amply manure 3 acres per week; and I leave my readers to determine, whether kilns of this construction are, or are not to be prefered, to those in shape of an inverted cone. The largeness of the surface in the last mentioned, must I should think, require coal of a better quality, and consume a greater quantity.

Lastly, let us take a view of the public roads. They are left 40 feet wide, and are stoned 12 feet.

It is usual to stone these roads one foot thick in the middle, and nine inches at the sides making thereby a gentle curve.

	s.	d.	
First forming	0	6	per rope of 20 feet.
Digging 8 load of stone (25 cwt. each)	2	0	
Wheeling or halling, do. . . .	3	0	
Breaking, do.	3	0	
	8	6	

Note, The expence of halling must vary according to the distance of the tone.

The inclosure being now finished; buildings erected; pools made, and public roads formed; let us now take a survey of the expence of cultivating these lands, under the following heads; ploughing, manuring, cropping, and harvesting. In this I shall endeavour to draw information from reason and experience, and shew upon what grounds the practices are founded, so that my readers may then take or refuse them, according to their own judgments.

I have before stated that the soil of Mendip Hills is a fine mellow mould, intermixed occasionally with less fertile ingredients, such as stones, gravel, clay and the like, and according as these are greater, or lesser in quantity, the soil is worse, or better. In all cases the husbandman may distinguish the general nature of the soil, by its aspect on the surface, or by the produce thereof. Where the fern grows in great luxuriance, there he is sure to find deep, good land, but weak, low furze, rushes, or white grass, are symptoms of poverty.

The object to which we now proceed in our disquisition may be deemed the most important and interesting, being nothing less than the process, by which this comparatively barren soil is converted into fertile and productive land: and on a nearer inspection, it will probably be allowed, that few instances can be adduced of attempts more successful to individuals, or more beneficial to community. This soil does not pour forth its vegetable productions spontaneously, but its qualities and strength are such, as to produce great returns, if properly cultivated and manured; and were an ancient inhabitant of these regions to return to life, he would be at a loss to know the name of this apparently new country.

The months of September or October are the best to commence the tillage. The instrument made use of, is a strong foot plough, without wheels, cost 2l. 2s. The breadth of the plit about 10, and the depth 4 inches. Four horses, or six oxen will turn about three fourths of an acre in eight hours. A man is employed to go after the plough, with a spade to repair balks, to dig up stones, and to lay the plit flat: this ploughing may be valued from twelve, to twenty shillings per acre. In this state it remains to be mellowed by the winter frosts, till March, when black oats are sown, after the rate of six or seven bushels per acre, and harrowed in by four turns of the harrow on the same ground. A few farmers previous to this sowing, have lately adopted the plan of *hacking* the surface at the expence of four shillings per acre: by which means less seed will do, and the same is more regularly distributed, and better covered, beside the hacking and harrowing is not more expensive than the troublesome dragging before-mentioned: the expence of either of these operations may be estimated at seven shillings per acre.

After this it is rolled at an expence of one shilling per acre. Nothing more is done till harvest, and the average produce may be set at twenty-five bushels per acre, the straw of which will pay for harvesting and threshing (that is about eight shillings per acre.)

Soon after harvest, or indeed at any part of the winter, the ground is cross plowed with the *double furrow* plough, value six shillings per acre. Harrowed in March, value two shillings, and in April the liming is begun, Four horses and two men, with two carts, holding 32 bushels of lime each, (if the kiln be not at a greater distance than one mile) will cover $1\frac{1}{2}$ acre per day, at the rate of 160 bushels per acre.

The lime is deposited in heaps of one bushel, at the distance of $16\frac{1}{2}$ feet every way. Cost per acre (value of lime included) thirty-five shillings.

Covering these heaps with earth, and afterwards spreading them, (which should be done as soon as the lime is dissolved) are worth one shilling and six-pence per acre.

After

After this the ground is well harrowed, two shillings per acre; then plowed very thin or raftered, five shillings; harrowed again two shillings, and in this state remains for the seed earth. It is found highly advantageous to expedite the liming, and to finish all the work previous to the seed earth by the middle of July; so that all the stock, such as cows, sheep, horses, &c. may have free access to the fallow, or may be frequently driven over it, for the purpose of making it close and compact. The latter end of September, or the month of October, is the time for sowing, and this is done in two ways, some sowing under furrow, others harrow in the seed; the latter I think preferable, as the uncorrupted sward, furze, &c. are by harrowing brought to the surface, and are a great defence to the infant plant during winter; whereas if buried, they keep the ground hollow, and expose the roots to injury. Which ever way it be done, the last plowing, sowing, and harrowing, will cost about seven shillings per acre, to which add $2\frac{1}{2}$ bushels of seed, value fifteen shillings, and the whole expence has been enumerated. No weeding is necessary, nor is there any other disbursement, save rolling in April, which should be performed with a very heavy roller, at the expence of two shillings per acre.

Let us now recapitulate the expences, and state the average produce per acre.

First Year. Dr.	£.	s.	d.	*First Year.* Cr.	£.	s.	d.
To first plowing . . .	0	16	0				
To hacking and sowing oats	0	7	0				
To 6 bushels seed . . .	0	15	0	By 25 bus. oats			
To rolling	0	1	0	2s. 6d. .	3	2	6
To one year's rent . . .	0	8	0				
Second Year.				*Second Year.*			
To cross plowing . . .	0	6	0	By 25 bushel			
To harrowing	0	2	0	wheat 6s.	7	10	0
To liming (160 bus. per acre)	1	15	0				
To covering and spreading	0	1	6				
To harrowing	0	2	0				
To plowing	0	5	0				
To harrowing	0	2	0				
To last plowing, sowing, and harrowing	0	7	0				
To $2\frac{1}{2}$ bushels seed . . .	0	15	0				
To rolling	0	2	0				
To two years rent . . .	0	16	0				
	7	0	6				
Profit	3	12	0				
	10	12	6		10	12	6

N. B. The straw in both instances will pay for reaping, harvesting, and threshing.

HARVESTING AND THRESHING.

The reaping of wheat is generally performed by the acre; and, as the ripening is a fortnight later on these hills than in the vale, there is no want of hands. The price from five to seven shillings per acre, including cutting, binding, and mowing. It is always hand griped as it is called, that is, collected within the palm of the hand

hand before the hook or sickle is applied. All the corn, both wheat, barley, and oats, are bound into sheafs and mowed in the field. The price for barley and oats from three to four shillings; beside these prices, the men are allowed for wheat two gallons of beer, and for barley and oats $1\frac{1}{2}$ gallon per acre.

In situations subject to sudden and violent rain, this custom of mowing in the field cannot be condemned, as in respect to wheat, the days cutting is secured every evening, and the lent corn can be put together and secured much sooner than in the common method.

The principal objections are the bringing mice with the sheaves into the barn, or large mow; and the want of sufficient dryness in the corn for winter threshing.

The men of this country are very dextrous in making these mows so as to prevent rain from injuring the corn; and they frequently remain 5 or 6 weeks in the field without suffering any damage.

Wheat is seldom threshed with the straw, but the ears are cut off, and the straw bound in sheaves tied very tight; the circumference of the sheaf at the bond should be six feet; this costs 4d. per sheaf, including the threshing of the ears. A good acre of wheat will produce three dozen sheaves, value 8s. 6d. per dozen. And by this method the firmness of the stalk is preserved, and rendered more valuable for the purposes of thatching buildings, &c. &c.

Barley and oats are threshed by the quarter. Price from 1s. to 1s. 6d. per quarter.

A good acre of oats will produce 2 waggon load of straw.

The land is now considered in its highest state of strength and vigor; and it is thought by most farmers, that every succeeding year reduces its value; nor can this be wondered at, when the subsequent course of cropping is stated.

It is no unusual thing to have three, or four successive crops of corn, nay sometimes five or six, without an intervening fallow, or fallow crop; greatest part of the straw is sold, nor is the land sown with artificial grasses, till it is no longer able to bear corn.

This mode of treatment, together with the coldness of the climate, has hitherto operated as an effectual bar to the settlement of opulent, and more enlightened farmers; but I am well persuaded, that if even one of that description were to settle here on a farm of

a proper size, viz. 5 or 600 acres, he would, according to the farmers phrase, "find himself at home," and his example would soon be followed by many others.

Cabbages, turnips, potatoes, carrots, parsnips, vetches, flax, oats, clover, and all artificial grasses, may be grown in the highest abundance and perfection.

The land is never glutted with rain, nor subject to drought, and the fogs, (of which so much is said) are prevalent only in the winter season.

It cannot be denied but that a cold, wet summer, such as that of 1792, is peculiarly unfavourable to the ripening of corn on lands of such elevation, but in summers like the last, few countries could vie with it.

Though I am no advocate for farms of an *excessive* extent, yet I think, that on soils, and in situations such as Mendip hills, they should not be less than 4 or 500 acres. I mean sufficient to keep a flock of sheep for the purposes of *folding*, which should be unremittingly pursued through both winter and summer months. On the fallows in the summer, and on the grass land, or in the bartons in the winter. A wether flock would be best calculated for the purpose, and it is a matter of doubt with many judicious farmers, whether sheep of that kind are not equally profitable with a breeding stock, even in situations more mild and temperate. By such a system of management, 100 acres might be manured every year with the fold which joined with occasional liming; and the application of the barton dung would keep the land in a progressive state of improvement, and at the least possible expence.

Formerly the ploughs used here were the most aukward, and ill contrived, that could be conceived, but they have in a great measure given place to the *double furrowed* plough, which was introduced to this neighbourhood by a speculative man who turned farmer on these lands, disregarded, and despised by all practical husbandmen. At first he became an object of ridicule to all around him; even his friends considered, that ruin must be the inevitable consequence of such rash, and ill-judged speculation. However, by means of activity and perseverance. he has not only weathered the storm, but has the satisfaction of seeing the example which he

he has set, followed by the inhabitants of many surrounding parishes.

Though common farmers are for the most part backward in adopting new plans, yet I never knew any *valuable* discovery that they did not sooner, or later fall into. So it happened with the double ploughs. For ten years did the person above alluded to use this instrument, and was constant in season, and out of season, in recommending it to others; (for they who have a true taste for agriculture, enjoy themselves in the communication of every useful discovery) but all in vain, the more warm he was in enforcing its utility, the more reluctant were the common renters in adopting the use of it; and in all probability it would have remained to the present day, undistinguished for its superiority, had not the same been manifested at the different trials of ploughs exhibited under the direction of the Bath Agricultural Society.

At present scarce any other plough is used after the first breaking; and I believe I may truly assert, that in comparison with the old ploughs of the district, no less than 100l. per year is saved on a farm of 500 acres. Another mode of management has been for many years past introduced by the person before alluded to, namely, ploughing by the *acre* instead of the day.

The contract is thus conducted; the master finds oxen and food, and the ploughman labor and a driver. The latter is also bound to attend on the cattle at all times, even when debarred from work by rain, snow, frost, or any other cause. The price is 2s. 2d. per acre for the ploughing of the rough Mendip lands when first inclosed, (this is done with a single plough) and 1s. 2d. for all other ploughings of every description.

By this system of management he has annually had more ground ploughed by *one* team, than his neighbours by *two*; and it has been no unusual thing for his man and boy to earn regularly per week 17s. 6d. that is for $2\frac{1}{2}$ acres per day on an average. Nay, his man has repeatedly ploughed with six oxen (in yokes) 20 acres of land, statute measure, in 48 hours; I mean in six successive days, reckoning eight hours per day: the breadth of the plit (according to agreement not exceeding nine inches, nor the depth less than four inches,) if the soil was deep enough to admit thereof.

Let us pause here, and seriously consider the advantages of *contract* in comparison with *daily* labor. The English laborer is naturally disposed to vigorous exertion, if encouraged thereto, either by an increase of wages, or by the exhilarating influence of good cheer.

Do we not see in times of harvest a degree of activity, exhibited unknown at other times of the year? and this at a season when the heat of the weather naturally induces fatigue.

Do not the manufacturer and artisan, almost of every description, have recourse to contract labor? and though their workmen earn from 10s. to 30s. per week, do they not find their account in so doing, from the emulation which it excites, and the perfection of workmanship which it produces?

Must it not be acknowledged, that in those countries where daily labor is the prevailing mode, a slow and indolent habit is generated, which neither promises nor threats can intirely overcome, to the great injury of the commonwealth, as well as of the farmer. Suppose we allow the average rate of daily labor to be 16d. and admit that by contract, men will be excited to earn 20d. what an addition of useful labor would be created, taking it in an aggregate point of view.

But I must not enter too widely into this field of discussion, and shall only add, that in respect to the operation of ploughing, the method now suggested can only be subject to two objections.

First the possibility of the cattle being injured by too great exertion; and secondly, imperfection in the execution.

Both these are easily obviated by stating, that the eye of the master may see, and his judgment may direct, so as to preclude the possibility of imposition, without detection.

Dispatch at particular seasons of the year may be considered as invaluable. particularly in respect to spring and summer crops. A dry and favourable season for sowing occurs in March; by contract labor, and improved instruments, you are enabled to plough and sow *double* the usual quantity. The increased produce in comparison with a sowing in April, may be fairly calculated at more than the rent of the land, exclusive of the comparative cheapness. The same argument will hold good, in respect to flax, hemp, turnips, potatoes, cabbages, summer fallows, &c. &c.

It is the general opinion of farmers in this district, that oxen are preferable to horses for the purposes of ploughing, but for harrowing and all other purposes the contrary.

The expences of keeping a team of each may be thus stated, and it will appear that the superiority of oxen is not so great, as some sanguine men have stated.

Horse team (4) the first cost including harness cannot be estimated at less than 100l.

	£.	s.	d.
To 30 weeks keeping at hay, 12 ton at 40s. . . .	24	0	0
Corn throughout the year	30	0	0
To 22 weeks keeping at grass, at 3s. 6d. each horse	15	8	0
Repairs of harness	2	12	0
Farrier and shoeing	4	0	0
£.	76	0	0

OX TEAM (6)

The first cost of these, supposing them to be of the beſt North Devon breed, and four or five years old, yokes, bows, and chains included, 70l.

	£.	s.	d.
To 26 weeks at hay. 24 ton at 40s.	48	0	0
26 ditto at grass, 2s. 6d. per week each ox . .	19	10	0
Repair of yokes and bows, and chains . . .	0	10	0
£.	68	0	0

Some farmers think that three horses are equal in exertion to six oxen; if that be admitted, the expences of the horse team, will be less than those of the oxen.

If an accident should happen whereby a horse is lamed, the value is much more lessened than in the case of an ox; but in all other respects, they stand on equal ground; for horses, if purchased at the age of four or five years, are improving in value for two or three years, as much, or more, than oxen. And every intelligent

farmer must be sensible of the folly of keeping a horse after he is six or seven years old; they should then be transferred to common carriers, &c. and agriculture should only be the medium, whereby a young horse becomes by gentle labor, inured to more severe discipline.

Having already stated that lime is the great article of modern improvement of these hills, I shall only add, that instances might be produced of lands letting at this time for 30s. per acre, which forty years ago were not worth 4s. and the beginning of all these improvements has been by lime, whereby the acidity of the soil impregnated with mineral exhalation, has been corrected, and crops raised on them as good as those on improved fields; and it is no less wonderful than true, that thirty cart load of rotten dung per acre, *previous to liming*, have had no sensible effect; but after the land has been once limed, the operation of dung is as perceptible here, as on other lands. Surely this circumstance will prove, that these hills come under the description of barren land, as referred to in the statute of Edward III. and as such be exempt from the payment of tithe for seven years. Yet this principle is now disputed, and though the clergy have in all the inclosures heretofore enumerated, honorably and generously relinquished any claim, it is now attempted by a lay impropriator, who of all others has no right to complain; as a foundation is laid for considerable augmentation of income, (*after seven years*) from a source whence he has hitherto derived no benefit.

The matter is now before the court of exchequer, and by its decision all ambiguity in the meaning of that act of parliament, will, I trust, be done away.

Before we leave the subject of liming, it may be right to inform my readers, that some have dressed their old pastures with hot lime, by which the moss has been destroyed, and a fine herbage produced, highly grateful to the palate of all sorts of stock. The lime after the rate of 160 bushels per acre is put on the land soon after it is mown, and its effects are very durable; being perceptible for fifteen or twenty years, and it quite alters the nature of the coarse, sour grass, to which old layers are very subject.

I confess I am ignorant of the whole cause whereby lime produces such happy effects; but however unknown the cause, all agree that it

is

is the most cheap, and the most efficacious manure that the husbandman on these hills can have recourse to.

Burn baiting, that is, cutting off the turf, drying it, piling it in heaps, and afterwards burning it to ashes, has been tried, but no sensible good effect, either immediate, or distant, having been experienced, the practice is relinquished; and I rather think this process is best calculated for cold, rushy, and heathy grounds, of little or no value.

The effect of burn baiting, even on lands best adapted to this process, does not last more than three or four years, and if followed up with successive corn crops, the strength of the land is so exhausted by the forced fertility, that a rest of eight or ten years is necessary to prepare for its repetition. If burn baiting be practised, it should be for *turnips*, after which only one crop of barley or oats should be taken, and artificial grasses sown therewith. If this rotation of crops be adopted, I see no reason why lands to which the manure is congenial, should be *wholly* denied the advantages of the practice.

A great deal in these instances depends upon the skill and judgment of the farmer. If he be wantonly debarred from the use of a valuable manure, he is injured; and if on the other hand, he uses it without discretion, his landlord suffers, and the most indefatigable industry will not save himself ultimately from loss, and perhaps ruin.

Of all the crops to which the land of this district is applied, there is none so useful as the potatoe. Not many years since this root was confined to the gardens, but lately it has been introduced into the field with great success; it is hardy enough to bear the exposure, and requires no extraordinary care or management in the cultivation.

The best manure is rotten dung, or the fold of sheep, and as there is no great hazard of success, this root is very generally cultivated, and is considered as the staple article of food in a poor man's family.

It is no uncommon thing for a family consisting of father, mother, and five or six children, to consume twenty sacks per year, of 240 lb. weight each sack, or 20 lb. a head per week, allowing twelve weeks cessation from this species of food; indeed the chil-

dren nearly subsist on it, and a deprivation thereof would bring the whole family to the parish. The crop varies from 60 to 160 sacks per acre.

Potatoes are also grown for the use of stock, and are found very useful, particularly in the months of February, March, and April.

From a series of experiments made by the writer of this report, and communicated through the channel of the Bath Society papers, it appears that their value, when applied to the fatting of hogs, could not be made to exceed 2s. 6d. or 3s. per sack of 240 lb. and from other experiments since made, it is probable, that no greater value can be affixed to them if applied to the sustenance of any other stock. However, this should be no discouragement, for on good land, and with good management, they may be grown for 1s. 6d. per sack, and will furnish the farmer with a certain supply of food in those months wherein he is most distressed.

Many object to the cultivation of this root *on a large scale*, considering it in the light of a great exhauster. If the produce of any crop so productive as this is, be sold from the farm, and consumed at so great a distance that no return can be made, I will acknowledge that such must be the effect; but if potatoes are consumed on the premises, the return of manure from the consumption of *one* acre, will be sufficient for *two* or *three*, and as the potatoe crop ought always to be highly manured, no deficiency need be feared in the subsequent crops of corn, grasses, &c. particularly if wheat be banished as a succeeding crop, and barley or oats substituted in its place.

It is now a common practice instead of boiling, to dress potatoes by *steam*, and by so doing, the quality is rendered more farinaceous, and a considerable saving is made in the article of fuel.

The breed of cows on these hills is of the *mixed sort*, and not worthy any particular notice, except their being good milkers. The sheep are for the most part the native Mendip, a sort that will thrive on the poorest soil, and fatten on such land as will scarcely keep other sorts alive; pasturage ever so dry and exposed will feed this kind. They are very hardy and their wool is fine; the mutton is also excellent for the table, being full of gravy and of rich flavor. Sorts of a larger kind have lately been introduced, namely the Dorset and South Down, and there is no doubt but that artificial

ficial grasses, accompanied with turnips and other winter provender, will support these, or indeed any other sort in the highest perfection.

The large heavy loaded sheep of Leicester and Lincolnshire have never been tried; but it might be worth while to make the experiment; and as these sheep are well cloathed, the coldness of the climate could not, I should think, affect them.

The great doubt lies, whether this sort of sheep would bear folding; if not they are inadmissible, as folding is the "*sine qua non*" of good husbandry on a sheep and corn farm.

Under the auspices of the Bath Society, unto which his majesty was graciously pleased to present a Spanish ram, a new breed of sheep has been lately introduced, which bids fair to exceed all othes of equal size in *quantity* and *quality* of wool, accompanied with a carcase by no means despicable; but as these crosses of breed are found sometimes to degenerate, I shall not be too warm in recommendation, till a farther trial has been made, and experience has confirmed their superiority.

On the northern declivity of Mendip hills are some very good coppice woods; the principal are Blagdon, Hasel, and Ubly, containing in the whole about 100 acres.

These woods are very romantic and picturesque, and being secured from the south west breezes, the growth is very rapid, and the profit greater than any will believe who have not had experience thereof; beside these profits may be made annual, and are in themselves more certain than any other produce. You have only to divide a coppice of 48 acres into 12 parts, that is 4 acres per year, 12 years growth. The more ashes in these coppices the more valuable, as the poles are very saleable at the coal pits, and I have known many instances of an acre producing in value 16l. net after the expences of cutting, carriage, &c. have been deducted. This is nearly 28s. per acre per annum, for the whole 48 acres, beside the accumulating value of timber trees. It is more profitable to cut coppice wood every 12 years, than to let it remain longer. On the southern declivity of Mendip hills, there are also some coppice woods, stoke wood the principal, but these being exposed to the western breezes, are not so productive.

In the eastern part of this district there are also some large and productive woods, such as Mells, Leigh, Edford, Harwich, Compton, Camely, &c. these being near the coal works are very valuable; interspersed also are many beautiful plantations, which are not only an ornament to the respective seats to which they belong, but are in themselves a fertile source of annual profit.

On land properly situated, no speculation can be more profitable or more pleasing than planting; the only objection is the length of time required to bring it to perfection; but surely this ought not to have much weight, as the benefit must accrue either to the planter, or his heirs; and certainly there is no way so easy of raising fortunes for younger children as by planting.

The Mendip hills are also famous for their mines, particularly of lead and lapis calaminaris. The former are nearly exhausted, or at least the deep working is so incumbered with water, that little can be done, and in all probability millions in value may remain concealed in the bowels of this mountain, till spirit enough be found in the country to perforate it by cutting a level or audit, through its base, namely from Compton Martin to Wookey Hole.

The distance is about 5 miles, and the depth from the surface about 150 yards; such a tunnel would not only convey off all water, but the driving it, or the sinking of the shaft or perpendicular pits, might lead to a discovery of veins of lead hither unexplored, and perhaps as valuable at that was at West Chewton, which tradition says yielded 100,000l. within the space of an acre. What the expence of such an adventure might be, I cannot exactly ascertain, but for argument sake, let us suppose it to be 100,000l. A thousand subscribers at 100l. each would suffice, and as no great number of men can, for want of room, be employed at the same time, I would propose that the principal money be vested in government securities, and the *interest only* expended; this would keep in constant pay more than 100 workmen, and in all probability before 10,000l. were expended, discoveries would be made highly beneficial to the adventurers, and to the public, and even under the worst supposition, the only loss would be that of the interest of 100l. to each individual.

In times past many thousands per year have been annually paid to the see of Wells for the Lord's share, (that is one tenth) of the lead

lead dug on the forest within the parish of Wells *only*, and is it not more than probable that lead, like coal, may be most valuable in the *deep?*

In the parishes of Rowberow, Shipham, and Winscomb, there are valuable mines of lapis calaminaris: this mineral is sometimes found within a yard of the surface, and seldom worked deeper than 30 fathom. Between four and five hundred miners are constantly employed in this business, and the average price is about 5l. per ton. In the parishes of Compton Martin and East Hartry are also many mines of a similar nature, and a considerable number of men are constantly employed therein.

Having now comprised in as small a compass as I could, the detail of the husbandry of these hills, I shall now leave my reader to pick the corn from the chaff, and shall conclude by giving some heads of a lease, comprehending many needful restrictions and covenants between landlord and tenant; to which I shall add a copy of the Laws and Orders of the Mendip Miners, as settled in the reign of Edward the Fourth.

CLAUSES *on* LEASES.

1st. Not to convert into tillage any pasture or meadow land without leave.

2d. To feed and mow the grass land alternately.

3d. Not to pare or burn any land without leave.

4th. Not to plant potatoes *for sale* without leave.

5th. To spend all the hay and straw on the premises, and to leave all the dung and straw to the succeeding tenant, without any acknowledgment.

6th. Not to let any parcel of the land to any under tenant without leave.

7th. To keep the messuage dwelling-house, barns, stables, &c. in good repair, on being allowed rough timber, and the labor of the thatcher.

8th. To pay all taxes and assessments, (land tax excepted).

9th. Not to cut down or lop timber trees, or lop any pollards without leave.

10th. To permit the lord, or his assigns, to search for mines, and to hunt or shoot on the premises.

11th. If pasture land be converted into tillage, the same shall the first or second year be manured, with not less than 160 bushels of lime per acre; and after such manuring to have two crops of corn only, and with the second crop to be sown down in a husbandry like manner with artificial grasses.

12th. At the conclusion of the lease to leave a sufficient quantity of tillage to the succeeding tenant, well fallowed in an husband-like manner by proper ploughing, for which the in-coming tenant shall pay a proper acknowledgment.

13th. To keep all the fences, gates, stiles, &c. in good repair, and to leave them so at the end of the term.

14th. To prosecute, if called upon by the landlord, all persons trespassing on the estate by hunting, shooting, fishing, &c. compensation being made to him by the landlord, for all expences incurred by such prosecution; to which is added all other common covenants.

THE LAWS AND ORDERS OF THE MENDIP MINERS.

BE it known that this is a true copy of the inrolled in the king's exchequer in the time of king Edward the Fourth, of a debate that was in the county of Somerset, between the lord Benfield, and the tennants of Chewton, and the prior of Green Oare: the said prior complaining unto the king of great injuries and wrongs that he had upon Mendipp, being the king's forreft, the said king Edward commanded the lord Chock, the lord chief justice of England, to go down into the county of Somerset to Mendipp, and sit in concord and peace in the said county concerning Mendipp, upon pain of high displeasure. The said lord Chock sate upon Mendipp on a place of my lords of Bath, called the *Forge:* whereas he commanded all the commoners to appear, and especially the four lords royals of Mendipp, (that is to say) the bishop of Bath, my lord of Glaston, my lord Benfield, the lord of Chewton, and my lord of Richmond, with all the appearance to the number of ten thousand people. A proclamation was made to enquire of all the company how they would be ordered, then they with one consent made answer, that they would be ordered and tryed by the four lords of the royalties; and then the four lords royals were agreed, that the comminers of Mendipp should turn out their cattle at their out-lets as much the summer as they be able to winter; without hownding or pounding upon whose grounds soever they went to take their course and recourse. To which the said four lords royals did put their seals, and were also agreed, that whosoever should break the said bonds should forfeit to the king a thousand marks, and all the comminers their bodys and goods to be at the king's pleasure or command that doth either hound or pound.

The old ancient occupation of miners in and upon MENDIPP, *being the king's forrest of* MENDIPP *within the county of* SOMERSET, *being one of the four staples of* ENGLAND, *which have been exercised, used and continued through the said forrest of* MENDIPP, *from the time whereof no man living hath not memory, as hereafter doth particularly ensue the order.*

1. FIRST, that if any man whatsoever he be, that doth intend to venture his life to be a workman in the said occupation, he must first of all crave licence of the lord of the soyle where he doth purpose to work, and in his absence of his officers as the lead reave or bailiff and the lord, neither his officers can deny him.

2. *Item*, That after the first licence had, the workman shall never need to ask leave again but to be at his free will, to pitch within the forrest, and to brake the ground where and in what place it shall please him to his behalf and profit, using himself trustily and truly.

3. *Item*, If any man that doth begin to pitch or groof shall have his hackes through two ways after the rake. Note that he that doth throw the hacke must stand to the girdle or wast in the same groof, and then no man shall or may work within his hackes throwe, provided always that no man shall or can keep but his wet and dry groof and his mark.

4. *Item*, That when a workman have landed his oar he may carry the same to cleansing or blowing to what minery it shall please him for the speedy making out of the same. So that he doth truly pay the lord of the soyle where it was landed his due, which is the tenth part thereof.

5. *Item*, That if any lord or officer hath once given licence to any man to build, or set up any hearth or washing-house, to wash, cleanse or blow oar, he that once hath leave shall keep it for ever, or give it to whom he will, so that he doth justly pay his lott lead, which is the tenth pound, which shall be blown at the hearth or hearths, and also that he doth keep it tennantable as the custome doth require.

6. *Item*,

6. *Item*, That if any man of that occupation doth pick or steal any ledd or oare to the value of thirteen-pence halfpenny, the lord or his officer may arrest all his lead works, house and hearth, with all his groofs and works, and keep them as safely to his own use, and shall take the person that hath so offended, and bring him where his house is, or his work, and all his tools or instruments to the occupation belongs as he useth, and put him into the said house and set fire on all together about him, and banish him from that occupation before the miners for ever.

7. *Item*, If that person doth pick or steal there any more, he shall be tryed by the law, for this law and custome hath no more to do with him.

8. *Item*, That every lord of the soyle ought to keep two miner courts by the year, and to swear twelve men of the same occupation, for the redress of misdemeanors touching the mineries.

9. *Item*, That the lord or lords may make and grant manner of arrests (*viz.*) first for strife between man and man, for their works under the ground or earth. Secondly for his own dutys for lead or oare, wheresoever he findeth it upon the same forrest.

10. *Item*, That if any man by means of misfortune take his death, as by falling of the earth upon him, by drawing or stifeling, or otherwise, as in time past many have been, the workmen of the same occupation are bound to fetch him out of the earth, and to bring him to Christian burial at their own costs and charges, although he be forty fathome under the earth, as heretofore hath been done, and the coroner or any officer at large shall not have to do with him in any respect.

MANUFACTURES.

THE principal manufactures in this district are those of woollen cloth, and knit worsted stockings, which in the town of Froome, as well as Shepton Mallett, are considerable; and from the number of hands therein employed, must have some effect on the agriculture of the neighbourhood.

The town and parish of Froome are found to contain nearly 1700 families, or about 10,000 people; more than one third of which are actually, and immediately supported by the manufactures spoken of; besides a vast number of the lower order of people in the adjacent villages. In this town the annual quantity of cloth manufactured, has lately been found to be more than 150,000 yards. In Shepton the inhabitants may be reckoned 6000, and the cloth manufactured 120,000 yards.

Whether the introduction of machinery for the expediting carding, spinning, &c. will enable the manufacturers to make *more cloth*, or whether a number of the poor must be driven to seek subsistence by other labor, may perhaps, be best ascertained by experiment. If the revival of the export of kerseymeres and fine cloth should take place, and sufficient stock of wool can be obtained, the decision will be in favour of the former part of the question, and all will be well; but should the present check on the export long continue, or should it be found that by the hands now in employ, and the machinery already in use, the whole stock of wool (which is most certainly a limited article) shall be wrought into cloth in nine or ten months of the year, the full grown and aged labourers in this manufacture will be seriously distressed. Landed property in the neighbourhood will be heavily burthened; and the children must migrate and seek subsistence by other employ where it can be found.

found. Should this be the case, many other professious and employments, which are either mediately or immediately connected with this manufacture, or otherwise dependant on the populousness of the neighbourhood, will be ultimately affected. Further, the agriculture of the western part of Wiltshire, and north western part of Dorsetshire, must partake of the consequence af such a migration, for the lands about Frome, or Shepton, not being well adapted to tillage, the inhabitants are chiefly supplied with corn and grain from those counties. The assistance of machinery was had recourse to by the manufacturers of Frome and Shepton from absolute necessity; for had they continued in the old method, their trade must have been lost, and indeed *now* the north country manufacturers are beforehand with them, particularly in the application of *water*, the best "*primum mobile*" of all machinery.

It is much to be feared that the improvements already made, and those now going on, will *ultimately* be the means of disseminating manufactures in other countries, to the prejudice of the export trade of Britain.

Before we intirely quit Frome, or as it was anciently called Froome Selwood, it may not be amiss to advert to the forest from which it derives an appendage to its name. The ancient forest of Selwood (on the verge of which the town of Frome stands) appears to have comprized a woody vale of about 20,000 acres; about 18,000 of which are now cleansed and converted into pasture and arable land, with a small portion of meadow; the remainder continuing in a state of coppice wood. The chief sorts of timber in these coppices are oak and ash, which, though not of large growth, are very good of their kinds, and find profitable markets in the neighbourhood: the oak selling from 50s. to 3l. 16s. per ton, and ash from 45s. to 3l. The underwood is chiefly hazel, ash, alder, withy, and birch; some of which at 18 or 20 years growth sell as high as 16l. per acre. To state the profit of these coppices in a clearer light, I would remark, that the annual value per acre in

timber and underwood, (I speak of those coppices which lie towards the northern end of Selwood) is from 15 to 30 shillings. Much of the open land within the limits of this ancient forest does not net more than 10 or 12 thillings per acre.

MIDDLE DISTRICT.

THE middle division of the county is the largest, being that part comprehended between the Mendip Hills on the North East, Quantock Hill, and the foreſt of Neroche on the South West; parts of Dorſetshire and Wilts on the South East, and the Bristol Channel on the North West. It includes the city and borough of Wells, the boroughs of Bridgewater, Ilchester, and Milborn Port, and the market towns of Axbridge, Shepton Mallett, Glastonbury, Brewton, Castle Cary, Wincaunton, Somerton, Langport, Yeovil, South Petherton, Ilminster, Crewkerne, and Chard, together with their adjacent Parishes and Villages, amounting in the whole to between four and five hundred thousand Acres.

The climate of this district may, for the most part, be pronounced mild and temperate, but on so varied a surface an uniformity of soil cannot be expected.

On the borders of Wilts, and Dorset, the lands are high, and partake of the soil and management of those counties; sheep walks, and corn, constituting the principal parts of husbandry. The farms are here large, and *folding* is unremittingly pursued. Wheat is seldom sown without *two* foldings; and fallowing every four or five years is the general practice. The corn produced is of a good quality, and finds a ready sale at Wincanton, Bruton, and other markets. The next division of this district, namely the country around Shepton, Bruton, Castle Cary, Ilchester, Somerton, Langport, Petherton, and Ilminster, is exceedingly fertile, both in corn and pasture; abounds with good orchards and fine luxuriant meadows, and is altogether as well cultivated, and as productive as most parts of the kingdom. In ſome parts flax and hemp are produced in great abundance, which together with wool furnish the raw materials for extensive manufactories. Westward of this, Polden, and Ham Hills rise boldly to the view, and constitute some of the inferior lands of the county. The soil on these

hills being very thin, and the estates disposed in small portions of common field, no considerable improvement can be effected without a fundamental change in the system of management.

Hence we descend into the marsh or fen lands, which are divided into two districts, namely, *Brent Marsh* and the *Bridgwater*, or *South Marsh*. Brent Marsh is that portion of land comprehended between Mendip Hills and Polden Hill, on the North and South, Bridgwater Bay on the West, and extending to Wells and Glastonbury on the East.

This marsh may also be divided into two parts separated by a tract of elevated land on which stand the parishes of Allerton, Mark, Blackford, Wedmore, &c. through the northern level runs the river *Axe*, emptying itself into the Bristol Channel at Uphill; and through the southern the river Brue, emptying itself into Bridgwater Bay near Burnham.

This country has been heretofore much neglected; being destitute of Gentlemen's houses, probably on account of the stagnant waters, and unwholsome air; but of late many efforts have been made to improve the soil, by draining and inclosing under a variety of acts of parliament. The benefit resulting therefrom, has been astonishing. The rhynes and ditches necessarily cut to divide the property, together with the deepening the general outlets, discharge so much of the superfluous water, that many thousand acres, which heretofore were overflown for months together, and of course of little, or no value, are become fine grazing, and dairy lands; to the great emolument of the individual possessors, as well as the benefit of the community.

The quantities thus inclosed in Brent Marsh within twenty years past, under authority of Parliament, are as follow: (*viz.*)

	Acres.			
Wedmore and Mear	4400	{ together with 1100 acres of turf bog as yet unimproved.		
Compton Bishop . .	300			
Glastonbury . . .	1500	Do	300	Do
Westhay, &c. . . .	1700	Do	1000	Do
Mark	2000			
Huntspil	1200			
Shapwick	100			
Blackford	900			
Wookey	900			
Westbury	450			
Bleadon	400			
West Pennard . . .	250			
Eddington	1000	Do	400	Do
Stoke and Draycot .	800			
Nylands	350			
Wells	1150			
	17400		2800	

Of these 17,400 acres, six parts out of seven are cleared of stagnant water, and rendered highly productive; on the turf bog but little improvement has hitherto taken place. There remain about 3000 acres to be inclosed, which (the turf bogs excepted) will compleat the division of all the moors within the Brent Marsh district. It is not to be understood, that the local drains, under such a variety of acts, and at such different times, can have the most perfect influence on the country, particularly when it is considered that the river Axe has no barrier to the tide, which flows several miles and choaks the lower part of it with *slime*, to such a degree, that many thousand acres adjoining the upper parts of the river are, in consequence thereof, very much injured. Were a barrier with proper sluices erected near the Bristol Channel, some of the most considerable windings of the river shortened, and the shallow parts deepened, not only the moors but the *old inclosures* would be greatly benefited thereby.

The river Brue drains a much more considerable part of Brent Marsh, than the Axe, and has a barrier to the tide (which rises there no less than twenty feet in height) with sluices therein, at Highbridge, but its foundation, and the apron and cills of the sluices are at such a height above low water mark, that the drain is very imperfect, and the lowest lands, which lie some miles up the river, are frequently incommoded by the land floods.

On the confines of the Brue, are two heath or turf bogs; one on the north side containing about 3000, and the other on the south containing about 6000 acres.

On these bogs scarce any pasturage at present grows. They are a composition of porous substances, floating on water and imbibing it like a spunge. They are observed to rise with much wet, and sink in dry weather. The principal use to which they are appropriated, is that of fuel to the surrounding parishes. As it is an object of the first importance to the country to have these bogs perfectly drained, and consolidated, I shall endeavour to suggest a plan whereby this desirable effect may in my opinion be attained.

The cause of the inundation and drowning of this level, arises from the outfalls being choaked up either by the collection of sea mud in the river, or by elevated land lying between it and the Bristol Channel. Of course nothing more is necessary than a removal of those obstructions to the outfalls, which will open a free passage and quick current to the land water; this being effected, the turf bogs which are now five, or six feet higher than the adjacent land would subside, and the porous earth become consolidated, and fit for all the purposes of vegetation.

The annexed plan, drawn by Mr. White the surveyor, will sufficiently explain the object in view, and excite the attention of all parties interested.

By the levels, thus delineated, (the accuracy of which may be depended on) it appears, that the spring tides are nearly on a level with the surface of the turf bogs, and that by the proposed outlet an additional fall of ten feet will be acquired. Such a drain reduced to an inclined plane of a foot in a mile, will be under the clay of the bog, and consequently discharge all its stagnant waters.

A far-

A farther explanation is unnecessary, as the plan will convey a more distinct idea of the general design, than words.

The present outlet at Highbridge is not only of insufficient depth, but is situate so far *inland*, that the slime and mud choak up the river, and the current is not rapid enough to dislodge the same.

I am aware that many of the proprietors of land on Huntspit, Mark, &c. will object under an idea, that their lands will be made *too* dry, and that in the summer season, their stock will be destitute of water. But this objection, and indeed every other drawn from the apprehension of a too liberal discharge of water, may be obviated, by *placing hatches at the different bridges*, which will be necessary both for public and private accommodation.

An improvement of such magnitude, cannot be effected without the authority of Parliament, and all persons receiving benefit, must be burthened with a rate, proportionate to the advantages derived. This assessment must be made by commissioners duly appointed, but subject to an appeal to the court of Quarter Sessions: and the drains when finished must be put under the view of the Court of Sewers.

I will now endeavour to give a hasty sketch of the probable cost, and subsequent improvement: but in this I do not pretend to accuracy; suffice it to say, that the apparent benefit so far exceeds the utmost latitude of expence, that no solid objection can lie on that head.

BRENT MARSH DRAINAGE.

Dr.	£.		*Cr.*
To Act of Parliament, gaining consents, &c. . .	400	By 9000 acres turf bog improved at the most moderate computation, 15s. per acre, making 6750l. per annum, 25 years purchase	168,750
To sluice at Letterde, near the river Perrott . . .	600		
To 12 miles of new drain, average depth 15 feet	12,000		
To lowering river Brue three miles	1500	By 5000 acres of flooded land improved 10s. 6d. per acre, or 2500l. per annum, 25 years purchase . : .	62,500
To purchase of land . .	2000		
To bridges, hatches, &c.	2000		
To sluice on the Axe near Hobbs boat	500		
To 1½ miles of new drain	1500		
To lowering the river Axe six miles	1000		
To purchase of land . .	1000		
To commissioner, surveyor, &c. &c.	2500		
	25,000		
To ballance of profit	206,250		
	£ 231,250		£ 231,250

On the side of the river Axe the expence of a compleat drainage would not exceed 5000l. and there can be no doubt that the low lands near Axbridge, Cheddar, Nyland, Draycot, Rodney Stoke, Westbury, &c. would be improved at least 2000l. per annum. As a farther stimulus it might be urged, that the air would be rendered more healthful, and the exhalations which now rise from so large a body of stagnant water, and are wafted by the winds to the high corn lands of the Mendip Hills to their great detriment, would be unknown.

Were

Were the turf bogs reclaimed and made productive, I think this district might be considered as one of the most fertile in the kingdom. The vales are formed principally by mud carried down by the rivers which flow through it, and deposited there by the tide's opposing the current thereof; many ages must have been required to effect this, but it is evident that the whole of this district is raised to a considerable height, above its original level; and that the turf bogs were in former days dry and firm land, not subject to inundation from the sea, or to the stagnation of the river waters; else how can we account for timber trees of great dimensions, both oak, fir, and willow, being found at the depth of 15 or 20 feet, standing in the same erect posture in which they grew; and reeds and other palustrine plants, at the same depth and in the same posture. Human bones, furze bushes, and nut trees with nuts, have been found at the same depth. Now it is manifest, that neither furze nor nut trees will grow under water. It appears therefore probable, that the whole of this level was at a former period dry, firm land; and that by some violent convulsion of nature it became of a sudden inundated; this is in some degree confirmed by the extraordinary depth of the clay or sound ground, on the verge of the *Highlands*; and it is well known, that in many parts of this kingdom the sea has gained on the land, and in other parts the land has gained on the sea.

The improvement of such a tract of barren unproductive land, would impart the most pleasing sensations to the mind, and I verily think that two grand drains, accompanied with proper lateral ditches, such as I have now suggested, would increase the rent of this district eight or ten thousand pounds per year.

The profit which has attended the improvement already practised during the last twenty years is, I should think, a sufficient incentive. Scarcely a farmer can now be found who does not possess a considerable landed property, and many whose fathers' lived in idleness and sloth on the precarious support of a few half starved cows, or a few limping geese, are now in affluence, and blessed with every needful species of enjoyment. Disorders of the body, to which the stagnant waters heretofore subjected them, are now scarcely known, and the inhabitants for the most part arrive to a good old age.

SOIL,

SOIL.

The soil of these moors may be comprehended under four divisions:

FIRST,

Strong, dry, and fertile clay of a considerable depth.

SECOND,

Red earth of various depth from one foot to six feet, covering the black moory earth of the heath.

THIRD,

Black moory earth on the surface with a substratum of clay at various depths.

FOURTH, *and* LASTLY,

The turf bog.

The first of these descriptions of land may be considered as of the best quality, being highly productive, and particularly so in a wet summer. If shut up early in the spring it will produce from two to three ton of hay per acre. Its value may be estimated from 2 to 3l. per acre, and it is for the most part devoted to grazing.

It is no less remarkable than true, that this land will fat a sheep nearly as well in the winter as the summer, if not stocked more than one to an acre.

The vast advantage resulting from the inclosure of the waste lands in the parishes before enumerated is so manifest, that whoever runs may read.

A moiety of the manor of Wedmoor might have been purchased about twenty years ago for 20,000l. It is now worth 7000l. per annum. The improvements in Huntspile, Mark, Mear, Glastonbury, Eddington, &c. &c. are nearly similar. In the latter hamlet single rights have been sold for more than 800l. and all this without any concomitant inconvenience. At first the scheme was highly unpopular, and its first promoters were on the eve of falling a sacrifice to popular fury and resentment, but by coolness and perseverance they weathered the storm: all parties are now satisfied, and acknowledge the wisdom of the measure. Nor has the advance of the poors rate been in any degree equal to what has been experienced in neighbouring parishes, where no inclosure has taken place, as will be shewn by the following statement.

WED-

WEDMOOR.	£.	WEDMOOR.	£.
Amount of poor rate 7 years previous to the inclosure	2132	Amount of poor rate 7 years subsequent to the inclosure	2342
HUNTSPILL.			
Do	1561	Do	2201
MARK.			
Do	1985	Do	2163
MEARE.			
Do	2016	Do	2170

An increased population necessarily accompanying such an occupation of productive land, muſt inevitably be attended with a proportionate advance in the poor's levy; besides, men cannot, in an instant by any, even the strongest incentives, be roused from a state of sloth to a life of labor and activity. To this may be added that a great part of the extra levy, arises *from the high demand for county stock*; and it is found that for several years past the rates are declining, notwithstanding the poor are treated with much more liberality than heretofore.

The division of property on these lands is effected by ditches 8 feet wide at the top, $3\frac{1}{2}$ feet wide at the bottom, and 5 feet deep, which may be cut in the strongest clay for 20d. per rope, which is something less than $\frac{3}{4}$ per cubic yard; and on the black ground and red earth at 16d. per rope.

At these prices a good workman will, in the summer, earn three shillings per day, and in winter two shillings. Can any excavating machine execute this work at a cheaper rate?

These rhynes discharge their waters into the rivers, and sluices are occasionally made to keep back water in times of drought, for the use of the stock.

The graziers on these strong clays are fond of large inclosures, and object to the planting any trees, or hedges, alledging as a reason, that they harbour flies, which teaze the cattle, and check their progress in fatting; trees also prevent a free circulation of air. Experience confirms the wisdom of this theory. Many also are of opinion, that one piece of forty acres will sooner fat a given quantity of oxen, or sheep, than two pieces of twenty acres each. All however do not agree in this sentiment, and the opponents urge

that animals eat with greater relish, when frequently changed from one field to another, than when they are confined to one.

As no satisfactory experiments have ever (to my knowledge) been recorded on this subject, let us reason a few moments thereon.

It is difficult to decide in this case from *experiment*. Two pieces of land, perfectly alike in quality, or two sets of stock exactly similar cannot easily be found; we must therefore form our opinion from some other data. The argument made use of by the advocates for change is, "that of giving the food to the cattle *fresh* and *fresh*;" but this seems not to be conclusive. Independent of the division fence (which occasions a loss of pasturage unfavorable to the small allotments) there must be an equal number of blades of grass in either case, and the cattle may vary their feeding as much in one instance as in the other, for in the large inclosures they will not be seen in the evening where they were feeding in the morning. The grand enquiry is, *Do the cattle*, or *do they not consume more* grass in one way than the other. I think they do: and shall not hesitate (though with great diffidence) to give my opinion in favor of a change of food; and this for the following reasons:

When an animal is turned into a piece of grass, he takes a survey of the whole field, for the purpose, I presume, of selecting that kind of herbage which best pleases his palate.

This perambulation does not much injure the grass, for if it be not very rank indeed (and graziers should be careful that it be not so) it will soon rise after the animals tread. He then becomes contented, and during the time of his abode, feeds in the same manner as he would, were the piece ever so large. After one or two month's residence in a large piece, the animal becomes disgusted with his situation and tired of his food; the grass is tainted by his breath and by the effluvia of his dung, he bellows for change, and traverses the field, consuming, or rather deftroying, more grass with his feet than with his mouth.

In ever so large an inclosure (properly stocked) every part of the field is tainted with the breath of the animal some time or other in the course of twenty-four hours, and it is astonishing how soon they become disgusted; in changing from field to field

it

it is not so. Every fortnight or three weeks brings a supply of untainted food, which gratifies their palate, and a change of scene amuses them and increases their comfort and enjoyment.

The only manure ever put on these lands is the contents of the drains and ditches, and this, with judicious management in the method of grazing, is sufficient to keep them in unabating fertility.

Some of this clay land, when tilled, has been known to produce ten or twelve successive crops of wheat, without an intervening fallow or fallow crop. I was shewn a field in the parish of Mark, which had growing in it the nineteenth crop of wheat, and I verily think the produce will not be less than fifty Winchester bushels per acre. No manure had been put on it during the whole time, save the contents arising from the cleansing of the ditches. The stubble was mown every year and carried off, two ploughings only were given it, after which the wheat was sown in the months of November or December, under furrow in eight furrow ridges, after the rate of $2\frac{1}{2}$ bushels per acre, chopping the clods and smoothing the surface of the ridge with a spade.

The average produce per year for the whole eighteen years was estimated to exceed thirty-five bushels per acre.

This astonishing fertility of soil can only be ascribed to the invigorating principles of the saline particles with which the land is impregnated. They enable it to produce a succession of crops, which in common land would reduce the soil to a mere *caput mortuum*.

Notwithstanding this encouragement to tillage, the plough lies idle, and nineteen parts out of twenty remain in grass; though it is apparent that the value of the land in fee may be gained in a few years.

GRAZING MANAGEMENT.

THERE are two methods of fatting oxen, the one called summer, and the other winter fatting; the first is thought the most profitable and accompanied with the least risque.

In the first method. They are purchased in February, and are for the most part of the Devon sort, bred in the lower part of So-

mersetshire. They are bought in good condition, and cost from 8l. to 15l. each; during the interval between February and grass time they consume each about 10 cwt. or 12 cwt. of *inferior* hay, (*viz.*) the skimming of their summer leaze. When at grass they are allowed from one acre to one acre and a half each ox, and some add one sheep to each ox. Horses, if any, are kept very sparingly, not at any rate to exceed one to twenty acres of grazing ground. These oxen will be fat some before and some soon after Michaelmas, paying for their keep from 3s. 6d. to 4s. per week. Frequent bleeding in small quantities, is found to accelerate their fatting.

The next stock are bought in June, July, and August, and are not of so good a sort, being either home bred or Welsh, and cost from 6l. to 8l. These follow the stock purchased in February, and are sometimes stall fed in the winter, and sometimes fatted in the field; in either case they have the best hay and good attendance.

They are fat in April and May, and sell from 12l. to 14l. each.

A grazier occupying 200 acres of the best land may fat yearly 100 head of oxen, to which add 270 sheep and 10 colts, constituting altogether a profit comfortable, but by no means *exorbitant*.

The accompt may be thus stated:

GRAZING.

Dr.	£.			*Cr.*	£.		
To rent of 200 acres, average value, 40s	400	0	0				
To tythe and taxes, fay	50	0	0	*Oct.* By 50 oxen at 18l.	900	0	0
Feb. To 50 oxen at 11l.	550	0	0	*May* By 50 oxen at 13l.	650	0	0
July To 50 oxen at 7l.	350	0	0	By profit on 70 sheep, summer kept	40	0	0
To mowing and making 50 acres of hay, at 10s.	25	0	0	By profit on 10 colts	40	0	0
To skimming and making 50 acres of summer leaze, at 3s.	7	10	0	By profit on 200 sheep, winter fatted, and sold in April unshorn	100	0	0
To wages throughout the year, besides the farmers labor	50	0	0				
To accidents	20	0	0				
	1452	10	0				
To profit interest of capital included	277	10	0				
	1730	0	0		1730	0	0

The oxen when fat are driven to the London, the Salisbury, and the Bristol markets, at the following expences (salesman's commission included.)

London, 12s. per head
Sarum, 5s. ditto
Bristol, 3s. ditto

They

They are nine days travelling to London, a distance of 130 miles. It is difficult to say which may be considered as the best market; but the general opinion seems to be, that the London market is calculated for those only who attend it regularly every week, the price of beef per ſtone greatly varying according to the plenty or scarcity in the market.

Some farmers graze heifers, in preference to oxen, buying them in about the months of March and April, and selling in October and November. The profit amounts to 40s. or 50s. each for their summer food, and the land is stocked after the rate of one heifer to each acre, together with a considerable number of sheep both in summer and winter, and it is thought by many that this method of occupation is more profitable than the former.

Others fat two year old wedders of the Dorsetshire and Somersetshire breed. The Dorset sort are purchased about Michaelmas at Sherborne and Stolford Fairs, price from 20s. to 30s. No hay is given in the winter unless the weather be uncommonly severe, or the ground covered with snow. They are sold fat between February and May, and weigh from 20 to 30lbs. per quarter. A few oxen accompany the sheep, which are bought in the spring and fatted the ensuing winter. It is the universal opinion, that sheep are not so profitable stock as oxen.

It is no unusual thing for some of the graziers to give their prime oxen a second summer's grass. In this case they are brought to a high state of perfection, and in all probability they pay more the *second* year than the *first*, for it is well known that an animal nearly fat will consume much less food than a poor one.

Ewes and lambs are also the stock of some farmers; they are purchased partly in the autumn in lamb, and partly in the spring with the lambs by their sides, and are mostly of the Dorsetshire or Mendip breed.

All the graziers of this county are partial to the red oxen of Somerset and Devon, and you seldom see a North country ox in their possession. They will not allow that the northern oxen possess any comparative merit either for labor or slaughter; perhaps some allowance should be made for long established prejudices, but it must be admitted that in the London market, to which fat oxen are brought from all parts of the kingdom, the Somerset-

Somersetshire, (next to the Galloway Scot fatted in Norfolk and Suffolk) appear to bear the belle both in respect to firmness of grain and internal fatneſs; and there cannot be a stronger proof of their merit, than the increasing demand for them with the most eminent graziers of Leicestershire, Oxfordshire, Warwickshire, &c. many of whom regularly attend the fairs both of Devon and Somerset, as purchasers of them lean; and I have been credibly informed they find a good account in so doing. As to myself, it is with reluctance that I hazard an opinion on this subject; respecting which men of long established experience are so much divided, and on which such various opinions exist. But I cannot help remarking, that if the superiority of the northern sort were so conspicuous as the great breeders of the North affirm, how is it that some of their best friends and most strenuous supporters in the *sheep line* desert them here, and give an unqualified preference to the western breed. It is not likely that a wary and considerate farmer would travel 150 or 200 miles to purchase stock, with all the manifold inconveniencies and risque which must attend the driving so far, if he could purchase equally cheap and good at home.

Nothing is more censurable than an injudicious partiality, and this principle oft times leads men hastily to run away with ideas unsupported by fact; but when long experience and frequent trial have produced conviction, a farmer would be equally inexcusable, were he to resist the influence naturally produced in his mind thereby.

The red breed of Devon and Somerset have been progressively increasing, and they are now partially diſpersed over great part of the kingdom, and in respect to their qualities as a *laboring* animal, I never heard but one opinion, and that opinion I can myself confirm from large and long experience, namely, that they are *the best in the kingdom*. In respect to their qualities as a *fatting* animal, I will not speak so decidedly, for I verily believe they have many rivals; the French, the Galloway Scot, the Leicester and Oxfordshire, the Herefordshire, the Glamorganshire, the Suffolk polled, are all good grazing cattle; and in almost every county may be found in the hands of the most spirited and attentive farmers, a valuable sort highly superior to the general run of the county; and I must again repeat, that the safest plan which a farmer can adopt,

is

is that of improving his breed by a judicious selection of his best females, and by procuring such males as are eminently distinguished for perfection in those points wherein his may be found deficient. A total change of stock is frequently accompanied with loss and disappointment, and if the attempt succeed you are for a considerable time driven to the necessity of fatting all you breed; for the rooted prejudice of graziers in favor of the prevailing sort of the county, whatever they may be, cannot easily be overcome; and you may in vain expect at market a price adequate to your care and exertion.

Notwithstanding what has been said, there are certain well-founded axioms in the grazing system relating to the shape of the animal, which cannot justly be disputed. Delicacy in the horn, head, and neck; deepness and roundness of the carcase, wideness of the loins, small bones accompanied with a thin skin: these, with many other points which might be enumerated, are considered as essentials, and are seldom unaccompanied with an aptitude to fat.

The same partiality which I have here stated to exist among the Marsh farmers in favor of the red oxen, was a few years since as strongly manifested in favor of the Dorsetshire sheep; but of late the polled breed of the lower part of the county gain ground, and are in high esteem.

These sheep are bred in the neighbourhood of Dulverton, Bampton, Wiveliscombe, &c. they are well made, yield a large shear of wool, and fat quickly; but they might in my opinion be greatly improved by a cross with the new Leicester, to which they have in size and shape some degree of affinity. The objection made by the breeders in that district to a cross with Leicester is, that what they might gain *externally*, they should lose *internally*; and that the deficiency in the fat of the inside would so disgrace their sheep in the eye of the butcher, that they would lose their old customers. Surely this reasoning is fallacious; for on a supposition that the inside fat of a sheep were by this intermixture to be reduced 6lb. per sheep, (and I think this as much as it possibly could be) the deficiency at 4d. per pound would amount to only two shillings; five pounds extra weight of the carcase would pay this, and if the buyer were to allow the butcher for this defect,

all

all reasonable objection on his part is done away, and on the other hand the grazier need not be alarmed, for he may rest assured, that the increase of the carcase will amply repay the want of inside fat.

DAIRY MANAGEMENT.

THE cows of this district being intended chiefly for the purposes of cheese making, the profit arising is in proportion to the quantity and quality of the milk; size therefore is not attended to, but principal regard is paid to the breed whence she sprung. The dairy men think it more profitable to have a small breed *well fed*, than the best breed in the world *starved*; and the cow that gives milk the longest is most esteemed *. The time of calving is from the beginning of February to Lady Day, and they take great care to keep their cows well three weeks or a month before they calve; the milk will rise in proportion to the goodness of their keeping; very little attention is paid to the nature or sort of the bull. The calves (those few excepted which are reared to keep up the stock) seldom live a month, and cheese making begins in March, from which time it continues till December.

The calves which are reared are fed principally with cheese whey, and in May they are turned to grass and left to shift for themselves; some careful dairy women have tried to increase their growth, by giving them whey after they are put to grass, but this plan is reprobated as doing more harm than good. When they become yearlings they are subject to a disorder provincially called the Quarter Ail, which is a mortification beginning at the hock, and proceeding with astonishing rapidity to the vital parts, occa-

* The cheese of this district is much admired, particularly that made in the parishes of Mear and Cheddar.

It is for the most part purchased by Jobbers, and sent through the medium of Weyhill, Gileshill, Reading, and other fairs, to the London market, where it is sold under the name of *double Gloster*.

The method of making has been so often described, that I shall not trouble my readers with a minute detail thereof, and shall only add, that cleanliness, sweet rennet, and attention to breaking the curd, are the principal requisites in cheese making.

stoning death in a very few hours. The first symptom is lameness, and no cure has yet been found; the quarter affected becomes intirely putrid whilst the other quarters are in a sound state.

This disorder is, I think, the same with that known in Norfolk under the name of Gargut; nor is it confined to these counties, but is, I believe, generally known; and an investigation of the cause of the disorder, which might lead to the discovery of a cure, is well worthy the attention of all agricultural bodies. Cows are subject to a disorder called the Yellows, something similar to the Jaundice in the human species. This disorder frequently affects the udder, and brings on a false quarter, that is, a deprivation of milk in one teat, accompanied with a swelling and inflammation. For this, however, I can suggest a remedy which seldom fails, *viz.* flour of mustard mixed with any liquid, two ounces a dose, and repeating the same two or three times in the course of 24 hours.

The heifers are put to the bull in July, when they are about one year and half old; and the prevailing opinion seems to be, that those which are kept from the bull a year longer do not turn out *good milkers*. The average produce of a dairy per day may be calculated at about three gallons per cow, from Lady Day to Michaelmas, and from Michaelmas to Christmas one gallon per cow per day.

Cows are kept till they are fourteen or fifteen years old, and when fatted they seldom get to a higher price than seven or eight pounds.

A dairy maid can manage twenty cows so far as relates to the in-door work, and the gross produce of a dairy frequently averages 1*l.* per cow, and in some particular instances 14*l.* but this can only be done when cheese is at the present enormous price of near 6*d.* per lb. twelve months old, and fat hogs at 4½*d.* per lb.

The following estimate of the expences and produce of a dairy, supposing the land and the cows to be of the first quality, may, I trust, be considered as tolerably accurate.

DAIRY TWENTY COWS.

Dr. *Cr.*

	£.	s.	d.		£.	s.	d.
To two milkers 40 weeks, at 3s. per week . .	6	0	0				
To a man's labor, winter serving cattle, changing their pasture, selling cheese, &c. &c. &c.	4	0	0				
To dairy woman, 4s. 6d. per week	11	14	0				
To dairy utensils, candles, salt, brushes, mops, and all other articles . . .	4	6	0	By 90 cwt. of cheese at 45s. . . .	202	10	0
To Arnotto . .	1	0	0	By calves . .	15	0	0
				By butter . .	10	0	0
N. B. A larger dairy might be kept for 25s. per cow .	27	0	0	By hogs . .	25	0	0
To rent 30 acres, summer pasture, 40s.	60	0	0				
To skimming the same, and making six ton of hay .	3	0	0				
To rent of 15 acres mown ground, 40s.	30	0	0				
To making the hay, say 30 ton, at 12s. per acre	9						
To tythe taxes, &c. say . .	40	0	0				
	139	0	0				
To profit, interest of money, and the decreasing value of cows included	113	10	0				
	252	10	0		252	10	0

On a comparison of this with the grazing account, it is apparent that the dairy occupation is more profitable than grazing, for the former amounts to 50s. per acre, whereas the latter is only 28s. per acre. On account of population the dairy system ought also to be preferred, as one grazing farm of 200 acres would afford a comfortable livelihood to four dairy families.

I am aware, that should these observations induce an increase of dairies, and consequently a more liberal supply of cheese, such a declension in the price of that article might take place, as would bring all things again on a level, and advance the grazier's profit to an equality with that of the dairy man.

Be this as it may, I think dairies should be encouraged; for the arduous domestic labor and incessant employment which they bring on the female part of a farmer's family, will always prevent an undue increase thereof, unless their profits on a comparison are very great indeed. But whilst I thus recommend encouragement to the pail, I must do it with this proviso, that a different mode of management be adopted from that now practised.

The cows of this district are almost universally depastured in the fields both summer and winter; in consequence of which the dung produced even by a large dairy is trifling indeed; hence arises a manifest declension in the fertility of the land, and you may distinguish a grazing from a dairy farm at a great distance. In this exhausted state the dairy land must remain, unless a different system of management be successfully inculcated. Were I to suggest a plan of improvement it would be the following: let all dairy farms be accompanied with a due proportion of arable, perhaps *a fourth part;* let proper stalls and bartons be erected as a residence for the cows during the winter months; let cabbages, turnips and potatoes be grown for their winter subsistence; but above all, let them be well littered and kept perfectly clean. By these means a large supply of dung may be procured at a little expence; and if the farmer wish to increase the quantity, he need only dig up the waste earth on the borders of the highways, and make a layer therewith in his bartons; this will absorb the urine, and when mixed and incorporated with the dung, will constitute a manure highly fertilising. It cannot be sufficiently regretted, that this practice should be so seldom adopted, for repeated experiments

ments have taught, that 100 acres of land thus managed, will keep more cows than 150 acres under the present system. *Artificial* grasses will enable the dairy man to turn his cows out a month or five weeks earlier than he was accustomed to do on *natural* grass and turnips, &c. will supply them with winter provender; so that the consumption of hay will be greatly reduced, and more land may be devoted to summer pasture. It may be here objected, that the quality of the cheese and butter may be injured; of this I have my doubts. Artificial grass in the months of March and April, will make as good cheese or butter as natural grass; after this the cows should be put to the natural pasture, and the former shut up for mowing.

As to the effect of turnips and cabbages, I will obviate every difficulty by stating a simple recipe, whereby all disagreeable flavor may be intirely prevented, in the making of butter, and as to cheese, there is but little made at that season; and if there were, the palate must be nice indeed which could distinguish a difference of flavor.

RECIPE.

When the milk is set abroad in the leads, put one gallon of boiling water to six gallons of milk. It may also be prevented by dissolving nitre in spring water, and putting about a quarter of a pint to ten or twelve gallons of milk when warm from the cow.

The second description of soil found in this district, namely, a strong red earth over a pure clay, possesses also many good qualities; it is neither subject to injury from an excess of wet weather, nor does it burn in a drought. This soil, formed by a deposit washed from the hills, may be considered as a fine vegetable mould, and if tilled, is capable of bearing a variety of crops in the highest perfection. Its value is about 40s. per acre, and its produce of hay about two ton.

Black moory earth is the third sort of soil found in this level, and on it extraordinary improvements have been effected, by covering the surface with a thick coat either of clay or red earth. In its natural state it is in a great measure unproductive, yielding scarcely any herbage, save carnation grass, rushes, and other aquatic plants. The deficiency of this soil arises from the want of tenacity;

city; the best means of improvement, is *compleat draining*, and after that a liberal covering with clay or red earth; these will freely incorporate with the soil, and make it sufficiently firm. After such improvement, no kind of land is more productive, particularly in a dry summer.

I have this year seen land of this description, spring fed till the 12th of May, yield by the 24th of June two ton of hay per acre; and Mr. Lax, on his farm at Godney, has for two years past kept twenty cows and a bull throughout the year on thirty-five acres of land. His plan is to winter * *layne* fifteen acres. This on an average of seasons is fit to be stocked the beginning of April, and is fed till the 12th of May. By this time the remaining twenty acres are in sufficient strength to take the cows, and will keep them till the after grass of his mown ground is fit to receive them; then the unfed grass in the summer leaze is *skimed*, which yields from 5 cwt. to 10 cwt. of hay per acre; this is given to the cows when they are dry, namely, in the months of December and January. After they have calved, which is from the beginning of February to Lady Day, they are supplied with the best hay; here are more than thirty tons of hay produced, so that twenty cows cannot possibly want winter provender.

Not many years since this farm was part of an extensive moor inclosed by Act of Parliament, and was purchased by Mr. Lax of the commissioners at 15l. per acre, to which add 5l. per acre for draining and claying, making in the whole 20l. per acre, at 5 per cent. the rent will be 20s. per acre.

* It is *old* English, and found in all books and laws relating to Forests.

Dr.	£.	s.	d.	Cr.	£.	s.	d.
To rent of 35 acres, at 20s.	35	0	0				
To taxes, highways, &c.	1	5	0				
To dairy women, and all other incidental expences, 25s. per cow	25	0	0	By 60 cwt. cheese, at 2l. 10s.	150	0	0
To expences, making 15 acres of hay, at 12s.	9	0	0	By 20 calves	15	0	0
To expences, skimming and making summer leaze hay	3	0	0	By butter	15	0	0
To fences	1	15	0	By hogs	20	0	0
To interest of capital	7	10	0				
	82	10	0				
Profit	117	10	0				
£	200	0	0		200	0	0

Though the produce of cheese in comparison with the general produce of the country is small, it must not be supposed that the deficiency arose from any want of food, but principally from the cows being young and of a small breed.

The last species of soil is the turf bog. The surface of this soil is of a light, spongy, tough texture, full of the fibrous roots of plants, and withal so matted together, that a spade or knife must be made very keen to penetrate it. Immediately under the turf or sward is found a vein of black moory sand, so unlike in its nature to the peat which lies underneath, that when cut with it and dried, it will fall off and separate from it. This mould is of good quality, and will bear both natural and artificial grass in great abundance. It is also an excellent manure for clay or any other heavy land; this black moory stratum is from one to two feet in thickness, and underneath is found the peat, which is from three to fifteen feet in depth.

Under

Under the peat is a bed either of clay or sand; the peat is full of flaggy leaves, and hollow stalks of rushes. These vegetable matters are accompanied with a substance like pitch, of a bituminous nature, which lies between the stalks of the rushes, and the leafy remains, and constitutes the inflammable part thereof. It is used as the common fuel of the country, and makes a clean and pleasant fire, particularly well adapted to the purposes of the dairy. An acre of land will furnish an immense quantity, insomuch that in the parish of Catcott it has been sold for a term of twenty-one years as high as thirty pounds.

There is no great difficulty in the mode of curing peat. In the months of May and June it is cut out with a keen instrument into the shape of bricks, left single on the ground for a few days to dry, by which time they lose part of their moisture, and become firm enough for piling in pyramidal heaps of about a waggon load each: in this state they are compleatly dried, and then sell for 10s. per waggon load on the land where they are dug, and the price of digging and carrying is five shillings per load. Though the outer covering or sward of this boggy land will burn, yet it is not much esteemed as fuel, being soon consumed.

Before I suggest a method of improving these bogs, let us advert to the probable cause of their present sterility. I conceive then that stagnant water is the grand operative principle which has for ages kept the superstratum buoyant, and swimming as it were, on its surface; this lifts up, and swells the soil, making it shake, and give way on treading. In confirmation of this idea it is found, that at the depth of four or five feet the black earth becomes a mere pulp, in which an iron rod will descend with a trifling exertion to the depth of the clay, and it invariably happens, that the worse the bog the deeper the clay.

In the third description of land stated at the beginning of this disquisition, the clay is found at the depth of three, four, or five feet, and gradually sinks thence to the lowest part of the peat bog, where it is found at the depth of eighteen or twenty feet. If therefore the surface of the two sorts of land be equal, one foot of stagnant water on the clay of the former will be accompanied with fourteen or fifteen feet on the clay of the latter. Such a body of water continually remaining at all seasons of the year (for in the

dryest summer I conceive its diminution does not exceed three or four feet) cannot fail of rendering the surface cold and unproductive. Agreeably to this theory the surface must rise in the winter, and subside in the summer months; and this is verified by fact, for certain fixed bodies are seen over the moor, at certain seasons, which cannot be descried at others.

If these premises be admitted, it follows, that the only radical cure must be compleat draining, and after that burning the matted surface; the former I think may be effected in the manner before stated, and the latter in the following way, without any great difficulty or expence.

In the months of March or April when the land is dry, let it be ploughed as deep as six strong horses can plough it; this will cost about twenty shillings per acre. In this state let it remain till the sod is dry enough to burn, then provide yourself with some keen cutting knives of about a foot in breadth, the cutting part of which should be of a semicircular form; with these let the plit be cut into parts of about two feet and a half in length, then let your burners reduce them to ashes as fast as possible, which being spread equally on the surface and ploughed in, sow the ground about the middle of May with one bushel and a half of buck wheat per acre, two bushels of ray grass, and five pounds of white Dutch clover. The cost of all this will be nearly as follows per acre.

	£.	s.	d.
First ploughing	1	0	0
Cutting the plit and burning	0	12	0
Spreading the ashes	0	3	0
Second ploughing	0	5	0
Harrowing	0	1	0
1½ Bushel buck wheat	0	6	0
2 Bushels of ray grass	0	5	0
5 lb. of Dutch clover	0	4	0
Tythe	0	3	0
	£. 2	19	0

Should the subsequent summer be moist, it is probable that the produce of buck wheat might be equal in value to the expenditure; but should it even entirely fail, the artificial grass will amply repay the expence and exertion of the husbandman.

After the buck wheat is harvested, let lateral trenches be cut at the distance of thirty-five feet, emptying themselves into the great drains; these trenches should be twelve inches wide, and sixteen inches deep, and will cost about one penny per rope (twenty feet) or about five shillings per acre. The contents of these trenches being for the most part black mould, will be excellent manure for the artificial grass, and should be spread thereon without delay. It might be adviseable for the first year or two, either to mow or feed with sheep, avoiding the tread of heavy cattle till the land has fully subsided, and if clay or red earth could be procured within a moderate distance, give it an occasional sprinkling therewith, after the rate of thirty or forty cart load per acre.

I have not the least doubt but with this management, or with something similar thereunto, the turf bogs might be all reclaimed, and made worth twenty-five or thirty shillings per acre. And as a proof thereof, I need only instance the vast improvements already made, and still carrying on wish unremitting assiduity by Mr. Moxham of Glastonbury, whose exertions in this way highly merit the warmest encomiums.

Without the assistance of the plough he has by draining and earthing, advanced land of the foregoing description from one shilling per acre to thirty shillings. His expences it must be allowed are great, for he puts one hundred cart load, nay, in some instances, one hundred and fifty cart load of red earth per acre, which being halled one and a half or two miles, the cost must be more than ten pounds per acre; yet notwithstanding this bountiful and expensive manuring, the advance in the value of the land amply compensates; for the present price of these bogs is two pounds per acre *in fee*, and many hundred acres may now be bought at that rate.

Mr. Moxham contends, that a covering of red earth, such as he bestows, is absolutely necessary to kill the old sward; and it must be admitted, that the end proposed is effectually obtained, but then the

the land is for some time unproductive, and the expence is also so enormous, that few farmers would have courage to go through so costly an experiment.

How far the plan of proceeding which I have before suggested is, or is not more eligible, I shall leave to Mr. Moxham and to my readers to determine.

Mr. Moxham has planted firs and alder hedges on these bogs with great success, and has made various striking improvements to the great astonishment of his neighbours, who could not conceive such things possible. In short, he is justly entitled to the thanks not only of the laboring poor, but also to those of the community, for his persevering industry and activity.

No country can afford greater encouragement either to the grazing, dairy, or corn farmer, than this; the salubrity and mildness of the climate, and the fertility and strength of the soil, enable the occupier to devote his land to either purpose with an almost certainty of success; and the annual profit over and above his rent cannot fail as a source of wealth and independence. The dairy farms are small, seldom exceeding two hundred pounds per year; the grazing farms are large and very detached.

It is obvious, that the profits of the dairy exceed those of the grazier nearly in the proportion of two to one, and as one hundred pounds per year will afford a comfortable subsistence to a family, small farms are best calculated to increase population, and to rear up an industrious race of independent yeomanry. Excepting the bishop of Bath and Wells, there are few proprietors who stand seized of more than six or eight hundred pounds per annum, and for the most part from one hundred to two hundred pounds per annum, and more than nine-tenths of the land are employed in pasture. The old arable was found not to pay for ploughing, and has therefore been laid down.

Some few farmers however have enriched themselves by giving four pounds per acre for some rich dry and newly inclosed land, on which they have grown fifty bushels of wheat per acre for ten years successively, without fallow or manure of any kind.

Where there is so much to approve, I am sorry there is any thing to condemn, but truth compels me to state, that a shameful inattention prevails as to their breed of cattle, and scarcely can an instance be produced of a farmer's giving more than ten pounds for

a bull, or three pounds for a ram; yet notwithstanding this general neglect, many are accustomed to sell their home bred team of four oxen, when fat, for one hundred pounds; and sheep in great abundance, that weigh from twenty to thirty pounds per quarter. The elevated corn lands were formerly in open common fields, but every effort has been made to divide and inclose them; the tenure however (great part being under the see of Wells, and other churches, under charity endowments, and under queen Anne's bounty) has operated as a check to the necessary exchanges. None of these common field lands will let for more than fifteen shillings per acre, whereas if inclosed they would let for twenty-five shillings.

Course of crops. 1. Fallow. 2. Wheat. 3. Beans or peas.

Price of Labor.

In the summer season, one shilling per day, with meat and drink; in the winter, one shilling and two-pence per day, with five pints of cyder. Labourers at task work will earn from two to three shillings per day.

Paring and Burning unknown.

Price of provisions something less than in the north east district of the county.

The low lands are badly wooded, and planting in general shamefully neglected, particularly a very profitable part of it, *viz.* the elm and the willow, both of which thrive in this soil, and the latter is much wanted for the purposes of the fishermen.

The turnpike roads are nearly in a state of perfection, which all travellers passing from Cross to Bridgwater will acknowledge. The parochial in a state of improvement, but much must still be done to render a journey through this country comfortable or pleasing.

The *old* farm houses are ill constructed and improperly situated, but the *new* ones are much improved in point of uniformity, regularity, and convenience.

The rack rent leases are generally for seven years, and the covenants confine the quantity of land in actual tillage; the number of crops, the mode of seeding, to spend the produce on the premises, to sell no hay, not to plough the meadow or pasture land, not to relet without consent, and for want of assets to re-enter.

Though

Though there are many things in the practices of this district deserving both commendation and imitation, I cannot help observing, that the process of making hay is not among the number.

In this respect they are the most egregious slovens I ever beheld. It is no unusual thing to see cocks of about a load each remain in the fields two months after they are made, and before the rivers were lowered and the country drained, these cocks were frequently carried away by a sudden flood. When conveyed to a large mow, no care is taken either in making or securing it; it is seldom thatched; some indeed make their mows in a conical form, by which means they suffer but little injury, but for the most part they are left flat on the top, and the winter rains soak from the top to the bottom, without shame or regret on the part of the owner. In their summer pastures they are equally slothful; docks, thistles, nettles, and other weeds cover nearly a quarter of the land, and wafted by winds, the seed is disseminated on the lands of their more careful neighbours. Oftimes have I observed, that where nature is most bountiful, her gifts are least prized. This is the case with the farmers here; so quick is vegetation even in the winter season, that the cattle (unless it be unusually severe) scarce ever want a a bite of grass, and a deficiency of winter provender is scarcely known. I presume it is on the same principle that the Scotch gardeners excel the English; having more difficulties to encounter, their exertions and care are proportionate thereto.

Before I take my leave of this rich clay soil, it may not be amiss to say something of their orchards, to the production of which this land is peculiarly adapted. Permit me therefore to state, by way of encouragement to planting, that there is scarcely an orchard in this district that will not let for four or five pounds per acre, and if the trees were planted at proper distances, viz. sixty feet every way, the pasture suffers but little injury; the strength of the soil enables the trees to throw forth a multitude of roots sideways, near the surface; it is therefore of the utmost importance that they should be placed at proper distances. In confirmation of this idea, a tree thus placed in an orchard belonging to Mr. Batt, of Mark, has in many years produced four hogsheads of cyder, and the tenant told me, that he would give for it one guinea per year, for a term of twenty-one years. The tree is not more than forty years

old: most orchards are planted too close. The desire of having a great deal of fruit upon a little ground is the cause of so doing; but the method defeats the purpose. When an orchard is first planted, sixty feet appear an immense distance, and I have known many, who acknowledge the advantage of distance, feel loth to admit so great a vacancy, and have planted at thirty feet, with a full resolution of rooting up every other tree at fifteen or twenty years old; but alas! this is scarcely practicable; after a tree is brought to full bearing, an insurmountable reluctance to eradicate it occurs, which arguments, however powerful, cannot overcome.

The sorts of apple in best estimation are, Royal Wilding, White Styre, Redstreak, Court of Week Pippin, Pounset or Cadbury, Flood Hatch, Black Pit Grab, Buckland, Mediate or South-ham, Royal Jersey, Woodcock, Red Hedge Pip, Old Jersey, and Redstreak. They are grafted on crab stocks in the nursery, with any gross growing fruit.

As soon as the ground for the orchard is ready, plant your trees, and be particularly careful not to plant them deep in the ground. After about four years, lop their heads and graft them with the fruit you most esteem, taking care to adapt your grafts to the stock. In other words, let your grafts, and the trees on whose heads you graft, be as similar in respect to luxuriancy as you can; on this a great deal depends. It is found, that a luxuriant gross growing graft will never succeed on a slow growing stock, and so "*vice versa.*" It may also be observed, that some excellent sorts of fruit are naturally so slow of growth, that a man instead of planting for himself, plants for his grand-children; and if you endeavour to force them (which is often injudiciously done) with luxuriant stocks, you occasion disease. The trees never become large or lasting, and the fruit will be tasteless and insipid.

Great care should be taken to secure the trees whilst young, from the nabbing and rubbing of cattle, and more especially sheep, but in this respect the planters in this country are not very attentive, nor is there any thing worth notice in their management of the fruit.

The average price of the article is about thirty shillings per hogshead.

THE

THE SOUTH MARSH

IS bounded on the North East, by Polden Hills, on the South West, by the river Parrett, on the North West, by Bridgwater Bay, and on the South East, by Ham Hill, &c.

That part thereof which lies nearest the sea, is higher than the interior part, owing to the great deposit of sea mud left at the high spring tides, for ages past; and it is also better drained, in consequence of being near the outlet, where the greatest fall of draining exists. (This observation also extends to the lands of Brent Marsh.)

The river Parrett is the principal drain of this marsh. It has no *barrier*, and the tide flows up as far as Langport, filling its banks, and frequently penning the land floods over the moor, and meadows adjoining; so that near thirty thousand acres of fine land are frequently overflown, for a considerable time together; rendering the herbage unwholsome for the cattle, and the air unhealthy to the inhabitants. An Act of Parliament was lately obtained for draining a considerable part of this fenny plain, called *King Sedgmoor*, which together with the adjoining inclosed meadows now flooded, amount to about twenty thousand acres. This desirable end is nearly accomplished, by having the outlet or sluice many miles lower, in the river Parrett, than formerly. Nothing could be more unpopular, at its outset, than this undertaking, and every obstacle, which prejudice and ignorance could suggest, the promoters thereof had to encounter.

About the year 1680 King James laid claim to the soil of this moor, and formed the design of improving it by a compleat drainage; but so perverse were the owners of the adjacent lordships commoning with their cattle on it, that they opposed the scheme with all their might; and discerning that they could make no justifiable claim to the soil, offered to assign to the king four thousand acres, in lieu of his right thereto; and to lay out the residue, being nine thousand five hundred and twenty-two acres amongst their lordships; which being accepted of by the king, there were allotments then made to each manor according to the following proportions:

NAMES OF MANORS.		ACRES.
Dunvear . .	To the heirs of Sir Robert Chichester, &c.	346
Stawell . .	To Sir John Stawel	274
Sutton Mallet .	To John Mallett, Esq.	234
Bawdrippe .	To Walter Long, Esq.	218
Brodney . .	To Thomas Muttlebury, Esq.	70
Middlezoy . .	To R. Warr, Esq. Sir R. Strode, &c. .	567
Moorlynch . .	To heirs of Mr. Floyer	354
Highham . .	To Henry, Lord Gray	708
Nether-ham .	To heirs of Sir Ed. Hext	264
Beere . . .	To Sir William Courtney, &c. . . .	229
Aishcott . .	To Sir Thomas Cheeke	526
Horsey . . .	To Sir George Horsey	370
Ched-zoy . .	To Earl Pembroke	411
Weston . . .	To Sir Peter Van Lore, &c.	582
Othery . . .	To Sir Edward Trent, &c.	428
Somerton . .	To Thomas Hill, Esq. James Rise Esq. and Burggesses, &c.	1505
Graynton . .	To the heirs of Mr. Watts	291
Pitteney . .	To Earl Northampton, and Sir J. Hanham	569
Compton Dunden	To Sir J. Strangway, and Baronet Portman	548
Walton . . .	To Sir Thomas Thynne	540
Street . . .	To Andrew Whittington, &c.* . . .	488
	Total acres . . .	9522
	Besides for the King	4000

Memorandum. That these allotments were rated proportionably, after the rate of two hundred and eighty-two acres of the moor (by the perch of fifteen feet) to every hundred acres of the severals.

In the reign of *King William*, a similar attempt was made. An act was obtained for draining it, but by some means or other its operation was entirely frustrated, This projected and useful improvement lay dormant till the year 1775, when it was revived by *Mr. Allen*, then member of Parliament for Bridgwater; sanguine of

* Dugdale.

of success, and highly impressed with the idea of its importance, he purchased a large number of rights, and having obtained a signature of consents, went to Parliament; but not having interest enough in the House, to stem the torrent of opposition, all his delusive prospects of profit vanished, and he found himself left in a small, but respectable minority. Though Mr. Allen met with so warm an opposition, yet there were not wanting many Lords of Manors interested, who expreſſed their decided approbation of the measure, in a *general point of view*, but objected to the mode, by which it was conducted, and to the men who were the ostensible movers in the business. After this defeat, nothing was done till the year 1788, when a meeting was held at Wells to take into consideration the propriety of draining the ſaid moor, and dividing it into *parochial allotments*. At this meeting Sir Philip Hales presided; and after much abuse and opposition, from the lower order of commoners, who openly threatened destruction to those who supported such a measure; the meeting was diſſolved, without coming to any final determination.

The leading idea was however afterwards pursued with great assiduity by Sir Philip, and his agent Mr. Symes of Stowey; and by their persevering industry, and good management, matters were brought into such a train, that application was made to Parliament in the session of 1790, for leave to bring in a bill for draining and dividing the said moor into parochial allotments, among thirty parishes and hamlets therein stated; and also among such other parishes, as may prove a right to feeding the same. In the spring of 1791 this bill passed into a law; and the commissioners, acting under the powers thereof, held their first meeting at Bridgwater, in June 1791.

I have been thus particular in stating the progress of this business, merely to shew the impropriety of calling public meetings, with a view of gaining signatures of consent; or taking the sense of the proprietors in that way. At all public meetings of this nature which I ever attended, noise and clamor have silenced sound sense and argument. A party generally attends with a professed design to oppose, and truth and propriety have a host of foes to combat.

Whoever therefore has an object of this kind in view, let him acquire consents by *private application*; for I have frequently seen the good effects thereof manifested, by the irresistible influence of truth, when coolly and quietly administered; and it has frequently happened, that men hostile to your scheme, have, by dispassionate argument, not only changed their sentiment, but become warm partizans in that cause, which at first they meant to oppose.

This never could have been done at a public meeting: for after men have once joined the band of opposition, their pride will not permit them to retreat.

How far the commissioners appointed under this act have discharged their trust, time will shew; but the general opinion of their conduct seems to be flattering; and those who at first supposed that the act carried with it the seeds of its own dissolution, are brought to confess, that the present appearances are promising.

It cannot but be supposed, that in the investigation of four thousand and sixty-three claims, (of which only one thousand seven hundred and ninety-six are allowed) and in making compensation for a large portion of land, necessarily cut through, in making the great drain, many causes of offence must be given; but I trust neither partiality, negligence, nor corruption, can be imputed to them; and if they have erred, it has been an error of the head, and not of the heart.

Previous to the present drainage, this moor emptied itself into the river Parrett, some miles above Bridgwater, and the fall from the moor was very trifling. Hence it followed, that the least flood covered it with water, and in that state it frequently remained many months. It was at first suggested by many people, whose abilities the county held in high estimation, that nothing more was necessary for the purpose of draining the moor, than the opening and widening these old outlets; but it occurred to the commissioners, that such a partial, and ineffectual mode of procedure, could not produce a radical cure. They therefore set themselves about to discover a convenient place of discharge lower down in the river, by which a greater and more rapid descent might be gained.

An old sluice called Dunbald Clize presented itself as the desired spot; and on levels being taken by Mr. White, an eminent surveyor,

surveyor, it appeared that an extraordinary fall of nearly ten feet could be acquired; and that the descent from the upper part of the moor to this outlet, (a distance of about twelve miles) was nineteen feet, or about one foot and a half in a mile. The only objection which could be brought to the measure, arose from a consideration of the great expences, which must be incurred, by cutting through two miles and a half of elevated land.

No alternative however presented itself. It appeared that this plan must be adopted, or the work would be incomplete. Justified therefore by the concurrent opinion of Mr. White, and of Mr. Jessop, (whose advice was taken) they proceeded boldly; and having erected at a great expence, and under numerous difficulties, (arising from the morassy nature of the ground on which it was built) a strong and substantial *sluice*; they proceeded to make a channel or cut fifteen feet deep, ten feet wide at bottom, and fifty-five feet wide at the top.

It is impossible to describe the ridicule which this undertaking excited. Some thought the commissioners mad; others, and by far the majority, ascribed the boldness of the plan to the liberality of the proprietors, in allowing the commissioners three guineas per day for attendance and management; and drew this sage conclusion, that the work would never be finished, but would be protracted till the expences *would equal* the value of the moor.

Uninfluenced by letters, or by menaces, the commissioners persevered; and they have the satisfaction of seeing the principal difficulties overcome; and of hearing those very men, who were most violent against the measure, acknowledge their error, and candidly confess that the work is well executed, and promises to be effectual.

It may be necessary, by way of instruction to others engaged in schemes of the like nature, to state, that had the drain been made less wide at the top (and the opponents insisted that it should have been only twenty-six feet wide) it would have collapsed, or fallen together; as it was, there were numerous, and alarming slides; the repairing of which cost a considerable sum, and there can be no doubt, but something of this kind, will happen for years to come; for the substratum at the depth of sixteen feet, is so soft,

and morassy, that it gives way to the superincumbent clay, and rises up in the middle of the drain.

This cut from the Dunbald sluice to the moor (a distance of about two miles and a half) cost four-pence per cubic yard, or in the whole about three thousand two hundred pounds; from thence, the price diminishes in proportion to the depth and width. Expensive as this undertaking inevitably must be, yet the benefit resulting from it, will most amply repay; for without saying any thing of the injury done to the health of the inhabitants in the circumadjacent country, and which this drain, by rendering the air more salubrious, will totally remove; we may fairly state, that the probable improved value cannot be estimated at less than four hundred and fifty thousand pounds.

Though the total amount of expenditure cannot with precision be ascertained; it may give some satisfaction, if I inform my readers, the probable sum total thereof. The following statement of the account Dr. and Cr. will approach pretty near the truth; but let it be understood, that this calculation is made under the idea of *parochial subdivisions*, without which little benefit will result either to the public, or individuals. The principles which I have in my report on the North East District fixed as *data*, incontrovertible, *viz.* That all commons, however rich and fertile the soil, are unproductive of profit, in consequence of *overstocking*, must be here adhered to, and this argument is equally applicable to old inclosures. Let a farmer put *ten* head of cattle into a given piece of ground where only *five* should be depastured, and the cattle will be of less worth, after the grass is consumed, than they were before: Of what value then is the land?

KING'S SEDGMOOR.

Dr.	£.	s.	d.		£.	s.	d.
To Act of Parliament, and all incidental expences	1628	15	0				
Interest of money borrowed . .	3500	0	0				
Commissioners .	5000	0	0				
Clerk . . .	1500	0	0				
Surveyor . .	800	0	0	By 12,000 acres, at 30s. per acre, and 25 years purchase . .	450,000	0	0
Printers . . .	300	0	0				
Petty expences .	600	0	0				
Land purchased .	2800	0	0				
Drains, sluices, Bridges and roads . . .	15000	0	0	By improvement of 4000 acres of adjacent land, 10s. per acre . .	50,000	0	0
Award and incidentals . .	871	5	0				
To which add .	32,000	0	0				
For subdividing in each parish	18,000	0	0				
To original value of the moor, say ten shillings per acre, at twenty-five years purchase .	150,000	0	0				
	200,000	0	0				
Profit . .	300,000	0	0				
	£. 500,000	0	0		£. 500,000	0	0

N. B. Had the commissioners been empowered to sell land at the commencement of the business, the expenditure would have been reduced 5000l. by the difference in the interest accompt.

This

This is not the only improvement, for by the addition of such a quantity of rich, and productive grass land, the upland inclosures, and common fields may be greatly advanced in value. In short, it is difficult to point out all the benefits likely to accrue from this grand, but arduous undertaking; beside, though the original value of the moor per acre is stated to be ten shillings, this is done merely with a view to give the arguments against the inclosure the greatest weight; and perhaps it would have been more just, to have stated its value at five shillings per acre, or even less than that, for a right of stocking could be rented for half a guinea per year.

Nor is the improved value at all exaggerated. On the contrary, I am confident it will exceed thirty shillings per acre; for even in this dry summer, three tons of hay per acre have been cut on inclosed lands adjoining, or near the moor, the soil of which lands is in no respect better than that of the moor.

Beside King's Sedgmoor, there are other similar tracts of land on the adjacent rivers Tone, and Yeo, on which no improvement has yet been attempted; namely Normoor, near North Petherton, Stanmoor, Currymoor, West Sedgmoor, &c. near North Curry, West Moor, near Kingsbury, Wet Moor, near Muchelny, amounting in the whole to about ten thousand acres, independent of many thousand acres of low flooded inclosed lands, which might be greatly improved by judicious draining.

These lands are for the most part far superior in their quality to King Sedgmoor; and the example now set before them, will, I trust, remove the mist from the proprietors eyes, and make them see in a true light their own, and the public interest.

Since writing the above, I hear to my astonishment, that at a meeting held a few days since at Borough Bridge, for the purpose of taking into consideration the inclosing, and draining of Stanmoor and Currymoor, the same was objected to by the *agents* of Lady Chatham and Mr. Portman, and by Mr. Brickdale and other proprietors in *person*.

These lands would fairly be worth forty shillings per acre the moment they were drained and divided; and if taken from the tenants, the original estates would not be reduced in their annual value one farthing. But on this subject, I have before enlarged very

very fully, and shall therefore only remark to those who are influenced by a humane regard to the right, and comfort of the cottager, that very few habitations of that description are to be found near these moors; and a great part of those which do exist, possess rights, which when divided, may be worth two or three hundred pounds, and if sold, will enable a man to rent an estate of one hundred pounds per annum, and to keep twenty or thirty cows, in the management whereof his whole family would become useful, and habits of industry, care, and œconomy, would by degrees be established.

Adjoining this extensive plain on the south side, lies a tract of elevated land, composed principally of sea sand, and shells; well adapted to the purposes of tillage, and in its nature so fertile, that potatoes, turnips, carrots, hops, madder, liquorice, and indeed almost every root, or plant useful in husbandry, might be grown on it in high perfection.

The arable is for the most part in common fields, and though exhausted by constant cropping, lets for near thirty shillings per acre. The wheat produced is of prime quality; and as to barley, it is supposed that Ched-zoy, Westonzoyland, Middlezoy, and Othery, produce the best in the county. Were the common field lands of these parishes divided into separate property, a portion of the new allotments in Sedgmoor annexed; and the whole comprized in farms of four or five hundred pounds per year, and let to some enlightened sheep and turnip farmers, these parishes might vie with any in the kingdom, both as to the *quantity* and *quality* of produce; but this cannot be effected whilst the lands are held by the present tenure. They are now occupied by small farmers holding under lives, some one life, some two, and a few three, without any power, or prospect of renewing.

It were to be wished, that all Lords of Manors possessing estates leased out on lives, would continue to grant renewals; and by so doing, I verily think they would promote their own interest; for though it must be acknowledged, that the leasing out a property upon three lives, at the usual price of fourteen or fifteen years purchase, is unfavorable to the interest of the *grantor*, yet I think that when an estate has been so leased out, it is more his interest to

renew,

renew, than to run against the lives; for when compound interest of money, be set against the reversionary income, the latter is soon swallowed up. Great advantages would also result to society from the general adoption of such a measure, for it is well known, that estates falling into hand, are greatly reduced in value, let the restrictions in the lease be ever so judicious. In confirmation of this idea, do we not see that lands held under the church, under corporations, and under charity endowments, &c. *where renewal is certain*, are nearly in as good a state as freehold property; and easily to be distinguished from lands held under private Lords, where such renewal is frequently withheld. Various are the opinions, respecting the comparative advantage attending the purchase of freehold and leasehold property. In favor of the former, the natural, and indeed laudable pride of man steps in, and decidedly determines. Most men wish to possess property independent of all controul, and the suits, and services exacted under many leases, are a relict of feudal tyranny, highly disgusting to men, fond of freedom and independence; but let us have recourse to figures, and we shall find that two men starting together *with one thousand four hundred pounds each*, and purchasing, the one a freehold estate, of fifty-six pounds per annum, at twenty-five years purchase, and the other a leasehold for three lives, of one hundred pounds per annum, at fourteen years purchase, would be in very different situations at the end of twenty-one years. Calculating the interest of each at five per cent, and allowing *three* renewals at two years purchase, (clear income) the leaseholders estate of one hundred pounds per annum (nett) would at the expiration of twenty-one years cost him 1205l. 18s. 0d. and the freeholders estate of fifty-six pounds per annum (nett) would at the expiration of the same term, cost him 1900l. 1s. 0d. as the following calculation will confirm.

FREEHOLD, 56*l. per Annum, nett, and* 25 *Years Purchase.*

	£.		
	1400		
Add. Interest	70	5 per Cent.	
	1470		
Deduct rent	56		
	1414		1st Year.
Add. Int. .	70	14	
	1484	14	
Deduct rent	56	0	
	1428	14	2d. Yr.
Add. Int. .	71	9	
	1500	3	
Deduct rent	56	0	
	1444	3	3d. Yr.
Add. Int. .	72	4	
	1516	7	
Deduct rent	56	0	
	1460	7	4th Yr.
Add. Int. .	73	0	
	1533	7	
Deduct rent	56	0	
	1477	7	5th Yr.
Add. Int. .	73	17	
	1551	4	
Deduct rent	56	0	
	1495	0	6th Yr.
Add. Int. .	74	15	
	1569	19	
Deduct rent	56	0	
	1513	19	7th Yr.

	£.		
Brought up	1513	19	7th Yr.
Add. Interest	75	14	
	1589	13	
Deduct rent	56	0	
	1533	13	8th Yr.
Add. Int. .	76	14	
	1610	7	
Deduct rent	56	0	
	1554	7	9th Yr.
Add. Int. .	77	14	
	1632	1	
Deduct rent	56	0	
	1576	1	10th Yr.
Add. Int. .	78	16	
	1654	17	
Deduct rent	56	0	
	1598	17	11th Yr.
Add. Int. .	79	19	
	1678	16	
Deduct rent	56	0	
	1622	16	12th Yr.
Add. Int. .	81	3	
	1703	19	
Deduct rent	56	0	
	1647	19	13th Yr.
Add. Int. .	82	8	
	1730	7	
Deduct rent	56	0	
	1674	7	14th Yr.

	£.		
Brought up	1674	7	14th Yr.
Add. Int. .	83	14	
	1758	1	
Deduct rent	56	0	
	1702	1	15th Yr.
Add. Int. .	85	2	
	1787	3	
Deduct rent	56	0	
	1731	3	16th Yr.
Add. Int. .	86	11	
	1817	14	
Deduct rent	56	0	
	1761	14	17th Yr.
Add. Int. .	88	2	
	1849	16	

	£.		
Brought up	1849	16	
Deduct rent	56	0	
	1793	16	18th Yr.
Add. Int. .	89	14	
	1883	10	
Deduct rent	56	0	
	1827	10	19th Yr.
Add. Int. .	91	7	
	1918	17	
Deduct rent	56	0	
	1862	17	20th Yr.
Add. Int. .	93	4	
	1956	1	
Deduct rent	56	0	
	1900	1	21st Yr.

Freeholders purchase of fifty-six pounds per annum, nett, allowing five per cent compound interest, stands him at the end of twenty-one years in . . £. 1900 1 0

First purchase 1400 0 0

Loss 500 1 0

LEASEHOLD, 100*l. per annum, (nett) and* 14 *Years Purchase.*

	£.		
	1400 0		
Add. Interest	70 0		
	1470 0		
Deduct rent	100 0		
	1370 0		1st Yr.
Add. Int. .	68 10		
	1438 10		
Deduct rent	100 0		
	1338 10		2d Yr.
Add. Int. .	66 19		
	1405 9		
Deduct rent	100 0		
	1305 9		3d Yr.
Add. Int. .	65 5		
	1370 14		
Deduct rent	100 0		
	1270 14		4th Yr.
Add. Int. .	63 11		
	1334 5		
Deduct rent	100 0		
	1234 5		5th Yr.
Add. Int. .	61 14		
	1295 19		
Deduct rent	100 0		
	1195 19		6th Yr.
Add. Int. :	59 16		
	1255 15		
Deduct rent	100 0		
	1155 15		7th Yr.

	£.		
Brought up	1155 15		7th Yr.
Add. renewal 2 years purchase nett rent	200 0		
	1355 15		
Add. Int. .	67 16		
	1423 11		
Deduct rent	100 0		
	1323 11		8th Yr.
Add. Int. .	66 4		
	1389 15		
Deduct rent	100 0		
	1289 15		9th Yr.
Add. Int. .	64 10		
	1354 5		
Deduct rent	100 0		
	1254 5		10th Yr.
Add. Int. .	62 14		
	1316 19		
Deduct rent	100 0		
	1216 19		11th Yr.
Add. Int. .	60 17		
	1277 16		
Deduct rent	100 0		
	1177 16		12th Yr.
Add. Int. .	58 18		
	1236 14		
Deduct rent	100 0		
	1136 14		13th Yr.

	£.		
Brought up	1136	14	13th Yr.
Add. Int. .	56	17	
	1193	11	
Deduct rent	100	0	
	1093	11	14th Yr.
Add. renewal	200	0	
	1293	11	
Add. Int. .	64	14	
	1358	5	
Deduct rent	100	0	
	1258	5	15th Yr.
Add. Int. .	62	18	
	1321	3	
Deduct rent	100	0	
	1221	3	16th Yr.
Add. Int. .	61	1	
	1282	4	
Deduct rent	100	0	
	1182	4	17th Yr.
Add. Int. .	59	2	
	1241	6	

	£.		
Brought up	1241	6	
Deduct rent	100	0	
	1141	6	18th Yr.
Add. Int. .	57	1	
	1198	7	
Deduct rent	100	0	
	1098	7	19th Yr.
Add. Int. .	54	18	
	1153	5	
Deduct rent	100	0	
	1053	5	20th Yr.
Add. Int. .	52	13	
	1105	18	
Deduct rent	100	0	
	1005	18	21st Yr.
Add another renewal .	200	0	
	1205	18	

Leaseholders purchase of one hundred pounds per annum, (nett) allowing five per cent. compound interest, stands him at the end of twenty-one years (admitting three renewals at two years purchase nett income) in the sum of . . . . . £ 1205 18 0

Profit 194 2 0

First purchase 1400 0 0

Free-

Freeholders loss at five per cent	500 1 0
Leaseholders profit at ditto	191 2 0
Difference	£ 691 3 0

N. B. A deduction must be made from Leaseholders profit, for Lords rent and Herriotts, and something from freeholders loss, for increasing value of timber, but these will not invalidate the general conclusions.

The great cause why leaseholds are held in low estimation by the commonalty, arises from the improvidence of the general holders, who for the most part expend the whole income of their estates, without laying by, a fund for the purpose of renewal; hence it follows, that their estates fall into hand, and the owners are reduced from a state of comparative affluence, to beggary; at which event, the general exclamation is, *who would have leasehold property?*

The declivities of the hills north, and east of Sedgmoor, are as barren, as those before stated are productive. The finer particles of the soil, have for ages, been washed into the moor, by heavy rains; and the remaining mould is shallow and sterile. When the moor is drained, and made productive, this lost fertility, may be in some degree restored, by carrying the produce of the moor to the Uplands, either by the sheep fold, or by consuming the hay thereon.

A great part of these high lands are in tillage, but the expence of ploughing is so great, and the produce so small, that it is matter of astonishment to me, how the farmer can gain a livelihood. Somerton and Compton Dundon, two considerable parishes to the eastward of Sedgmoor, are for the most part the property of the earl of Ilchester; and I know no parishes in the county so susceptible of improvement. The arable lands in common field lie so detached, and divided, and the estates, farm-houses, &c. are on the whole so badly disposed, that vast improvements might be made by judicious exchanges, and by a proper arrangement of the property. The soil is naturally good, and around the town of Somerton is a multitude of gardens, which supply the adjacent markets, even so far as Wells and Shepton Mallett, with early peas, beans,

beans, potatoes, &c. and in the month of August with cucumbers by cart loads; these they raise on hillocks, under which is placed about two bushels of *horse* dung, collected in King's Sedgmoor by children, and brought to their gardens on the backs of, or drawn in carts by, asses.

There is a large market held every three weeks at Somerton during the summer months, and to it, is brought an immense number of sheep, principally of the Dorset breed, together with oxen and other cattle; these are purchased by graziers occupying the rich grass lands of the county.

On the summit of Polden Hill the corn land is for the most part in common field, and under the following course of husbandry, wheat, beans, fallow. The general produce of wheat twelve bushels per acre, and of beans the same; very little barley or oats; but in the inclosed fields, clover and vetches thrive exceedingly; and if the farmers were to have more of these articles, and plough less, they would find their account in so doing, for nothing will bring a farmer to poverty, so soon as *poor corn land.*

From the nature of the stone on the surface, as well as from some trials lately made with the borer, I have reason to think that on the northern declivity of Polden Hill, may be found a vein of marl which passes through the parishes of Cossington, Chilton, Eddington, Catcott, Shapwick, and Ashcott, and from thence extends to Butleigh and Kingsweston. Should it prove of good quality, the discovery will be highly important, and be the means of advancing the lands to treble their present value. This marl has been tried at Butleigh and Kingsweston, and I believe with success. It is not improbable that the same vein extends to Yarlington, near Castle Cary, where it has been dug and used with great advantage by J. Rogers, Esq. whose improvements both in agriculture and planting are very meritorious.

I cannot pass over this neighbourhood without noticing the pleasant and fertile parish of Castle Cary, which both in respect to soil, and climate, cannot well be excelled. I could wish some spirited agriculturist would here try, whether the exclusive power of growing good hops, is confined to Hants, Kent, and a few other counties. The luxriancy of the wild hop, the richness and depth of the soil, the mildness of climature, and the security from

violent winds, all conspire to render such a speculation promising. The consumption of the county in this article is immense, and I have no doubt but I could select in different parts of it, many hundred acres, as well adapted to this culture, as any lands at Farnham, and at one fourth the price which is there given, beside a much easier access to manure of all kinds, and a greater and cheaper supply of poles.

In Castle Cary potatoes are grown on a very large scale, and it is no unusual thing to get one hundred and sixty sacks (two hundred and forty pounds each) per acre, the average price about five shillings per sack.

Proceeding to the eastward, and passing by the town of Bruton, you get into the woodlands bordering on Wiltshire, which extend from Pen Selwood to within three miles of Froome.

This forest was disafforested about the seventh of Charles I. and divided into three portions, one whereof was allotted to the Lords of Manors, another to the Commoners, and a third to the Crown. The latter was sold off to the adjoining landholders; Sir Richard Hoare, Bart. Thomas Southcote, Esq. the Duke of Somerset, William Beckford, Esq. the Earl of Corke, and the Marquis of Bath, are the owners of the greater part of the woods now remaining. No great quantity of woodland in this tract of country has been grubbed within the last forty years, but much new ground has been planted during that period, particularly on the hills belonging to the Marquis of Bath, Mr. Beckford, and Sir Richard Hoare, very much to the profit of the owners, as well as to the ornament, and convenience of the country.

These woodlands are in general in a state of coppice wood, with an intermixture of timber, chiefly oak; but the soil, particularly in the vallies, being in general of a strong, yellow clay, is of so cold and retentive a nature, that vegetation is exceedingly slow, and the oak trees, though springing up spontaneously in great abundance, are so apt to get mossy, and dead topped, that few of them come to a large size; and yet on account of its vicinity to good inland markets, which are never overstocked with underwood or timber, the profit from woodland, under any tolerable degree of management, may be fairly taken at nearly double the

value

value of the adjoining land, in an arable, or pasture state; and the profit arising from the new planted hills, particularly the sandy parts of them, has been in many instances near ten per cent. on the original expence of planting and fencing.

Surely no greater inducement can be held out to the owners to preserve the old woods, or to plant new ones, in soils and situations so favorable to their growth; and in a country that would suffer very materially for want of wood, if deprived of this resource.

But as the profit arising from these woods depends very much on the mode of management, it will not be thought improper to give a few general rules, taken from the appearance of such of those woods as are *well managed*, to the owners of those woods that have a very different appearance; and that appearance not occasioned by any apparent disadvantages of soil or situation.

The natural defect of these woods, particularly that part of them which abounds with oak timber, has already been stated to be the slowness of their growth. This proceeds from three causes.

1st. The native coldness of the soil.

2d. The exposure of a great part of the woods to the south west wind.

And, 3. The injury the woods receive from cattle.

In proportion as these defects have been obviated by art, the woods may be said to be well, or ill managed. Draining the cold, wet parts of them, is the obvious remedy of the first mentioned defect. Screening them from winds, by skirting with Scotch fir, and other hardy plants, and keeping them moderately thick of timber, are the best remedies for the second. But both these remedies will be useless, unless a strict attention be paid to the fences, so as to keep the woods from being cropped by cattle. This is particularly hurtful to slow growing timber, and by it these woods, (though in very few instances subject to common rights) are very materially injured.

Wherever, as is the case in the greatest part of the woods, oak timber is the natural produce of the soil, it should by all means be encouraged, and as its growth to a certain period is usually very rapid, and afterwards altogether as slow, it should be cut when that

that period of stagnation commences, and a fresh set let up to supply the deficiency.

There are many instances in these woods, where although the underwood cannot by the best management be made worth more than eight pounds per acre at sixteen years growth, yet at least twelve small oaks worth twenty shillings a-piece, may be cut regularly at every round of the wood, from every acre, and that without injury to the underwood.

No system will pay equal to this; the underwood, instead of suffering from the multiplicity of trees, will absolutely be better than without any. The shelter afforded by these trees making amends for the damage done by the dropping from them; especially as ash underwood, on which the value of coppice wood greatly depends in this country, (and which does not grow well under the dropping of timber) does not in general thrive well in these cold soils.

The underwood that thrives best in them is oak, willow, alder, and above all *birch*. These kinds of wood will, if proper attention is paid to them, be fit to cut at sixteen years growth; if cut oftener the wood will scarcely be large enough for the purposes of the country; and if suffered to stand much longer, the timber is apt to receive a check from the cold winds, when deprived of the shelter of the underwood. The coal pits of Mendip furnish a never failing market for the poles of this underwood, and the demand for the domestic uses of the country is fully sufficient for the residue; and as not only this end of the county of Somerset, but also the adjoining part of Wiltshire, depend on these woods for oak timber, the demand is, and always will be, equal to the supply.

Sometimes charcoal is burnt for the use of the manufacturers. The wood is then cleaved and heaped into what is called a cord of wood, the dimensions of which are

8	Feet	4	Inches	long,
4	Do	4	Do	high,
2	Do	2	Do	broad.

The price of cleaving and heaping from twenty-two pence to two shillings and three-pence per cord. The expences of burning one hundred cord of wood, the value of which for fuel is six shillings per cord, may be thus estimated:

	£.	s.	d.
Cabin for the man	0	5	0
Burning 263 sacks of charcoal, at 6d. per sack .	6	11	6
Halling Do. at 6d. per sack	6	11	6
Unloading	0	12	0
Wear and tear of sacks	3	10	0
	17	10	0
100 Cord of wood valued as fuel, at 6s. . . .	30	0	0
	47	10	0

PRODUCE

263 Sacks, of 9 bushels each, at 4s. 10½d. per sack	64	2	1½
From which deduct	47	10	0
Balance in favor of charcoal in comparison with fire wood	16	12	1½

As to the new planted woods, particularly those on the high parts of Rodenbury Hill, Witham Park, and Kingsettle Hill, although all kinds of wood grow well upon them (and especially upon the sandy parts of them) provided they are planted in masses sufficiently large to shelter themselves from the winds, yet nothing appears to grow so well as fir, and particularly *Scots fir*. An occasional mixture of silver fir, spruce fir, and larch, on some of the best and most sheltered spots, and a general thin mixture of beech, and other forest trees, add certainly very much to the *variety* and *beauty* of the plantations in which they have been introduced, but in point of *profit* the Scots fir stands unequalled, for rapidity of growth, for superiority in value, when grown, and above all, for its ability to bear the cold exposure of the country.

There are instances on these hills, on land not worth in a state of pasturage three shillings per acre, that plantations of Scots firs of thirty years old, are now worth eighty pounds per acre, * and the

* This is proved by stating, that at eight feet and a half distance, six hundred and forty trees stand on an acre; and that they are worth at a low computation, two shillings and sixpence each.

demand for this kind of wood increases as fast as its uses, become more and more known. A great encouragement surely to cover the residue of the land of this description with plantations; especially when it is considered that this kind of application of the land, not only contributes so wonderfully to the improvement of the estate on which it is made, and to the employment of the poor of the neighbourhood, but that it also adds so much to the beauty, the comfort, and the convenience of the country for many miles round.

The coldness and sourness of the soil of this part of the country, and particularly of those parts that were once in woodland, tend much to depreciate its value in cultivation, either as arable, or pasture land.

In an arable state it produces few sorts of grain kindly. It will not at all do for barley; it is in general too poor and stubborn for beans, and only a very favorable season can insure a good crop of oats; wheat is its favorite crop, and this is sometimes late in ripening, and is frequently purchased at the loss of two, or three years rest, and of more dung than the pasture part of the country can afford to lose. And the peculiar inaptitude of this soil to return to grass, after it has been once ploughed, (and more especially, as is too often the case where it has been burnbeaked) is an insuperable objection to its being used in any kind of convertible husbandry. In a state of grass land, the lateness of the spring, and consequent length of the winter, reduce its value very much, even in the only mode of application to which it is at all adapted, *viz.* "the Dairy."

The great improvement of which the cold part of this country is capable, may be expressed in a few words, "Shorten the Winter." This is to be done principally by draining off the superfluous water, as the springs of so many principal rivers, *viz.* the *Frome*, the *Cale*, and the *Brew* rise in this neighbourhood, the land must every where be full of it; and secondly, by treading the wet land as little as possible in the winter; but, on the contrary, winter haining, wherever it is practicable, and of course mowing early in the summer, and endeavouring as much as possible to mow and feed every piece of land alternately.

Nothing has contributed more to the improvement of the cold, wet parts of this country, than the plan which seems daily to gain ground, of building sheds for housing cattle in the winter. This not only prevents the land from being poached out in wet seasons, whereby the sward is frequently trod out of sight, but also produces dung of which the land is so much in want, and of which it has hitherto had so little; it being a well-known fact, that many pieces of land have been constantly mown *every year* within the memory of man, and that frequently, not earlier than August, without the least return of dung, or any other manure whatever, save only the assistance supposed to have been given them by the foddering of cattle thereon in the winter, and which in wet seasons has certainly done more harm than good.

Those parts of this district which have a covering of red loam, particularly in Witham Park, and those which lie on the deep sand vein, which runs through Kilmington and Yarnfield, have been much improved by chalk, from Bradley, Long-Knowl, &c. and by this assistance, may be very profitably kept in tillage; but the want of a permanent manure for the cold clays, which comprise the greater part of this district, is a very great objection to the ploughing them at all, and a strong recommendation to the keeping them in a state of pasturage.

Wherever there is, in this cold country an appendage of arable land to a dairy farm, and which is certainly not only useful, but absolutely necessary on account of straw for making dung; care should be taken to prevent the tenant from using any part of the stall dung on the arable land, so as to oblige him to buy lime, rags, ashes, and such like for the latter, and to reserve the whole of the stall dung for the grass land.

Every encouragement should also be given to induce the tenant to under drain the land, or if the landlord has already made the drains, to preserve them. He should also be obliged to mow, and feed the land alternately, and induced by proper cattle sheds, to take his cattle off the wet lands sometime in November, whereby he would not only save treading out his land, but also be enabled to get early grass; he would by that means also be enabled to mow early in the summer, and of course to get a good crop of after

grass,

grass, which he may preserve till a late period in autumn, and by thus shortening the winter *at both ends*, he may be enabled by *art* to reduce it nearly to the length it generally is, in more favored situations, and thereby in a great measure cure the *great natural defect of the country*.

A scheme is on foot for cutting a navigable canal through this part of the county. It is to commence at Poole in Dorsetshire, and to terminate at the junction of the Kennet and Avon, with the Bath and Somersetshire coal canal. If this should be accomplished, there can be no doubt but many advantages would result therefrom.

Exclusive of the articles of coal, corn, &c. which would be conveyed by this canal, the salterns of Lymington, which have for some years ceased to work, would be revived, and the county of Somerset be supplied with salt at a much cheaper rate, and of a quality superior to the Droitwich. The Purbeck, and Portland stone, would be conveyed at an easy expence, and the timber of the forest of Selwood would in return be taken to Portsmouth. In short, the advantages of such a canal are so manifold, that a recapitulation thereof would take up more time than at present I can bestow.

Leaving these forests, and advancing southward, we pass through a rich fertile country, extending from Wincanton through Yeovil, to Crewkerne; here flax and hemp are cultivated in great abundance, the value of which is in proportion to the skill and spirit with which it is cultivated,

A crop of flax greatly depends both on the management of the land previous to sowing, and on the goodness of the seed.

To raise it to advantage it should be sown on new broke up ground, ploughed once, and the surface hacked. It should be harrowed once before sowing, and twice after. Seed imported from Riga, and sold at about fourteen shillings the bushel is to be preferred; and the produce for two or three years may, without change, be sown again; April, and the beginning of May are the months for sowing, and the quantity two bushels and a half per acre.

The great damage done to flax in its growth, is by weeds; and if those people you employ to weed it, be not careful, they may do more harm with their feet, than their hands can do good. At any rate

late the weeds must not be suffered to get head of the flax, for if they do, it will become stunted in its growth, and get to no height.

When the plant is arrived at its growth, and is in full blossom, which in common seasons will be about the beginning of July, it is fit to be pulled, if the grower has a greater regard to the produce of the stalk, than to the seed. However, it is a common practice to injure the whole crop, for the sake of the seed; and to let it remain till the seed begins to ripen, so as to have both flax and seed. In this case the land suffers greatly; for flax seeded is a great impoverisher, but if pulled whilst in blossom, is an excellent preparative for turnips, which should always follow a flax crop, instead of wheat. The great reason why the Irish, and indeed most foreign flax is finer than the English, is, because they pull it early, and sow particular spots purposely for the seed; and perhaps it would be politic in Government to grant a bounty on all foreign flax seed sown in this kingdom, so as to reduce the price of foreign seed nearly to a level with our own; by this, the growth of flax (and with it the linen trade) would be encouraged, which has of late suffered considerable diminution by the restrictions to its cultivation imposed by land owners, under the idea of great injury done to the land by the culture of this plant.

After the flax, there are two methods of working it; the first is called *rating of it*, that is, steeping it in water, in order to loosen the rind, and separate it from the stalk; and the other is called *dew ripening*, which is the spreading it on grass land, and by rain and dew producing the same effect. The early flax is mostly watered, which is done by laying the bundles in a pond or reservoir of soft water, and keeping them down by stones, or any other heavy bodies. In the course of seven or eight days the rind will be sufficiently loosened, and they must be taken out of the water, spread abroad, and dried. In this part of the operation, great skill and attention are necessary; for if it be left in the water too long, the threads become rotten, and useless to the manufacturer; it is therefore more adviseable to take it out *too soon*, than to leave it *too long* in the pits. Those who raise flax for the seed and stalk both, go through an operation called ripling; this is separating the seed from the stalk, by passing the flax through a kind of coomb before it is watered.

watered. These coombs are made of iron, and the teeth are so close that the heads cannot pass through, and are consequently pulled off.

It is observable, that the land on which rated flax is spread to prepare it for housing, is greatly improved thereby; and if it be spread on a coarse, sour pasture, the herbage will be totally changed, and the best sorts of grasses will make their appearance. Having myself cultivated flax on a large scale, and observing the almost instantaneous effect produced by the water in which the flax was immersed, I was induced some years ago to apply it to some pasture land, by means of watering carts, similar to those used near London, in watering the roads. The effect was astonishing, and advanced the land in value ten shillings, or fifteen shillings per acre. This liquid is much superior to animal urine. The practice, I therefore strongly recommend to the cultivators of flax; possibly it may not be a new idea, but I believe it is seldom so applied.

The second method, namely dew ripening, may be carried on immediately after the flax is pulled, or it may be dried and mowed, and in the months of February or March the seed may be stamped from the stalk, and the latter spread on the grass land to ripen.

The principal manures made use of by the growers of flax, are the sheepfold, woollen rags, horn shavings, and lime; and it is no unusual thing for the farmer to find ground, manure, ploughing, and all team work; and the laborer to find seed, and all manual labor, dividing at the conclusion, the produce in a way similar to that before stated in my teasel account. The expence and produce of an acre of watered flax may be thus estimated:

Dr.	£.	s.	d.	*Cr.*	£.	s.	d.
To rent of land, &c.	2	0	0				
To manure . . .	2	10	0				
To ploughing . .	0	8	0				
To hacking . . .	0	5	0				
To harrowing and rolling	0	4	0				
To seed and sowing (Riga) . . .	1	15	0				
To weeding . . .	0	10	0				
To pulling . . .	0	6	0				
To halling to pits and watering. *N. B.* The price of this depends on the distance .	0	10	0	By 40 dozen of flax, at 7s . . .	14	0	0
To taking out of pits, halling, spreading, drying, and housing	0	14	0	By bounty 4d. per stone . . . . (allowing 1s. for expences)	0	10	4
To braking, swingling, and dressing 40 dozen, at 1s. 4d.	2	13	4				
To tythe . . .	0	5	0				
	12	0	4				
Profit	2	10	0				
	£ 14	10	4		£ 14	10	4

To this profit may be added the succeeding turnip crop, and the improvement of the land by the manure; without these, it cannot be considered as very lucrative, for it is precarious, and if a dry season follow the sowing, it frequently happens that the flax does not get to any height, and is scarcely worth pulling. Some people may think the expences over rated, but if they consider that the calculation is made under the idea of an acre *statute measure*, and also that it includes beer, tools, and many other trifling articles of

of expence, they will be disposed to acknowledge it to be correct, at least I can say, that it is drawn from my own experience of its truth.

HEMP.

THE culture of Hemp and Flax agrees in many respects; but in their nature, and form, they are widely different. In flax, the male, and female embrio, are lodged in the same flower; but in hemp the male is found on some plants, and the female on others; they are therefore called *male*, and *female* hemp; that which has only flowers is the *male*, and that which has seeds the *female* hemp. The male is ripe five or six weeks before the female, and they both arise from the same seed.

It requires a deep rich, dry, sandy loam, and abhors a cold, wet clay; a piece of woodland grubbed up generally answers well, fresh land, good tillage, but no dung: even land exhausted with other crops, *if well tilled*, will produce good hemp, and if properly managed, will leave the land as clean as a garden.

The quantity of seed per acre about three bushels, and time of sowing April or May; great care must be taken to keep off the birds, for they are very fond of the seed, and their time of feeding, is principally before sun rise, and within half an hour of sun set. compleat weeding is as necessary for hemp, as flax.

About the beginning of August the male hemp will be ripe, and great care should be taken that the pullers do not trample, and injure the female hemp left standing. It must be gathered into small bundles, and nothing more is necessary than to dry it in a proper manner, so as to make it fit for working.

In managing the female hemp particular regard is to be had to the seed; care therefore must be taken in drying it. After it is tied up in bundles about the size of a yard round, it should be set up in the sun for three or four days, but if the weather be difficult, it may be stacked in small mows of about a waggon load each, where it may remain till it is thoroughly dry and fit to be housed; a little wet does not injure the *stalk*, but it greatly damages the seed. An acre of land will produce from twenty to thirty bushels of seed, and the stalk of the female hemp is more valuable than the stalk of the male. The watering, braking, and dressing of hemp,

is so nearly like those operations on flax, that I shall not detain my reader any longer on this article, and shall only add, that in many cases the crop is more profitable than that of flax.

Between Yeovil, and Taunton, including the parishes of Martock, Puckington, Barrington, Kingsbury Episcopi, Lambrook, South Petherton, Ilminster, Hinton St. George, and the adjacent places, lies a tract of strong, loamy land, from sixteen to thirty inches deep, on a substratum of clay; a more pleasant country can rarely be found. The proprietaries are large, and the estates are mostly held by lives, under the Lords of the fee: there are however many freeholders who possess from one hundred pounds to seven hundred pounds per annum.

The farms are from forty pounds to six hundred pounds per annum, and are composed partly of rich grazing, and dairy land worth from thirty to thirty-five shillings per acre; partly orchards, worth from two pounds to three pounds ten shillings per acre. Sheep walks worth from fifteen to twenty-five shillings per acre; and the arable from twenty to twenty-five shillings per acre.

The rich pasture land is partly grazed with heifers, and partly devoted to the dairy. Few farmers milk their own cows, but they are let to a class of people, scarcely known in other counties, called dairy men. A herd of a good breed will let for six pounds ten shillings per cow; a certain portion of land is devoted to their summer keeping, and a sufficient quantity of hay is provided by the farmer, for their winter sustenance.

This practice of letting dairies, must have originated, either from *pride*, or *indolence* on the part of the farmer's household, and ought in my opinion, to be checked by the landlord.

When the female part of a farmer's family is unemployed (and without a dairy, that must be the case throughout great part of the year) dissipation, folly, and extravagance take the lead, and domestic care, and industry are entirely forgotten. Were I a gentleman of fortune, I would never let an estate to a farmer, whose family was too proud, or too indolent, to undertake the management of the different departments thereof.

The sheep of this district are an *improved* sort of the Dorset, and many considerable ewe flocks are kept, to the amount of four to six hundred;

hundred; they begin lambing about Christmas, and the lambs are weaned in May. After the lambs are shorn, which is at Midsummer, they are worth about fifteen shillings each. The produce of an ewe sold at three years and three quarters old may be thus stated:

	£.	s.	d.
Two lambs, at 15s.	1	10	0
Wool both of ewe and lambs	0	12	6
Folding	0	15	0
Ewe	1	8	0
	£. 4	5	6

The ewes forward with lamb in October, are sold to the London market for the purpose of house lamb, and sometimes bring thirty-five shillings, though folded to the time of sale.

Some farmers buy wedder lambs about Midsummer (shorn) at fifteen shillings, and keep them about twenty-two months; constantly folding them. They are then sold (unshorn) to the graziers occupying the marsh lands, at the price of twenty-seven to thirty-eight shillings each.

	£.	s.	d.
Folding	1	0	0
Wool	0	4	0
Average price sold at	1	12	6
	2	16	6
Deduct first cost of lamb	0	15	0
	2	1	6

The latter stock requires less care than the former, and at the same time enables the farmer to manure more land; for they may be folded through the whole winter, on the pasture land.

The number of sheep kept in this district is immense, and folding unremittingly pursued.

Clover is the grass generally sown, and their course of husbandry, 1st. Wheat, 2d. Turnips, 3d. Barley, 4th. Clover, Vetches, Flax, Hemp, Peas or Beans, and 5th. Wheat again.

The crops of the *large* farmers are greater than those of the *small*, owing to their sowing more turnips, and vetches, and consequently keeping a larger folding stock. Some of the arable land being in common field is in the following course, 1st. Wheat, 2d. Barley, 3d. Clover, Vetches, Potatoes, &c. and then Wheat again. These crops are comparatively small; wheat is found to succeed better after flax, or hemp (*provided they be not seeded*) than after potatoes, or beans.

Irrigation is not much practised; there is indeed near the town of Ilminster some land watered with the wash of the town, the good effects of which are manifest. In general it is thought that the water issuing, or washed from poor hills, is of little service; and they say that watering in the summer, will rot the sheep.

Fallowing is not practised; the prevailing opinion is, that corn crops equally good may be obtained after turnips, clover, potatoes, peas, vetches, beans, hemp, flax, &c. (if well manured and kept clean) with those after a compleat *summer fallow*. "These are enlightened farmers!"

Let any man visit this country, view their crops, and the condition of the land, and many arguments will not be necessary, to make him an *antifallowist*, at least on soils like these.

The large farmers carry all their dung on their *pasture* land (excellent!) and support their arable by folding, lime, horn shavings, rags, &c. but the small farmers act directly the reverse; the large farmers all plough with oxen; the small farmers with horses. A renter of sixty pounds per year, must keep *three* horses, for he cannot plough with less; and one of five hundred pounds per year will not keep more than *eight*; here is a comparative saving of twenty horses, and justifies my former predilection for large *corn* farms.

The largest uninclosed, upland, common in this district, is the forest of *Neroche*, containing about eight, or nine hundred acres.

The right of stocking on this common, belongs to the parishes of Ilminster, White Lackington, Donyat, Broadway, and others; and in regard to quantity, is unlimited. For want of proper draining, this common rots the sheep, and is of very little value. If inclosed, drained, and cultivated, it might be made worth from twelve to twenty-five shillings per acre.

The

The land in open field, is for the most part in small pieces of one, two, and three acres each; were proper exchanges made, and the same divided into pieces of ten or twelve acres, it would be advanced in value eight or ten shillings per acre.

This country is very populous, and the wages low, notwithstanding there are many considerable manufactures.

Men's daily labor in winter is 1s. per day, with cyder.

Do. . . summer is 1s. 4d. . Do.

Women's Do. . . winter . . 6d. . Do.

Do. . . summer . 8d. . Do.

Mowing grass, 1s. 4d. per acre, and one gallon of cyder.

barley, 1s. . . Do. . . . Do.

Reaping wheat, 4s. . . Do. two gallons and a half of cyder,

And all other labor proportionably cheap.

Great attention is paid to draining by all the sheep farmers. The common drains are sixteen inches wide, from twenty to thirty deep, and are for the most part *turf drains*; when the turf is strong, they are found very durable.

Paring and burning are universally reprobated.

There is plenty of wood in the hedges, and on the pollard trees, but very few timber, or coppice woods; and yet the country at a distance looks like one continued grove; owing to the numerous *orchards*, every where dispersed. The cyder made in the neighbourhood (particularly in the parish of Martock, which perhaps is one of the largest parishes in the kingdom) is not only excellent in *quality*; but in *quantity*, beyond calculation; from hence the northern part of the county, less abundant in this article, is supplied, and *coal* taken back in return.

There are considerable manufactures of narrow cloth from four to seven shillings per yard, the quality of which, both for appearance, and duration, is not equalled in the kingdom. In these, great numbers of men, women, and children, are employed, but the country being very populous, there is no want of hands in agriculture.

There are also many manufactures of coarse linen, such as dowlas, tick, &c. also of gloves, girt web, &c. all of which give animation, wealth, and comfort to the inhabitants of this rich, and delightful region.

On the whole, the practices of this district deserve imitation; they keep their grass land in high condition, and their arable looks like a garden. They are particularly attentive to the eradication of weeds, and their turnip, and indeed all their fallow crops, may vie with any in the kingdom.

Lately some of the *Leicester sheep* have been brought into this neighbourhood, by Mr. Pester near Yeovil, and by Mr. Lowman near Crewkerne. The carcases of some have been sold in Crewkerne market, and were remarkably fat, and highly esteemed for their delicious flavor; but with all these good qualities, if they cannot walk a mile to the fold, they never will gain much ground in this country.

Passing from Crewkerne to the southward, you enter one of those excavations, or large vales, for which this county is remarkable; comprizing the villages and hamlets of Clapton, Seaborough, Wayford, Woolmingston, Purtington, Cricket-Thomas, Winsham, &c.

Within this vale, commences a district of twenty miles square, (one half in Somerset and the other in Dorset) which ought to be noted for supplying the summer markets at Exeter with *weanling calves*. These calves drop in February, and March, are suckled by their dams for three weeks; when they are housed, and suckled by hand with warm skimmed milk until the month of May; at which time they are sold to the drovers, for the market beforementioned. At Exeter they are bought by the Devonshire farmers, and depastured for three or four years, when they are disposed of to the Somerset graziers, who fatten them for the London market: thus we see that part of what is called the Devonshire breed of cattle is the produce of a small district of the counties of Somerset and Dorset; a breed which will probably, ere long, be generally acknowledged to be equal to any other in the kingdom.

The dairy at Ayshcombe farm, within the parish of Wayford, is a good specimen of the Devonshire breed *.

* Mr. White also of Ilchester has given notice to the Agricultural Society at Bath, that he intends to exhibit, for the premium offered by that Society, a young bull of his own breeding, together with the sire and dam of the *Devonshire* race; and all breeders of horned cattle, are challenged by him, to produce, at the said exhibition, any three of equal value for stock.

The

The arable lands of the parishes of Wayford, Winsham, &c. are troublesome in tillage, and but moderately productive.

The district here mentioned, is justly famous for its rich butter, which is highly admired in the London market, under the denomination of Dorsetshire butter; as well as for its sweet, veined skimmed-milk cheese (scarcely an oleagenous particle in it) with which Honiton market, and from thence Exeter, and the greatest part of Devonshire is supplied.

SOUTH WEST DISTRICT.

THE agricultural practices of this division of the county merit the attention of all travellers.

The climate, particularly of that part which is called the *Vale of Taunton Deane*, is peculiarly mild and serene; and the soil highly fertile and productive. The eye is agreeably relieved by a judicious mixture of arable, and pasture; and if it be contrasted with some parts of the Northern District, it may emphatically be called the Land of *Canaan*.

There are however certain parts north west of the said vale which are mountainous, and subject to that mutability of weather, and moisture of air, generally found on elevated situations.

Quantock, Brandon, and Dunkry Hills, may be noted for their wild, and rugged scenery; and the part which is called *Dunkry Beacon*, is the highest land in the whole county.

This district may be subdivided into two lesser districts, including 1st. the parishes of Taunton, Wilton, Trull, Pitminster, Bishopshull, Bradford, Buckland, Ninehead, Wellington, Sampford, Hill-farrence, Oake, Staplegrove, Norton, Cheddon, Thurloxton, North Petherton, Monkton, Kingston, Cothelston, Bishop's Lidiard, Heathfield, Halse, Ashpriors, Fitzhead, Milverton, Langford, Budville, Thome, Bathielton, and Runnington.

These parishes comprehend what is generally called the *Vale of Taunton Dean*.

SOIL.

The soil is a rich loam, interspersed in some places with clay, as part of Bradfield, Buckland, north side of Wellington, part of Sampford, Hill-farrence, Ninehead, Oak and Heathfield; and in other parts with sand, or a lighter mould; as Kingston, Bishop's Lidiard, Halse, Fitzhead, Milverton, Langford, Thorne, and Runnington.

These hundreds, together with that of North Curry, are principally held under the churches of Winchester and Wells, and the lands are chiefly possessed by small proprietors.

The

The major part of the five hundreds of Taunton Dean, consists of customary lands of inheritance, held under the Lord Bishop of Winchester, paying an annual rent. These customary lands pass by surrender, paying to the Lord, fines and heriots, on alienations; there are also many singular customs, within the manor, difficult to be understood, even by the tenants themselves. The descent is that of *Borough English*, with variations. The wife is heir to her husband; and it is no uncommon thing, for a widow on the death of her husband, having children by him, to marry again, and carry the estate into her second family, to the disinheritance of her first.

If the fines, heriots, and other incidental incomes within the manor, were commuted with the Lord, for an increase of the annual high rents; the lands enfranchised by Act of Parliament, and to pass in descent as other lands of inheritance by common law; the income to the bishoprick would be more certain, and the present inconveniencies avoided. In course of time, the proprietors would enlarge their possessions, and the manor would be brought into farms of sufficient extent for the employment of a team; which is not the case at present.

The dry uplands are devoted to tillage, and the rich lowlands to grazing or dairy. On the former wheat, beans, peas, and vetches are the principal crops; and those lands which are capable of improvement by watering, (of which there is a considerable proportion) are so managed, as to produce excellent spring feed for ewes and lambs, together with abundant crops both of hay and after grass, but the water being frequently scarce, the water-courses are a perpetual source of litigation.

There are very few estates entirely in pasture. Every little farmer is fond of the plough; but in most of these small farms, where there is not sufficient employment for a team, the occupiers situation is not better than that of a day laborer.

Much of the arable land will spontaneously produce a variety of excellent sorts of grass, and shortly become good pasture, if laid down in an husbandlike manner. The artificial grasses here sown are broad and white clover, trefoil and ray grass, called here *ever-grass*. Many farmers think the latter impoverishes the soil; but they substitute no other perennial in its stead.

The stock is principally neat cattle and sheep; the former of the *North Devon*, the latter of the *Dorset* breed, both excellent of their kind. Many graziers prefer the oxen bred in this district, to those of Barnstable, South Molton, Torrington, &c. and the sheep are considered as equally profitable with the Leicestershire breed which have been introduced, but do not gain ground.

The dairy farmers are accustomed to take in sheep to keep during the winter, (*viz.*) from the beginning of October and November, to the 5th of April; the usual prices are for hog sheep five shillings, and for ewes seven or eight shillings per head. The Dorsetshire flocks are greatly improved by this custom, and the price of keeping is on the advance.

Rotation of crops. On the clayey loam, 1st. Fallow manured with ten cart load of dung, and sixty or eighty bushels of lime per acre, mixed with the earth of the headlands.

2d. Wheat	5th. Clover
3d. Beans	6th. Clover
4th. Barley	7th. Wheat

The Grub has of late years so attacked the wheat sown on the clover lays, that this practice is in some measure discontinued.

In the foregoing rotation, the crops are good; seldom less than twenty-five or thirty bushels of wheat, and the same quantity of beans. The beans are planted promiscuously, after the rate of five bushels of seed to an acre; and after beans they sometimes sow the winter vetch; feed it twice in the spring, and prepare the land for wheat.

In no county are the farmers more attentive to the mode of sowing wheat, or laying up their lands in such form, as to secure them from injury by winter rains; and the quality of the grain is such, as to induce the farmers of Sussex, Hants, and Berks, to purchase it for *seed* at Weyhill Fair, at a great price; seldom less than ten shillings and six-pence per bushel.

An implement called a mattock is much used here, and is peculiar, I believe, to the West of England; it is of great service in sowing wheat and peas on clay lands; the ridges consist of six furrows, with a furrow left unploughed between each ridge, which is called a *comb*. The labourers with a mattock chop the furrows abroad,

abroad, and bring part of the earth against the comb; the seed is then sown and harrowed with two horses abreast, each horse going on the comb; they then (with a plough called a combing plough) divide it; the plough being conſtructed to throw one half of it as a furrow to the right, and the other to the left; the laborers then go over the ridges a second time with their mattocks, and strike those furrows towards the middle of the ridges, which effectually covers what grain the harrows may have left uncovered, and leaves the ridges in the shape of a neat asparagus bed.

This method is very well calculated for clayey and wet lands, where it would be dangerous for the cattle to trample on the ground.

An acre a day is the usual quantity ploughed.

On light loam the following rotation is practised.

1st. Wheat. 2d. Peas. 3d. Barley. 4th. Winter Vetches, which produce a good feed by the latter end of March, or beginning of April, and are fed a second time, at the latter end of May; the land is then ploughed once, and sown with turnips, which are hoed and consumed before Christmas; and 5th. Wheat again.

A better system is adopted by some, *viz.* substituting barley as the fifth crop on which clover is sown. The clover is well manured the ensuing winter, spring fed, and cut in the autumn for *seed*; after which wheat is sown on one ploughing as the seventh crop.

In the parish of Bishop's Lidiard they frequently plough their wheat stubble soon after harvest, give it a good dressing of rotten dung, and let it lie in ridges during the winter. In the month of February or March they sow carrots, which are fit to be dug up the latter end of July; they then sow turnips or plant cabbages, and after those sow barley and grass seeds. On rich sandy loam this husbandry cannot be too much extolled.

It is not the general practice within these hundreds to give the arable land a compleat fallow. They more frequently introduce what they call *a pin fallow*, which is ploughing after vetches, clover, or beans, two or three times, to prepare for a succeeding crop of wheat. In this way they put on a good dressing of rotten dung before the last ploughing.

On some of their land they have fallows, and wheat alternately, manuring with lime.

A mixture of the earth of the headlands with lime and rotten dung, is the general manure for the ploughed lands, and soapers ashes and rotten dung *alone* for the pasture.

The method commonly adopted for mixing the earth, lime, and dung together, is to carry the dung and spread it on the headlands, or on heaps of earth collected on different parts of the field, and then put the unslaked lime on the dung, covering it up with earth till it is slaked, and fit for mixing; but as the lime is by this method dissolved upon the dung, the richest part of the manure is consumed by the lime, or carried off in vapour.

The ploughs, drags, harrows, rollers, waggons, and carts now used, are much the same as they have been for sixty years past. Of late indeed the double furrow plough has been introduced, and seems to gain ground; all who have tried it, acknowledge its superiority for light soils, and for ploughing the barley or turnip land.

Oxen are principally used, and are for the most part worked in yokes; some however are advocates for working singly in harness, and there can be no doubt but oxen may be used more to advantage this way, than the other. The shape of an ox's breast is peculiarly ill calculated to bear the pressure of the bow, and when worked hard in pairs, they are apt to get into a habit of leaning against each other; by which their progressive motion is much impeded. But of all methods, that which is practised in Portugal, Flanders, some part of Ireland, and other countries, namely working them by the *head* and *horn*, is, in my opinion, the best.

I once saw on the farm of Lord Shannon, near Cork in Ireland, three ploughs at work on a strong soil, drawn each by a pair of oxen abreast, in a manner similar to the application of horses in Norfolk. The harness consisted of a long rein of untanned leather which was fixed to the yoke, and then intersected the horns two or three times; after which it passed from the back of the horn over the forehead; to prevent the bruising of which, a *matting* was placed of sufficient thickness, to secure it from injury. In this way the animals *pushed*, rather than *drew*, and with apparent ease

ploughed

ploughed an acre a day each without a driver, turning at land end, with as much docility, as horses. His Lordship informed me, that two moderate sized oxen, had some time before, drawn home from the corn field, (a distance of two miles) in a French skeleton cart, as many sheaves of wheat, as weighed upwards of three ton, and with no apparent extraordinary exertion.

Drilling has been tried in this part of the county, particularly by two farmers of Halse, and by Mr. Anderdon of Henlade. On light poor soils, it has been found to answer, but in rich strong loams, the corn has proved too rank.

Mr. Anderdon has drilled all his corn for twenty years past. At first he formed an experimental field of four acres, divided into several equal parts, where he tried drilling various crops, in comparison with sowing them broadcast, and finding his drilled and horsehoed crops of beans, wheat, peas, turnips, &c. sufficiently encouraging to proceed to acres, he has continued the practice ever since; by which means he has certainly improved his land, and eradicated weeds.

He at first used Willey's drill plough for sowing double rows, which is to be seen in the repository of the Society of Arts in London.

With this, he drilled two rows, about a foot asunder, on five feet ridges, leaving intervals of four feet for horse hoeing. Since, he has drilled single rows on ridges of three feet, by which means he keeps his ground cleaner, and has a produce equally good with the double rows. Of wheat, he generally reaps from fifteen to twenty-four bushels per acre, which is about the average of the wheat crops of his parish sown in the *broadcast way*.

In the year 1791 he reaped from one field twenty-nine bushels per acre. The field was drilled in single rows, three feet asunder; this may be called the Tullean method of drilling, and was practised many years ago by that enlightened agriculturist Jethro Tull. The prevailing method of the present day, is to drill at intervals of six, nine, or twelve inches. Though the practice of drilling corn has been highly extolled by some, and astonishing instances of produce recorded, yet the writer of this report cannot find that it gains ground in the county of Somerset. If the advantages result-

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ing from the practice were so great, as they are represented, surely practical farmers would adopt it. The saving of seed, would alone be a sufficient inducement, and in a national point of view would be worthy the attention, and encouragement of the legislature. *Experience*, that best guide in all agricultural pursuits, has shewn that there are substantial objections to the practice, and they may be comprised under the following heads:

1st. The difficulty in getting compleat drilling and hoeing machines, and laborers skilful enough to conduct the process.

2d. The danger of having too *thin* a crop, whereby it is rendered more subject to rust, blight, mildew, and the effect of wind, than *thick* broad cast crops.

3d. Rankness in the straw, subjecting it to drop before the grain is perfected.

4th. Lateness, and irregularity in ripening.

Let us now state the advantages:

1st. Saving of seed.

2d. Strength and vigor communicated to the land by well-timed hoeings.

3d. Destruction of weeds.

How far these advantages counterbalance the disadvantages, I shall not take upon me to determine. I can only say, that my trials (and they have been repeatedly made on a large scale) have been uniformly unfortunate. In dry seasons, the drilled corn, particularly barley, has been not only *late*, but *unewen* ripe, and this is an unsurmountable obstacle to the sale of it, for the purposes of malting; and in wet seasons the growth of straw has been so encouraged by the hoeing, that it has dropped before harvest, and the grain has been but of little value. Last year I divided a ten acre piece, and drilled part with white Poland oats in equidistant rows of one foot, after the rate of one bushel and a half, and some part after the rate of two bushels and a half per acre.

This was done the beginning of April; three weeks after I sowed *broadcast*, the remainder of the field, with the same sort of seed, after the rate of six bushels per acre. Though sown last, the *broadcast* was ripe a fortnight before the *drilled*. The grain was of better quality, regularly ripe, and the produce ten bushels per acre more.

more. The drilled crop, *sown thick*, was better than the other. Were I to renew my practice of drilling, I would (particularly in spring crops,) deposit nearly double the quantity of seed recommended by the advocates for drilling, and at least a month before the usual time of sowing broadcast.

For beans, peas, vetches, turnips, potatoes, carrots, and all gross growing plants, and roots, *drilling* cannot have a more warm advocate than myself; and with respect to wheat crops on light sandy soils that are subject to weeds, the operation of hoeing which necessarily follows that of drilling, may frequently be of essential service not only to the wheat crop, but to the succeeding ones; but with respect to corn in general, and particularly *barley*, and *oats*, I must for the present demur, at least, till I have seen better proofs in favor of the drill system. Perhaps indeed, the ill success which I have experienced, and particularly the late ripening already mentioned, might have been owing in some measure to the system of saving seed being carried to too great an excess.

I cannot dismiss this subject without paying a just tribute of approbation to that ingenious mechanic and enlightened agriculturist, the Rev. J. Cooke, whose drill machine, and horse hoe, are well adapted to the purposes for which they are designed. Though we cannot accord on the subject of the drill husbandry, I must give my unqualified assent to his general principles respecting the preparation of land for arable crops; and I verily think, that his instruments called the *skuffler*, and *scarifier*, are the best contrivances I ever beheld, both for the pulverization of the soil, and the destruction of weeds.

The usual seed time for wheat is November, but it is frequently sown after turnips, so late as January or February, notwithstanding which the crop is ripe, and harvested in a favorable season, by the middle of August. Colored peas are planted about Candlemas, white peas at Lady Day, horse beans from Candlemas to Lady Day; oats are sown in March, barley in April and the beginning of May; peas are harvested rather before wheat, barley at the end of August, oats and beans in September.

Of wheat they generally sow two bushels, peas four bushels, beans five bushels, planted by women with dibbles or setting sticks promis-

promiscuously all over the land, and the crop is seldom weeded; oats five bushels, barley three bushels and a half.

Of late a few farmers have drilled their beans in rows twenty inches asunder, horse hoeing them; others thirteen or fourteen inches asunder, hand hoeing the alley, at the expence of four shillings per acre; in both these ways, they have deposited nearly the same quantity of seed, as in the promiscuous planting, especially in the closer rows.

The produce has been uniformly superior to those planted in the old method, and the land kept cleaner for ensuing crops.

The common fields in this district are so few, and the uninclosed wastes (a portion of Blackdown and Pickeridge hill excepted) so insignificant, that little improvement can be made in that way. There are a few low common meadows, where frequently the hay crop (provincially "the tonsure") belongs to one man, and the after grass to another, by which means such lands are totally neglected, being neither drained, nor manured.

The waste lands on that part of Blackdown which lie within this county, are supposed to exceed a thousand acres; they are so situated on the declivity of the hill, that floats might easily be made to convey the water, issuing from the springs, over the land.

And if the water should not be found to fertilize, it would not be difficult, or expensive, to convert these floats into drains, and thereby render the ground more dry, and healthy.

The occupiers of estates contiguous to these hills, stock them with young cattle in the summer months, but the distant tenants reap little or no benefit.

The price of labor throughout the whole district is nearly the same, (*viz.*) Men through the year one shilling per day, and beer; women for weeding and common work, six-pence per day; and for mattocking the wheat and hay-making, eight-pence per day; but contract labor is gaining ground daily, and in this way men will earn four-pence or six-pence per day more than at day work.

Excepting some peat turf on Blackdown, there is scarce any fenny land to be met with. On soils any way inclined to a weeping surface, great attention is paid to draining, which is done by digging

digging the drains deep, filling part of them with clean picked stones, and covering with earth to the depth of six or eight inches. Where stones are scarce, shoulder trenching is practised, but these are liable to be filled up with the workings of the mole, unless water constantly runs in them *.

All tenants are restricted in their leases from paring and burning, and the practice is scarcely known.

This division does not abound with *oak*, but *elm* grows in the hedges, and if their heads are not unfairly lopt, get to a size sufficiently large for the keels of ships of war. For the most part they grow from the inchors or suckers of the neighbouring trees; probably some from seed. Few are planted from nurseries, nor is there often any occasion for it, elm being the spontaneous production of the country.

Their heads or side branches are seldom mutilated, it being underſtood that the stem swells, in proportion to the sap that is drawn from the root to the head.

PROVISIONS.

The price of provisions is comparatively moderate. In Taunton the best beef, mutton, veal, and lamb, may be had by agreement with the butchers, at four-pence per pound the winter, and three-pence halfpenny the summer half year; turkey, three shillings and six-pence; goose, three shillings; ducks, two shillings and sixpence a couple, and fowls, two shillings; fish, at certain times, very cheap.

* The great skill of draining land consists in cutting off the water at its source. One deep drain judiciously placed, will frequently preclude the necessity of any other; in most instances such a drain should be near that part of the declivity from which the springs issue. This depends on the position of the clayey substratum, and on the height of the reservoir from whence the springs are fed. A judicious survey of the adjacent land, and a liberal use of the borer are necessary; preliminaries to a cheap and effectual remedy for wet land, and there are few men in the kingdom possessed of equal skill in this department of agriculture with Mr. Elkington of Warwickshire, whose fame is not confined to the county in which he lives, but is known and acknowledged in many parts of the kingdom.

LEASES.

By the custom of the manor of Taunton Dean, the tenant is not, without a licence from the Lord, to let his customary lands for more than a year and a day; but to encourage good husbandry, it has been usual of late years to grant rack rent leases for seven, fourteen, or twenty-one years.

The tenant covenants with the landlord, not to sow rape, hemp, or flax; these crops being considered as great exhausters, making no return in manure. It has also been common to allow the tenant church and poor rates, but it is to be doubted whether the poor are in this case better provided for, although the rates for their maintenance increase; for the occupiers, when no ways interested, are apt to be remiss in looking into the poors concerns.

Of late years this burthen has been thrown on the tenant, by way of raising his rent.

At the commencement of the term, it is usual for the landlord to put the premises in compleat repair; after that, the tenant finds reed, spars, and carriage of materials during the term, and the landlord timber, stones, and lime. The handicraftsmen are paid between them.

In this way the landlord and tenant being mutually interested, the expence of repairs is lessened, and the buildings are kept in better order.

The tenant also covenants to take care of sapling and timber trees, and to carry one hundred and twenty horse seams (about twelve cart load) of dung, or fifteen hogsheads of lime, or a proportion of both mixed with earth on every acre of land, converted to arable, and to take but three crops of corn, before the same quantity be renewed. He also covenants never to sow two crops of wheat in succession, nor to convert to tillage any maiden or old pasture without leave, under the penalty of five pounds an acre per annum for the remainder of the term.

MANUFACTURES.

About a century ago the woollen manufactories in the town of Taunton were in a very flourishing condition, and of course some of its benefits devolved to the agriculturist; but of late years the warmth of party at the elections of their representatives in Parliament has ran so high, that it has not subsided from one election to another; by which means manufactures declined, and have been removed to Wellington and other places. So that it may fairly be inferred, that if the right of election to members in Parliament has been injurious to any borough in the kingdom, it has been so to this.

There are, however, some hopes that trade may revive here, as the carding and spinning machinery have been lately introduced with considerable spirit, and perseverance. Some gentlemen in this town have lately formed a connection with the patentees possessing the secret of making cloth without either spinning, or weaving; and it must be acknowledged, that the samples they have exhibited, give flattering prospects of success.

Though the trade of Taunton has declined, yet considerable manufactories are carried on at Wellington, Wiveliscombe, and other places; and many thousand hands are employed therein.

Before I quit this rich, and delightful vale, I must not pass by unnoticed, their orchards, from which cyder is made in the highest perfection. There are many gentlemen in the neighbourhood of Taunton, who sell their best cyder for five or six pounds per hogshead; and it is supposed that they possess an art, peculiar to themselves, of conducting the fermentation, and thereby preserving a rich, and delicious flavor. The best fruit delights in a strong clayey soil, and it is common to mix a certain quantity of bitter apples, which add much to its quality for keeping; but unless great attention be observed in making, the labor is in vain; for cyder requires much greater nicety of management, than malt liquors. The apples are suffered to fall off the trees, or when tho-

roughly ripe, are picked with great care *. They are then put in heaps to ferment, and remain in that state for three or four weeks; after they are ground, and the liquor is expressed, it is suffered to remain in tubs, from thirty to forty hours, when a scum, or froth, will rise on the top; this they narrowly watch, and when it breaks, they rack for the first time into vessels; after which unremitting attention is necessary to prevent *excessive fermentation* by early and frequent rackings.

Where the natural soil is not good of itself, such manure should be mixed with it as best suits its temper.

If the soil be a cold heavy clay, horse dung, coal, and soapers ashes, will bring it to a due temperament.

It it be light and hollow, marl, or mud from ponds and rivers, highway dirt mixed with lime, cow dung, &c. will mellow and inrich it, and if the spade be occasionally employed to dig around, without wounding the roots, a fruit tree may be made to bear more abundantly, and to produce richer fruit.

Improvement of the heads is also of as much consequence as of the roots; and this should be particularly attended to in the early growth of apple trees. This is reckoned a very material part of tree husbanding, for according as the head of the tree is first trained, so it will grow in a form more or less regular. Even in old orchards, judicious pruning has frequently made unfruitful trees, bear in great abundance.

The second division of this district, includes the parishes of Combflory, Bagborough, Stowey, Stocourcy, Crowcombe, Stogumber, Williton, Watchet, Dunster, Minehead, Porlock, Timberscomb, Cutcomb, Withy Pool, Winsford, Dulverton, Wivelscomb, &c. &c. together with the forest of Exmoor.

The soil of some part of this district is but little inferior to that of the former, but the hills, and forests, are for the most part left

* I would here particularly caution all farmers possessing orchards, not to fall in with the usual custom of beating down the apples with sticks.

Early in the autumn the buds for the succeeding year are formed, and being tender, are soon destroyed. To this violent attack on the branches, may in a great degree be attributed the incapacity of trees to bear fruit two years following.

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in a state of nature. The corn land is in general good, and the watered meadows in the parishes of Crowcombe, Stogumber, Monksilver, Nettlecomb, Dinniford, Dunster, Dulverton, &c. are as good as any in the county. If we appreciate land by its capacity to keep stock throughout the year, *watered meadows* are invaluable, and it is to be hoped that the different reports, which will no doubt be sent to the Board of their importance, will induce a general application of water, wherever it be of good quality, and there is a possibility of conveying it. A great part of these watered meadows lie on steep declivities, and as the water passes quickly over them, and never lies stagnant, not a rush can be seen; this is not always the case in *low* water meadows, which for want of proper draining are much incommoded by them. Meadows which lie in a low situation and nearly on a level, should be thrown up into convex beds about thirty or forty feet wide, along the ridges of which the water should be conveyed, flowing regularly at the different outlets, and having a free passage in the trenches lying between the beds.

The expence of doing this seldom exceeds six or seven pounds per acre, and the benefit is frequently twenty or thirty shillings per acre per annum.

Excepting those instances where water passes through a town, or after sudden floods carries with it rich particles of vegetative matter, the lands receiving it near the spring head, are supposed to be the most benefited, and the quicker it is made to pass over the land, and the greater the *impetus* given by a large quantity thrown at once, the quicker, and more powerful are the effects.

The first watering commences in November, and is continued with regular intermissions from that time to February. These meadows are frequently, in this temperate climate, fit to receive ewes and lambs, as early as Candlemas, and a constant and regular succession of food from that time to the beginning of May, enables the farmer to view his flock with the utmost complacency, and to look with pity on his neighbours, destitute of such a resource in these trying months.

At the beginning of May, the land is unstocked and watered; after six or seven weeks they mow from thirty cwt. to forty cwt. per acre.

Estimate

Estimate of the value of such land.

	£.	s.	d.
Spring feed from Candlemas to May-day	1	5	0
35 Cwt. of hay per acre, at 30s. per ton	2	12	6
After grass to November	1	1	0
	4	18	6

Considering it as connected with a large sheep and corn farm, all estimates must be below its real value; for it is well known, that according to the probable plenty, or scarcity of food in the months of February, March, and April, does a farmer apportion his stock for the whole year. Should turnips fail, his only resource is the hay mow; his ewes suffer, his lambs become stunted and of little value. His meadow ground devoted to the scythe is *spring fed*, whereby he suffers a diminution of ten hundred of hay per acre. These are but a few of the many evils attendant on a deficiency of food in the months beforementioned, and must raise the importanee of water meadow in the eyes of all discerning husbandmen; beside, these lands require no dressing, but will preserve an undiminishing vegetation from year to year, and will enable the farmer by means of the sheepfold, to enrich his other lands without injury to these *.

As the different modes of irrigation have been long before the public in a treatise published by Mr. Boswel, of Piddletown in Dorsetshire, and by other writers in different parts of the kingdom, I shall not further enlarge upon this subject, than merely to caution

* On the demesne of J. F. Luttrell, Esq. of Dunster Castle, a large tract of land in a convertible course of tillage is manured with water. The usual rotation of crops, is 1st. Wheat on the ley. 2d. Turnips. 3d. Barley and artificial grasses.

It is then suffered to remain in pasture two years, and during that time it is at stated intervals regularly flooded by a stream descending from the adjacent hills.

The course is then renewed, and this has been the constant practice for many years.

The produce has been in general very considerable, (*viz.*) of wheat forty or fifty bushels, and of barley fifty and sixty bushels per acre.

the farmer, unexperienced in this branch of improvement, not to feed with *sheep* in the *autumn*; for, though it may be done with the utmost safety in the spring, it is frequently fatal in the *autumnal* months.

The farms in this division are rather less than in the last, but the husbandry is much the same, only there is more land in tillage. The mountainous lands are uncultivated, and are depastured with sheep and young bullocks.

In the vicinity of these uncultivated hills, *viz.* at Bicknoller, Elworthy, Brompton Rolph, and Old Cleeve, oats are the principal corn crop, barley and wheat are grown but on a small scale.

The rotation of crops varies from that of Taunton Dean. Here wheat is generally sown on the ley, and none but very stiff land is fallowed. Turnips are much cultivated, but they are very lavish in the consumption, giving too large a space of ground to the sheep at a time, making thereby great waste.

There are many coppices (chiefly of Oak underwood) on the declivities of Quantock and other hills, but they are under no system of management. Their value, at present, of twenty years growth is from four to ten pounds per acre.

Many considerable manufactories of different kinds of woollen goods are carried on with great success, and afford employment to the inhabitants in every stage of life, but they are accompanied with a gradual increase of the poors rates.

FENCES.

The beech hedges, around Dulverton, Dunster, &c. are not only beautiful to the eye, and an excellent fence and shelter, but are a source of annual profit to the proprietor.

The banks on which they are planted, are six or seven feet high, and between four and five feet wide at the top; the mouldering of the sides is frequently prevented by a dry stone wall, four feet high. There is no ditch, and the hedge consists of three rows of beech, planted on the top of the bank, at about one foot distance. Their growth is very rapid, and they seem to defy the destructive qualities of the sea breeze, so fatal to the white thorn and most other plants;

plants; when at maturity the middle row is cut to the ground, and the outside rows plashed. The quantity of fuel supplied by these hedges is very considerable, and the only objection that can be made to them is, that the earth used in the construction of the banks is so considerable a quantity, that a large portion of the field is robbed of its vegetable matter, and rendered for some years unproductive.

RHUBARB.

At Williton near Watchet, the Turkey rhubarb has been cultivated, and brought to great perfection by Mr. Ball, surgeon, of that place. His management of this root having been particularly described in the annual publication of the Society of Arts, &c. I shall not notice it here, and shall only add, that equal attention and success have attended the exertions of James Bernard, Esq. of Crowcombe in the same article, though in a different climate and soil.

It cannot be totally foreign to our purpose to mention the herring fishery of Porlock, Minehead, and Watchet, which for some years past has been carried on to some considerable extent.

The lower classes of people have, in consequence, obtained a cheap and wholsome food, particularly since the legislature has taken off the duty on salt, used in curing these fish, for *home consumption.*

It were to be wished that this fishery could be further promoted and encouraged, as it would be a means of furnishing employ during the winter, for those sailors who are engaged in the lime stone, and culm trade, during the summer months.

Their frequent journies across the Channel, make them excellent pilots, and a hardy and skilful race of sailors would occasionally recruit that grand bulwark of the nation, the *Royal Navy.*

In an agricultural survey of the county of Somerset, it will naturally be expected that particular notice should be taken of the forest of Exmoor; its vast extent, and capability of improvement, render it an object well worthy of attention.

This

This forest extends from north to south about eight miles, and from east to west ten or twelve; containing, according to an accurate survey lately made, about nineteen thousand nine hundred acres. Nearly at the centre of this large tract of land, is an estate called *Simonsbath*, inclosed, and consisting of about two hundred acres, with a dwelling house, licenced and frequented as an inn; and all offices belonging to it convenient for the management of the farm, and transacting the concerns of the forest. Here the forester has an annual sale for the small horses that are bred on the surrounding hills; and here also during the month of May, he meets the farmers from all the country round, who enter in his books the number of sheep which are depastured with him, at the rate of five pence per head. The small horses (in the whole upwards of four hundred) are not taken into better keeping, nor to more sheltered grounds, during the severest winter. When the snow covers the forest to the depth of many feet, these hardy animals are seen in droves, traversing the little vallies and sheltered parts, gathering their scanty fare from the banks of rivulets, and warm springs, but the sheep are almost all driven off for the winter, in the months of November, December, and January, according as the season is more or less severe.

The river Barl runs adjoining to this estate, but resigns its name, on being joined by a small stream about two miles to the east called the Ex. This stream takes its rise in a low swampy spot of ground, about two miles north east of Simonsbath, and runs to the other end of the forest; becomes when joined by the Barl, a very considerable river, and in its passage to Exmouth passes by Bampton, Tiverton, and Exeter, to which, and Exmouth, it seems to give name, as well as to this extensive forest.

Into these rivers, Barl, and Ex, a number of small rivulets from every direction are constantly pouring their streams, and, should ever a general inclosure be attempted, offer an opportunity of watering some hundreds of acres. The water in these rivulets seem of the purest kind; it is not impregnated with any noxious mineral, and the soil, beyond any doubt, is favorable to vegetation.

On the summits of the hills, and especially on the west, and north, are *swamps* of many acres extent. They are cut up as turf, at the rate of eight-pence or twelve-pence per thousand, paid to the tenant of the forest, and would be an inexhaustible stock of fuel to any inhabitants settled on the better part, as well as of black peat for burning lime, working iron, smelting ore, or any manufacture where fire is used.

The roads are in general, as might be expected in so large a tract of land without inhabitants, very bad, and in some places scarcely passable. But the whole abounds with materials to make them firm and comfortable, at an easy rate, and few bridges would be necessary.

Excepting a few willows and thorns by the sides of the rivulets, not a tree nor a bush, out of Simonsbath estate, is to be seen on the whole forest; but plantations of most kinds need no more shelter, nor better soil, than is to be met with here. Oak, firs, beach, and elm, would thrive in all the parts capable of tillage. And a very large proportion of the whole, needs but the spirit, and the fortune of some one, or more of our wealthy gentlemen in England, whose attention, if turned this way, sanctioned by the royal proprietor, would render the forest of Exmoor in a few years, as fair a prospect as the surrounding country; and not an useless, and void space as it now is, in the map of the county of Somerset. The term useless, however, may be said by some to be misapplied, when the quantity of sheep is mentioned, that is depastured on it. From the best information to be had, twenty-two thousand are summered here, besides the four hundred horses beforementioned; but the race is so small, and their value so trifling, that little profit accrues to the owner. Veins both of copper, and iron, have been discovered, that might be worked to advantage, considering how convenient the situation is for shipping off the produce; Porlock, Lymouth, and Combmarten, all sea ports, not being more than nine miles distant from the centre of the forest.

From each of those places, and also from Ilfracombe and Barnstaple, vessels are every week passing to Wales, (where founderies have been long established) in *ballast*. A large vein of lime stone is known to pass from east to west near the centre of the forest,

forest, and proper stone is found for building on almost every part. And to complete the whole, *slate* of a good quality has been dug up in large quantities not far from Simonsbath; and there is every reason to think it may be found in other places. Water is in plenty in every part, as before-mentioned; several market towns are within a few miles of the forest. Large tracts of land are well adapted for the tillage of flax, which is known to thrive best on old, or unvegetated ground with a strong deep soil. The grain which thrives in the adjoining parishes would, no doubt, flourish here; and a ready sale would be found in the neighbouring markets, or by being exported from the ports on the Bristol channel.

The ashes arising from the weeds, and other extraneous matter on the surface being burnt, and mixed with lime, would be a first dressing preparatory either to a crop of turnips or corn.

From the produce of the crops, would arise manure for future tillage, and what is now a barren waste, might be made worth from five to twenty shillings per acre.

The plan for inclosures and building on the forest, I would recommend, is this: Let there be a small town or village erected near the middle, suppose by Simonsbath House, which should form proper residences for artificers and husbandmen, to be employed in building farm houses, and inclosing many a comfortable estate round them. From this centre town, or village, it would be easy to get a supply of provisions and all other necessaries, as a butcher baker, shopkeeper, &c. might be there settled. And till other houses or villages should be built, labourers, artificers, and workmen, might find lodgings, provisions, &c. in the bordering parishes, many of which at this time have more labourers than they can well employ. The method of fencing, cultivating, manuring, &c. would vary but little from the plan adopted on Mendip Hills; and if prosecuted with vigor, would tend to lessen the poors rates, and would train up a rising generation to care and industry, instead of theft and idleness.

A RECAPITULATION

OF THE

HINTS FOR IMPROVEMENT,

ALREADY SUGGESTED IN THE PRECEDING PAGES;

WITH SOME

ADDITIONAL REMARKS.

1st. *Inclose and cultivate all waste lands susceptible of improvement, and divide and inclose the common fields.*

THE various causes which have operated to retard the progress of this species of improvement, have been so fully stated before, that I shall only add by way of encouragement, that the lands of Mendip Hills inclosed and cultivated in the course of the last thirty or forty years, are now worth between seven and eight thousand pounds per annum, which in their original state did not exceed fifteen hundred pounds.

It was naturally expected that so great an accession of arable land, would introduce such a plenty of corn (particularly of oats) in the adjacent markets, as would be accompanied with a proportionable diminution in price; but no such consequences have followed. The average price of oats for the last twenty years, has not been less than eighteen shillings per quarter, *Winchester measure*. From this circumstance, some have been foolish enough to question the presumed advantage, exultingly crying, "Is not corn dearer than it was before? Are not the poors rates equally high? Where then are the happy consequences derived from the measure? Corn could not have been dearer had no inclosure taken place." Hold! the price of every article varies according to the plenty, or scarcity in market; and if the *home* supply be not sufficient for the consump-

consumption, other markets at a distance must be resorted to; this would have been the case in the neighbourhood of Mendip Hills, had no inclosures taken place. The counties of Wilts and Dorset must have supplied the deficiency, and the *carriage* alone would have amounted to ten per cent. As to the increase of the poors rate, this has been *general*, and may be attributed partly to an increased population, and partly to a growing dissoluteness in the manners of the poor, which ever accompanies national improvement. Active exertions in this way cannot fail to produce a scarcity of labor, and to this, as naturally follows an advance of wages; but the misfortune is, that such an advance, is not accompanied with a growing disposition in the workman, to maintain, in a more comfortable way, his wife and family, or to lay by, against a time of need. No, if he can earn eight or nine shillings in *four* days of the week, the remaining *two* days are devoted to pleasure, or luxury, and the wife and children are in a worse situation, than when more moderate wages compelled him to constant work.

I have known many instances, where the wages of a collier and his family, not exceeding five persons, have been twenty-five shillings per week, and their improvidence has been such, that one week's illness, has brought them to the parish for assistance.

I can also look back to the time, when a commendable degree of pride, operated on the minds of the lower class, and withheld them from applications to the parish for relief, unless in great distress. This pride, I am sorry to say, is totally lost, and the boon is now administered by the parish officer, with *caution* and *reluctance*; and received by the poor, with *dissatisfaction*, and *ingratitude*. From what I have said, let it not be inferred, that I wish to depress the poor, or to debar them of that comfort, which their usefulness in society intitle them to enjoy. No sight can be more pleasing to me, than to see an industrious cottager, returning from his daily labor, with a cheerful countenance, and viewing his wife and children, with complacency and delight; and I would contribute to their happiness as much as in me lies, by humbly recommending to our legislators, a serious perusal of a pamphlet, published some years ago, entitled, *Twenty minutes Advice on the Poor Laws*. By the plan there suggested, I verily think the situation of the industrious

trious poor, would be meliorated, and the idle and diſſolute would be made to contribute towards their ſupport. All thoſe who are converſant with the ſtate of the lower claſs of ſociety, muſt know that the period of life in which a workman moſt ſuffers, is when he has five or ſix ſmall children. Then it is, that the ſupport of the whole family depends on the father's labour, and his utmoſt exertions are ſcarcely ſufficient to procure them bread; ſhould ſickneſs befal him, he muſt contract debts; and ſhould this repeatedly happen, before he has extricated himſelf, his ſpirits are broken, and the love of Freedom and Independence no longer exiſts. A degree of torpor and inactivity ſucceeds, from which he ſcarcely ever emerges. To the man in this ſituation, I would, if poſſible, adminiſter relief; and the beſt method I can ſuggeſt, is that of encouraging, by the authority of Parliament, *Friendly Societies*, under the regulation of which, the *Bachelor* might be made to contribute to the ſupport of the *married*; this would in ſome degree check that diſpoſition to celibacy, which is but too apparent among the lower orders of mankind, and would add to the comfort of wedlock, and to the population of the realm.

A progreſſive, and too liberal an increaſe of wages, for daily labour, will leſſen the *quantum* furniſhed, and will only tend to increaſe the diſſolute manners of the poor; whereas the plan ſuggeſted by the author of the beforementioned tract, would, I humbly think, be attended with the happieſt conſequences both in an individual, and a national ſenſe; and I hope the time is not far diſtant, when this inſtitution, or ſomething ſimilar thereunto, may commence, and the poor be extricated from their preſent dependance, on the ſcanty bounty of a pariſh officer, and intitled to claim a ſupport from a fund, to which they have contributed, and to a part of which, they have a legal, and incontrovertible right.

d. Where lands are ſituate on bleak and expoſed eminences, improve the climate by judicious and extenſive plantations.

Though I am no advocate for ſtandard trees *in fences*, yet I think large and maſſy plantations, in elevated ſituations, are not only ornamental, but profitable,

In

In this part of the kingdom, they should be placed on the *south west* side of a farm, as the wind from this quarter is most injurious. The *Scotch fir* will endure almost any severity of climate, and the *beech* will resist the destructive influence of the sea breeze; next to these, in point of hardiness, is the *sycamore*, the *ash*, and the *birch*.

Such plantations may be placed at the angles of the large fields, or on spots too rocky, and uneven to admit the plough. They should be planted when young, and great care should be taken to secure them from cattle; this is best done by a stone wall, for hedges are liable to be broken down by sportsmen, and the work of many years may be destroyed in one night. I would rather see cattle in a field of ripe corn, than in a new made plantation. The damage in one instance is only partial, in the other it is nearly irreparable.

34. *Wherever marl, lime, or chalk can be procured within a reasonable distance, neglect not a liberal use thereof; and if destitute of such resources, be careful to make as much dung as possible by folding sheep, housing all sorts of cattle, preserving urine, collecting woollen rags, ashes, horn shavings, bones, &c. &c.*

In the northern part of the county of Somerset, both marl and lime are in great abundance. The former is dug for about six-pence per ton, and as it is the produce of the land to which it is applied, the carriage is very trifling. There can be therefore no excuse for those people who possess such a treasure, and yet forbear the use of it. Wonderful, however, as it may appear, I can assure my readers, that there are large tracts possessing veins of this invaluable manure *unwrought*, and in those parts where it is applied, a repetition of it seldom takes place in less than twenty-five or thirty years; so that a liberal manuring does not exceed one shilling and six-pence per acre per annum, and for this, there are many instances of an almost immediate advance of rent of twenty shillings per acre.

Lime

Lime is still more plenty than *marl*, and within a distance of six miles from the coal pits, may be burnt for sixteen-pence or eighteen-pence per quarter. Its beneficial effects are universally known, and acknowledged, and yet strange to relate, a second application thereof seldom takes place in less than fifteen or twenty years; this reluctance may be attributed to the baneful effects, not of lime, but of an injudicious and exhausting course of cropping.

Allowing that arable land may be injured by a too liberal use of this manure, it must be allowed, that with pasture no such consequences could ensue. Lime, like marl, kills all the coarse, sour grasses, brings a sweet, and beautiful herbage, grateful to the palate of all cattle; it forms a kind of pan under the surface, by which the nutritious particles of dung are kept longer within the reach of the roots of plants, and is the means of making *ten* load go, as far as *twenty* when applied without a previous liming. Its activity is not abated in the course of three or four years; for if the land be broken up at that distance of time, its effects are as visible in the subsequent crops of corn, as if it were immediately applied. Happy then are those farmers who possess such advantages, and have the sense and spirit to use them. How would a Devonshire farmer rejoice, were he to find limestone and fuel on the same estate. In that part of the kingdom, to the honor of the county be it spoken, they frequently send twenty miles for lime, and give four-pence and six-pence per buchel at the kiln; and our wiseacres of Somerset will scarcely bestow carriage, were the landlord to give them the lime.

Where neither marl, lime, chalk, nor any other similar substance, dug from the bowels of the earth, can be procured, it behoves the farmer to be earnestly solicitous to supply their places with either animal, or vegetable manure. For this purpose let him mow all his stubbles for litter, house his cattle during the winter months, fold his sheep, grow a large portion of turnips, cabbages, vetches, rye, &c. keep a numerous stock, and be moderate in the extent of his corn land. Great attention also ought to be paid to the management of dung when made, for by neglect great part of its strength may be lost. When properly soaked with

with urine, it should be conveyed in its strongest state to the turnip land, or any other destined to receive it, in a *low waggon* instead of a cart. These waggons should be made to open at the sides, and the contents should be deposited in large heaps of ten or fifteen loads each, with considerable elevation; and it should be shook abroad with as much care as a gardener takes in making a cucumber bed. By these means a strong fermentation is excited, and turning is unnecessary, and perhaps injurious.

From these heaps placed at such a distance as to manure *one* acre, it may be wheeled and spread for two-pence halfpenny per load. In this method of hauling out dung, three waggons, four horses, and five men are employed; namely, one waggon and two men loading in the yard, another waggon and two men unloading in the field, and the third waggon and driver going backward and forward *.

Wherever waste earth, mud from ponds, highway dirt, ashes, &c. &c. can be procured, compost heaps should not be neglected; these are best calculated for pasture land.

Such a conduct will entitle him to a great produce, and keep his land in good order; but all this will not *do* without—

4thly. *A universal and regular rotation of crops.*

This I conceive to be the most prominent feature, in good farming, and if it were generally adopted, would increase the produce of the land *threefold.*

* In the application of dung the farmers of Somerset begin at the wrong end. It is almost the general practice to manure for the *wheat* crop, whereby the land is made foul, and though there is a great burthen of straw, there is but little corn.

How much more beneficial would it be, to apply all the dung to potatoes, turnips, &c. and to the artificial grasses, making wheat the last crop in the course? It is also usual to manure the turnip land immediately before sowing, but I have experienced great advantage, and more decided certainty of a crop, by manuring in autumn on the stubbles, ploughing the same in, on a fleet furrow, and letting it remain in that state during the winter months.

A custom prevails in this county, and indeed in most others, of subjecting a portion of land to continual tillage, and of interdicting the plough on all the other; this originated from improper conduct on the part of the tenant. No sooner is the plough put into his hand, than he uses it without mercy, harrassing the land with constant crops, till its fertility is intirely exhausted.

The landlord, alarmed at these baneful effects, endeavours to counteract the progress by restraining clauses, and these are indiscriminately applied both to *good* and *bad* farmers; and are considered by the one, as *highly necessary*, and by the other as *exceedingly grievous*.

Were we to advert to the general practice of the tenants, we should be led to justify the caution of the landlord; but were we to calculate the loss, yearly incurred by such restrictions, we should have cause to regret, that the covetousness of the occupier, should have rendered necessary a conduct, so inimical to the general weal of the kingdom.

In respect to low meadow land, or very rich pasture, there can be but one opinion, viz. *that it should so remain*, but it must be allowed, that there are in this kingdom large tracts of old grass land, *mossy*, *hide bound*, and comparatively speaking, *unproductive*. Land of this description, might be greatly improved by *ploughing*, and if the following course of crops, and mode of manuring were adopted, would be left at the end of three years, of double the value it was in the sward.

ON LIGHT LAND.

1st. Peas or oats on the ley.

2d. Vetches fed off, and the land manured with lime or the sheepfold preparatory to turnips.

3d. Barley and artificial grass-seeds.

In which let it remain till the grasses fail, and the land again becomes mossy; then renew the course.

ON

ON HEAVY LAND.

1st. Beans on the ley.

2d. Spring fallow, well manured, and cabbages *.

3d. Oats and artificial grasses.

Then remain as before.

The foregoing courses of cropping, cannot possibly injure the land, and by them fallowing is excluded, which (unless in particular instances, such as great foulness, or dearth of manure) I do not think necessary.

5th. *Enlarge the upland corn farms; erect proper buildings and conveniencies for the shelter of the cattle in the winter months, thereby inviting substantial, and well informed farmers, of more enlightened countries, to settle upon them.*

I have before stated the advantages of large corn farms, buildings, &c. and shall therefore only add, that nothing so much contributes to the progress of good husbandry, as example. One good farmer in a parish (particularly if he take no pains to make proselytes) will in a few years convert all the rest: the superiority of his crops, the advancing fertility of his land, the thriving state of his cattle, the abundance of manure, all plead daily in favor of his system, and will in the end, produce conviction, even in the most bigoted mind.

I know no method by which general improvement can be more promoted, than by dispersing the farmers of those counties, whose practices are held in the highest estimation, among those parts of the kingdom, on which the light of good husbandry has never

* The cultivation of cabbages on *heavy* land cannot be too strongly recommended. It puts the clay land farmer on a level, with his neighbours occupying light land, and as a farther encouragement, I can assert, from experiments repeatedly made, that *two* tons of cabbages are equal to *three* of turnips, that they are less subject to injury from frost, and that the expences of cultivation, compared with turnips, do not exceed five shillings per acre.

shone. This would introduce into general practice the turnip husbandry of the eastern districts, with all its concomitant advantages.

The soil, and climate of the county of Somerset, is peculiarly well adapted to the cultivation of this root, and were the pasture lands less rich, and productive, necessity would oblige the farmer to have recourse to this root for winter subsistence. At present the quantity of land devoted to this purpose is trifling indeed, and in most instances the hoe is never used, nor are they consumed with any degree of œconomy.

Though the rent of the land in the elevated parts of this county may be considered high, there are advantages which more than compensate; these are its rich and productive quality in all seasons, the facility with which it may be ploughed, the easy access to marl, limestone and coal, goodness of roads, vicinity to markets; and, lastly, the high price of produce. The last mentioned advantage, is alone sufficient, to induce a residence, for it frequently happens that corn sells twenty per cent. dearer here, than it does in the eastern counties.

6th. *Improve the stock by a judicious selection of males and females for breeding; and be particularly careful to choose a male handsome in those points, wherein the female may be deficient.*

In this department of husbandry, the farmers of Somerset are very inattentive, though they all acknowledge, that the proper stocking of a farm is of the highest importance.

In confirmation of this, I need only inform my readers, that few instances can be produced of a bull being sold for more than fifteen pounds, or a ram for more than five pounds. As to stallions there are but few bred: the mares are served by horses brought every spring from the northern counties, and without this cross, the breed would be contemptible indeed.

It is not within the compass of my undertaking to enter upon this article at large; suffice it to say, that it is a thing of great consequence to the husbandman, and the only caution to be observed, when

when he introduces an alien stock, by way of improvement, is, not *to change from rich land to poor*, or from a *warm to a cold climate*.

7th. *Encourage the use of oxen.*

It is universally acknowledged, that too great a portion of land is employed in raising food for horses; and it is also to be known, that a draught horse, if well fed and kept in house thirty weeks of the year, will consume twelve quarters of corn, and thirty cwt. of hay, beside grass; this may be considered as the produce of five acres of good land, which under common cultivation would maintain three men. If therefore the riches of a country consist in the extent of its population, and that population, can only be advanced by increasing the means of subsistence, it follows, that every man who keeps an unnecessary horse is an enemy to his country, by retarding the increase of his own species.

Navigable canals would also greatly tend to reduce the number of horses, and wherever the situation is such as to admit of them, should be encouraged.

To a spirit of speculation and gambling, the country is indebted for the canals now cutting, and others in contemplation; but though the rage has subsided, yet I trust the probable advantages will inspire the present adventurers, with sufficient spirit and vigor to prosecute their undertaking, to its full completion.

The county is rich, populous, and abounds with all those heavy articles of traffic, which will render water conveyance profitable to the subscribers, and beneficial to the public; and if the cuts be made of small dimensions, the cost will be trifling; the consumption of land, and the invasion of private property insignificant: such a canal, could only be considered as a large ditch, and might be so multiplied, as to answer the purpose of turnpike roads.

8th. *Amend the public roads.*

Nothing so much contributes to the improvement of a county, as good roads; before the establishment of turnpikes, many parts of this county were scarcely accessible.

Seven or eight horses were necessary to draw a waggon loaded with *two* tons weight, and scarcely ever exceeded the distance of twenty miles a day; now, the same number of horses will draw *five* tons, and travel thirty or forty miles. This is an immense saving of labor, and yet the establishment of such roads was as unpopular, and the probable benefit as little credited, as those of canals are now. The money collected at the gates was considered as a burthen, and the public were for some time loaded with an extra charge for carriage. This, however, did not last long, for in the course of a few years, a diminution in the price of carriage universally took place, and it has gradually fallen from that time to this.

Before the turnpike roads were established, coal was carried on horses backs to the distance of fifteen or twenty miles from the collieries; each horse carried about two hundred and a half weight. Now one horse with a light cart, will draw ten hundred weight, or four times more than the horse could carry; can an insignificant toll be put in competition with this saving?

In respect to private roads, I would recommend a repeal of the law compelling statute labor, and changing the same to a composition in money.

Whenever a farmer is called forth to perform statute labor, he goes to it with reluctance, he considers it as a legal burthen, from which he derives no benefit. His servant and his horses, seem to partake of the torpor, of the master. The utmost exertion of the surveyor cannot rouse them, and the labor performed, is scarcely *half* what it ought to be.

This would not be the case, were the surveyor to receive in money the highway tax; he could then employ such workmen as would do him justice, or if they were indolent, or insolent, he could dismiss them.

9th.

9th. *Encourage the use of such ploughs, and other instruments, as are best calculated to expedite work and do it well.*

Admitting that there are only one hundred and fifty thousand acres of tillage in the whole county, and that the same are ploughed on an average twice; allowing also that one third of this is of so hilly a nature, that a wheel plough cannot be used to advantage, there will remain one hundred thousand acres capable of being turned with the double plough.

For the sake of argument, let it be also admitted that three horses, a man and a boy, with the common plough of the country, will turn an acre a day, and that the double plough with four horses, and the same number of attendants, will turn two acres. The number of acres will of consequence be ploughed in half the time, and the difference in expence, cannot exceed two shillings per day. Here then might be a saving of twenty thousand pounds per annum, in this article alone, besides the inestimable advantage of expediting work at certain seasons.

Some may doubt the possibility of making the double plough so generally useful; but I can truly say, I have never yet found an instance, where it could not be worked to advantage, and it is well known, that on the various trials made under the auspices of the Bath Society, on lands of the most *difficult nature*, my man, with the double plough, has always gained the prize.

In the counties of Wilts and Dorset, where three large and powerful horses are put to a single plough, the saving by such an instrument would be immense; and this I can confirm, by the testimony of some eminent farmers of the first named county, who in consequence of my recommendation, have introduced them on their respective farms, with great profit and success.

10th. *Sow early in exposed, and cold situations, and be particularly careful not to plough or harrow in wet weather.*

The necessity of this caution is so well known to all practical farmers, that I need not, I trust, enforce it.

11th. *Destroy rats and mice.*

The depredations of these vermin are too important to be overlooked. A sensible farmer of my acquaintance, thinks that by them, and birds, a thirtieth part of the corn of the kingdom is devoured. Corn in barns they have free access to, and it is very difficult to keep the mows on stathels free from them. If they are not brought in from the corn field, a stick, a rake, pike, or any other body carelessly placed against the mow, will introduce them.

Destructive therefore as they must be, it behoves all farmers to make their slaughter a general concern, and it might be done by a parish rate.

12th. *Introduce threshing machines.*

These are common in the northern parts of this kingdom, and in Scotland, and from the accounts I have received, answer the purpose, threshing the corn both well and expeditiously. There can be but one objection, which is, the lessening of *in-door* labor in the winter months. As a substitute for which, let the farmer house all his cattle, and employ the barnmen in attendance upon them.

13th. *Let all unmalted corn be sold by weight.*

The different measures of this kingdom, and the confusion incident thereto, was so notorious, that great pains have been taken by the Houses of Parliament to introduce one general standard measure, and the acts of the legislature have been followed up by the most active exertions of the magistrate.

By these means the Winchester measure is pretty general, and in respect to this county, I may add to the *great benefit of the seller*, and the *great loss of the purchaser*. The calculation in respect to the comparative price between the old and new measure, was formed on the difference between eight and nine gallons, but this is erroneous; the old measure of the county was not less than nine gallons

lons and a half, and in some instances ten gallons, so that the buyer gives seven or eight per cent. more than he ought to give; and I humbly think that *weight* would be a better standard, as the drier and plumper the corn is, the heavier it weighs.

14th. *Grant long leases.*

All farmers who have spirit enough to improve their estates, should have some security for being reimbursed the expence. Where a man's tenure is precarious, and subject to the whim, and caprice of a landlord, little improvement can be expected. Upon unimproved farms, such as wastes, commons, &c. newly inclosed, a considerable expenditure is necessary to bring them into order. Here the tenant should have a lease of twenty-one years, and the rent to advance at fixed periods; for instance, suppose the land in its original state to be worth when inclosed, and accompanied with necessary buildings, five shillings per acre; this rent, if the tenant is to pay all expences of cultivation, should continue seven years; at the expiration of which time, he should be advanced to ten shillings, and at the end of fourteen years, to fifteen shillings per acre.

Or the following method might be adopted; let the landlord pay all expences of cultivation, manuring, &c. and charge five per cent. on the expenditure, allowing the periodical advance to be proportionably less. At all events, the interest of the tenant should be better preserved, than at present; but this is so copious a subject, that I must forbear entering into it, not doubting but it will be ably treated by some of your numerous correspondents. I must now hasten to a

CONCLUSION.

THIS county does not raise grain sufficient for its consumption, nor are the climate and soil of many parts thereof favorable to corn farming; yet were all the improvements before suggested to take place, there cannot be a doubt, but that the produce of the soil

might be increased one third. The quantity of grain annually purchased from the adjacent counties of Wilts and Dorset, cannot be less than one hundred thousand quarters; and were it not for the coal that is sent in return, would drain the county of great part of its specie.

The reporter cannot with absolute precision state the total amount of acres, or the number of inhabitants in this county, but he conceives the former to be about one million of acres, and the latter about three hundred and fifty thousand. The average value per acre of the inclosed and cultivated land, is not less than twenty-five shillings per annum. The different appropriations of this surface of land may be arranged in the following way:

	Acres.
Towns and villages	3000
Public and private roads	20,000
Rivers, lakes, ponds, &c.	2,500
Woods and plantations	20,000
Meadow and pasture land inclosed	584,500
Marsh and fen land uninclosed	30,000
Arable and convertible land inclosed	270,000
Common fields	10,000
Uncultivated wastes	60,000
	1,000,000

The increased rent which might be produced by draining the marsh lands, and by inclosing and cultivating the common fields and waste lands, may, according to the most moderate calculation, be thus estimated:

Number of Acres.	*Description.*	*Increased Rent.*	*Total Increase.*
30,000	Marsh lands	0 15 0	22,500
10,000	Common field	0 5 0	2,500
60,000	Uncultivated waste	0 5 0	15,000 *per ann.*
			40,000

To

To which may be added, a capacity of improvement in the arable and pasture lands *inclosed*, of at least five shillings per acre, amounting to 213,625l.

These blessed effects would be the natural consequence of that spirit of industry, which public encouragement would excite, would add 250,000l. per annum to the rental of the nation, and be much more valuable, than any foreign conquest of treble the amount. Would to God that nations would learn wisdom, and instead of coveting distant territory, improve to the utmost, *that* which they possess.

It now only remains for me to apologize to the Board and the Public, for the desultory and procrastinated way, in which this Report has been executed.

The various public, as well as private business, in which I was engaged, prior to my undertaking this survey, could not be dispensed with; I have therefore only had it in my power, to snatch an occasional hour, from other numerous avocations. Had not my general knowledge of the county, and particularly of the northern and middle districts, enabled me to write on its practices without a personal survey, I must have declined the undertaking. As it is, I have felt, and still feel, a considerable portion of regret, that I did not resign the appointment, as the Board might have then selected some person possessed not only of more leisure, but of superior ability.

Before

Before I take my final leave, I am bound to acknowledge my obligations to the following Gentlemen, whom I recommend as correspondents to the Board, and whose communications and assistance have in a great degree contributed to enrich the work, and to give it any trifling merit, which it may be fupposed to possess.

Mr. PERKINS, of Oakhill, near Shepton Mallett.
Mr. ANDERDON, of Henlade, near Taunton.
Mr. WHITMASH, of Batts, Ditto.
Mr. ABRAHAM, of White Lackington.
Mr. MATTHEWS, of Bath, Secretary to the Agricultural Society.
Mr. CROCKER, of FROOME.
Mr. LOCK, of Brent.
Mr. WHITE, of Sand, near Wells.
Mr. PHIPPEN, of Mere, Ditto.
Mr. KINGDON, of Melverton, near Taunton.
Mr. DAVIS, of Longleat, Wilts.
Mr. PALFREMAN, of North Devon.

With a sincere wish, that the establishment of an agricultural Board may be attended with all those happy consequences, which its most sanguine supporters can desire,

I remain, their most humble servant,

J. BILLINGSLEY.

Ashwick-grove, Oct. 4th, 1794.

FINIS.

ERRATA.

Page 42	line 5	from the bottom *for* qualifying *read* qualifying
52	2	from the bottom *add* Lancaster *after* York
53	22	*for* 8,000,000 *read* 12,000,000
—	23	*for* 12,000,000 *read* 3,000,000
60	28	*for* Blagdon *read* Bleadon
67	9	*for* adviseab'e *read* advifeable
71	6	*for* tone *read* Stone
84	23	*for* hither *read* hitherto
97	7	*for* Huntspit *read* Huntspil
—	17	*for* must be made *read* may be made
—	19	*for* must be put *read* should be put
98	12	*for* 10s. 6d. *read* 1 s.
114	15	*for* skimed *read* skimmed
118	33	*for* present price of these bo s is *read* original price of these bags was
126	18	*for* ninety fix *read* ninety eight
168	2	from the bottom *for* the incapacity *read* the supposed incapacity
178	6	from the bottom *for* they have *read* they would have