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GENERAL VIEW

OF THE

AGRICULTURE

OF THE COUNTY OF

KENT,

WITH OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

BY JOHN BOYS,

OF BETSHANGER, FARMER,

DRAWN UP FOR THE CONSIDERATION OF THE BOARD OF AGRICULTURE

AND INTERNAL IMPROVEMENT.

BRENTFORD,

PRINTED BY P. NORBURY.

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[4]

ADVERTISEMENT.

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

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

[5]

To the READER.

IT is requested, that this Paper may be returned to the Board of Agriculture, before the First *of* March *next.*

It is hardly necessary to add, that the Board does not consider itself responsible, for any fact or observation, contained in these reports, which, at present, are printed and circulated, for the purpose merely of procuring additional information; and of enabling every one, to contribute his mite, to the improvement of the country.

JANUARY, 1794.

[6]

PREFACE.

WHEN I undertook to draw up an account of the husbandry of Kent, I was not wholly ignorant of the importance of the business in which I engaged, or of the difficulties that might arise in the progress of it. Having however been employed all my life time in the cultivation of large farms and various soils, I had some, I hope not unbecoming, confidence in my own resources; and I had the honor to number among my friends and acquaintance many excellent Agriculturists, in different parts of the county; moreover, I thought I might reasonably expect liberal assistance even from stranger, especially from such as had been solicited by the Commissioners to render it me. Under these impressions, I sought for information, and, wherever I applied, obtained it to the full extent of my expectation. The Public has here the result of my enquiries. Had my leisure been greater, or a longer time been allowed, the language might have been improved, and the mistakes lessened.

If the work has any merit, I claim only so much of it as respects diligence in collecting the materials: all the rest belongs to Lord Viscount Lewisham; Lord Viscount Bayham; William Geary, Esq. of Oxenheath; William Boys*, Esq. of Sandwich; Mr. Edmeads, of St. Clair; Mr. Edmeads, of Cobham; Mr. Cooper, Mr. John Curling, and Lieutenant Edward Boys, of Thanet; Mr. Granger and Mr. Head, of Shepey; Mr. Fearman, of Linsted; Mr. Randall and Mr. Charlton, of Maidstone; Mr. Thompson, of Seal; James Joynes, Esq. of Gravesend; Mr. Pilcher Ralf, of Romney; and Mr. Eel. Simmons, of Staplehurst.

BETSHANGER, J. BOYS.
DECEMBER 22, 1793.

*I owe much to this gentleman's kindness in various ways; which I should be glad, but am forbid, to particularize.

[7]

INTRODUCTION.

KENT.

THIS County forms the south east angle or corner of the Kingdom, and probably derives its name from that circumstance. Its figure is quadrilateral, and it is bounded on the north side by the river Thames, the county of Essex, and German Ocean; on the south by the county of Sussex; on the east by the British Channel; and on the west by the county of Surry.

It is about sixty-three miles in length from Deptford to the point of the North Foreland, comprehending between these extremities about one degree and twenty-nine minutes of longitude; and measures on the east side, in a direct line from the North Foreland to Dungeness- Point, nearly forty miles, between the latitudes of 50º, 54', and 51º, 23', 20" north. It is divided into two grand districts, called West and East Kent; the former containing the laths of Sutton at Hone and Aylesford, with the lower division of the lath of Scray; the other comprizing the laths of St. Augustine and Shepway, with the upper division of Scray.

The county contains about thirteen hundred square miles, or eight hundred thirty two thousand acres, sixty-three hundreds, four hundred and thirteen parishes, two cities, thirty-nine market towns, nine thousand freeholds, forty thousand houses, and two hundred thousand inhabitants.

It sends eighteen members to parliament, pays nearly a twenty-fourth part of the land-tax, and provides nine hundred and sixty men for the national militia.

The socage tenure of gavel kind prevails in general over this county, to which there are certain special customs inherent, antiently called Consuetudines Kantiæ, being the common law of Kent.

[8]

Two chains of hills run through the middle of Kent, called the upper and lower hills; the northern range and whole north side of the county are composed principally of

chalk and flints; the southern of iron and ragstone; more westerly, towards Surry, clay and gravel prevail upon the eminences.

Below this last range lies the Weald, an extensive level tract of land, rich and fertile at some places, where fine pasturage and timber are produced. The soil, a deep clay and marl, and so soft that the carriage and ploughing work is mostly done by unshod oxen.

The principal rivers of Kent are the Thames, the Medway, the Stour, and the Rother; the two former are navigable for the largest ships to Woolwich and Chatham, and for small craft to a very great distance. The Stour and the Rother admit coasting vessels to Sandwich and Rye. The Ravensbom, the Cray, and the Darent are small creeks or streams that fall into the Thames; the first at Deptford, the others in one channel at Longreach. Most of the marshland of this county lies along the margin, or at the mouths of these rivers, or has been formerly covered with the waters of ancient havens and ports, now in a great measure obliterated. These rivers likewise have formed islands towards their mouths. Thus the Thames and the Medway at their extremities contributed their waters jointly to the separation of the Isle of Graine from the main land, but the channel is now filled up. The Swale, one of the mouths of Medway, in like manner cuts off Shepey from continent from the continent of East Kent. Graine is throughout low and marshy, and is about three miles and a half long, and two and an half wide.

The north part of Shepey is high ground; but it is mostly low and marshy on the south side, where two streams running into the Swale form the islets of Elmley and Harty. Shepey is about thirteen miles long and six broad.

Thanet had a full claim to the title of an island when the Rutupine Port was in its prosperity; but its pretension to the

[9]

appellation is now barely kept up by a small sewer communicating with the Stour and the Sea. The bed of that once famous harbor now forms valuable tracts of marshes, comprehending above twenty-five thousand acres. Thanet, including Stonar, contains nearly forty one square miles, or about twenty-seven thousand acres.

The Rother rises in Sussex, and empties itself into the Sea at Rye, forming the harbor of that port. It had formerly another outlet at Romney, the dry channel of which is still visible. From Rye it proceeds to Apledore, and then by a curvature, forms the Isle of Oxney, which is about ten miles in circumference, an consists of a ridge of upland, running through its middle, and of low fertile marshes towards the river.

The Weald of Kent before-mentioned was formerly covered entirely with woods. It has now many small towns and villages, but is more thinly inhabited than the other parts of the county, and of course much less cultivated. Its principal productions are large fat oxen, hops, fruit, and oak timber.

Romney-Marsh is an extensive tract of rich marsh-land, at the south corner of the county, originally enclosed from the Sea by a strong wall thrown up between the towns of Romney and Hythe. Its chief productions are mutton and wool. Those of the county at large are horses, castle, sheep, hogs, venison, poultry, game, rabbits, and fish; wheat, barley oats, beans, peas, and tares; canary, clover, trefoil, cinquefoil, and most other garden seeds; asparagus, potatoes, turnips, and all kinds of culinary plants; hops, timber, underwood, iron, atone, chalk, copperas, salt, &c. &c. &c.

Its manufactures are but trifling, nor do they come within the limits of an agricultural survey.

Thus far is a general description of Kent; but the county is so extensive, and has so many different soils, systems of management, and productions, that it is necessary, in order to

[10]

make a proper survey of the whole, to divide it into the following districts, namely,

The Isle of Thanet,

The Upland Farms of East Kent,

The Flat Rich Lands in the vicinity of Faversham, Sandwich, and Deal,

The Hop Grounds, &c. of Canterbury and Maidstone,

The Isle of Shepey,

The upland Farms of West-Kent,

The Weald of Kent,

And Romney- Marsh.

And to examine each district under the following heads, namely,

Soil,

System,

Productions,

Implements,

Price of Labour,

What Improvements have been made,

What Improvements may be made,

Miscellaneous Observations.

ISLE OF THANET

Consisted formerly of ten Parishes, viz:

1. St. Giles, alias Sarre,
2. St. Nicholas at Wade,
3. Monkton,
4. Birchington,
5. Woodchurch,
6. Minster,
7. St. John the Baptist,
8. St. Peter the Apostle,
9. St. Laurence, and
10. Stonore.

[11]

1. The Vicarage of Sarre is now united to the neighbouring Vicarage of St. Nicholas, and the Church which was dedicated to St. Giles, is totally destroyed. The great tithes belong to the Church of Rochester. The Ville of Sarre is within the jurisdiction of the Cinque Ports, and maintains its poor separately from the parish of St. Nicholas, which is in the county at large.

The Manor belongs to Mr. Henry Collard.

2. St. Nicholas. The great tithes belong to the Archbishop. Thomas Gillow, Esq. Lessee.

Places of note in St. Nicholas.

Down-Barton, a Manor belonging to William and Eliab Briton, Esquires.

Shuart holds of the Manor of Down-Barton, by fealty and rent, and belongs to William and Eliab Briton, Esquires.

Bartletts holds of Down-Barton, as above, and belongs to William and Eliab Briton, Esquires.

3. Monkton Church, dedicated to St. Mary Magdalen, a Vicarage belonging to the Archbishop's patronage.

The Manor and the Great Tithes belong to the Dean and Chapter of Canterbury. The Lessee is Mr. Finch. The Vicar is endowed with all the Small Tithes of Monkton, and the two Chapels of Birchington and Wode, with the oblations, legacies, and obventions, and 12l. 1s. 8d. in money.

Places of note in Monkton.

Monkton-Court is a Manor belonging to the Dean and Chapter of Christ-Church. Sir Brook Bridges the Lessee. The Great Tithes belong to the Almonry-Farm, which is part of the estate of the Dean and Chapter. Clive-Court is a Farm belonging to Josiah Fuller Farrer, Esq.

4. Birchington is a Chapelry of Monkton.

Places of note here,

Quekes, a Seat and Farm, belongs to William Roberts, Esq.

Gore-End, a Farm, belongs to William and Eliab Briton, Esquires.

[12]

Brookesend belongs to the Dean and Chapter of Canterbury. John Friend the Lessee.

St. Nicholas-Court, a Tithing belonging to Queen's College, Cambridge. It pays Small Tithes to the Vicar of Monkton.

A Personage in Birchington belongs to Mr. Bushel.

Westgate, a Manor Farm, belongs to Mr. Edward Taddy.

Birchington is within the jurisdiction of the Cinque Ports.

5. Woodchurch. (Church destroyed.)

Woodchurch, a Farm, belongs to T. Austin, Esq. Cheesman's belongs to ditto.

6. Minster, a Vicarage, belonging to the Archbishop.

Places of note in Minster.

The Court-Lodge, the Mansion of the Manor of Minster. The estate is now in two parcels, Minster-Court with the Manor belongs to Lady Coningham, and Seven-Score to the heirs of ——— Wadsworth, Esq.

Sheriff's-Court belongs to Mr. Terry.

Oldland-Grange belongs to the Dean and Chapter of Canterbury. Lessee Peter Fector, Esq.

Powcies belongs to Mr. Henry Harnet.

Thorne belongs to Mr. Henry Wotton, of Minster.

7. St. John the Baptist, or Margate, is a Vicarage, in the patronage of the Archbishop.

Places of note in this parish.

Dandellon belongs to William Roberts, Esq.

Nash-Court belongs to Jacob Sawkins, Attorney at Law.

Dane-Court, a Manor, belongs to Henry Hawley, Esq.

Salmeston, a Manor, belongs to the Archbishop of Canterbury; the present Lessee is the Earl of Guildford.

Updown belongs to Josiah Farrer, Esq.

Fleet, belongs to Mr. Samuel Righton and William Roberts, Esq.

Vincent belongs to Mr. Ambrose Collard of Minster.

Hengrove, a Manor, belongs to Henry Hawley, Esq.

[13]

Shottenden, to ——— Forbes, Esq.

St. John's is in the jurisdiction of the Cinque Ports.

8. St. Peter's Vicarage in the Patronage of the Archbishop.

Places of note here.

Calais-Grange, the Parsonage Farm, belongs to the Dean and Chapter of Canterbury. Lessee the Corporation of Canterbury.

Dane-Court belongs to Mr. Robert Tomlin.

Brompston belongs to Henry Jessard, Esq. and Mr. John Grey.

9. St. Laurence, a Vicarage in the patronage of the Archbishop.

Places of note here:

Spratling-Street belongs to Mess. John and Thomas Weston.

Manston-Court belongs to Mess. Smith, Rammell, and Wotton.

Ellington belongs to John Garret, Esq. and others:

Upper Court a Manor, belongs to Thomas Garret, Esq.

Nether Court belongs to Thomas Garret, Esq.

Newlands belongs to the Archbishop of Canterbury. Mrs. Bedford is the Lessee.

Ozengell Grange, belongs to the Dean and Chapter of Canterbury, Charles Dering, Esq. the Lessee.

Dumpton, a farm, belongs to the Earl of Hardwick.

Chilton, to Mr. Cooper and Mr. Curling.

Cliffsend to Bethlehem Hospital.

The Ville, or Town of Ramsgate, is within, and part of, the parish of St. Laurence, in respect to all ecclesiastical matters; in every other respect maintaining its own poor, &c. &c. and within the jurisdiction of Sandwich.

10. Stonore, its Church destroyed, belongs wholly to the devisees of the late Charles Foreman, Esq. of London, Hop-Merchant.

The Manor of Monkton, Minster, and Down Barton, are paramount over the other manors in Thanet, Monkton, and

[14]

Down Barton, extending over the western part, and Minster over the eastern part, being divided by St. Mildred's Lynch.

Much of the Isle of Thanet was naturally very thin light land, but the greater part of it having belonged to the religious, who were the wealthiest and most intelligent people, and the best farmers of the time, no pains or cost were spared to improve the

soil. The Sea furnished and inexhaustible supply of manure, which was brought by the tides to all the borders of the upland, quite round the Island; and most likely was liberally and judiciously applied by the Monks and their tenants; and their successors to the present time, have not neglected to profit by their example. Owing to these circumstances, Thanet always was, and most likely always will be, famous for its fertility; and the Monkish tale of Thanet's deriving its superior fruitfulness from its having been the asylum of St. Augustine, is not so far from the truth as it may at first appear. Old historians said, "Felix tellus Tanet sua fecundidate;" and modern writers on husbandry, speak of it as one of the finest gardens in the kingdom.

In short, is there another district in Great Britain, or in the World, of the same extent, in such a perfect state of cultivation; where the Farmers are so wealthy and intelligent; where land, naturally of so inferior a quality, is let for so much money, and produces such abundant crops?

The whole Island contains about three thousand five hundred acres of excellent marsh-land, and twenty-three thousand acres of arable; all the lower part of the latter bordering upon the Marshes, and some parts of the hill, where there is a good depth of earth, are exceedingly productive, and the principal part of the remainder, although naturally a poor thin light mould on a chalky bottom, is made exceedingly fertile by the excellence of the system under which it is cultivated. By an exact account taken of Minster, in Thanet, January 1, 1774, there were found to be in that parish, 149 houses, 696 inhabitants,

[15]

viz. 359 males and 337 females; of these in 16 farm-houses, were 110 males and 57 females, and in 133 houses, inhabited by tradesmen, labourers, and widows, there were 249 males and 280 females. The average number of inhabitants male and female, to each farm-house is 10,4375, to each of the other houses, 3,9774, and to the whole number of houses, 4,6711. And by another account taken in 1773, of St. Laurence, including Ramsgate, which contains more than two-thirds of the houses and inhabitants of the whole parish, there were found in that parish 699 houses, and 2726 inhabitants. And again, in 1792, there were found 825 houses, and 3601 inhabitants, which is an

increase of 126 houses, and of 875 inhabitants in that parish in nine years. The population in the latter period, 4,369 per house.

SOIL.

The bottom soil of the whole island, or what modern writers in husbandry call the subsoil, is a dry hard rock chalk. The tops of the ridges are about 60 feet above the level of the Sea, and are cover'd with a dry loose chalky mould, from 4 to 6 inches deep; it has a mixture of small flints, and is, without manure, a very poor soil. The vales between the ridges and the flat lands on the hills have a depth of dry loamy soil, from 1 to 3 feet, less mixed with chalk, and of much better quality.

The west end of the island, even on the hills, has a good mould, from 1 to 2 feet deep, a little inclining to stiffness; but the deepest and best soil is that which lies on the south side of the southernmost ridge, running westward from Ramsgate to Monkton; it is there a deep rich sandy loam, and mostly dry enough to be ploughed flat, without any water furrows. The Soil of the marshes is a stiff clay, mix'd with a Sea sand, and small marine shells. There is no commonable land, nor an acre of waste, in the island.

[16]

SYSTEM.

The general system, or plan of management in this island, on all the thin light soils, has been, time out of mind, one of four courses, viz.

Fallow,
Barley,
Clover,
Wheat,

But subject to several variations, which have much encreased of late. The soil having been greatly improved during the last fifty years of excellent management, it is found that the course may be extended to advantage by substituting Peas for Fallow, thus,

Peas,
Barley,

Clover,

Wheat.

Or,

Peas,

Barley,

Beans,

Wheat;

And then return to a Fallow as before; and sometimes, tho' but seldom, and then generally considered as bad management, a crop of Barley is taken after Wheat, thus,

Barley,

Beans,

Wheat,

Fallow, &c.

It is to be understood here that the foundation of all good management, and the system most practised, is the first mentioned of the four courses; and it is by this system, with the plenty of manure from the sea weed, that great part of this island, which is naturally as poor land as any in the kingdom,

[17]

is made to produce such excellent crops of corn of the first quality.

The deep rich sandy loam before described, and some of the best of the land at the west end of the Island, are cultivated under the round tilth system of East Kent, viz.

Beans,

Wheat,

Barley.

The process under the four course system is, after raking up the stubble of the wheat, and stacking it near the farm yard for littering hog pounds, thatching, &c. to plough the land five or six inches deep as soon as possible in the Autumn, which is cross plough'd when the land is tolerably dry in the Spring, and repeated two or three times during the Summer months. Between the times of ploughing, collections of mould, farm-yard dung, sea-weed, &c. are formed in convenient situations in the fields,

which are turned over in the Autumn, and in frosty weather carried out on the fallow, at the rate of from 40 to 45 cart loads per acre; this manure is spread and ploughed in, as soon as opportunity offers, and the barley is drilled in, at the rate of three bushels per acre, or sown broad cast, four bushels per acre, the first dry week in February or March; and if for clover or trefoil the next year, those seeds are sown with the barley: the clover or trefoil lies only one year, and is ploughed about five or six inches deep in November, and sown with wheat.

If no seeds are sown among the barley, the stubble is plough'd in about six inches deep in the winter, and harrow'd the first dry week in February; and then beans are drilled in furrows 18 or 20 inches apart, at the rate of four bushels per acre; the furrows are harrow'd, and the land generally rolled down smooth. As soon as the beans appear they are horse-hoed, and sometimes immediately harrowed across the furrows, and then, as soon as they have recovered the harrowing, they are hand-hoed with a hoe about five inches

[18]

broad, at each side of the furrow, at the expence of three shillings per acre; which operation is repeated in May, or the first week in June, at four shillings and sixpence per acre; the ground is then stirred with an earthing plate, to raise a quantity of mould against their sterns.

As soon as the beans are harvested, the land is scuffled with the broad share, and male perfectly clean by harrowing, and burning the weeds, if any, and then ploughed for wheat. In both cases, whether clover lay or bean stubble, the wheat is usually sown three bushels per acre, after having been steeped in salt water from 5 to 12 hours, and mixed with flaked lime. When peas follow the wheat they are drilled in, and managed in every respect the same as the bean crop, except harrowing after the horse hoe. The barley and other crops after peas, are managed the same as if the land had been a summer fallow instead of peas. Under the round tilth system, the bean and wheat crops are managed the same as before mentioned; but the barley is usually sown later, in order to give time, by thrice ploughing, to clean the land; and the manure is generally spread on the barley stubbles for beans.

Radish seed is frequently sown on these lands instead of beans, for the London market; and canary seed in lieu of wheat, both on the clover lays and bean stubbles. The radish is sown in March, on furrows made with a two or three cheped* plough, about ten inches apart, two or three gallons of seed per acre; as soon as they appear, every other row is cut up with a horse hoe, leaving the rows twenty inches apart. When the plants get two or three rough leaves, they are hoed out to the distance of from ten to fifteen inches apart in the rows, and then kept clean by a second horse and hand hoeing, if necessary.

The crop is seldom fit to reap till October, and sometimes is out in the fields till near Christmas, without receiving any

*A provincial term for the piece of wood on which the share is fixed.

injury from the wet weather; it being necessary that it should have much rain to rot the pods, that it may thrash well.

Canary is sown the first dry week, in February, on furrows ten or eleven inches apart, (the land being previously made fine and light on the surface;) about four or five gallons per acre, and as soon as the furrows can be seen, they are hoed with a Dutch hoe, at the expence of twenty-pence per acre, and kept clean by repeated hoeings when necessary during the Summer. It is generally ripe by the beginning of September. Like radishes it requires much time in the field, and seldom suffers by wet weather.

Paring and burning is but very little practised here.

The system of grazing in the marsh lands of this Island is generally to buy in lean cattle and sheep, and keep them till they are fit for the butcher. The cattle are principally bought out of the Welch droves, and the sheep from the fold flocks in the vicinity.

The grass that is mow'd for hay is usually set up in stacks, either in the marshes near a foddering lodge, or carried home to the farm yards on the borders of the marshes, and given to fatten bullocks, or sold to the Inn-keepers of Margate or Ramsgate.

The harvest for barley, oats, and peas, generally commences the last week in

July, and for wheat, the first week in August.

LIVE STOCK.

SHEEP.

The sheep kept here are wethers of the Romney-Marsh* breed, which the flock farmers buy in when lambs, at Romney-fair, the 20th of August, at from 12 to 14s. each, according to times and circumstances; and when they

*See Romney Marsh.

have kept them two years, they either sell them lean to the fatting grazier, or make them fat themselves on turnips, and pea or bean straw. Sainfoin and clover hay are generally too valuable at the watering places, to be used for them. Oats, and cullings of garden beans, are sometimes given to finish them in the Spring. When these two yearling sheep are sold in the Autumn to the graziers, the price is from 24 to 28s. each; and when made fat, produce from 34 to 42s. according to their size and fatness. The few sheep bred in these marshes are of the same sort, except some small parcels of Dorsetshire and South Down ewes, which are bought to make early fat lambs.

CATTLE.

The Cattle bought in by the grazier to fatten in the Marshes, are the North and South Wales sorts, which are brought by the Welch drovers to Canterbury and other markets; and the chief part of the dairy cows are selected from those droves: others are a mixture of those and home-bred cattle of various sorts and shapes. The principal object as to a cow here, is the giving a large quantity of milk; if a cow, tho' ever so ugly, is a good milker, and produces a cow calf, it is often reared for the dairy. There are no ox teams used here, which is partly the occasion of there being but little attention paid to the size and shape of the cows.

HORSES.

There are many very fine teams of cart horses in the hands of the farmers of this Island, some of which were bred here from a fort that has been long established; and others are a cross between the old Kentish cart mares, and stallions from the midland counties, or half bred Flemish; and within these few years, there have been several very good mares brought from Flanders, which have cost from 25 to

[21]

40 guineas each. Black is the favourite colour, and there are but few of any other; they are from 15 to 16 hands and an half high, with much bone and good action. They plough with four in winter, and work an acre and an half in a day; and in barley season with two, and then plough two acres a day, with a mate to lead the horses.

HOGS.

The Hogs of this district are of various sorts, some farmers preferring large, and others small ones; but there are none very large and coarse. The smaller sorts are those mixed with the Chinese breed. They are fatted at the age of 18 or 20 months, for the use of the family of servants in farm houses, and made to weigh from 10 to 25 score. The Chinese fatten readily, but are generally thick hided, and do not bear the cold well; and from their tenderness are very apt to hide in stable dung and get the mange.

A great number of pigs are rear'd in his district, and fed in the corn stubbles for the butchers, which are killed in the Autumn for roasting pork, at the age of three or four months, then weighing as many score pounds each.

ORCHARDS.

There are not any worth mentioning; many farmers are obliged to buy apples from East Kent, for domestic use.

Hops have been tried without success.

IMPLEMENTS.

The Kentish turn wrest plough is the only one known here; it consists of a beam of oak ten feet long, five inches deep, and four broad, behind which is a foot 5 inches by

3 ½ and 3 ½ feet long; on the top of this the handles are placed, and tenon'd to the end of the beam, and mortised at the bottom to the end of the chep. Through the beam, at 2 feet 5 inches distance from the foot, is a sheath of oak 7 inches wide,

[22]

and 1 ½ thick, which is mortised into the chep in an oblique direction, so that the point of the share is 22 inches distant from the beam. The chep to which the share is fixed, is 5 feet long, 4 inches wide, and 5 inches deep; the share is of hammered iron, weighs about 32 lb. is 20 inches long, and from 4 ½ to 7 inches wide at the point.

The upper end of the beam rests on a carriage with 2 wheels, 3 feet 2 inches high; on the axletree is a gallows, on which is a sliding bolster to let up and down. Through the centre of the axle is a clasp iron, to which is fixed a strong chain call'd a tow, that comes over the beam, so fixed, as by means of notches, or a pin called a check, to let the whole plough out a greater length from the axle, thereby letting it down to a greater depth.

This implement altogether is most certainly a very heavy one, and from its construction must be made very stout; as otherwise either the beam or chep will break with the force of four strong horses when it comes suddenly against a rock or any stiff place in the soil, a hard beaten path, or root of a tree, &c. with these ploughs the soil may be turned up a great depth, and laid quite flat, without any kind of furrow being left open, which is a great advantage in a dry soil. They cost, with every kind of tackle fixed for drawing them, entirely new, about five guineas each.

Harrows consist of four beams of ash, each 4 feet and half long, and 2 inches and an half square, fram'd together so as to be 4 feet and an half wide behind, and 4 feet before; there are 6 or 7 teeth of iron in each beam, which when new are 11 inches long, and weigh about 1 ¼ lb. each; one boy usually leads a pair of horses, each drawing one harrow. They cost, with a strong iron chain, called here a harrow strap, about one guinea.

The carriages used for carrying corn to market, &c. are call'd hutches, drawn by 4 horses, generally loaded with from

[23]

7 to 12 quarters of corn, according to its weight and the distance it is carried. They are 13 feet long, are made crooked at sides that the width cannot be positively ascertained; but are generally 3 feet wide before, and 4 behind at the bottom, and about 6 or 8 inches wider at top, and 20 deep; they are boarded at the sides and ends close enough to carry sand. If made with wooden axletrees, they cost about 20 guineas, if with iron 25.

The dung carts are of various dimensions, but mostly about 7 feet long and 20 inches deep; 4 feet broad behind, and 3 feet 10 inches before; are usually drawn by 2 horses, and with broad wheels; and with every thing new and well made, cost about 8 guineas.

Rolls of various sizes are used for breaking the clods, they are made 9 feet long, and from 14 to 24 inches in diameter; cost from 3 to 10l.

Wheat is reaped with a toothed sickle. Barley and oats are mown with a long scythe and cradle; they are then bound into sheaves with a harvest rake, being drawn together on one foot 'till the bundle is of size sufficient for a band made of two lengths of the corn twisted together.

Horse rakes are used for dragging together the loose barley left by the binders; they are made of oak, 12 feet long, with iron teeth 14 inches in length and 5 apart; the beam is out 4 inches by 3; these rakes are drawn by one horse led by a boy, with a man behind to lift it up every time it is filled with the corn. Price from 18s. to 24s.

Wheat stubble rakes are used to drag that article together, made on the same principle as the last mentioned, but much heavier and 2 feet shorter; the beam is 5 inches by 4; drawn by two horses. Cost about 2l. 2s.

[24]

PRICE OF LABOUR.

	s.	*d.*		*s.*	*d.*
Labourers per day (of ten hours)	1	6	to	1	8
Thrashing Wheat, per quarter	2	0	to	3	0

——— Barley	1	4	to	1	8
——— Beans	1	0	to	1	2
——— Oats	1	0	to	1	2
——— Peas	1	6	to	1	8
——— Canary feed				6	0
——— Radish, per bushel	1	6	to	1	8
——— Clover Seed				5	0
Spreading Dung, per hundred cart loads				4	0
Turning ditto, ditto				4	0
Casting Ditches in the Marshes, 11 feet wide, and 3 or 4 deep, per rod	1	2	to	1	8
Hedges, very few made, and those generally by the day.					
Hoeing Beans first time, per acre				3	0
Ditto, second time				4	6
Ditto Peas, per acre	3	0	to	4	0
Dutch-hoeing Canary & Barley, per acre	1	8	to	2	0
Common hoe	3	6	to	4	0
Hoeing Turnips, per acre				6	0
Reaping Wheat, per acre	8	0	to	16	0
Mowing Barley &Oats, including binding, making bands, and shocking	4	0	to	6	0
Cutting Beans and binding				6	0
——— Peas, without binding	4	0	to	5	0
——— Canary or Radish Seed	6	0	to	7	0
Mowing Sainfoin	2	0	to	3	0
——— Clover Hay	2	0	to	3	6
———— Seed				2	0
——— Grass, in the marshes,				2	6

£. £.

Waggoner's wages by the year, with board	10	to	13
Second Ploughman	9	to	11
Third ditto	8	to	10
Waggoner's Mate	6	to	10
Second Boy	4	to	7
Third ditto	3	to	6
Bailiff	12	to	16
Dairy Maid	4	to	6
Cook	4	to	7

	s.	*d.*		*s.*	*d.*
Shepherd, per week	9	0	to	10	6
Women weeders, per day				0	8
Children, from 10 to 14 years old				0	6
Value of Ploughing an acre of land				7	0

What Improvements have been made.

The improvements that have been made here in the last half century are striking, and have arisen from the alteration of system, the plenty of manure judiciously applied, and the advantage of long leases. The attention of the farmers to the destruction of weeds is exemplary. Some of the farms, in the upper and middle part of the Island, were, within the memory of men now living, the greater part of them poor barren sheep walks, intermixed with fields of arable land, with crops of corn in the month of June grown yellow with charlock in full bloom, so as to cover the corn; besides many other sorts of weeds, and the crops of corn among the weeds sometimes hardly worth harvesting. But now on these farms very few weeds are to be seen, and the land is covered with crops nearly equal to what the best land produced formerly, when less attention was paid to weeding and cleansing the crops.

[26]

By this change of management, and the consequent improvement, some farms

here have been sold at fifty and sixty years purchase.

It is not to the excellent system and sea weed only, that these improvements are to be attributed, for the sheep fold claims a considerable share. Turnips raised by means of manure, and fed off by the flock upon such a light dry soil, is a certain way of getting a crop of barley or oats; and those crops being sown with clover or trefoil, and folded in the Summer, form the best tilth yet known for wheat, and the land is left in an improved state for the next crop of turnips. There is yet another cause of some of the improvements, in the use of marsh or ditch mould, which some farmers get in the summer time, and mix with their farm-yard dung, in heaps of from 3 to 600 cart loads, turning the whole together, and when thoroughly incorporated, they carry it out for barley or turnips, at the rate of 40 or 50 loads per acre. These are the whole of the agricultural improvements made on the arable lands of the Isle of Thanet. —A part of the marsh lands have been much improved, by means of shortening the course of the river Stour to the Sea, by a cut across a narrow isthmus of land in Stonar, thereby letting off the superfluous water, in wet seasons with greater expedition.

How far the navigation of the river to Sandwich is injured, for want of the back water, is not my business to enter upon here.

Some of the marsh lands have been improved by hard stocking with sheep, and a very valuable tract of near 200 acres, has been lately enclosed by a strong wall from the sea, near Ebb's-Fleet.

[27]

The perpendicular height of the wall	9 feet.
Width at bottom	36
Top	3
The face of the wall to the sea forms an angle whose base is	22
And perpendicular height	9
The back side forms angle, whose base is	11
And perpendicular height the same	9

The expence 27s. per rod.

27s. per Rod of 16 ½ Feet.

This against the sea in the deepest water. A lesser wall is made nearer the shore, whose

Perpendicular height is only	7 feet.
Width at bottom	29
——— at top	2
The face next the sea forms an angle whose base is	18
And perpendicular height	7
The back side forms an angle whose base is	9
And perpendicular height	7

The expence 17s. per rod.

17s. per Rod of 16 ½ Feet.

[28]

What improvements may be made.

After having said so much in favor of the improvements already made in this Island, and the excellent system under which it is cultivated, it cannot be expected that there is much to be said on this branch of the subject.

There are, however, some improvements yet to make, for there are several fields of poor thin chalky lands on the hills, in the vicinity of Margate and Ramsgate, that never were known to have any manure carried to them, which doubtless would pay very well for mending after a few years, if the occupier had the whole of the produce to himself; but the mischief is, that if he is at a great expence in purchasing town dung, or

getting sea weed up the cliffs for this land, he is probably a considerable loser the first two or three years by his industry; when at the same time the tithe gatherer, who is at no part of the expence, trouble, or hazard, gets corn each year perhaps equal in value to two or three years purchase of the land in its unimproved state; hence it is, that some of the poor land lies neglected. If a fair commutation for tithe could be devised, so as to satisfy all patties, there can be no doubt but that the produce of this Island, great as it already is, would be much encreased, by the additional crops that would be raised on these barren spots, which would be an advantage to the community in proportion to the additional stock of productions*. There would be another very considerable advantage to the public in the saving of labour, in harvest, by the corn being carried into the occupiers barns in much less

*Having sent a copy of this report to an ingenious friend in Thanet, he returned it with the following remark.

"Whatever may be the ill effects of tithe taken in kind, or whether any, I shall not here enquire into, but only remark, that the thin chalky land on the hills in the vicinity of Margate and Ramsgate, are not indebted to the tithe gatherer for their little produce, but to the inability of the occupiers, who are, generally speaking, mean in circumstances, carters, machine drivers, &c. &c. who plough, &c. when they can, in season or out of season. The same kind of land is the occupation of the wealthy farmer, exhibits a very different appearance to the eye of the spectator, and produces a more ample return to the pocket of the occupier."

This is most certainly in some measure the case; but there is a much greater quantity of poor unimproved land occupied by farmers, than by caters and machine drivers; Nash-Court Farm, near Margate, has several score acres, which in all probability would have been manured before this time, had they been tithe free.

[29]

time than it is carried into the parsonage; the latter being frequently at a great distance from some part of the parish, much time is spent in getting the corn home. The value of the difference of the labour, between carrying the tithe corn into the parsonage

and farmer's barn, is just so much loss to the public, and if rightly calculated for the whole kingdom, would amount to an immense sum±.

Among the disadvantages to the public I the collection of tithe in kind, the quarrels between neighbours, who perhaps would otherwise be very good friends, is a very material one; and more particularly where the tithe gatherer happens to be the clergyman, (who, of all men, ought to be on the best terms with his parishioners) but this fortunately is seldom the case in the Isle of Thanet, the tithe there being mostly in lay hands.

For the reasons before mentioned, a commutation for tithe, may fairly be ranked among the first of agricultural improvements remaining to be made*.

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±The author is a tithe gatherer to a considerable amount, and of course interested in the collection of tithe; but seeing, as he does, the many obstructions to all agricultural improvements, together with many other inconveniencies, and losses to the public, by means of tithes; and being called upon for his opinion, he feels it his duty to give his sentiments.

*The following is a remark by the same gentleman in Thanet.

"All the great or corn tithes are in lay hands, (excepting a small portion in Minster) and are all taken in kind; and yet this report states agriculture in a very flourishing state in Thanet; it would perhaps enlighten the question, if a fair comparison could be made, with strict impartiality, between a tithe free farms, and some of the best cultivated and managed farms, subject to the tithe gatherers, in Thanet and East-Kent."

The local advantage of an inexhaustible supply of manure from the sea, is sufficient to counterbalance the disadvantage of payment of tithe in kind, and seems to be the true reason why so much of the poor land has been improved.

[30]

IRRIGATION.

There is some of the marsh land, at the lover part of the river Stour, which is under the level of the river at spring tides, and probably might be irrigated to great advantage, and the more so, as hay is often very valuable, on account of the demand at

Ramsgate, Margate, and other bathing places in Thanet.

POOR.

Great improvements might be made in the police and management of the poor in this Island, by incorporating the ten parishes, and erecting a house of industry, somewhere in the centre, by which means the whole would be maintained at much less expence, and the greater part of the poor much better provided for than they are now; the expences of the poor for the last three years, I have been favored with by the different parish officers, and are as follow, viz.

		POLICE			POOR		
		£.	*s.*	*d.*	*£*	*s.*	*d.*
Sarre	about	300	0	0			
St. Nicholas		733	0	0			
Monkton		973	0	0			
Birchington		899	0	0	6	10	4½
Woodchurch		252	0	0			
Minster		1449	0	0*			
St. John Baptist		3786	0	0	17	0	0
St. Peter the Apostle		1972	0	0			
St. Lawrence		384	14	7			
Stonore		34	10	1			
	3)	10783	4	8			
Average of three years	*£*	3594	8	2			

The local advantage of an inexhaustible supply of manure from the sea, is sufficient to counterbalance the disadvantage of payment of tithe in kind, and seems to be the true reason why so much of the poor land has been improved.

*Of this sum, the parish of Minster, has expended in rents for poor people, who were not able to pay their own rents,

		£.	*s.*	*d.*
from Easter	1790, to Easter 1791,	8	5	0
	1791, to 1792,	14	7	6
	1792, to 1793,	19	12	6

[31]

or annual expence of maintaining the poor of the Isle of Thanet, which is 2s. 7¾d. for every acre of land.

Among the list of improvements that may be made, a better mode of drawing leases between landlord and tenant is a very material one. Many of the leases, of the present time, acre mere copies of old ones, that have been handed down through several generations, and acre as little understood by some farmers, (if ever they read them) as if they were written in Hebrew or Greek. Leases should be simplified, and made as short as possible, and written in terms easily comprehended by the meanest capacity; all repetitions avoided, and no covenants whatever inserted, but what are absolutely necessary. Some farmers are bound to sow wheat after beans, on land not fit to produce beans; to leave a quantity of podware gratten±, for a wheat tilth on farms where some sorts of podware is the worst tilth, known to sow wheat upon; and on dry upland farms, where turnips and clover are known improvements, not the least mention of those articles; not even a covenant, to leave an acre of either, at the end of the term, nor to destroy wild oats, charlock, or thistles*.

For want of a reform in this department of farming business, estates are often much injured, and incoming tenants half ruined in getting their farms into good order. It is the interest of every tenant, having a term of years in his farm, not only to keep it in good condition, but to improve it till within the last two or three years, and consequently not

One very great impediment to any effectual reform in the management of the poor in Thanet, arises from the different jurisdictions of the County, of Sandwich, and of Dover within it.

In the jurisdiction of the County.

St. Laurence, only part.

Minster, all.

Monkton, all.

St. Nicholas, only part.

Of Sandwich.

Ramsgate, the remainder of St. Laurence, Sarre, the remainder of St. Nicholas.

Of Dover.

The whole of Birchington, ditto of Margate, ditto of St. Peters§.

§ Note by a friend in Thanet.

±Local term for stubble.

*These observations are equally applicable to other parts of the county.

[32]

many restrictions are necessary during that period; it is requisite, therefore, only to make it equally his interest during the remainder of the term, which would be most effectually done, by compelling him or his heirs to allow for damages, as the clergy do for delapidations.

Miscellaneous Observations.

Weedlands. —There is but little wood growing in this island. Husbandry use stuff and fire-wood is brought from the neighbouring parishes.

Provisions. —The pride of provisions, during the winter, is the same here as in other parts of the county; but during the bathing season, they become high, owing to the great influx of company. At Dandelion, near Margate, there is a public breakfasting every Wednesday during the season, where more than a thousand persons have assembled at one time; while this is the case, provisions cannot be very cheap there.

Farm Houses. —Nothing can exceed their general neatness, and even elegance. From some of them, there is the most beautiful prospects of East Kent, the Downs, and coast of France.

Manure. —Mention having been made of the sea-weed, it remains only to describe the method of getting it up, which is done through sloping passages in the cliff, called gate-ways, for the carts to go down to the sea. When a quantity comes ashore,

after a gale of wind, the farmers set all hands to work, to get as much as possible while the tide serves, lest the next tide should carry it away; and if it happens in the night, they work at it then till stopped by the waters coming on. Some farmers will get up in one tide two or three hundred cart loads; those who live at a distance hire small spots of land, of a few perches, to lay the fresh weed upon as they get it; and carry it away to the farm at a more convenient opportunity. It sometimes comes ashore in quantities that amount

[33]

to several thousand cart loads, and perhaps all swept away by the next tide. The principal method of using it, is by mixing it in layers among the farm yard dung in the mix hills, it is of great use in helping to rot the dry part of dung carried out of the farm-yard in Summer.

Besides the advantage of this manure, there is another in the great quantity of dung made in the towns of Margate and Ramsgate, which is eagerly sought after by the farmers.

Sea sand is sometimes used among the farm-yard dung, and is of great service.

Highways. —The roads are all mended by the parishes, and are kept in excellent order.

Weeds. —A weed begins to infest this Island, and is not a little alarming to the farmers, as it is of the most prolific kind, and very difficult to eradicate. It was introduced a few years ago among some oats, which were imported in a vessel that was wrecked upon the coast of the island, and were washed by the tides along the shore among the sea weeds, and with that carried to different farms at the same time. It is of the class Tetradynamia, and produces its seed in a pod; flowering and seeding at the same time throughout the Autumn. The inhabitants call it the Stink-weed, from its fetid smell. It seems to be either the Brassica Muralis, of Hudson, or a variety of it.

The Upland Farms of EAST KENT.

Under this head it is intended to describe all the district of upland in the eastern part of the county, not comprehended in the districts of Thanet, Shepey, or the rich

lands of Deal, Sandwich, and Faversham. It is of two kinds, one very open and dry, the other much enclosed with wood and coppices; the open part lies between the city of Canterbury and the towns of Dover and Deal, and the enclosed part of the tract extends from Dover, by Eleham and Ashford to Rochester length, and from the Isle of Shepey to Lenham, &c. in breadth.

[34]

SOIL.

The open part of the district between Canterbury, Dover, and Deal, is of various soils, no one parish or farm being perfectly similar in all its parts. The principal Soils are, 1st. Chalk, 2d. Loam, 3d. strong Cledge, 4th. Hazel Mould, 5th. Stiff Clay. Besides these there are some small tracts of Flints, Gravel, and Sand. The chalk soils are of various depths, from three to six or seven inches of loose chalky mould, on a rock chalk bottom, and are mostly found on the tops and sides of the ridges of this district. At some places there is a little mixture of small flints, and at others of black light mould, provincially called black hover. This last, in an unimproved state, is the worst land of this district, and the whole of these chalky soils are much neglected, and consequently of very little value; but where they happen to be improved, by paring and burning, destroying the charlock, with good manure afterwards, they become very good land for turnips, barley, clover, and wheat; and some parts produce tolerable crops of sainfoin.

The loamy soil is a very dry soft light mould, from 6 to 10 inches deep, on a red soft clay, which is good brick earth and lies in a stratum of from 3 to 7 feet deep, under which is generally a layer of chalky marl, and then the rock chalk. This soil is very good, ploughs light, and may be worked at all seasons, and it produces god crops, if well managed, of all sorts of corn or grass.

The strong cledge is a stiff tenacious earth with a small proportion of flints, and at some places small particles of chalk; it is from 6 to 10 inches deep, on a hard rock chalk, and is found on the tops of the hills; when wet it sticks like birdlime, and when thoroughly dry, the clods are so hard as not to be broken with the heaviest roll. It is very difficult to work, except when it is between wet and dry. This land, when well managed, and the seasons are favorable for the work, produces good crops of wheat, clover, and

oats, but

[35]

when unkindly seasons happen, and dry summers succeed, it is very unproductive.

The hazel mould is a light soil on a clay bottom, more or less mixt with flints ad sand. It is dry and forms very kindly land for barley and wheat upon clover lays. Beans are sometimes blighted on this sort of land, as is wheat also on bean or pea stubble, but more particularly the latter, for which reason wheat is very seldom sown after peas.

The stiff clay lies on the tops of the highest hills, about Dover, the wetness of this soil arises only from the rains in Winter, for the springs are above 300 feet deep. This is a cold late soil from 8 inches to 12 deep, on the rock chalk- it has at some places a layer of a yellow coloured clay, between the surface mould and the rock.

Flints. —This land or rather mass of stones occurs only in small tracts in the valleys about Dover, and Stockbury near Maidstone. It consists of beds of flints with hardly any mould to be seen. It is very expensive to plough; but under good management, with plenty of manure, is very productive in wheat, barley, and beans. There is very little gravelly soil, and not much sand in this district, a little of the latter, however, is seen in the vicinity of Hythe and Folkstone. It is very light land to work, and excellent for turnips, barley, clover, wheat, peas, and potatoes.

SYSTEM.

The first mentioned soil, namely, chalk, forms a very considerable part of the district under survey. This sort of land cannot be said to be under any settled system of management, for there are almost as many schemes of practice as farmers; much of it is down land or sheep walks; some of which (although no very material part) has been so time out of mind, and some tenants are restrained (very injudiciously) from breaking up those old downs. The practice has been chiefly, when old sheep walks have been ploughed up, to do it in wet

[36]

weather, in the midst of winter, when other arable lands are too wet to work with advantage; and the principal inducement has been that of employing the teams when they would probably be doing mischief on better soils. This sort of land, when so ploughed, is usually overrun with charlock, (provincially called Kinkle) produces very poor crops, sometimes hardly worth harvesting. The crop of oats is generally succeeded by a fallow; perhaps sown with cole seed, and then oats with seeds*, and after that crop, if the land can be folded, a slight crop of wheat is obtained; but that only on some of the best parts of the field, where there is a greater depth of soil, or the flat tops of some downs where there is a soil somewhat stiffer and better than the slopes of the hills. Some of the courses of crops of the down lands, when ploughed, are as under, viz.

1.	2.	3.
Down land	Down land	Down land
Oats	Oats	Oats
Coleseed	Fallow	Fallow
Oats	Oats	Oats
Seeds	Clover or Rye Grass	Sainfoin, from 5 to 10 years
Oats	Oats	
Fallow	Fallow	

4.	5.	6.
Downland	Down land	Down land, burnt
Oats	Peas	Turnips same year
Tares	Coleseed	Barley
Coleseed	Oats	Clover
Oats	Clover	Wheat
Seeds	Wheat	Turnips, &c.
Wheat	Fallow	
Fallow		

*Clover and trefoil.

[37]

7.	8.	9.
Downshare Turnips	Downshare Turnips	Downshare
Turnips	Turnips	Wheat
Barley	Barley	Barley
Clover	Sainfoin	Oats
Wheat		Oats
Fallow		Rye Grass

The five first and last are the prevailing courses, and are each of them, very bad, as they generally tend to impoverish the soil, and make it worse, if possible; for whatever grows upon it is carried to the barn among other crops, and the straw goes to the general mass of dung, and increases the heap for the better sort of land. Hardly any body ever thinks of dunging this soil, it is consequently impoverished, by being robbed of every thing it produces. But it is not so with the 6th, 7th, and 8th courses, for there the burnt turf produces turnips almost to a certainly; and by folding these off with sheep, much manure is left on the land, and a stout crop of barley and clover obtained; the clover being again folded off, a good crop of wheat is produced, and the land in a gradual course of improvement. The 9th, and last mentioned, is the course after downsharing that has hitherto generally prevailed, and is the most destructive plan that can be devised; It is this injudicious management of downshare land, that has brought the practice of downsharing into disrepute. Four crops of white corn in succession, with rye grass at last, would impoverish the best land in the kingdom; what then must it do on some of the worst? Even if rich land was well manured for a crop of wheat, and that succeeded by three crops of white corn and rye grass, it must inevitably become poor; and then the coat of manure might with as much propriety and justice be condemned for having done the injury, as the downshare for having hurt the land before mentioned; in short, it is not downsharing, but the wrong management

[38]

afterwards that is destructive. Downsharing is the greatest improvement yet known for chalky soils, if rightly managed.

Loamy soils are usually under the round tilth system of East Kent, viz.

Barley,
Beans,
Wheat.

The barley is a cleansing crop, by being first ploughed in the Winter, and then twice or thrice more in dry weather in the Spring, before the barley is sown. Some farmers, whose hand is very clean, plough only twice, and then drill the barley in April, in rows from 7 to 10 inches apart, hoeing and hand weeding the intervals. Four bushels are sown broad cast, and from two and an half to three drilled per acre. Barley is mown, and after lying a week or two is bound in sheaves, and set up into shocks of ten at a place to be tithed. The barley stubbles are ploughed in the Winter as soon as wheat sowing is over, and dung intended for beans carried out. The beans are put in rows from 18 to 20 inches apart, if boxed in, four bushels per acre; if drilled or dropped by hand, three only; the crop is horse and hand hoed, as in the Isle of Thanet, and the whole with the succeeding wheat crop is managed as mentioned in that district. See page 17.

The strong cledge is generally under a four course system of

Fallow,	*Or*	Fallow,
Oats,		Wheat,
Clover,		Clover,
Wheat.		Wheat.

The oats and clover are sown, in a dry season, in March; the clover is generally fed with sheep and folded for wheat, which is sown early that the work may be finished before much wet weather sets in. If the fallow is cropped with wheat, it is sown the end of October, or beginning of November; the clover seed in that case is sown on the wheat in

the spring, and covered with a roll only; for this soil is generally too much pulverised with frost to admit harrowing at that time. The clover is fed as before mentioned, and

the crops of wheat and oats are harvested as on other soils already described.

The hazel mould is under different systems at different places, according to the fancy of the farmer or situation of his land. Some pursue the Norfolk system of

Turnips,
Barley,
Clover,
Wheat.

Others the East Kent, of

Barley,
Beans,
Wheat,

And others Peas,
Barley,
Clover,
Wheat,

Some sow early peas and turnips the same year.

This sort of soil being dry and very easy tillaged land, it may be managed as well under one course as another. If the occupier has with it a track of grazing land, he finds turnips and clover convenient, and pursues the Norfolk system; on the other hand, if he has no grass land, or has the corn tithes himself, he finds it most advantageous to pursue the East Kent system. The methods used for sowing and harrowing the several crops, are the same as before mentioned; it is needless, therefore, to repeat it here.

The stiff clays on the tops of the chalk hills are under a four course system of

Fallow,
Wheat,
Beans,
Barley;

[40]

And a very good one it is for such a soil. The fallow gives an opportunity of getting a fine early wheat season, which is very necessary on this cold backward land.

The wheat stubble is ploughed soon in the Winter, by which the frost brings the surface into fine order for drilling the beans as soon as the land gets dry in the Spring. The beans are horse and hand hoed to keep the land clean for the barley crop, which is put into the land at two ploughings only. The corn is harvested in the same manner as on other soils, but is much later than any other sort of land. The wheat harvest usually commences about 14 or 18 days later than in the Isle of Thanet, or towards the end of August, and other crops in the same proportion.

The system of grazing in East-Kent, on the upland farms, if it may be called grazing, is that of feeding flocks of lean sheep on the downs and seeds, folding them every night. These are bought in wether lambs, in August, and sold out lean when about two years and a half old to the fatting graziers. Some farmers of late years, by sowing many turnips, make their wethers fat and sell them to the butchers in the Spring.

LIVE STOCK.

Almost the whole of the sheep kept on the upland farms of East Kent, are the true Romney Marsh breed, whose carcases and bones are large, and wool is long and fine. They are a sort of sheep that require rich land and good keep to make them fat; and when they are so, come to a great weight, with a very valuable fleece. It seems quite contrary to reason and nature, that they should be equally adapted to rich marsh land and poor chalky downs, and consequently they are not so fit for this district as the South Down sort, whose natural soil is a fine turf on chalk hills.

The cattle are the same as described in Thanet, viz. mixtures of many sorts, without any attention whatever to breed or shape. It is much to be regretted, and somewhat extraordinary,

that in a country where agriculture is arrived at such great perfection, there should be so little attention paid to the breed of cattle.

HORSES.

Many farmers have great pride in their fine teams of horses, which are often

much too fat to do the quantity of work in a day that they ought. The sort, size, and value are much the same as before mentioned in Thanet.

HOGS.

Are of many sorts and mixtures; they are usually kept in farm-yards, until they are a year and a half old, and then put up to fatten on beans and peas, for pickling pork, which is laid down in brine tubs, to feed the ploughmen; they are made to weigh from ten to twenty-five score pounds each. Some are fattened and killed at from six to twelve months old, and sold to small families in the neighbouring towns and villages, or to pork-butchers, who retail them in sides and quarters, to those families. The business of rearing and fatting hogs for sale, is generally considered as a bad one.

There are not many hop-gardens on the upland farms of East Kent; they are managed as will be described under that particular head; those of the parishes of Woodnesborough, Ash, Wingham, &c. are the principal, and will be more properly included in the flat rich lands of the vicinity of Sandwich, as will likewise the orchards of that part of East Kent.

IMPLEMENTS OF HUSBANDRY.

The Kentish turn wrest plough, harrows, rolls, butches, dung carts, &c. with the prices of each, are the same as described in the Isle of Thanet. See page 21.

[42]

PRICE OF LABOUR.

	s.	*d.*		*s.*	*d.*
Labourers per day	1	6	to	1	8
Thrashing Wheat, per quarter	2	0	to	3	0
——— Barley	1	4	to	1	10
——— Beans	1	0	to	1	3
——— Oats	1	0	to	1	6
——— Peas	1	6	to	2	0

——— Canary feed	6	0	to	7	0	
——— Clover Seed; per bushel				5	0	
Spreading Dung, per hundred cart loads,						
24 bushel each				3	6	
Turning mixhills				3	6	
Making hedges, per rod	0	2	to	0	4	
If plashed and bound				0	6	
Hoeing Beans, per acre	3	0	to	3	6	
——— Peas	3	0	to	4	0	
Dutch-hoeing Barley, per acre	1	8	to	2	0	
Common hoe	3	0	to	4	0	
Hoeing Turnips	5	0	to	6	0	
Reaping Wheat, per acre	7	0	to	15	0	
Mowing Barley or Oats	1	8	to	2	6	
Binding and shocking	1	8	to	2	6	
Cutting Beans and binding	5	0	to	6	0	
——— Peas, without binding	4	0	to	5	0	
——— Canary	6	0	to	7	0	
Mowing Sainfoin	1	8	to	2	6	
——— Clover for Hay	2	0	to	3	0	
——————— Seed	2	0	to	2	6	
——— Grass Hay on Meadow	2	6	to	3	0	

[43]

	£.	*s.*	*d.*		*£.*	*s.*	*d.*
Waggoner's wages, per annum							
(and board)	10	0	0	to	13	0	0
If a married man, and boards							
himself, per week	0	10	0	to	0	10	6
Second ploughman, at per annum	9	0	0	to	11	0	0
Third ditto	8	0	0	to	10	0	0

Waggoner's mate	6	0	0	to	9	0	0
Second plough boy	4	0	0	to	6	0	0
Third ditto	3	0	0	to	5	0	0
Bailiff	12	0	0	to	16	0	0
Dairy maid	4	0	0	to	5	0	0
Cook maid	4	0	0	to	5	0	0
Shepherd, per week	0	9	0	to	0	10	0
Womens wages for weeding, per day					0	0	8
Children from 10 to 13 years old					0	0	6
Value of ploughing an acre of land	0	7	0	to	0	10	0

WOODLANDS.

The woodlands of the eastern part of Kent are dispersed principally between the great road from Rochester to Dover, and the chalk hill that runs from Folkstone by Charing to Detling. These woods furnish the country with fire wood, tillers for husbandry uses, and the dock yards with timber for ship-building; but the most material part of their produce is the immense quantity of hop-poles cut out for the neighbouring plantations.

SOIL.

The soil on which these woods grow is of various sorts; by much the greatest part of the subsoil is a hard rock chalk, and the surface is in some parts clay, others stiff cold cledge, intermixed with flints, and some is a poor cold loam. The chief of the productions of the chalky soils, are ash, willow, and hazel, and of the cold clays, oak. birch, and beech. The

usual age of selling, from twelve to fifteen years growth, and the method is to cut and lay it in ranges of two rods in width, throwing out the hop-poles of two ranges into one row, and then laying them up in half hundreds for sale: stakes and binders, for hedge-

making, are cut out by the men who fell she wood, as are the large poles for husbandry use. The wood is generally sold by the proprietors to wood dealers, by the acre, and they retail it to the consumer. Tithe is paid for it at the rate of two shillings and three-pence per pound, of the price the proprietor sells it for. The price of selling is from fourteen to sixteen shillings per acre, with ten or twelve pence per hundred, for all the hop-poles, and four pence per hundred for the stakes and binders. The range wood is commonly sold in small lots of twelve perches, in the most eastern part, where wood is scarce, and where more plentiful, it is frequently sold by the acre, or made up into faggots and sold by the hundred. The price of labour, for making the faggots for domestic uses, is from two and six-pence to three shillings per hundred; and for brick kilns, from eighteen pence to two and six-pence per hundred; for domestic uses they are made six feet long, and three feet in girt, and for brick kilns of different shapes and sizes, according to the fancy of the brick manufacturer. Woodland estates are generally considered of very great value, but to say what they produce would be ridiculous, for some are worth only five pounds per acre when felled, while others are worth forty pounds or more; their value depends almost entirely on the quantity of hop-poles they produce, and the price they sell for.

There are no common fields in this country and but few common pastures in this part of it; the principal and only on f any extent, is Swingfield Minis near Eleham, which contains about five hundred acres: an attempt was made a few years ago to get an act of inclosure, but the owners and occupiers could not agree about it.

[45]

What Improvements have been made.

The principal improvements that have been made on the uplands of East Kent, are,

Cleaning the poor lands from weeds.

Turf burning.

The introduction of turnips.

Erecting Houses of Industry.

The chalky lands are naturally subject to charlock, which formerly was never

pulled out of any but the best land; but of late years, many farmers have found it their interest to eradicate this pernicious weed equally from the bad and good land: If land is not rich enough to produce one good crop in a year, it is quite contrary to reason to suppose it capable of producing two; the destruction of weeds therefore must leave the land in better heart for a crop of corn, and when land is once got clean from weeds it is very easy to keep it so; but if one year neglected, and a crop of the seeds of weeds is suffered to drop on the land, it becomes a work of time and difficulty to get it clean again. The method used to eradicate weeds, is to make good summer fallows, ploughing often in dry weather, and always to harrow the land and roll it down close after the plough, while it is moist and mellow; that brings up the seedling weeds, which subsequent ploughings destroy. The succeeding crops of corn are drilled, which gives an opportunity of taking out what few weeds remain.

Some poor lands of this districts have been greatly improved by downsharing and burning the turf of waste banks and highways. Downsharing is done by land, cutting the turf from half an inch and half in thickness, and burning it to ashes. The whole work is done for 30s. per acre. Turf ashes are made from waste spots, by being dug with the spade, or pared with the downshare plough, for 6d. per cart load of about 30 bushel.

[46]

Crops of wheat and barley have lately been produced on some of the chalky downs (by means of these improvements) that were worth more than the fee simple of the land on which they grew.

The introduction of turnips on the poor land of East Kent increases every year, and is most certainly a very great improvement, for by that practice good crops of corn are obtained, on lands which were before hardly worth cultivation; and flocks of sheep are seen on farms that never before kept any, and their produce in corn is equal, if not superior, to what it was before any sheep were kept.

Several Houses of Industry have been erected, under Mr. Gilbert's act for incorporating parishes; which provide a better maintenance for the poor, and education for their children, who before were brought up in idleness and vice.

Some of the corporations that have been established a few years, have already made a considerable reduction of their debt, which sufficiently proves that their sesses will in time be reduced.

What Improvements may be made.

Nothing can be devised that would so much set improvements afloat as a commutation for tithe.

There are immense quantities of poor land in East Kent, which, experience has proved, might be made to produce good crops of turnips and clover, that never yet have produced either; but the expence is so great to the occupier, with the idea before him that another may reap the greatest benefit, that hardly any person is willing to set about improving on such terms. The productions above-mentioned were raised on lands that paid no tithe, and that circumstance was the principal inducement to make the exertion. Let tithes be compounded for, if it was only for one term of 20 years, and turnips, clover, mutton, and wool would increase in an astonishing degree. Farmers then

[47]

would have the satisfaction of reaping the fruits of their own labour; and would set about turf burning and every scheme they could devise to mend that land which they now care but little about.

There are some small tracts of grass land along the rivers and rivulets of this district that might be irrigated; but the practice (among the farmers in general) is hardly known.

The introductions of South-Down sheep, on the chalky downs of East-Kent, may be mentioned as an improvement of great importance; experience has proved the fact beyond a doubt; but farmers in general are so bigotted to old customs, that it is with great difficulty they can be persuaded to make trial of any new kind of stock, or to adopt any innovation whatever.

SWINGFIELD-MINIS,

Before mentioned, is a common covered with furze and brakes, with a few small

patches of grass; it supports some lean cattle and poor half starved sheep; the soil is a very cold soft loam, and might probably be converted, by and act of inclosure, to good meadows, for there are several small pastures on the borders of it that produce very good grass.

PROVISIONS.

The common price of provisions at this time (November 1793,) are

	s.	*d.*			*s.*		*s.*	
Beef,	per lb. 0	5		Ducks and Fowls, per couple,	2	to	3	
Mutton,	0	5		Turkeys, each	4	to	5	
Pork,	0	5½		Geese, ditto		4	to	5
Veal,	0	6		Fat Pigs, a month old,		3	to	4
Best Cheshire cheese,	0	6¾		Apples, per sack,		7	to	8
Rough meal, per bush.	6	0		Potatoes,	4	to	5	

At Canterbury a society for the encouragement of agriculture has been lately instituted, which is liberally supported,

and promises to be of great public utility. See Annals of Agriculture, No. 119.

The management of WOODLANDS, in the District extending from CHATHAM-HILL to CHARING.

The soil on which these woods grow is, for the most part, flint and clay, with chalk at no great distance from the surface. Where chalk is the chief component part of the upper surface, the wood is of slow growth and little value. They are generally cut down from 10 to 14 years growth, and the price varies from 5 to 15l. per acre depending in a great measure on the goodness of the wood, the demand and the price of poles. Hop

poles are the chief article which make woods valuable in this part of the country, there is not only a constant demand for them at home, but they are carried as far as Maidstone, and to a considerable distance beyond; the planters preferring the poles which grow upon the hills to those of quicker growth and nearer home.

Part of the woodland in this district is in the hands of the proprietors, and part is let to the tenants who occupy the adjoining farms. When fit to fell it is commonly sold by valuation. After the purchase is made and the leaf is off, the wood is parceled out among the different workmen employed by purchaser. The first step is to clear the stocks of the small spray, bushes, &c. these are made up into bavins, bound with two wifts*, and are called winter kiln bavins; they should be six feet long, and two in circumference over the bands; the price of making them is three shillings per hundred, and they sell in the woods for six shillings per hundred. If bushes are wanted, the best are bound up in bundles with one whift, at one shilling and six-pence per load, consisting of fifty bundles; and they sell in the woods from seven to ten shillings per load.

*Local term for bands.

[49]

After the stocks are cleared, they are cut down and thrown into ranges, wide enough to admit a team to pass to fetch away the different articles. These are cut out as the stocks are felled, and consist of first and second best poles, first and second ordinary poles, use poles, stakes, and binders, thatching rods, austry rods, hurdle rods, wheel timber, piles, and props. The remainder not fit, or wanted, for these purposes, is thrown into the range, where it remains to employ the woodmen in the Spring.

The best second poles consist of the same wood as the first, and are only a smaller pole, varying in length from fifteen to sixteen feet. They sell in the wood from twenty to twenty-one shillings per hundred.

The first ordinary poles consist of oak, gascoign, red birch, beech, and hornbeam; the two last very inferior: their length should be from seventeen to eighteen feet; they sell in the wood from twelve to twenty shillings per hundred.

The second ordinary poles, varying in length from fifteen to sixteen feet, sell in the wood from ten to twelve shillings per hundred.

Use poles consist of ash, chesnut, willow, oak, asp, and gascoign, which are too large for hop poles. They are cut at a half-penny each, and sell in the wood from four-pence, according to the size, length, and goodness of the wood. The largest sort are sold by admeasurement, from eight to nine-pence and ten-pence per foot.

Stakes and binders are cut out of hazel, ash, oak, willow, and maple; they are bound up in bundles, twenty-five in each; the price of cutting is three halfpence each, and they sell in the wood from four-pence halfpenny to six-pence per

[50]

bundle; the length of a stake should be five feet, of a binder from fifteen to eighteen feet.

Thatching rods are cut out of the same kinds of wood as the stakes and binders, which are not of a proper length for binders, or large enough for stakes. They are bound up in bundles fifty in each; the price of cutting is two-pence per bundle, and they sell in the wood for six-pence. The length of a bundle should be six feet.

Austry rods are smaller than thatching rods cut out of hazel, they are used to bind billet wood for the London market. They are bound up in bundles, one hundred rods in each; the price of cutting is two-pence, and they sell at six-pence per bundle in the wood: their length is five feet.

Hurdle rods are cut to make hurdle gates for folding sheep; they are cut out of the same kind of wood as binders, indeed they are only a small binder from ten to fourteen feet long. They are bound up in bundles fifty in each, the price of cutting is two-pence, and they sell in the wood at six-pence per bundle.

Wheel timber is cut out of large beech of two or three falls growth, it is used for fellies of wheels, it should not be less than seven inches diameter at the small end. It is cut down for one penny for every day length of three feet, and sold in the wood from seven-pence to eight-pence per length; if sold by admeasurement, at the same price per foot. If smaller, it is cut out for axle-trees, plough cheps, and wrests. Axle trees should be seven feet long, and six and a half inches in diameter at the small end; they are cut

for one penny each, and sell in the wood for ten-pence; plough cheps should be five feet long, and five inches diameter at the small end: they are cut for one halfpenny each, and sell in the wood for six-pence.

Plough wrests should be four feet long and five inches diameter at the small end: they are cut for a halfpenny each, and sell in the wood for two-pence.

[51]

Piles are out of beech and hornbeam; they are used to prevent the tide from washing away the chalk at the footing of the sea walls, and are cut of different lengths.

	s.	*d.*			*£.*	*s.*	*d.*	
12 feet long	1	1½		6 feet long	1	15	0	
11 ———	1	0½		5 ———	1	5	0	
10 ———	0	11½	each	4 ———	0	19	0	per hundred
9 ———	0	10		3 ———	0	12	0	
8 ———	0	8½						
7 ———	0	7						

N.B. The above is the price of the piles delivered at the place where they are to be used. Land carriage is five shillings per hundred for six feet piles, four shillings for five feet, three shillings for four feet, and two shillings for three feet piles. If they go by water carriage the price is the same.

Props, which are used in the coal mines at Newcastle, are cut out of oak and birch; they should be cut six feet four or five inches long, and be two and a half inches diameter at the small end: the price of cutting is a halfpenny, and they sell in the woods at two pence each.

These are the chief, if not all the articles which are cut during the Winter. In the Spring, what remains in the ranges is made up, part into Summer kiln bavins, which are made of the smallest wood, and bound with two withes, and should be six feet long. The price of making is three shillings per hundred, and they sell in the wood from eight to nine shillings per hundred. Part is made into household bavins, being the best faggots

which are made; they should be six feet long, and two feet over the band; the price is also three shillings per hundred, and they sell in the woods from twelve to fourteen shillings per hundred. The remainder is cut out into cord wood; each stick should be three and a half feet long, the length of the cord fourteen feet, and it should be stacked three feet high; the price of cutting and stacking is

[52]

two shillings per cord, and the cord sells in the wood from twelve to sixteen shillings.

It has been found by those who have been very attentive to the management of their woodlands, that wood, like every thing else, decays, and produces fewer poles every fall, unless they are replenished. This is left done in the Autumn after the wood is felled. The plants, whether chesnuts, ash or willow, should be taken up from the nursery, with as much earth to their roots as can be conveniently done, and their small roots should be cut as little as possible. Strong plants taken up in this manner, and planted with care, seldom fail: they should be looked over the next Spring, to fasten those which the frost may have loosened.

The tithe of woodlands was, a few years ago, at two shillings in the pound, but now varies from two and three-pence, to two and six pence and to three shillings. Many clergymen are of opinion that the woods ought not only to be cut down, but to be made up into the different articles for sale, but this is not true; if the clergyman and purchaser should disagree, all that the latter has to do, is to sever every tenth perch and leave it: the expence of doing this is found to be about three pence in the pound. If wood therefore is sold at a fair valuation, it appears unreasonable for any clergyman to demand more than two and three pence in the pound.*

The flat rich Lands in the vicinity of FAVERSHAM, SANDWICH, and DEAL.

The land meant to be described under this lead, is that which lies nearly on a level, and within a few miles of the towns above mentioned. It is extremely fertile, and under the most excellent system of management; it is almost entirely arable, and being without that variation of culture prevalent

*Copy of a paper presented to the Kent Agricultural Society by Rd. Tilden, Esq. of Milsted near Sittingbourne.

[53]

in most other parts of the country, it was thought necessary to describe it under a separate head.

SOIL.

It consists of two sorts, namely, rich sandy loam, with a greater or lesser mixture of sand, and stiff clay, some of which in the lower parts are rather wet. The surface of the first is seven or eight inches deep, with a subsoil, varying in depth, of strong loam, clay, or chalk; this soil is always ploughed with four horses, is very dry and kindly land to work at all seasons, no ridges or water furrows are required; it produces great crops of wheat, beans, barley, oats, and peas, and sometimes canary and radish seeds.

The stiff wet clay is that which has a strong clay bottom or any substance that holds water. It lies low, is subject to land springs, and of a close texture, so as not to admit a quick filtration of the water.

This, when well drained and kept clean from weeds, and otherwise well managed, in a favorable season, is excellent land, and produces good crops of wheat, beans, and canary; but is generally very expensive to keep in good order.

SYSTEM.

The dry loamy soils are cultivated in the round tilth system of East-Kent, namely,

Barley,
Beans,
Wheat.

A few oats are sown instead of barley, and peas instead of beans; and sometimes a crop of canary is sown on the bean stubble instead of wheat.

Barley is sown or drilled on the third ploughing at the end of April and begging

of May, the quantity of seed sown, and other management the same as before described on the loamy soils of East-Kent. When the land is manured

[54]

the dung is generally laid upon the barley stubble for beans, at the arte of forty or fifty cart loads per acre; when ploughed the beans are drilled, or dropped by hand, from three to four bushels per acre; the crop is frequently horse and hand hoed three times each, and always kept perfectly clean from weeds. It is harvested as in other parts; after which the land is ploughed once entirely flat, and sown with wheat chiefly in the month of November. The crop of wheat is carefully hand weeded in the summer months, and the harvest usually commences a few days later than in the Isles of Shepey and Thanet, or about the first week in August.

The stiff wet clay of the lover parts of this district is much of it under a two course system of beans and wheat alternately. The beans are always put in rows twenty inches apart; they are frequently planted by women dropping them by hand, while a man follows and covers them with the loose mould which he cuts and draws from the next furrow, with an instrument called a planting hoe. Wheat is sown brad cast before they rainy season commences in the Autumn, and this land is laid in flat ridges of half a rod or width; after sowing, the ridge furrows are opened to let off the water in winter.

The best of these stiff wet lands are often sown with canary instead of wheat, and garden beans are planted instead of common ticks; these are the windsor and toker beans, which are dropped by hand, at the arte of six bushels per acre, in rows twenty inches apart; they sometimes, when too much land is planted, and the crop happens to be indifferent, they sell at low prices, and turn to a very bad account, and at such times are given to fattening bullocks, sheep and pigs. Both the bean and canary crops are kept clean by repeated hoeings. The canary is cut in September, at the expence of six or seven shillings per acre, and is left a great while in the field, in lumps of half s sheaf at a place, before

[55]

it is fit to bind and carry to the barn. The expence of thrashing this seed is six or seven shillings per quarter.

The chaff of it is the best horse food of the kind that comes out of the barns. The live stock, price of labour, and implements of husbandry are the same as in other parts of East-Kent. There are no woodlands, nor any waste or commonable lands in these parts of the country.

Rectorial tithe is almost always paid in kind, and vicarial generally compounded for by the year. This tract of land having been under a constant course of good management, for a great number of years, there does not appear to have been any particular improvements made, nor does there seem room to expect much to be made in future.

In the vicinity of Sandwich there are a great many orchards, which some years produce large quantities of excellent apples; some of which go to the London market, but the principal pat is sent by the coal vessels to Sunderland and Newcastle.

The farmers usually sell their orchards by the lump to fruiterers, who gather, sort, and pack them, in baskets, or old sugar hogsheads, for exportation.

The hop grounds of the parishes between Sandwich and Canterbury, are those which produce the fine East-Kent hops, so much sought after by the London brewers. For their culture and management see the Canterbury Plantation.

The size of farms varies from fifty to three hundred acres and some few more, but the greater number are from one to two hundred.

Leases are granted from seven to twenty-one years.

The usual covenants are for the landlord to allow for land-tax and quit-rent, and to repair all buildings, gates, and timber fences. The tenant to repair all hedge and ditch fences, and to fetch materials for repairs within a limited distance. Timber reserved to landlord, hedge bushes to the tenant, who repairs glass windows, and finds straw for thatching, with beer to workmen. The tenant covenants to leave a certain quantity

[56]

of bean stubble, the last year of his term, for a wheat tilth, and sometimes to horse and hand hoe the beans.

The Hop Grounds of CANTERBURY and MAIDSTONE.

The hop plantations in the vicinity of those places, being the principal ones of the country, a description of them may suffice for the whole; but as the soil and sort of hops are very different in the two district, it may be necessary to describe them separately: and first,

CANTERBURY.

The plantations called the City grounds, are those surrounding the city, to the distance of two or three miles, and contain between two or three thousand acres.

The hops growing there and in East Kent are of a very fine rich quality, and if well managed, are of a good colour. They are highly esteemed by the London brewers for their great strength, doing more execution in the copper, than those of any other district.

SOIL.

The best of the hop plantations of this district, are those which have a good deep rich loamy surface, with a deep subsoil of loamy brick earth: this kind of land forms the principal part of the plantations of East Kent; there are however some good grounds, where the surface is very flinty, and some of gravelly nature, but those are very inferior.

SYSTEM.

When a piece of ground is intended to be planted, the first thing is to plough the land as deep as possible, early in October, and to harrow it level; it is then meted each way,

[57]

with a four rod chain, placing pieces of reed or stick at every tenth link, to mark the place of the hills; which makes 1000 per acre. This is general method; but some few grounds are planted eight, and some twelve, hundred per acre; some are planted wider

one way than the other, in order to admit ploughing between the hills instead of digging; but this practice, although it has been tried many years, does not seem to increase, on account of the difficulty of digging along the rows where the plough cannot go; that part being much trodden with the horses in ploughing, digs so much the worse, that an extra expence is incurred, which in some measure defeats the œconomy of the plan. When the hills are marked out, holes are dug about the size of a gallon, which are filled with fine mould, and the nursery plants placed in them.

Some put three plants, others two, and some only one good one to each hole. If the land is planted with cuttings instead of nursery plants, the holes are dug in the Spring as soon as cutting time commences; some fine mould is provided to fill up the holes, in which are placed four or five cuttings, each about three or four inches in length; they are covered about an inch deep with fine mould, and pressed down close with the hand. When the land is planted with cuttings, no sticks are required; but if nursery plants are used, they require sticks or small poles, six or seven feet high the first year: In both cases the land is kept clean during the Summer by horse and hand hoeing; the next Winter dug with a spade, and early in the Spring the old binds are cut off smooth about an inch below the surface, a little fine mould is then drawn over the crown of the hills. As soon as the young shoots appear, so that the hills may be seen, they are stuck with small poles from seven to ten feet long, in proportion to the length it is expected the bind will run; these poles are called seconds, and are generally bought in the woods, at from five to eight shillings per hundred, and three of them are placed to each hill. As soon as the bind gets about two feet in length women are employed to tye them

[58]

to the poles. The land is kept clean, during the Summer, by horse and hand hoeing, as before mentioned. The proper time for gathering them is known by the leaf of the hop rubbing freely off the string, and the seed turning brown. They are picked in baskets, containing five bushels each, and are carried to the oast in bags, at noon and evening, for drying. Great care and skill is necessary in this branch of the business; the smallest neglect or ignorance in the management of the fires will spoil the hops, and occasion

great loss to the planter. When dried and sufficiently cool to get a little tough so as not to crumble to powder, they are put into bags or pockets; the former containing two hundred weight and a half, and the latter a hundred and one quarter: they are then trodden very close, and weighted by the exciseman.

The second year after planting, full size poles from fifteen to twenty feet in length, according to the strength of the lad, (which cost from sixteen to thirty-six shillings per hundred) are placed to the hills instead of the seconds, which are removed to younger grounds. Here great care is necessary not to overpole, for by that means young grounds are often much weakened; and it is equally so not to over-dung them, as that will make them mouldy.

Fifty cart loads of well rotted farm-yard dung and mould, once in three years, are generally esteemed sufficient for an acre of land.

Implements and Appendages to the Hop Grounds.

Every hop plantation of four or five acres requires an east, about sixteen feet square, which, built substantially with the requisite stowage room, costs from one hundred and fifty to two hundred pounds.

This is furnished with a set of picking baskets, about twelve in number, which cost about five shillings and six-pence each. Also a good scale beam, with weights and scales, which together cost about five pounds.

[59]

A shim made with a frame like a wheel-barrow is esteemed the best sort; it costs about two guineas. This implement is a very useful and convenient one likewise for tearing up weeds on Summer fallows.

A harrow to be drawn by one horse, with a small wheel in a front, to go round at the ends of the plantation, and a pair of handles to be holden by the man who follows it, in order to keep it from bruising the binds. This implement costs about one pound fifteen shillings.

A large iron peeler to make holes in the land for the poles, costs six or seven shillings. A hop dog to wrench up the poles costs five shillings.

PRODUCTIONS.

There can be no certain report made of the produce of the hop plantations, because, in some years, the growth of this district is less than two hundred weight per acre, and in others it is fourteen or fifteen; the average may be seven or eight.

PRICE OF LABOUR.

		£.	s.	d.
Labour, per day,		0	1	6
Digging, per acre,	15s. to	0	18	0
Cutting, per acre,		0	5	0
Poling,		0	10.	0
Sharping old poles,		0	2	0
Tying,		0	10	0
Crowning, a shovel full of mould to every hill, when cleansed of superfluous bine,		0	1	6
Half hilling,		0	3	0
Whole hilling, or second operation,		0	2	6
Summer hoeing, per acre,		0	5	0
Picking by the basket of five bushels,	7d. to	0.	2.	0
Drying, per week, with a quart of strong beer per day,		1.	1.	0

[60]

		£.	s.	d.
Composition for tithe, per acre,	10s. to	1	5	0
Bagging, per lag,		0	1	0
——— per pocket,		0	0	9
Sharping new poles, per hundred,		0	0	6
Shaving		0	1	6
Drawing new poles into the ground, per hund.		0	3	0
Stripping poles of the bind, per acre,		0	2	6

Opening the hills, per acre,	0	5	0
Stacking poles, per acre	0	2	6

What Improvements have been made.

The management of the hop grounds is much the same as it has been for a long series of years, and no improvement of consequence has taken place; one however, in the mode of drying, ought to be mentioned, namely, the use of a small quantity of brimstone on the fire when the hops are first placed on the kiln. This suffocates the great number of insects, which are frequently seen crawling on the hops, and occasion a speedy evaporation of the superfluous moisture which otherwise usually hangs for a long time after they first come to the fire. By the use of this mineral the hops come off the oast much brighter in colour, and it is most certainly a great improvement in the art of drying hops.

What Improvements may be made.

There does not appear any alteration necessary in the culture of hops; but it would be a great encouragement to the plantation if some permanent composition was fixed by the legislature in lieu of the payment of the tithe in kind; for although there are but few instances of the tithe being taken in kind, yet as it hangs over the heads of the planters, it prevents many persons from engaging in the business.

[61]

MAIDSTONE PLANTATION.

The hop plantation of this town, and its vicinity, extends through the several parishes along the shelf of land which lies below the chalk hills, on the borders of the weald of Kent. This plantation in some years grows great crops of hops, but the quality of them is much inferior to those of Canterbury and East-Kent.

SOIL.

The subsoil is a hard stone commonly called Kentish rag, which makes very good lime. The surface soil, where the hops are planted, is of different kinds of stone shatter; that is, having a greater or lesser mixture of small pieces of stone and sand.

SYSTEM.

The management of the plantations of this district and the price of labour is nearly the same as in the Canterbury plantations; it is not necessary, therefore, to repeat it.

TITHE.

A composition for the tithe of hops is paid from five to fifteen shillings per acre.

HOP POLES.

The price of hop poles is from fifteen to forty-two shillings per hundred.

ORCHARDS, CHERRY GARDENS, and
FILBERT PLANTATIONS.

In the neighbourhood of Maidstone, are a great number of small fields, of from one to ten acres, and somewhat more, panted with fruit of different kinds, for which the rocky soil of neighbourhood seems particularly adapted. The easy water carriage to the metropolis, from the Medway up the

[62]

Thames, renders the growth of fruit a very profitable article of husbandry. The best method known here for raising orchards of apples and cherries, and plantations of filberts, is to plant them among hops, by which they very soon come to perfection; the constant culture of the land for the hops, with the warmth and shelter they afford the young trees, causes them to grow with great luxuriance. It is a very common practice to plant hops, apples, cherries, and filberts, all together. Eight hundred hop hills, two hundred filberts, and forty apple and cherry trees per acre. The hops stand about twelve, and the filberts about thirty years, by which time the apples and cherries require the whole land.

Sometimes apples and cherries are planted in alternative rows, with two rows of filberts between each of them.

There are some plantations of filberts raised among hops, without any other trees.

PLANTING.

The method of planting apple and cherry trees, is to dig holes about two feet square, and two spits deep, taking out the rocks, and turning down the surface soil, on which the young tree is placed, and the remainder of the earth is trodden down close about the roots; they are supported by stakes, until they get sufficient strength not to be hurt by gales of wind. A composition of lime and night soil, is with a brush painted on the stems of the young trees, which is said to promote the growth of them exceedingly.

The favourite sorts of apples for cyder, are the golden rennet, sharp russet, golden mundy, kernel permain, and the stire apple: for domestic uses, the lemon pippen, or quince apple, farley pippen, royal russet, ribstone pippen, holland pippen, pigsnout, walling, loans permain, nonpariel, golden pippen, french pippen, kentish pippen, and golden nob.

The cyder fruit generally hangs on the trees until the twentieth of October, and is then gathered and laid in heaps

under cover, the early sorts a month , and the latter ones from one to three months, to ripen; it is then ground and pressed, and the juice put up into casks. In plentiful years, cyder fruit sells for fourteen pence, and in scarce years up to two shillings per bushel.

Mr. Stone, of Maidstone, is a cyder maker of great repute, and in a very extensive line of business; being called upon in this survey, he, with great liberality, offered to communicate any information, for the benefit of society. His warehouse, mill, press, and vaults, were contrived by himself, many years ago, with great ingenuity, and are exceedingly convenient.

From many years experience, he finds no particular advantage in watching the fermentation of cyder, in order to rack it at any exact time; a method considered of great consequence in Herefordshire, as mentioned by Mr. Marshall, in his Rural Œconomy of that county.

Mr. Stone mixes all sorts of apples together, and makes excellent cyder. Golden pippens alone make very fine cyder, if well managed, but great skill and care are required.

The sorts of apples for domestic uses are sold to fruiterers, who send them to London by the hoys, and to the north of England by the coal vessels.

Fruit orchards are considered as the most valuable estates. Tithe is very rarely paid in kind; but in lieu of it, a composition of two shillings per pound, on the price of the fruit.

CHERRIES.

The site preferred for this fruit is where there is a deep surface of loam upon the rock. If grown by themselves, they are planted from twenty to thirty feet distant, and are put somewhat deeper in the earth than apples; in order respects the management is the same. The sorts are the black-heart, white-heart, Flemish, or early kentish, courone, Hertfordshire-black, wild-black, and red cherries.

[64]

They are usually sold to the higlers, who retail them on the sea-coast of Kent by the sieve, or basket, containing forty-eight pounds each; or they are sent to London by water, and consigned to fruit factors.

Tithe is paid by composition of two shillings per pound on the sale.

Cherry gardens while they are in full bearing, which is seldom more than thirty years, are more profitable than orchards; but after that time the orchards produce the most money.

FILBERTS.

There are several hundred acres in the vicinity of Maidstone. The soil best adapted for them is the stone shatter sandy loam, of a quality somewhat inferior. It is a disadvantage for the trees to grow with great luxuriance, as they bear most nuts when but moderately strong; if they are planted among hops, without apples or cherries, they are put about twelve feet apart; when the hops are dug up the filbert plantation is kept

clean by repeated digging and hoeing, and great skill is necessary in pruning to make them bear well. A small part of the produce of this plantation is sold to the higlers, who retail them in different parts of the county; but the principal part is conveyed by water to London, and there consigned to factors, who sell them by the hundred of an hundred and four pounds, from sixteen to forty-two shillings per hundred, in proportion to the crop and demand.

Tithe is compounded for by the year.

ISLE OF SHEPEY.

The Isle of Shepey is separated from the rest of the county of Kent by an arm of the sea, called the Swale, navigable for ships of 200 tons burthen. It is said to have derived its name from the number of sheep that were continually feeding on it.

[65]

It is about eleven miles in length, and eight at its greatest breadth. It contains the parishes of

1. Minster, with the Ville of Sheerness,
2. Queenborough, which sends two members to parliament,
3. East-Church,
4. Warden,
5. Leysdown,
6. Elmley, and its Isle,
7. Harty, and its Isle

The land of this island rises from the shores of the rivers, on the south east and west bounds of it, towards its center; but on the north side, it seems by the height of its cliffs, to have once extended much further. The cliffs are in length about six miles, and gradually decline at each end; the more elevated parts containing about two thirds as far as they extend, and they are at the very highest of them about Minster, not less than ninety feet, consisting of clay, and being washed at their basis by the tides which beat against them, more especially when driven by strong north east winds, they are continually wasting and falling down upon the shore; and so great is the loss of land at

the highest parts, that sometimes near an acre has sunk down in one mass from the height upon the sea shore below. Some farms have lost many acres within these few years. About four fifths of this island consists of grass land, of two sorts, namely, marsh land and upland pasture, the former has a very liberal share if rich and good fatting land; but great part of the latter is but very poor breeding land, that will hardly support an ewe and an half per acre; most of the arable land is exceedingly fertile, in wheat and beans, especially towards the north side, in the parishes of Minster and East Church. The enclosures on the hills are small, and are surrounded with thick hedge rows of elm; and the whole face of the country is exceedingly pleasant in fine weather, being interspersed with much small hill and dale, and frequent houses and cottages. The roads throughout the island are

[66]

very good all the year, owing to the great plenty of gravel and beach pits and but little wear in it, the prospects are very pleasing and extensive on every side.

There is hardly any coppice wood throughout the whole of it. There are some small furze grounds, and bushy shaws, on the hill, which afford shelter for many hares, and a few pheasants and partridges. Good fresh water is very scarce in most parts of the island; between Eastchurch and Minster there are a few springs, and notwithstanding they rise very near the sea, the water is perfectly good and fresh. The air is very thick, and much subject to noxious vapour, arising from the vast quantity of marshes in and near it, which makes it very unwholesome, insomuch that few people of substance live in it, especially in the low and marshy parts, where the inhabitants are very few indeed, and consist chiefly of lookers.

The garrison and dock of Sheerness, its environs, and town of Queenborough, the reader however will except from this observation, where there are many gentlemen of property and substance constantly resident.

The cliffs on the north side of this island are composed of clay, and are continually wasting and falling down upon the shore, as is already mentioned. They belong to the three manors of Minster, Shurland, and Warden, the owners of which, let them out of the proprietors of the copperas works, who employ the neighbouring poor to collect the

pyrites, or copperas stones from the shore, which they deposit in heaps, on the cliff, at the rate of one shilling per bushel, for their labour, until a sufficient quantity is procured to load a vessel to take it away. The liberty of collecting the copperas on the sea shore, is let by the lords of the manors for sixty pounds per annum.

[67]

SOIL.

Almost the whole of the isle of Shepey is a deep strong stiff clay, some parts are so very sticky in the Winter time, that the plough wheels get loaded with dirt in one mass, so as to form the shape of a grindstone, and are often overturned with the great weight of mould, collected unequally upon the wheels, on which account foot ploughs are sometimes used.

The horses shoes are frequently torn off, by the fore foot sticking in the soil until the hinder foot strikes its shoe against the heel of the fore one, so as to tear off the shoe. The best time to plough these soils, it is said, is when they are thoroughly wet. Some of the upper parts of the island have a few gravelly fields, but those are very wet in winter, and are rather stiff. The chief part of the upland pasture is a stiff clay, covered with ant hills, is very wet in Winter, and subject to burn is a dry Summer, and split open a great depth. The soil of the marshes is also a stiff clay underneath; it is the original sediment of the sea: the richness of the soil from the land having been thickly covered with sheep, for a long series of years, the surface, for an inch or two in thickness, is a black rich vegetable mould.

SYSTEM.

The general method of cultivating the arable lands of the isle of Shepey, is to grow beans and wheat alternately; and when the land gets foul, or they think it wants rest, they substitute a fallow for the bean crop, which is done once in six or eight years. On the gravelly parts, they sow a few oats, and some barley, but in very small quantities, especially the latter. A few turnips are sown, but from the land holding the wet so very late in the Spring, they are of little use to the grazier. If the cabbage culture is beneficial in any situation, it must be a great acquisition in this island as a substitute

for the turnips, and the soil is well known to be particularly favourable

[68]

to their growth. Much clover is sown with great success, the lay is the farmer's favourite tilth for the wheat. The land is ploughed in the Winter for beans, with four horses, which plough about an acre in a day with much difficulty. The beans are drilled in rows about twenty inches apart, as soon as the land will admit of it in the Spring; they are horse hoed twice, and hoed and weeded by hand once. The beans are harvested as in other parts of the county, and the stubbles are ploughed only once, and then sown with wheat in October: the land is laid in flat ridges with open furrows, to carry away the water in Winter. The harvest usually commences as early as any part of Kent. The wheat which this island produces, is generally the best that goes to London market; it frequently weighs sixty-four pounds the Winchester bushel, and from its early harvest, is of a fine colour, and the bran of course, is very thin. The beans also a very sample; both the crops of wheat and beans are very large when the land is in good order.

The clover that is sown in this island is mown twice; the first time for hay, and the second for seed: from the earliness of the soil, the hay is got off soon enough for the second cutting to come in good time for the seed crop. This stiff soil with a good harvest season, produces frequently great crops of very excellent seed.

The upland pasture is wholly employed in breeding lambs, or feeding young lean sheep. These fields are generally so poor as to keep only one or two breeding ewes per acre, or two or three tegs. The ewes are generally put to the ram the sixteenth of November, and the lambs when weaned in August, are sent out of the inland to be kept by farmers, on stubbles and turnips, and are returned about the middle of April; the usual charge has been about two shillings per score on stubble, and two and six pence on turnips. When they return home, they are places on the poorest of the grass land, for the Summer, at the end of which the ewe tegs are removed.

[69]

moved to the breeding grounds, and the wether tegs remain as lean sheep another

year, they not being fattened in this island until they are three years old, except in some particular cases.

The inferior parts of the marsh land are used in the same way; but the best fats a great number of sheep, and many head of cattle. The sheep are put to the fatting grounds in the Winter, and are sent to Smithfield the following Autumn, they are there sold by sales men, whose commission, together with the expences, of droving, turnpikes &c. amount to about eleven pence per head from the ferry. The salt water sometimes breaks over the walls in these marshes, and does infinite mischief to the land, and the grass does not recover for many years.

LIVE STOCK.

Sheep in the Isle of Shepey are of the Romney Marsh breed, and what are called in Smithfield true Kents. The soil being much inferior to Romney Marsh, the sheep are somewhat smaller, and from the same cause, their wool is lighter and finer. Some graziers get rams from Romney Marsh, others prefer their own sort, and but very few, if any, pay that attention which it is their interest to od, to the wool of the rams they use. The fat wethers at three years old, weigh from twenty to twenty-four pounds per quarter.

CATTLE.

The cattle of Shepey are almost wholly of the Welch sort, bought by the graziers out of the droves that come from the counties of Carnarvon, Denbighshire, & Isle of Anglesea, with a few from South Wales. Many Welch calves are brought in to live among the sheep in the marshes, to take off the rough grass, in which they are of great service to the land, by preventing the grass from running into coarse spots.

[70]

These calves, at the latter part of the Sumer, are put in to some of the best of the land, with plenty of grass, where they get full of flesh, and are supported through the Winter with good grasses and hay, foddered out in the marshes: they are usually sold to the butchers about June or July, and weigh from twenty-two to twenty-six score; there is

scarcely an instance where they are fatted the first year, that is, at two years old. The few runts that are fed in the island, reach about thirty score.

HORSES.

The horses for the plough are bed principally from a sort that has been in time out of mind. The mares are covered by stallions that come over from other parts of the county in the season; they are of a size somewhat smaller than those of other parts of Kent, where the land ploughs much lighter. Whether smaller horses are found to answer best here, it is not easy to determine; but it is natural to suppose, that such very stiff heavy land must require strong horses; and it seems therefore that the breed of them here is become small, from neglect; and it would perhaps be better if more attention was paid to the breeding and rearing the colts in these parts.

HOGS.

The live stock of this class, as at most other places, are mixtures of many different sorts, between the natives with the large Berkshire and small Chinese. Little attention is paid to this animal, though the breed might doubtless be very much improved, with proper care.

IMPLEMENTS OF HUSBANDRY.

There are two sorts of ploughs made use of here, the Kentish turn wrest of a large size with a long *tow*, which costs, with all tackle complete, about six pounds. This is

the plough that is principally used; the other is a foot plough, which is used in Winter on account of the stickiness of the land, when the wheel plough will not go. The harrows are the same as in other parts of East-Ken, and cost here twenty-five shillings each.

Waggons are made here to contain a chaldron and half, and cost about twenty-seven pounds.

Carts are made of two sizes, one sort contains about thirty bushels, and costs seven pounds; the other twenty bushels, and costs about five pounds ten shillings.

There are but few orchards, nor any hop grounds in the Island, and no commonable or waste lands. The gardens between Minster and East-Church contain several acres, which supply Queenborough and Sheerness markets with vegetables, which are very excellent, and particularly every species of cabbage; but the demand for those articles is so very great, that the island-does not produce one half that is consumed, and the deficiency is made good by gardeners on the other side of the water, who attend Sheerness market chiefly on a Saturday.

PRICE OF LABOUR.

	s.	*d.*		*s.*	*d.*
Day Labourer, per day,				2	0
Carpenter, ditto, and 3d. for lowance,				2	6
Spreading dung, per hundred cart loads,	3	0	to	4	6
Thrashing wheat, per quarter,				2	6
——— oats,				1	0
——— beans,				1	0
Hoeing beans, per acre,	3	6	to	5	0
——— turnips,				7	0
Making hedges, per rod,				0	3
Hedge ditch, ditto,				0	3
Cleaning marsh ditches,	1	0	to	1	3
Cutting ant hills, per acre,	5	0	to	11	0

[72]

	s.	*d.*		*s.*	*d.*
Carting them together, per acre,	5	0	to	11	0
Value of ploughing an acre of land,	10	0	to	12	0
Mowing thistles, per acre,	0	1½	to	0	6
Reaping wheat,	7	0	to	12	0

——— beans,	7	0	to	10	0
Mowing oats,	2	0	to	2	6
——— clover,	1	8	to	2	6
——— grass,	2	6	to	3	6

	Gs.		*Gs.*
Waggoner's wages by the year,	10	to	13
Second Ploughman	9	to	10
Third ditto	8	to	9
Waggoner's Mate	8	to	10
Second Boy	4	to	7
Third ditto	3	to	4
Bailiff	11	to	12
Dairy Maid	4	to	5
Cook	3	to	4

	d.		*s.*		*d.*
Women, per day	10	to	1		0
Girls	6	to	1		0
Boys			0		6

Poor Rates of MINSTER Parish.

Per pound rent three shillings, and East-Church one shilling and nine-pence.

COVENANTS.

Leases of twenty-one years are usually granted. Landlords covenant to repair buildings, gates, stiles, and dry fences; and tenants to repair and support all hedge and ditch fences; they have liberty to cultivate as they please; but are restricted from breaking up old grass lands, and are bound to

leave a certain portion of Summer fallow, at the end their term, with all the manure of the last year.

What Improvements have been made.

The only improvement of any consequence in the Isle of Shepey, is that of cutting the ant hills, which were, and are still in many places exceedingly numerous; many are so large as to contain half a cart load in a hill, and are so thick at some places, that a man may step across a whole field without getting off them. Much of this work has been done within these few years, where leases are granted. The method is to turn them over with a sharp tool, when soft in the Winter, and then cast them together in heaps, where they lie for two or three years, being often turned over, and when well rotten, and reduced to fine mould, they are carried out and spread on the land. Where there is any dung to be had in the marshes, from hay stacks being foddered out, or if there is any farm yard at hand, it is often mixed among this mould, and forms a good compost for the grass land.

There are some graziers, however, here, who positively assert, that the cutting these hills does harm to the land, and declare, that they would not suffer the hills to be cut from their land, if it could be done gratis.

Those who have done it, in general, seem very well satisfied, and think it (as it really seems to be) a very great improvement.

Much of the lands have been greatly improved by surface draining, and some small tracts have been under-drained to a very great advantage.

And on the arable lands, some great improvements have been made, by manuring the land with cockle shells, of which there are immense quantities thrown up by the sea along the shore.

[74]

What improvements may be made.

If the cutting ant hills before mentioned, is an improvement, of which to the by-stander there can be no doubt, there remains a great scope for improvements on that head, in the island of Shepey.

There are, at some places, great quantities of thistles and rushes in the marsh lands, which, if they could be destroyed, might be counted among the number of improvements.

Some persons contend that rushes cannot be destroyed, but it is well known, that it has been done at other places, and if so, why not here? Others say, that rushes, in a deep snow, are very useful for cattle to feed upon; but a good (or even a bad) hay-stack must surely be much better.

In the article of manure, the sea furnishes an inexhaustible supply of sand and cockle shells, that greatly improve the arable lands. The crops of fine corn which the soil of this island generally produces, with its vicinity to the first market in the world, is such an inducement to exertions of this kind, that it is wonderful there is so much land here in a neglected state. In the upper parts, there are several fields of poor gravelly land, partly covered with furze, bushes, and rubbish, which, by the supply of manure from the sea, might, at a small expence, be made extremely fertile. They would not, most certainly, have been in their present state, had they been in the hands of the inhabitants of the neighbouring Isle of Thanet.

To obtain and preserve good fresh water for the cattle, should be the grand effort of every grazier, which however is much neglected. Many of the salt-water fleets which contain several acres, might, by a proper method and attention, in a few years become reservoirs of fine fresh water. From the elevation of the island, the floods must fall heavy, and favourable for this purpose. Cleansing and deepening of the fresh ditches, should be more attended to.

[75]

Notwishstanding great wages are given, there are but few labourers to be got; this inconvenience evidently arises from the bad accommodations, and want of cottages.

TITHES.

The rectorial tithe is usually paid in kind, and the vicarial compounded for. There have been some disagreements respecting the vicarial tithes in the parish of Minster, which is now settled by paying two shillings per pound on their rent, and an addition to that of six pence per acre for uplands, nine pence for marsh lands, and one shilling per acre for mowing meadows, by which an acre of upland that lets for five shillings per acre, pays on shilling to the lay impropriator; an acre of marsh land that

lets for ten shillings, pays one shilling and nine pence, and an acre of meadow, that lets for twenty shillings, pays three shillings per acre, or reduced to a fraction,

The poor land pays	8/40	
The middling	7/40	of its rent, in lieu of vicarial tithes.
The best	6/40	

MANURE.

Cockle shells are laid thirty cart loads per acre, they make the stiff clays work much better, and greatly improve the soil.

Chalk is brought from the banks of the Medway and Thames, and is excellent manure for the clays of this isle. Town dung from Sheerness improves all soils, and lime is of great service to the gravelly lands on the hill.

POOR.

The erection of a house of Industry, with the incorporation of the seven parishes, under Mr. Gilbert's act of parliament, would probably be found of great advantage to the inhabitants and poor of this island.

[76]

The Upland Farms of WEST KENT.

The western part of this county, consists of a great variety of soils and systems of management. It is much more inclosed than the eastern part, and produces more timber and underwood.

The best cultivated is the north side of the district, from Rainham to Dartford, a tract of five or six miles in breadth. Parallel to this, is a space of the like breadth, of exceeding cold stiff flinty clay, which is generally ploughed with six horses; this is the flat top of the chalk hill, that runs from the sea, by Folkstone, throughout to the county of Surry, near Westerham; the soil of this slip of land is nearly alike, and is but of small value, on account of the great expence of cultivation.

It is the highest land in the county, and is from thence, by some called the Hog's Back of Kent.

Between this hill, and the borders of the Weald, and county of Surry, is an inclosed county, with much gentle hill and dale, the hills shelving in almost every direction, with several varieties of the ragstone soils. This part produces great quantities of hops and fruit, with some corn and grass, also timber and underwood, and has many pieces of common and waste land.

The upper part or west end of this district, is also much inclosed with many coppices of timber and underwood; great part of the latter goes to the metropolis in different kinds of faggots. The corn and hay that are not consumed in the neighbourhood, go likewise for the most part to London.

In the close county about Hayes and Bromley, and from thence towards Tunbridge, farms run from one to two hundred acres, and on the hill, some from four to eight hundred.

[77]

SOIL.

The varieties of soil in the western part are, 1. Chalk, 2. Loam, 3. Clay, 4. Gravel, 5. Sand, 6. Hassock, 7. Pinnock, 8. Coomb, 9. Hazel Mould.

The chalky soils are found on the sides of hills, and at different places along the borders of the Thames, between Dartford and Rochester; they are from five to seven or eight inches thick, of a loose chalky mould, on a rock chalk bottom; those of the greatest depth of surface, that are well cultivated with a due proportion of manure, are very productive in corn and seeds, and yield great crops of sainfoin.

The loamy soils are found at different places, chiefly in the valleys; this land is of light tillage, and where well managed, is very productive of corn, seeds, and hops, and is of various depths.

The clay soil is of two sorts. That which lies at the top of the chalk hill, is much mixed with flints, is so very tenacious, as to require six strong horses to plough an acre per day in Winter, and when left unploughed till very dry in Summer, it is almost impossible to get through it with eight horses, and sometimes not at all. This sort id from eight to twelve or fourteen inches deep on the rock chalk, at some places a stiff yellow clay between.

The other sort of clay is a cold wet stiff kind, with a small mixture of the rag stone; it is chiefly found in the low grounds of the western part of the county, and both sorts are of small value, being very expensive to cultivate, and except the seasons are very favourable, they produce but poor crops. It sometimes happens, that this land yields a great crop of wheat, which, like a prize in the lottery, tempts the fortunate adventurer to try his luck again, with great loss of labour and waste of substance.

Gravelly soils are chiefly found about Dartford and Blackheath, which produce early green peas, turnips, winter tares,

[78]

rye, peas, oats, and some wheat. These gravels are from five to eight inches deep, with a subsoil of rocky gravel or sand. There are other soils called gravel, on the lower part of this district, which are a mixture of the small pieces of Kentish rag, sand, and loam, the small particles of stone predominating, give it the title of gravel; this sort produces, when well cultivated, good crops of turnips, oats, clover, and wheat.

The sandy parts of this district are in general very poor, being mostly of the black sort, and are chiefly found on commons and heaths. There are some however in cultivation, which produce excellent turnips and corn.

Hassock, or Stone Shatter. —The surface of this soil, is a mixture of sandy loam, with a great portion of small pieces of light coloured Kentish rag stone, 'tis from six inches to a foot or two deep: the subsoil a solid rock of stone. This land produces great quantities of hops, apples, cherries, filberts, and likewise good turnips, potatoes, seeds, and corn, also much excellent hay on old grass lands.

Pinnock. —This land is very bad to till, and extremely poor; it is a sticky red clay, mixed with small stones, but although it is deemed poor for cultivation of grain, &c. yet it produces very fine chesnut wood; and filberts likewise grow well upon it. This sort of land also lies upon the rock.

The coomby soil of West Kent is an extreme stiff moist clay mixed with stones and flints of different sorts; it ploughs so heavy as always to require six horses, and sometimes when dry and hard, eight are necessary, and even then, frequently not more than half an acre is ploughed in a day. This sort of land is found in the parts about Seal

and Wrotham, and is nearly the same as described under the title of clay.

A fine hazel mould is found on the sides of the hills, and in the valleys, at different places throughout the whole of this district.

[79]

SYSTEM.

The mode of cultivation or rotation of crops, varies so much through this part of the county, that it is impossible to lay down any particular system as the practice of the district; every farmer follows that plan which he thinks will answer his purpose best, and hardly any two neighbours adopt the same mode; and many that set out with a particular system in view, are driven from it, by an unkindly season, and the untowardness of the soil.

The chalky lands, when under the plough, are cropped with turnips, barley, clover, wheat, for one, two, or three courses, and the laid to sainfoin, or rye grass for a few years; after which the same course again. This is easy tillage land with four horses, the value of ploughing an acre seven or eight shillings.

The clay soils where they have settled systems and favorable seasons, which admit the pursuing them, are

Fallow,	Fallow,	Fallow,
Wheat,	Wheat,	Wheat,
Clover & Trefoil,	Clover & Trefoil,	Oats,
Wheat,	Oats,	Peas.

On the hill above Wrotham, &c.

Fallow,	Wheat,	Clover,	Wheat,	Oats.

They frequently sow sainfoin or rye-grass for a few years, and then break up with a fallow, and pursue the same course again. It is ploughed with six and sometimes eight horses. Value of ploughing, an acre, from twelve to sixteen shillings.

The gravel and sandy soils.

Turnips,	Turnips,	Turnips,	Turnips,
Barley,	Oats,	Barley,	Barley,
Clover,	Clover,	Clover,	Clover,

Wheat,	Wheat,	Wheat,	Peas,
		Oats,	Turnips.

It is dry land and ploughs light; value of ploughing six or seven shillings per acre.

[80]

The hassock or stone shatter soils are under one of the following systems,

Turnips,	Turnips,
Barley or Oats,	Barley,
Clover,	Clover,
Wheat,	Wheat,
Peas,	Beans,
	Wheat.

This works kindly, and is ploughed with four horses, for about seven or eight shillings per acre.

Coomby and Pinnacky soils are nearly under the same system as the clay already described, and the hazle mould is frequently managed with four courses. Turnips, barley, clover, wheat, with variations of substituting oats for barley, and peas for wheat; and sometimes after wheat and clover lay, a crop of peas is taken.

On the tract of land between the borders of the Thames and the hill, the gravelly soils are often cropped with early peas, which are gathered green for London market; and then turnips the same year, succeeded by oats, clover, and wheat in succession. Sometimes rye and winter tares are sown, fed off with ewes and lambs in the Spring, and then followed by turnips, &c.

The poor chalky land of this part is cultivated as at other places, and sown with sainfoin, great crops of which are produced by the assistance of soot, ashes, &c. from London.

The best land of the valleys, is, much of it, under a system of six courses, namely, turnips, barley, clover, wheat, beans, wheat.

For turnips, on the chalk and other poor soils, the land is ploughed in the winter, and cross ploughed in a dry time in the Spring, as in other parts of the county already mentioned; and generally manured with farm-yard dung ad mould, from hedges and

ditches, before the third or fourth time of ploughing, unless manure is carried out for the preceding crop of

[81]

wheat, for without the land is in good heart the poorest sorts, especially, will not produce good turnips. They are fed off with sheep, and the land if it is stiff, is sown with oats on one ploughing; and if light and kindly for barley, that grain is sown instead of oats, for which the land is sometimes twice ploughed. The clover seed is sown on both crops before the last harrowing, and a great part of the clover is mown for hay, and then fed off the remainder of the Summer; when it is ploughed once and sown with wheat, for which crop a clover-lay is esteemed here, on these soils, as well as in other parts of Kent, the best tilth known.

The stiff red clays and coomby soils, are always Summer, fallowed for wheat, three or four ploughings are given, as time and seasons will allow; but bad Summer fallows are frequently made on such land, notwithstanding every exertion of the husbandman. They are sown as early as opportunity will admit, ad the same rule is observed, when cropped with oats or peas; for the cultivator cannot always sow when he wishes, he must therefore do it when he can. When these sorts of land are laid down with seeds, (what the Norfolk farmers call layers) they are sown with rye grass, clover, and trefoil; they continue two or three years, and are then ploughed in the Winter, and made a Summer fallow for wheat, with the same course as before.

The sandy and gravelly soils intended for turnips, are frequently sown with rye, which is fed with sheep, previous to sowing the turnip seed. This may be of great advantage to the sheep, should there be a scarcity of food in the Spring; but it must tend to exhaust the soil, and weaken the turnips, unless the sheep get great part of their food by day on grass land, or other feed, and go to the rye by way of folding the land by night; or if the land is to be manured for turnips, there is no fear of a crop, in that case, the sowing of rye may be excellent management, and, indeed, every plan is excellent, on these soils, that tends to secure good crops

[82]

of turnips, for that is the very essence and spirit of good husbandry.

Not only the manure of the sheep in feeding off the turnips on these loose lands, but the treading of their feet is of great service.

The barley and oats are sown as early as possible, as are mown as in other parts of the county; but here they are not bound in sheaves, but raked together by hand, and carried into the barn loose, where they are trodden with a horse. The clover is mown for hay, and fed after with sheep till Autumn, and the once ploughed for wheat.

The stone shatter and loamy soils, and hazel mould, are of a light dry nature, and may be worked almost at any time. These are made into good tilths for turnips, and frequently produce fine crops without any manure. The sooner the turnips are fed off, and the land sown, the better the produce in general, of barley and oats; although great crops are sometimes obtained by a late sowing, if kindly showers soon succeed. But late sowings with a succession of dry weather, generally fail. The clover crop and wheat sowing are managed as before mentioned on other soils, only it is to be remembered, that the second growth of clover, on these, as well as all other soils, is sometimes saved for seed, but not in any great quantity. When beans or peas are put in on the wheat stubble, that operation is performed by drilling across the furrow, as soon as the land is dry in the Spring; the crops are managed in other respects by hoeing, &c. as in East Kent, and the bean stubble is sown with wheat, as described in that district.

The early peas for gathering green, are drilled in rows, eight or nine to the rod, in the end of November, or beginning of December; they are generally sold by the acre, to persons who gather them, and send them by water from Gravesend, or by land carriage to London market. The pea-straw when stacked dry, is esteemed very good fodder for

cattle and sheep. The land is immediately ploughed and sowed with turnips. Manure is not always, but should be carried out for peas, by which no time is lost in getting the turnips sowing forward, and the manure is y that means, well worked among the soil, to the immediate benefit of the young turnips, which is of the utmost importance; for by a rapid growth, they get out of the way of their great enemy the flea.

Rye and winter tares are sown in great quantities near London, for spring feed for early lambs; they are fed off in good time for a crop of turnips.

The general management of this district, when compared with that of many other counties, may be said to be very good; but it will by no means, bear a comparison with some of eastern parts of this county, for cleanliness of crops, and general activity in the articles of labour, which are material circumstances in seed time and harvest.

The chalky soils which are always subject to charlock, are frequently seen quite yellow in June and July, with that plant in bloom, overtopping the crops of corn.

LIVE STOCK.

There are very few horses bred in these parts, the farmers buy them of dealers, who bring them at the age of three, four, or five years, from the midland counties. The diaries are small, seldom exceeding six or eight cows, and those are home bred, of mixed breeds, between the Staffordshire, Welch, and Sussex.

Some of the small dairies of three or four cows, have the Welch sort only. Some of these Welch cattle are fattened on the meadow lands, with hay and grass in the Winter.

SHEEP.

A flock of sheep under a shepherd, and folded at night, is a very rare sight in West Kent; it is only a very few of the largest farmers who follow that practice.

[84]

The sheep mostly kept in this district, are the South Down sort, bought in wether lambs, at the autumnal fairs on the Downs, chiefly at Lewes, the second of October; they are kept the first Winter on stubble land, with grass and a few turnips, and on grass and seeds in Summer, and frequently are fatted on turnips, the next Winter, before they are quite two years old; this is become the favourite sort within these few years, and increases annually in this district.

The other sorrs of sheep kept here, are the West Country from Wiltshire and Dorsetshire, the wethers are brought in at all ages, to be fattened on turnips.

They are chiefly bought at Weigh Hill fair in Hampshire. The Wiltshire sort is

very long back'd and long legged, large bone and horns, which latter grow close to their cheeks; their wool is short and thick, much finer than Romney Marsh, though courser than South Down, and is frequently very hairy about the breech. They are often naked under their bellies, are esteemed a kindly sort to fatten on turnips, with oil cake and corn, or hay, and with such feeding, they arrive at a great weight, namely from twenty-four to forty pounds per quarter; near Maidstone there are more of this sort than any other.

The Dorsetshire sheep are much smaller, with horns that turn more off from their cheeks, and wool rather finer; they are fed on turnips and other artificial food, and weigh from sixteen to twenty-four pounds per quarter.

Many parcels of ewes of these sorts, are bought in by the farmers to make early fat lambs; the Dorsetshire, are the first to produce early lambs, they are fed in the valleys on grass land, and on turnips, oil cake, corn, ad hay. Both lambs and ewes are made fat, and sent to Smithfield market, or are sold to neighbouring butchers or jobbers.

Hogs, as at most other places, are mixture of many sorts, from the large Berkshire, to the small Chinese; no two farmers having the same sort.

[85]

IMPLEMENTS OF HUSBANDRY.

The Kentish turn wrest plough is used with four horses on the lightest, and six on all the stiffest soils.

It is made much stouter here than is East Kent, and is drawn by a long large link, called a tow, which comes from the axle to the heel of the plough. They plough from half an acre to an acre and a quarter per day, in proportion to the strength of the land, and the weather. The expence of a plough about five guineas.

Harrows are made with five beams, each having five teeth, they are made larger or smaller in proportion to the strength of the soil, and cost from twenty to twenty-four shillings.

Double harrows are used, each of which require two horses, they have six beams, each with six teeth, projecting ten or twelve inches from the wood, and cost fifty shillings.

Rollers of stone are used to break stiff soils, drawn by six horses, they cost from twelve to fourteen pounds each.

Wooden ones of oak, from twelve to twenty inches diameter, cost from four to eight pounds.

Wagons are used to carry corn to market and for hay, &c. they contain a chaldron and half of coals. If built with iron axletrees, they cost thirty pounds, if with wooden one, twenty-four pounds.

Carts hold about twenty-four bushels, and cost seven pounds. Next Maidstone, hutches are made to contain two chaldron of coals, and cost thirty pounds.

The carts carry twenty-four bushels, and cost eight pounds eight shillings. Smaller carts for one horse, contain fourteen bushels, and cost five pounds five shillings.

PRICE OF LABOUR.

	£.	s.	d.		£.	s.	d.
Labourers, per day,	0	1	6	to	0	1	8
Thrashing wheat, per quarter,	0	2	6	to	0	3	0
——— Barley,	0	1	6	to	0	1	8

[86]

	£.	s.	d.		£.	s.	d.
Thrashing oats,	0	1	0	to	0	1	3
——— Peas,	0	1	6	to	0	1	8
Digging hop ground, per acre,					0	15	0
——— Cutting,					0	5	0
Working hop grounds, all kind of labour included, per annum, per acre,					3	0	0
Hoeing beans, per acre,	0	3	0	to	0	4	0
——— Peas,	0	3	0	to	0	5	0
Spreading dung, per hundred, cart loads,					0	3	4
——— or per acre, about					0	1	8

Tuning dung, done by the day,								
Making hedges and ditches, each per rod,						0	0	3
Poleing hops, per acre,						0	10	0
Digging mould, per square rod,								
without having the roots						0	1	0
Reaping wheat,	0	8	0	to		0	12	0
Mowing barley and oats,						0	2	6
——— Sainfoin,						0	3	0
——— Clover,	0	2	6	to		0	3	0
——— Grass.	0	3	0	to		0	3	6
Waggoner's wages, per annum,	10	0	0	to		12	12	0
Second ploughman,	8	0	0	to		9	0	0
Waggoner's mate,	6	0	0	to		7	0	0
Second boy,	4	0	0	to		5	0	5
Bailiff,	12	0	0	to		14	0	0
Dairymaid,	5	0	0	to		6	0	0
Cook maid,	5	0	0	to		7	0	0

In some parishes the prices of labour and servants wages, are much higher than others at a small distance.

[87]

What Improvements have been made.

The introduction of sheep by means of the turnip culture, on many farms of West-Kent, where formerly none were seen, and the consequent amelioration of the soil, may be considered as the first improvement that has been made in this district.

Many tracts of land before the cultivation of turnips, were frequently seen with poor crops of corn, sometimes hardly worth harvesting; but now, by means of that culture, they often produce very abundant crops. The advantage from the value of the sheep feed, added to the increased quantity of corn produced, is a sufficient evidence of the improvement. In some woodlands great improvements have been made by filling up the vacant places, with such sorts of plants as the soil seemed best adapted for. Chesnuts

have been found to flourish extremely on the poor gravelly and sandy soils of this district, more especially on that sort of gravel here termed pinnock. At some places where hardly any other plants will flourish, chesnuts grow with the greatest luxuriance.

There are two or three hundred acres of potatoes annually grown in the neighbourhood of Maidstone, which are chiefly used for fattening oxen; but whether this may be ranked as an agricultural improvement is yet doubtful: for many farmers assert that they lose money by the practice, while others think it profitable.

The fattening oxen on oil cake and hay, stands nearly in the same predicament. Some farmers in this district who use oil cake, are well satisfied if they do not lose more than forty shillings by each ox, as they estimate the manure produced at about that value.

What Improvements may be made.

The western part of the county affords fine scope for the employment of improving genius.

[88]

The waste lands, the neglected woods, and the impoverished commons, are so many evidences of the necessity and importance of such enquiries as the present; and the legislature will have abundant merit in suggesting to the proprietors and occupiers of these estates, a plan of improvement from which individuals and the community will derive the greatest advantages.

The common and waste lands of West-Kent form an extent of many thousand acres, which at present produce very little; though under proper systems of management they might undoubtedly be made of great value. Some of them have a good soil, but in general they are covered with sand, gravel, or stones; none of these lands, however, are totally unproductive. Inclosures would do much; industry, and due attention to the natural produce, and what has been cultivated on similar soils in other places, would do more. Nature is a wise counsellor, and those who follow her advice can, with the aid of art and observation, do wonders in agriculture.

The commons and waste lands of West-Kent, are

Hothfield Heath.

Charing Heath.

Lenham Heath.

Pinnenden Heath.

Cox Heath.

Barming Heath.

East Malling Heath.

Seal Chart.

Hays Common.

Bromley common.

Bexley Heath.

Dartford Hearth.

Black Heath.

&c. &c. &c.

[89]

IRRIGATION.

Is hardly known among the farmers of this district, not one in ten ever heard of the practice; and as there are a great number of little vales, with rivulets running through them, there are many opportunities for improvements of this kind.

Miscellaneous Observations.

Tithe of corn in the vicinity of Maidstone, is generally compounded for. Wheat, from six to seven shillings per acre, and Lent corn, from four to five shillings.

Leases, by some proprietors, are refused, on account of the game: few tenants are bound to any particular system, but are restrained from selling straw, hay, or dung, and from breaking up old pasture land, under penalties of from three to five pounds per acre.

They are never bound to keep their land clean from weeds Landlords usually covenant to keep the buildings in repair, and to pay the land tax and quit rent.

In some parts, the tenants are allowed to sell straw and hay, on condition of buying a

load of manure for every load of straw or hay sold.

The price of provisions is nearly the same as in the eastern part of the county, excepting only, the productions of the country being somewhat cheaper at places most remote from the capital and populous towns; and imported provisions, such as Cheshire cheese, Irish butter, &c. being somewhat cheaper at those places.

The state of farm houses cannot be otherwise generally described, than that the best cultivated parts have the greatest number of good houses, and that the worst cultivated parts have a great number of bad one, and from hence it may be inferred, that where agriculture flourishes, population will increase, and trade flourish in proportion.

[90]

MANURE.

Farm-yard dung and hedge mould mixed, is the principal kind used for both arable and meadow lands; but in some parts, much of the dung is carried to the meadows and hop grounds, and lime is used on the arable land, and on stiff cold clays great quantities of chalk are used. It is said to improve the land for twenty years. The value of it in the land is often estimated between out-going and in-coming tenants, when lately laid on, as high as five pounds per acre.

HIGHWAYS.

The turnpike roads, and those most frequented, are kept in tolerably good order; but the bye roads of West Kent are frequently impassable for post chaises, and very bad for every other mode of travelling.

The difference between the shoulders of the axle trees of wagons and carts, is two inches more in the eastern part of Kent, than in the vicinity of Sittingbourne, and in the western part two inches less, which makes it very inconvenient for carriages of one district to pass in the deep channels of the other, and seems to be a public inconvenience.

The WEALD of KENT.

This district of the county was in ancient times, an immense wood or forest,

inhabited only by herds of deer and hogs, and belonged wholly to the king.

By degrees it became peopled, and interspersed with villages and towns, ad by piecemeal, was, for the most part, cleared of its wood, and converted into tillage and pasture. There are however some woodlands still in their original state.

The reputed boundary of the Weald, begins at the margin of Romney Marsh, and runs along the top of the Ragstone-hill, above the churches of Kingsnorth, Great Chart, Pluckley,

[91]

Egerton, Boughton-Malherb, Ulcomb, Town-Sutton, Chart-Sutton, Linton, Hunton, Yalden across the Medway to Teston and Wateringbury. From thence it proceeds by Hert's-Hill, River-Hill, and Idle-Hill, to Wellestreet on the borders of Surry, and then in union with the boundary lines of that county and Sussex, taking in the Isle of Oxney, goes on to Apledore, and the borders of Romney Marsh. It is somewhat remarkable, that the sloping part of the stone hill which separates the Weald from the ragstone shelf above, should be so thickly covered with villages, whose churches stand about half way up the slope of the hill; while the neighbouring chalk hill ridge, which separates the ragstone shelf from the hill above it, has not a single village or church upon it the stone hill, in the extent of between twenty and thirty miles, has ten or twelve parish churches upon it.

SOIL.

The Weald of Kent has the reputation of being an entire mass of clay, but on examination, it is found, there are the following varieties of soil, namely, 1. Clay, 2. Hazel mould, 3. Sand, 4. Ragstone gravel.

The clay is either stiff and exceeding heavy to plough, or a wet sort which ploughs somewhat lighter. The first is chiefly found on the eminences, or their sloping sides. The surface is about seven or eight inches deep, under which is a stratum of stiff yellow clay about a foot or two thick, with a subsoil in some parts, of excellent marl.

The second sort of clay lies in the lower parts, is extremely wet after showers of rain, and a long time in getting dry, which often occasions a late sowing, and a

backward harvest, and frequently the wheat season is totally lost. The surface of this land is seven or eight inches deep, and the subsoil is at some places, a yellow clay, and at others a soft sand-stone rock, which is often used for mending roads. It grinds down to a soft sand.

[92]

Four horses with difficulty plough an acre per day in these soils. In some parishes bordering on Sussex, the ploughing work is done by oxen, four or five par are generally fixed to a plough, and do about the same quantity in a day as four horses. The hazel-mould is a clay soil of a drier nature, from having a considerable mixture of sand; it ploughs lighter, and is the best land in the weald. Sandy soils are of two sorts, black and white; the black is little regarded, but the white is much improved by marl and lime.

The little there is of this soil in the district, produces turnips, barley, clover, and wheat, and the subsoil is the soft sand stone. The ragstone gravel is found only in small patches, and is of little value in its present state, being covered with furze, heath, and broom.

SYSTEM.

The covenants in the leases between landlords and tenants, point out the system to be pursued, which is fallow, wheat, oats, clover, or layers for two or three years. The tenants are bound to lay one hundred bushels of lime per acre, on the fallows for wheat, and generally put on double that quantity.

This lime is made of chalk, from the hill before mentioned, and is brought from the distance of twenty miles, to some of the parishes, tho' there is excellent lime stone in the centre of the weald; and even in the parish of Bethersden, famous for a fine lime stone, called Bethersden marble, chalk lime is preferred, and the chalk to make it is procured at a considerable distance. Chalk-lime is applied to stiff clay lands, and stone lime for sandy soils.

The old lays are ploughed late in the spring, generally in the month of May for the first time.

They are cross ploughed and well harrowed, as opportunity offers, during the

summer in dry weather.

The lime is dispersed, in heaps of a load or two at a place, during the Summer, and spread with a shovel out of a cart

[93]

before the last ploughing for wheat, which is generally sown in the month of October, and reaped in the middle of August.

The wheat stubble is cleared in the Autumn for littering the bullock yards, thatch, &c. the land is ploughed six or seven inches deep, and the oats are sown with the clover seed, without any other ploughing, as soon as the land gets dry in the Spring. The soft wet clay soils are generally sown with rye grass and clover together. The crops of seeds are mown for hay, and then fed off until the land is ploughed; except in some cases, where clover is sown alone on the best land, which is mown twice; the first time for hay, and the second for seed. In the best land beans and peas are sown on the clover lays, and on the old layers of grass. Peas frequently succeed; beans very seldom. The hazel mould ad best sandy soils are under the four course system of turnips, barley, clover, wheat. The turnips are frequently carried off the land, which so exhausts the soil that the clover lays are often ploughed up for a summer fallow. Oats are mown and carried into the barn and trodden with a horse, as in other parts of West-Kent.

GRAZING.

A great portion of the land of this district is old pasture, and much of it very excellent. The system of management is to rear young cattle, which are put out to keep to the Romney-Marsh graziers in the Summer. In the Autumn, they are taken home to the layers and inferior grass lands, and in the Winter to the straw yards, or stay out on rough lands, and have straw carried to them; when they are of age to fatten, which is at four years for steers and three for heifers, they have the best grass with hay. That which is made of rye grass and clover is given at the first part of the Winter, and the best hay of the farm is used to finish them. Old meadows are always mown for hay to fatten the oxen.

The inferior ones are stocked, first with milking cows to take off the head grass,

and afterwards the lean cattle, or

[94]

working oxen. A suit of fields are thus fed in rotation during the Summer.

A great number of Romney-Marsh lambs are taken into keep in the Winter, on the stubbles, old layers, and meadows; the price of keep is from two shillings to two and sixpence per score, per week. These lambs are returned the filth of April, and in bad Winters frequently go home nearly starved, from which they sometimes die in great numbers when they get into good keep. Great losses are likewise often sustained after a wet Autumn, by the rot.

The layers of rye grass and clover are mown for hay, which is used for the `lough teams and lean cattle, and some of the best is given to fattening bullocks in the beginning of the winter. The old meadows produce great crops of hay which is of a very fattening quality. Bullocks fed thereon frequently weigh from forty to forty-five score each, and some old working oxen attain the weight of sixty score, or sometimes much more. The fat oxen are commonly sold between the months of March and June. The sale of them is the chief dependance of the Weald farmers for payment of their rent, and other heavy expences.

LIVE STOCK.

There are hardly any sheep bred here, excepting a few for producing early fat lambs, of the Wiltshire and Southdown sorts. Some of the Wiltshire wethers are bought in to fatten on turnips, and a few Southdown wether lambs are bought in the Autumn, ad kept on the driest parts until they are two years old, and then made fat for sale on turnips or meadow lands.

CATTLE.

Are of the Sussex breed, both for the pail and plough. Some farmers are more careful in the choice of bulls and breeding cows, than others; but there is not that attention paid to this department of farming business, as in the midland counties. The finest bull of this district would hardly sell for

[95]

twenty guineas, although he may be very handsome in every respect, and weigh, if killed, fifty or sixty score. These cattle are almost invariably of a deep red colour, and remarkable for a kindly soft skin. Their bone, in proportion to their great size, is small. The best of them have a great breadth of loin, and length of sirloin and rump, with a small head and neck, their horns are short and stand upwards. They have a ready disposition to fatten, and seem to deserve the attention of the curious in cattle, as much as any sort in the kingdom. If the same acre was taken here in breeding them, as is done in other counties, the breed might be greatly improved; and probably some of the best might be found equal in value to a Shakespear or a Brindle Beauty.

The hogs are various mixtures of the home breed, and Chinese kinds; many are kept in the woods in the Autumn on acorns, and fattened on corn in the Winter.

The hop gardens of the Weald are dispersed in small fields, in most of the parishes, they are managed as in other parts of the country, but produced less crops, and hops, of an inferior quality.

IMPLEMENTS OF HUSBANDRY.

For breaking up layers, a foot plough with a turn wrest is used, they cost fifty-five shillings each. For cross ploughing, and every other occasion, the Kentish turn wrest plough, it costs five guineas. Harrows, rolls, and wagons as in the western part already described.

Carriages, called bavin tugs, are chiefly used for faggots, and many use them for corn and hay.

They carry one hundred and fifty faggots, each four feet long and three girt. The kind and fore wheels are fourteen feet apart, by which the length of the carriage is so much, that the load lies very low, and is thereby less liable to be turned over, which otherwise would often be the case in the roads of the Wealth. This implement costs about fifteen or

[96]

sixteen pound. Dung carts contain sixteen bushels, and cost seven pounds. Marl carts contain twelve bushels, and cost five pounds each.

PRICE OF LABOUR.

		s.	*d.*		*s.*	*d.*
Day labourers,		1	4	to	1	6
Thrashing wheat, per quarter,	2	6	to	3	0	
——— oats,					1	0
——— barley,					1	6
——— peas,					1	6
——— beans,					1	4
Spreading dung per hundred cart loads,					3	4
——— lime, per hundred bushels,					1	0
Hedging, per rod,					0	2
Scowring ditches,					0	2
Reaping wheat, per acre,		6	0	to	10	0
Mowing oats or barley,		1	2	to	1	6
Cutting beans,		5	0	to	6	0
——— peas,		3	0	to	4	0
Mowing clover hay,		1	6	to	2	0
——— grass,		2	6	to	3	0
Value of ploughing an acre of land,		7	0	to	8	0

	£.		*£.*
Wagoner, per year, with board,	10	to	13
Second ploughman,	9	to	10
Waggoner’s mate,	5	to	7
Second boy,	4	to	5
Bailiff,	10	to	13
Cook-maid,	4	to	5
Dairy-maid,	3	to	4

WOODLANDS.

I am favored with the following account of woodlands by Mr. Randall, a very respectable and ingenious nursery-man, at Maidstone. Some are in East and West Kent, as well as the Weald.

[97]

GENERAL OBSERVATIONS on the preceding Table.

The oaks are all cut in the flawing season, for the bark of all sizes.—The fencing poles are either used whole or cut into gates for sheep.—The hop poles are sorted into three, four, or five sorts, and sold by the hundred. The faggots or bavins are made into lengths of five feet, the best for bakers and house-keepers; and on the hills they make inferior sorts, called kiln-brush, which are used for burning lime.—Stakes and ethers are cut out before the faggots are made.—In the neighbourhood of Chatham they cut some small bundles of brush and cord wood, for the use of shipping, and the metropolis.—The Woodlands of the Weald are tithe free.

What Improvements have been made.

The Summer fallows are said to be better and oftener ploughed than heretofore, and more lime is bought by the farmers. The use of marl too increases; it being found of great benefit to the stiff clays and sandy soils.

Some grass lands have been greatly improved by it. The quantity laid on an acre is usually three hundred cart loads, or about thirty-six hundred bushels; it has the reputation of making the white clover come exceedingly strong among the grass.

What Improvements may be made.

In the little vales of this district there are several tracts of low grass lands of a rich and fertile nature, which often in Winter, and sometimes in Summer, are entirely under water; and the crops of hay are frequently, when mown, swept away by the floods, occasioned by vile neglect of the drainage, an evil which can only be remedied by a commission of sewers.

The system of fallow, wheat, oats, layers, prescribed by the landlords, prevents

speculative trials of any new mode of culture. It may be presumed, that among the various systems of management throughout this kingdom, there are some of

[98]

them, that if tried here, would be found more profitable than the present practice; at any rate improvements should not be restrained by covenants in leases.

The HIGHWAYS of the Weald

Are perhaps the worst turnpike-roads in the kingdom: some of them are absolutely impassable by quartering carriages, and at all times in Winter, even carts are excluded; and it is extremely dangerous and frequently impracticable in that season to ride on horseback along the main roads. In consequence of which, narrow paths, called horse tracts, are paved with stones; or formed with sea beach, on one side of the roads, just wide enough to ride upon; but even this convenience is not general.

Can materials for making good € wanting, where sandstone and limestone so much abound?—And would not good roads contribute to improvements in husbandry?

Miscellaneous observations.

Tithe is generally compounded for throughout the Weald of Kent.

Wheat, from	5s.	to	6s	
Oats,	3s.			per acre.
Beans, peas, and barley,	3s	to	4s.	
Seeds and meadow,	2s.			

Leases are usually granted for twenty-one years. Some for seven, eleven, and fourteen.

Poor rates are very high, generally from three to six shillings per pound, and a few as high as seven shillings. Would not houses of Industry contribute to lessen the poor rates?

Irrigation is hardly known, but might be practised in some places to great advantage.

[99]

ROMNEY MARSH.

Is a spacious level of exceeding good rich marsh land, lying at the south corner of the county of Kent. Its shape is nearly that of a parallelogram, whose length from the foot of Allington-Hill to the sea shore, between Dungeness and Rye, is about twelve miles; and breadth, from the borders of the Weald of Kent, by Warehorn to the sea shore, between Romney and Dymchurch, is nearly eight miles. It contains the two corporate towns of New Romney and Lydd, and sixteen other parishes. The quantity of land contained in this level, that is within the county of Kent, is about forty-four thousand acres; the adjoining level of Guilford-Marsh is the greater part of it in the county of Sussex.

There is a small tract land along the sea shore, that consists of poor € sand hills, and some portion of the Marsh is but indifferent breeding land; but the principal part of this level is wonderfully rich and fertile.

There are but very few oxen fed on it compared with what other rich marsh lands usually keep; but the quantity of sheep bred and fed here, exceeds, perhaps, any district of the like extent in the kingdom. Some of the fields support of young sheep, in the Summer, from five to twelve per acre; and most of the breeding lands keep two and an half and three ewes per acre throughout the Winter, without hay, or any other resource whatever.

The scattered inhabitants of the marsh are chiefly lookers and bailiffs, whose employers reside in the upland parts of the county, or in the neighbouring towns.

The fences are either ditches or oak posts and rails, there being but very few hedges, or hardly any trees in the marsh, except a few about some of the villages. Immense quantities of oak posts and rails are annually brought out of the woodlands of the Weald of Kent, for the repairs of the fences.

[100]

Mr. Hasted says, in his History of Kent, “This large tract of marsh land was perhaps fenced in from the overflowings of the sea, as early as any in these parts of

England; for the laws, statutes, and ordinances, for the conservation of it, are, like our common laws, without any know original; and as early as the 35th of King Henry III. they are called ancient and improved customs. At the above time it appears, that there were 24 jurors, or jurats, as they are now called, who were, time out of mind, elected by the commonaltie, and sworn to do the best they could for the preservation of the marsh from such overflowings; and they had, by custom and prescription, power to raise a tax for that purpose, which was confirmed by the same King's Letters Patent, at Romney, on September the 20th, in the 36th year of his reign."

The marsh is defended against the sea by an immense wall of earth of great strength; the face of it next to the sea is covered with overlaths and piles, that prevent the waves f the sea from washing away the earth. This wall is upwards of three miles in length, which with three guts through it, and their respective sluices, is maintained by a scot over the whole level. The expence of the repairs of this wall and the sluices, is above four thousand pounds per annum.

SOIL.

Almost the whole of this spacious level of fine marsh land, is the sediment of the Sea. It consists chiefly of a soft loam and clay, with a greater or lesser mixture of sea sand; there are however, near the sea shore, some small tracts of blowing sand, and some sea beach, which are of very little value.

The principal part of the soil being a fine soft loam, with a mixture of sea sand, and having lain time out of mind in grass covered with sheep both Winter and Summer, its turf is wonderfully thick and fine; and the grass it produces is

[101]

of a fattening quality, equal, if not superior, to any in the kingdom. The other parts which are inferior, are those which have a € portion of sea sand, and are a stiff clay; or those which have too much sand or gravel, and are in consequence apt to burn in dry Summers; and those are the lands which are used as breeding grounds.

The subsoil is frequently seen in alternate layers of clay and sand, and sometimes beach and sand.

SYSTEM.

The grand system of management in this marsh, is that of breeding, rearing, and fattening sheep; the practice of feeding lean cattle and even fattening some of the smaller sorts of Welch ones, is only made subservient to the principal object— sheep grazing—merely to take off such grass as runs away from the sheep € growing time; it is always considered as extremely bad policy to see much grass on the land among sheep. Every grazier whose business is complete has two sorts of land, namely, breeding land and fattening land. The breeding land is stocked with ewes in the Autumn for the Winter; every field has such a number placed in it, as the occupier supposes it will keep, which is from two and a half to three and a half, and in some cases four per acre, in proportion to the strength of the field.

The rams are usually put to the ewes, allowing one to forty or fifty, and sometimes sixty, from the twelfth to the sixteenth of November, and stay with them about five weeks. The ewes live entirely on the grass, without any hay, during the winter; in deep snow they scrape with their feet, ad obtain a subsistence, although they then lose flesh and sometimes become very poor by their yeaning time. This marsh produces many twins, but a great number are lost, so that most graziers consider their crop not a bad one, if they wean as many lambs as they put ewes to ram. The lambs are weaned the first or second week in August, and very soon

[102]

after put out to keep to the upland farmers of the county, where they remain ‘till the fifth of April, at from two or three shillings per score, per week. When they return to the marsh, they are put on the poorest land, or such fields as the grazier thinks want improvement by hard stocking; which is here called tegging a field, and is held to be of great service. These young sheep are placed in the placed in the fields in proportion to what it is judged each will maintain from the fifth of April until August, which is at the rate of from five to twelve per acre.

The wether tegs in the Autumn are removed to the fatting, and the ewe tegs to the breeding grounds, among the two and three yearling ewes. The wethers remain ‘till July or August following, when, as they become fat, they are drawn out and sold to the

butchers at the marsh markets, or are sent to Smithfield. The two yearling wethers, when fat, at this season weigh from € twenty-eight pounds per quarter, and some of the largest and best fed, a few pounds more. The old ewes, here called barrens, are put to fattening as soon as their milk is dried after their third lamb, which is at the age of four years, on some of the best land, where they are placed from three to five per acre for the Winter. These, in favourable Winters, are sometimes made fat and sold in the Spring soon enough for the same field to take in a fresh set of wethers and make them fat by the Autumn; but this can only be done by light stocking.

In kindly growing Summers it is particularly necessary to keep a strict watch on the grass, that it may not run away from the sheep, and to prevent it by adding more sheep, or any other stock that can be had to keep it under; for if it is suffered to run from the sheep, they are much injured and the grass gets coarse; upon such occasions, cattle are generally taken in to keep, at very low prices. The young cattle that are fed in the marsh, are chiefly taken in to keep for the Summer, from the upland farmers. They are placed among

[103]

the sheep, to eat the coarse spots of grass, and are kept there from May about twenty weeks.

Some graziers for this purpose buy welch calves in the Autumn, put them out to keep, in farm yards, for the Winter, and in the Spring place them among their sheep, where they get fat in a few months and weigh from eighteen to twenty-two score each.

A very few oxen are fattened, which are bought in from the plough teams of the wealds of Kent and Sussex. They are very large and have a reserve of the best grass to themselves; from their size they require a longer time to get fat than the smaller sorts; they usually weigh from forty-five to seventy score each.

WOOL.

This article here is the € sort of the first quality, being very long fine; the fleeces of the young sheep are about five pounds weight, those of the ewes six, and the fattening wethers eight or nine pounds each. This marsh is supposed to produce twenty

pounds of wool per acre, which, for forty-four thousand pounds of wool, or three thousand six hundred and sixty-six packs per annum. But as the greater part of the land has above four sheep per acre at shear-time, and as the average weight of the fleeces is certainly above five pounds, the annual growth of this marsh in the county of Kent, is probably full four thousand packs.

TITHE.

The grass lands, (except of the parish of Lydd,) pay a modus in lieu of tithe, some of four-pence, some eight-pence, and others one shilling per acre; and the corn lands pay a composition of from four to six shillings. And some parishes paying the low modus for grass, if it is mown, pay one shilling per acre.

[104]

ARABLE.

The very small portion of land under the plough is wonderfully productive in wheat, beans, and peas. The quantity annually broken up is thought to increase, owing to the moderate composition before mentioned, taken by the Clergy in lieu of tithes. The practice of ploughing however is not very general; and the greatest quantity in any one person's hands, hardly exceeds fourscore acres; very few have half so much; and most of the tenants none,

SYSTEM.

The first crop when the marsh land is ploughed, is usually peas, the second peas or beans, and then wheat, succeeded by beans and wheat alternately for a few years, with sometimes a variation of a crop of oats or peas.

There is neither woodland nor hop-ground in the marsh, and hardly any fruit growing.

PRICE OF LABOUR.

	s.	*d.*	*s.*	*d.*
Labourers, per day,			2	0
Mowing thistles, per day,			2	6

———————— per care,	0	4	to	1	0
——— grass, per acre,	3	0	to	5	0
Women hay-making, per day,				1	2
Men,				2	0
Casting ditches, 9 feet wide, per rod,	1	6	to	2	0
Fencing, per rod, 2 posts and 8 rails				13	0
Ditto, 2 posts and 6 rails,				9	0
Thrashing wheat, per quarter,	3	0	to	4	0
———— beans,	1	6	to	1	8
———— peas,	1	8	to	2	0
Value of Ploughing an acre of land,	11	0	or	12	0

Implements of Husbandry the same as in other parts of the county.

[105]

What Improvements have been made.

The increased number of sheep kept in Romney Marsh, sufficiently denotes its improvements; and it is chiefly the hard stocking with sheep that has been the means of a greater number being fed. For it is in the Marsh a settled maxim, that the more a field does keep, the more it will keep.

Romney Marsh has generally been considered very unhealthy for its inhabitants, but of late years it is found to be greatly improved in that respect; it being now as healthy as many other parts of the county: and this change is attributed to the attention of the occupiers in cleaning out their fence ditches, by which there is less stagnated water.

The land was formerly much overrun with ant hills, but now very few are to be seen; they are cut and carried to low places, or laid up in ridges or banks, by way of sheltering the young lambs from the cold wind: and some have been rotted in heaps, and then spread on the land for manure. This is most certainly a very great improvement, although there are some few graziers yet, who positively assert the contrary, and will not suffer the ant hills to be destroyed, under an idea, that there is more grass grows between them, by means of the shelter they afford. But this argument seems more an

excuse for neglect, than a justification of ant hills.

What Improvements may be made.

The general management of the land in Romney-Marsh is so very excellent, that it is hardly possible to conceive a better mode. The fences are kept in good order, the grass fed down smooth and even; thistles constantly kept under, and drainage well conducted, which together with the constant verdure and innumerable quantity of sheep always feeding on the land, form a universal neatness and beauty of appearance hardly to be met with in the kingdom.

[106]

The art of improving the breed of sheep and growth of wool in this district, is however yet quite in its infancy, especially when compared with those arts in the midland and northern counties.

The size of ewes and rams is with most graziers the principal object in the breeding of sheep; great bone is considered as merit oftener than demerit, and coarse wool frequently preferred to fine, in order to bring down the scale; every idea of excellence in wool being attached to quantity, not quality. In Autumn, when the ewe tegs are sorted out for the breeding grounds, by taking out the bad ones for sale or fattening, there are very few graziers, if any, who reject those with coarse fleeces, if they like them in other respects; hence it is that almost every man's growth of wool is uneven, some very fine fleeces and others very coarse. This must in some respects puzzle the buyers of wool, how to calculate the true value of every man's growth, and probably induces them to be very cautious in giving a full price, through fear of having a great share of coarse fleeces; was every grazier to refuse to breed from coarse woolled ewes and rams, their growth of wool would soon become even and fine, and wool buyers would be in less danger of being deceived by a great portion or coarse wool, and would buy with greater confidence; and the grower would, in all probability, obtain an additional price, more than would compensate for any deficiency in the weight.

The soil of Romney-Marsh and its climate seem naturally disposed to produce wool of a very long staple, and at the same time a very fine quality in proportion to its

length. It should, therefore, be the study of the growers of wool to improve the advantages nature has blessed them with, by rejecting, as breeding ewes, every one which has a loose open coarse fleece, or a hairy breech; and to choose both rams and ewes with thick, long, fine wool in every part. If this rule was generally adopted, the growth of wool in Romney Marsh would, in all probability, in a few years be twenty or

[107]

thirty per cent, better than it now is; and by getting it thick on the skin, there would be, perhaps, very little, if any deficiency in weight.

By great attention to the carcase, that also might be much improved; rams ad ewes should be selected with great breadth of loin and chine, small head, neck, and bone, straight back, and short legs. These points being gained, every other merit, such as a disposition to fatten quick, and great weight, will follow or course; for there can be no doubt, but that a small boned animal fattens quicker than a large boned one with the same quantity of food; and those sheep, which from a given quantity of food, produce the greatest quantity of flesh, and least of bone, must undoubtedly be the most profitable animals to the community.

FINIS.