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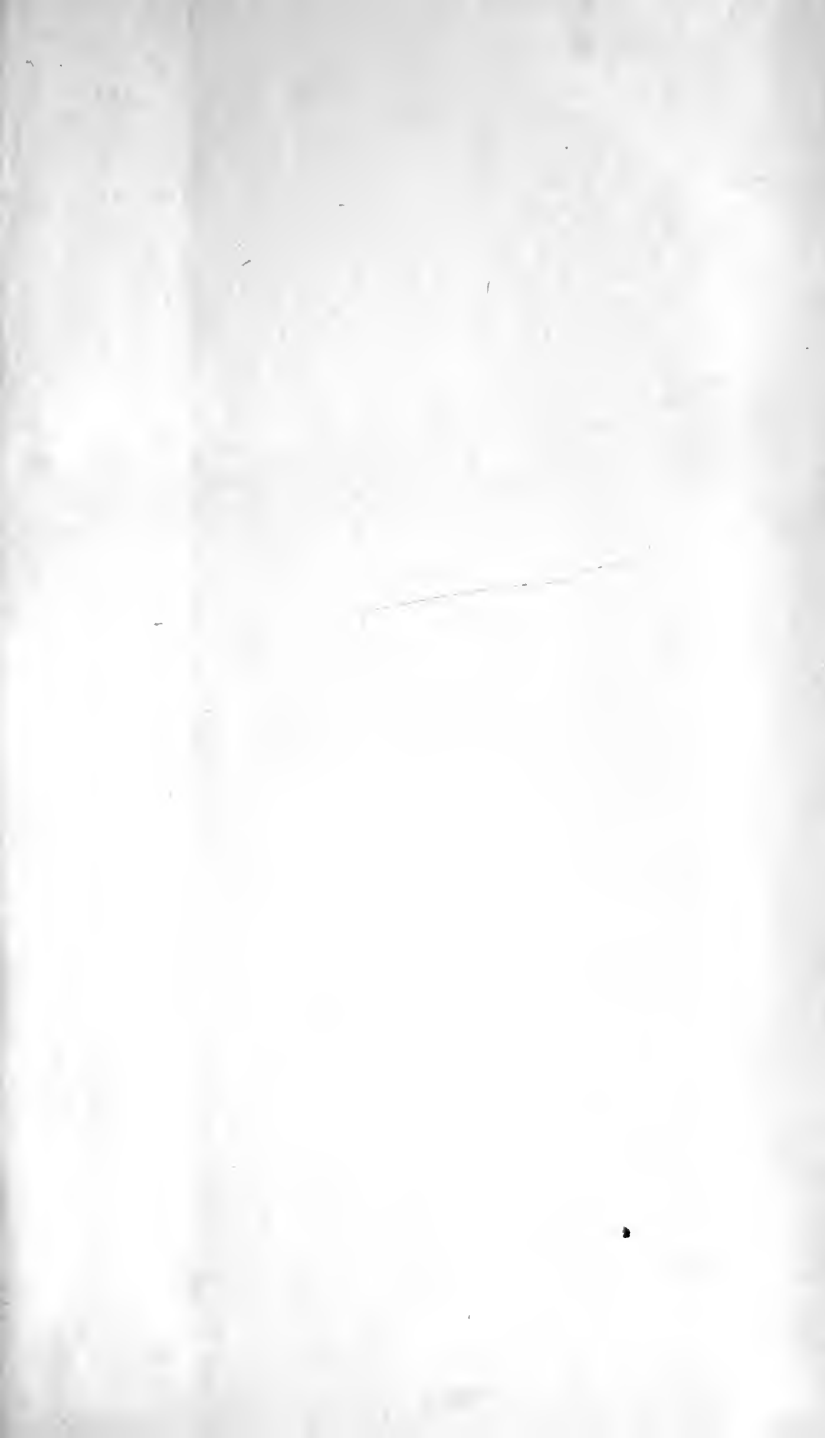
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*Annual Volume*

THE

RURAL ECONOMY

OF THE

Henry C. Taylor.

WEST OF ENGLAND:

INCLUDING

*MINUTES OF PRACTICE,*

IN

THAT DEPARTMENT.

---

---

By Mr. MARSHALL.

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THE SECOND EDITION,

WITH

MANY IMPROVEMENTS,

AND

*CONSIDERABLE ADDITIONS.*

---

IN TWO VOLUMES.

VOL. I.

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LONDON:

Printed for G. and W. NICOL, Pall Mall; LONGMAN, HURST, REES,  
and ORME, Paternoster Row; CADELL and DAVIES, Strand;  
LACKINGTON, ALLEN, and Co Finsbury Square;  
J. HATCHARD, Piccadilly; and J. HARDING,  
St. James's Street.

1805.





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## ADVERTISEMENT.

**T**O my valuable and lamented friend, the late Sir FRANCIS DRAKE, whose virtues were best known to those who were most acquainted with his private character, I am chiefly indebted for the opportunity of forming the Register, which is now under publication.

IN the Summer of 1791, I made my first journey into the WEST of DEVONSHIRE, to examine into the state of his Rural concerns, in that part of the County; and, in the Autumn of the same year, returned, to endeavor to retrieve them from the discreditable state, in which I had found them. In the succeeding Autumn, I made a third journey, to the same quarter; and, in the Summer of 1794, I went over the whole of the

DRAKE

DRAKE ESTATE,---now my Lord HEATHFIELD's,---lying in different parts of Devonshire.

It will perhaps be said, that the VALLEY OF THE TAMER is too confined, and is of too little importance as a District, to be suitable for a PRINCIPAL STATION. Indeed, it is more than probable, that had I *chosen* my station, it would not have been that which circumstances assigned me.

BUT (thanks to the Disposer of Circumstances),---now, when I am acquainted with the several Districts of this Department of the Island, I am convinced, that there is no other situation, which could have been made equally favorable to my views, as that in which I was placed, *as it were*, providentially. There is no other individual station, in which I could have commanded, so well, the two Counties of DEVON and CORNWALL, and at the same time, the fertile District of the SOUTH HAMS,---“ the Garden of Devon-

shire ;"—of which distinguished District the Valley of the Tamer forms, in reality, a part.

BESIDE, in the Valley of the Tamer, and on the magnificent Farm on which I resided,—the very first in the Country,—I possessed the most favorable opportunity, that either circumstances or choice had to give, of studying the DANMONIAN PRACTICE, in all its branches, and in its almost pristine purity\*.

A FEW particulars of modern practice, that have been recently introduced into this part of the Island, especially into the South Hams, have not deranged the LONG-ESTABLISHED SYSTEM OF DANMONIAN HUSBANDRY ; which is still firmly rooted, in these Western Districts ;

\* DANMONIAN,—an epithet derived from *Danmonia*, or *Damnonia*, an ancient name of part, or the whole, of the Western Peninsula of Britain.

This name, being common to Devonshire and Cornwall, is peculiarly applicable to the DISTRICT of the STATION ; as well as to SOUTH and NORTH Devonshire.

tricts; and remains as distinguishable from the ordinary management of the body of the Island, as if the Peninsula, they form, had been recently attached to it.

MOREOVER, it will appear, in the following pages, that, altho the Danmonian practice has many defects, it has likewise its excellencies, by which the British Husbandman may greatly profit; and very many peculiarities, by which the mind of an attentive reader will be enlarged, and its prejudices be relaxed. I therefore consider it as one of the most fortunate circumstances, which have attended the execution of my undertaking, that I was led to the pure fountain of this distinguished practice.

LONDON, May 1796.

# ADVERTISEMENT

TO THE

## SECOND EDITION.

THE first Edition of these Volumes was written with less deliberation (owing to a combination of circumstances) than any other work I have published; and a few errors, none of them however of serious importance, eluded my notice; for want of that leisurely and uninterrupted attention that is essential to accuracy, in composing a work which comprises such a multiplicity of topics, as belong to a comprehensive Register of the Rural Economy of a Country.

BUT my information having been enlarged, by the various journies I have occasionally made through this Department of the Kingdom,

dom,

**xvi** ADVERTISEMENT TO SECOND EDITION.

dom, and the temporary residences that I have annually enjoyed within it, since the publication of the first Edition, as well as sufficient leisure to revise, digest, and apply to their appropriate uses, the materials thus collected, I have been able, not only to make several corrections and improvements of the REGISTER, or body of the work, but some considerable additions to the MINUTES.

LONDON, June 1805.

THE

**WEST OF ENGLAND.**

**INTRODUCTION.**

**THIS** popular appellation is usually given to the four most Western Counties; namely, **CORNWALL, DEVONSHIRE, SOMERSETSHIRE, and DORSETSHIRE.**

**BUT**, in examining a Country, like England, with a view to the existing state of its **AGRICULTURE**, and the other branches of its **RURAL ECONOMY**, the arbitrary lines of Counties are to be wholly disregarded. For if any plan was observed in determining the outlines of Provinces, in this Island, it certainly had no reference or alliance whatever to Agriculture; unless it were to divide, between opposing claimants, the natural Districts, which require to be studied separately,

and entire. *Natural*, not *fortuitous* lines, are requisite to be traced; *Agricultural*, not *political* distinctions, are to be regarded.

A NATURAL DISTRICT is marked by a uniformity or similarity of SOIL and SURFACE; whether, by such uniformity, a marsh, a vale, an extent of upland, a range of chalky heights, or a stretch of barren mountains, be produced. And an AGRICULTURAL DISTRICT is discriminated by a uniformity or similarity of PRACTICE; whether it be characterised by grazing, sheep farming, arable management, or mixed cultivation; or by the production of some particular article, as dairy produce, fruit liquor, &c. &c.

Now, it is evident, that the boundary lines of Counties pay no regard to these circumstances. On the contrary, we frequently find the most entire Districts, with respect to Nature and Agriculture, severed by political lines of demarcation. The Midland Districts, for instance, a whole with respect to soil, surface, and established practice, is reduced to mere fragments, by the outlines of the four Counties of Leicester, Warwick, Staf-



ford, and Derby\*. Again, the Fruit Liquor District of the Wye and Severn includes parts of the Counties of Hereford, Gloucester, and Worcester†; and the Dairy District of North Wiltshire receives portions of the Counties of Gloucester and Berks within its limits, and extends its practice to the Eastern margin of Somersetshire ‡.

HENCE, it may be truly said, to prosecute an Agricultural Survey, by Counties, is to set at naught the distinctions of Nature, which it is the intention of the Surveyor to examine and describe; and to separate into parts the distinguished practices, which it is his business to register entire.

SUCH a mode of procedure is an impropriety, not only in theory, but in practice. It destroys that SIMPLICITY OF EXECUTION, and PERSPICUITY OF ARRANGEMENT, which alone can render an extensive undertaking pleasurable to him who prosecutes it, and profitable to the Public.

ANOTHER

\* See Rur. Econ. of the MIDLAND COUNTIES.

† See GLO. ECON.

‡ See as before.

ANOTHER practical objection, which lies against surveying by Counties, beside the repetitions or references it requires, is the UNNECESSARY LABOR it incurs, and the SUPERFLUOUS VOLUMES to which it necessarily gives rise. For it is not the practice of every township or farm, which *can* be registered, nor that of every hundred or county, which *requires* it.

IT is the SUPERIOR PRACTICES of DISTINGUISHED NATURAL DISTRICTS, in different and DISTANT PARTS OF THE ISLAND (thus separating, and thereby showing in the most intelligible form, its more-DISTINCT PRACTICES), and these only, that are necessary to be *fixed*; —AS A FIRM BASIS, ON WHICH TO RAISE FUTURE IMPROVEMENTS, AND STILL MORE ENLIGHTENED PRACTICES.

THE PRACTICE OF THE WEST of ENGLAND, —the subject of the present volumes, —verifies the foregoing remarks. It is distinguished in a peculiar manner from that of the rest of the kingdom: and this peculiarity extends, not only over the Counties of CORNWALL and DEVON, but reaches within those of SOMERSET and DORSET.

AN inconveniency, in registering this peculiarly distinct practice, arises from there being no leading District, near the center of the extent of country over which it prevails, wherein to study and record the radical practice, as well as the modern improvements that have been introduced, with every advantage. That which I was led to, in the manner already mentioned, is, in many points of view, the best STATION for the purpose. But there being other Districts of greater celebrity, and which stand forwarder in modern improvements (mostly copied, however, from the superior practices of the more central parts of the Island, and which I have already registered), I have made a point of paying such attention to them, as their respective merits appear to require.

THE DISTRICTS which are here to be described are these :

*First*, WEST DEVONSHIRE, (the DISTRICT of the STATION) : including the Western margin of Devonshire, and the Eastern parts of Cornwall.

*Second*, The SOUTH HAMS. A contiguous District, which forms the Southern point of Devonshire.

*Third*,

*Third*, The MOUNTAINS of Cornwall and Devonshire.

*Fourth*, The District of NORTH DEVONSHIRE.

*Fifth*, The VALE OF EXETER.

*Sixth*, The DAIRY DISTRICT, which includes parts of East Devonshire and West Dorsetshire;—and,

*Seventh*, The VALE OF TAUNTON, in West Somersetshire.

*Together with* TRAVELLING NOTES in passing through the SOUTH-EASTERN PARTS of SOMERSETSHIRE.

1804. SINCE the publication of the First Edition of these volumes, I have had many opportunities of re-examining the Agricultural Department which they describe, and of traversing its area, in almost every direction. The produce of these Excursions will appear in this Edition;—either progressively as they occurred, in distinct MINUTES; or as NOTES attached to former Excursions.

## REFERENCES to the MINUTES:—

45. ACROSS DARTMORE, from MORTON HAMPSTEAD to WEST DEVONSHIRE.
47. Through SOMERSETSHIRE, from STOURHEAD, by *Castle Cary*, *Somerton*, and *Langport*, to *Chard*.
49. In the CENTRAL PARTS of DEVONSHIRE, from *Exeter* to *Okehampton*.
51. Along the SOUTHERN COAST of DEVONSHIRE.
55. In NORTH DEVONSHIRE, from *Ilfracoomb*, by *Barnstaple*, to *Torrington*.
57. Through SOUTH SOMERSETSHIRE, from *Ilminster*, by *Ilchester*, *Castle Cary*, &c.
58. Through the same, by *Crewkerne* and *Ilchester*, to *Wincaunton*; with general Remarks on the VALE OF ILCHESTER.
65. An Excursion in NORTH SOMERSETSHIRE: also across the SEA MARSHES; and in the VALE of BRIDGEWATER, in the CENTRAL Part of SOMERSETSHIRE.

Remarks to the Editors:—

- 25. A. ... from Milton Mass.
- 26. ... to West Devonshire.
- 27. Through Somersetshire, from Stour-  
head, by Castle Cary, Somerset, and  
Barnstaple, to Chard.
- 28. In the central parts of Devonshire,  
from Exeter to Okehampton.
- 29. Along the southern coast of Devon-  
shire.
- 30. In North Devonshire, from Hartland,  
by Barnstaple, to Torrington.
- 31. Through South Devonshire, from Il-  
fracombe, by Bideford, to Exeter, &c.
- 32. Through the same, by Crediton, and  
Barnstaple, to Wincanton, with ex-  
tra Remarks on the Vale of Ex-  
eter.
- 33. In Devonshire, in North Devonshire, with  
extra Remarks on the Vale of Exeter; and in  
the Vale of Devonshire, in the  
central part of Devonshire.

*DISTRICT THE FIRST.*

**WEST DEVONSHIRE;**

INCLUDING

**THE EASTERN PARTS**

OF

*CORNWALL.*

**INTRODUCTORY VIEW OF THIS DISTRICT.**

**B**EFORE we enter into a detail of the several branches of the **RURAL ECONOMY** of the District of West Devonshire, &c. it will be requisite to take a comprehensive view of the **DISTRICT** itself; and to endeavor to mark its distinguishing characters:—

**FIRST**, As a production of Nature.

**SECONDLY**, As part of the domain of the realm.

**THIRDLY**, As the property of individuals.

*SECTION*

## SECTION THE FIRST.

## NATURAL CHARACTERISTICS

OF

## WEST DEVONSHIRE, &amp;c.

IN taking a cursory view of the NATURAL HISTORY of this District, I shall attend to such particulars, only, as have an immediate connection with RURAL ECONOMICS; conformably with the plan which I have hitherto found it requisite to pursue. These particulars are,

- I. Its situation in the Island.
- II. Its extent.
- III. Its elevation with respect to the sea.
- IV. The conformation of its surface.
- V. Its climature as it affects Agriculture,
- VI. The waters which occupy its surface.
- VII. Its prevailing soils.
- VIII. The subsoils most prevalent.
- IX. The useful fossils found in its strata.
- X. The minerals it contains.

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I. The **SITUATION** of this District is within the South-western limb of the Island, which separates the two seas—the Irish and the English Channels.

Its **NATURAL BOUNDARIES** are Dartmore, an extensive and elevated tract of mountains, on the East; Hinksdon\*, and other mountains of Cornwall, on the West; with Plymouth Sound, and the estuaries branching out of it, on the South. The Northern boundary is less evident. Brent Tor and the heights around it may be said to separate this District from **NORTH DEVONSHIRE**.

II. The **EXTENT** of this secluded tract of country is not inconsiderable: It is about twenty miles from North to South, and about ten miles from East to West. But within these limits some barren lands are included.

III. Its **ELEVATION** above the sea is less than the eye may estimate. The tide  
flows

\* **HINKSDON**. The name of this mountain is explained in different ways. Perhaps it is rooted in *Hin* (*Celtic*) the **WEATHER**, and *Don* or *Down*, a **HILL**, or **Height**. It is, to this day, the weather gauge of the country under survey (see the Sect. **WEATHER**), the whole of which it commands. The views from it are very extensive; reaching nearly or quite from sea to sea; that to the South being peculiarly grand.

flows to its center. The vallies of course lie low; but many of the hills rise abruptly; and much of the cultivated lands may be deemed *hill*; all of them *upland*. No part of the District can be strictly called vale; nor is there any extent of flat meadows, or marsh lands, within it; though, here and there, a narrow meadowy bottom of a valley or "coomb" is observable\*.

IV. The SURFACE is various in the extreme: not only from the number, narrowness, and depth of the larger vallies, whose sides often rise steeply from the banks of the streams that divide them; but from the hills, or wider spaces between those vallies, being broken, in the manner peculiar to the South-western extremity of the Island: a style of surface which takes place at the Western termination of the chalk hills of Dorsetshire, and continues to the Landsend †.

\* COOMB—properly COOM,—from *Cwm* (Welsh and Cornish) a Valley or Dell, a name that is still prevalent in these Western counties; and is more or less retained, perhaps, wherever the SOUTHERN CELTS gained a permanent footing in England.

† For itinerary remarks, on the surface of the District now under notice, see the following MINUTES, 1, 2, 3, 4, 5, 14, and 21.

V. The CLIMATE of West Devonshire is particularly marked. The situation of the District between two seas; its immediate exposure to the main ocean, in the direct passage of the South-west winds; and the elevated summits of the mountains, which surround it, arresting the fleets of vapours as they arrive heavy laden from the Atlantic;—unite in rendering this portion of the Island liable to an excess of rain; this, to a coolness of climate, and a lateness of season. Though situated in the most Southern *climate* of the Island, its harvests are comparatively late; but vary in a singular manner with the season.

In 1791, wheat crops in general were green, the first of *August*, and hay harvest was, then, barely at its height. The twentyfifth of August, corn harvest was in forwardness, the weather having recently been dry and hot. Nevertheless, at that time, much corn still remained green; especially on the skirts of the Cornish mountains; where wheat is not unfrequently harvested after Michaelmas. In 1792, barley harvest did not close, even on the comparatively forward lands of Buckland, until the beginning of October: the season wet. On the contrary, in 1794, a very dry season,

season,

season, wheat harvest commenced the last week in July.

Taking the par of years, we may fairly place West Devonshire ten days or a fortnight behind the Midland District, which lies more than two degrees of *latitude*—namely, about one hundred and fifty statute miles—farther North. A proof that *climate* and *climature* have not an immediate connection\*.

VI. WATERS. This District, notwithstanding the steepness and elevation of its surface, is singularly well watered. Every description of water may be said to belong to it, except the lake.

The SEA and its ESTUARIES sever it to its center. Its RIVERS are the *Tamer*, the *Tavey*, and the *Plym*; whose various brooks, rivulets, and rills, furrow the sides of almost

\* The following memoranda will show the mildness of Winter, in this South-western extreme of the Island.

In 1792, presently before Christmas, bees were in full work—on the blossoms of the ivy. And from that time to the end of December, the large blue house fly was frequently on the wing. The latter end of January, 1793, was as mild as early May, in the Northern provinces.

The swallow and the house martin I have repeatedly seen in November, and a few winters ago (1804) they were observed, here, in December: the thrush may be heard in full song, in every month of the year.

every slope; frequently issuing from near the summits of the hills.

But I have met with no instance of collected waters, among the Western mountains; such as frequently occur in the Northern parts of the Island. Dosmary Pool, a small lakelet, which lies among the mountains, between Bodmin and Launceston, is the only one I have seen.

It is among complex ranges of mountains that *lakes* are generally found. Those of Cornwall and Devonshire form only one chain; except in the part where this pool occurs.

VII. SOILS. The SPECIES of surface soil is remarkably uniform, and singular in its component parts. It does not class properly with any of the ordinary descriptions of soils, namely, clay, loam, sand, or gravel; but is of a silty nature. Perhaps the principal part of the ordinary soil of the District is perished slate-stone rubble; or slate-stone itself, reduced by the action of the atmosphere to its original silt, or mud: among which, however, a portion of loamy mold is mixed, in various degrees of quantity\*.

Hence,

\* For Remarks on the Accumulation of Soils, see SOUTHERN COUNTIES, II. 96.

Hence, tho' the species of soil may be said to be the same, the QUALITY varies, and in some instances, very greatly. There are small plots of land, upon the upper branches of the rivers, equal in quality with the best-soiled Districts of the Island; deep rich land; grazing ground of the first quality.

The prevailing DEPTHS of the soils of the ordinary cultivated lands of the District are from five to ten inches. But they are seldom naturally free from rocks or large stones to these depths: and they are generally mixed plentifully with loose fragments of similar rocks and stones: which will be mentioned under the next head.

Other observable circumstances of the soils of West Devonshire respect their ABSORBENCY, and their being in a manner free from TENACITY. For, notwithstanding their smoothness, and apparent unctuousness while wet, they presently become dry and clean, after the heaviest rain\*: excepting after a long

\* 1804. The following notice, taken in July 1791, will show this quality of the Devonshire soils, in a striking light. "How singularly *clean* are the soils of this District. It has rained almost all this day;—the whole of the afternoon, very hard; clearing up, suddenly, at sunset. This evening, I have walked over a turnip ground,

continuance of winter rains, when, the subsoil being surcharged, the soil, especially in particular plots, remains perhaps, for some length of time, in a state of mud; yielding to the foot in walking over it; a mere quagmire; horses and cattle reaching the rocky substratum every step. This evil quality, however, is narrowly limited, both in respect to extent and continuance; and might be removed, by draining.

Upon the whole, the natural properties of this singular species of soil are such, as to render it highly favorable to the purposes of Husbandry; it being, under proper treatment, productive either of corn or herbage.

VIII. SUBSOIL. This is universally of a stony or a rubbly nature. I met with no beds of clay, loam, sand, or gravel; such as we find

just sown, and a summer fallow that is now plowing;—both of which are as free from tenacity, or stickiness, as if there had been no rain in the course of the day! Not a drop of water is detectable, nor the least appearance of any having run off the surface. The rotten slate rock, I find, lies from six to twelve inches beneath the surfaces of these lands, and has absorbed the whole of the superfluous rain water, as it passed through the soil;—together with some portion of the dung, I am afraid, which has recently been plowed in, for turnips.”

find in other Districts. The prevailing substratum is a soft SLATEY ROCK; which, in some places, rises to the soil; in others intervenes a stratum of rubble, or unhardened slate stone; which, in quality, partakes of the firmer and purer rock; the relation of the two being analogous with that which subsists between limestone and the rubble, with which it is frequently covered\*.

Intermixed with the soil, and often united with fragments of slate rock, is found, in blocks and fragments of various sizes, a species of spar, crystal, or quartz—provincially “WHITTAKER;” which, in color, is mostly white, sometimes tinged with red, or rust color. It is most commonly seen in small fragments, of varied form and surface, mixed with the soil, and exposed on the surface by the plow and harrow. The larger pieces are gathered off ley grounds, and become an excellent road material. Sometimes it is found in large blocks, of several cubic feet in size: and is frequently seen, in quarries, adhering to masses of slate-stone rock; in the manner in which limestone and its

\* For the degree of ABSORBENCY of the West Devonshire subsoil, see the last note.



spar are united; as if the two productions were caused by similar processes of Nature.

IX. FOSSILS. BLUE SLATES of the first quality, for covering houses, are raised in different parts of the District. FLOORING SLABS, and SLATE STONES for walling, are found in most parts of it\*.

A singular species of FREESTONE is raised near the center of this District. It has formerly been distributed over the West of Devonshire, and a great part of Cornwall; having been used most especially for sculptural purposes, in the Gothic ornaments of churches and other buildings. It appears to have received its immediate formation from fire; though evidently not the production of a volcano, in the situation in which it is now found. It is called "Rooborough stone," from the name of the common pasture—Rooborough Down—under which it is buried—in a long narrow line, stretching across the  
Down.

\* SLATE QUARRIES. Those three valuable materials are usually found in the same quarry. The building stones lie nearest the surface. Under these the flooring slabs; which are sometimes raised of great size. And, beneath these, the roofing slates; which are cleft out of blocks of this purest part of the rock, into slates of different dimensions. See the LIST of RATES.

Down †. MOORSTONE, or QUARTZOSE GRANITE, is plentiful on the mountains, on either side of the District.

X. MINERALS. Mines of TIN, COPPER, and LEAD (containing a portion of SILVER) are still worked in the District; whose surface is defaced, and for ever rendered unprofitable, for the purposes of agriculture, or other cultivation, by these intolerable nuisances. The stannary laws, if any such laws can really be said to exist, ought to be forthwith abrogated, and some rational regulations be struck out;—such as men of common sense may understand, and under which industry may be protected, from the rapine of adventurers; who not unfrequently do irreparable injury, without obtaining any counter advantage to themselves or the community: throwing away that attention and labor, which, if bestowed on the soil, might long remain a national benefit.

† It is insensible to the marine acid.

## SECTION THE SECOND.

THE

PRESENT STATE OF THE DISTRICT

AS A PART OF

THE NATIONAL DOMAIN.

IN viewing what may be termed the POLITICAL ECONOMY of this District, it may be proper to confine ourselves to the following branches of that subject.

- I. The political Divisions of the District.
- II. The present state of Society within it.
- III. The public works it possesses.
- IV. Its present productions, as they may be viewed in a political light.
- V. The characteristic features, or the present appearance of the face of the country, viewed as a passage or part of the demesne lands of the Empire.

I. POLITICAL DIVISIONS. The County of Devon ranks among the largest of the English Counties.

In regulating the Militia, it is divided into three DISTRICTS; namely, *North*, *East*, and *South* Devon; this Western part being included in the last.

The subdivisions are termed HUNDREDS; some of which, I understand, have still their Courts;—held principally, I believe, for the recovery of debts under forty shillings.

HUNDRED COURTS, or Courts peculiar to the subdivisions of Counties, were formerly prevalent; and might not a revival of these ancient inquests, with regulations adapted to the present times, be rendered serviceable, in matters of embankment, common drains, extensive inclosures, roads, and public nuisances, that are not peculiar to any particular manor?

The MANORS of the District are many of them small; frequently, more than one being included in the same township\*. The Courts are regularly held, and well attended; the rents of the lands appropriate to the manor being usually paid at the Courts.

It must not be omitted to be mentioned here, that, by the custom of this country,

\* In the parish of Ugborough (extensive) there are, I am informed, six separate manors; each of which holds its Court.

the inquests of manors take cognizance of the weight of bread, within their respective precincts: an admirable custom, which might well be extended.

The revival of Manor Courts, throughout the kingdom, (or the establishment of other rustic tribunals of a similar nature,) could not fail of producing the happiest effects. They are the most *natural* guardians of the rights of villagers, and the most prompt and efficient

POLICE OF COUNTRY PARISHES,

I have formerly suggested the benefits which would probably arise from manorial inquests\*, and the more my observations are extended, the more I am convinced of the numerous advantages which would arise from them.

The TOWNSHIPS are mostly large. Many of them have formerly been monastic. A sufficient evidence, this, of the amenity and natural fertility of the District.

II. THE STATE OF SOCIETY. The particulars to be noticed, under this head, are

1. The towns of the District.
2. Its villages and hamlets.
3. Its

\* See YORK. ECON. Vol. I. p. 27.

3. Its inhabitants.
4. Their habitations.
5. Their ordinary diet.
6. The fuel most in use.
7. The employments of working people.
8. Provident Societies.

1. The chief town of the District is *Plymouth*; which, with the new town adjoining to the dock yard, and familiarly called *Dock*, together with the village of *Stonehouse*, which now nearly unites the new and the old towns, may be said to form, at once, the PORT and the MARKET of the District.

*Taristock*, however, in point of situation, and heretofore, perhaps, in that of respectability, might rank high among the market towns of the kingdom. It is situated in the Northern quarter of the District, among its richest lands (though beset with wild mountain scenery), and was formerly famed for its monastery. At present, tho meanly built, it is a tolerable market town; and is the only inland town, in the District, now immediately under survey.

2. The VILLAGES of West Devonshire are few and small; farm houses, and many cottages, being happily scattered over the areas of the townships. Nevertheless, near most

of the churches, groups of houses occur; with here and there A HAMLET.

Within one of its townships, are found the *remains* of a BOROUGH—*Beer-Alston*: in which, however, not a single voter, at present, resides.

3. INHABITANTS. Those of Plymouth and its environs are not objects of this survey. They have been drawn together, by war and commerce, from various quarters.

The natives of Devonshire are mostly of good person; tall, straight, and well featured. Many of the women are of elegant figure:—differing very much, in person and features, from their neighbours,—the female mountaineers of Cornwall. But a similar distinction is observable between the Salopian women and those of the mountains of North Wales; and between the females of the Lowlands and the Highlands of Scotland.

In the habitudes and manners of the middle class, we find little which marks the inhabitants of this Western extremity of the Island, from those of the more central parts of it; except such provincial distinguishments as are observable in almost every District; and except what arises from an over-rated estimate of themselves.

This

This endemial habitude, which is not obvious to strangers only, but which the Gentlemen of the country, who mix with the world, are the first to remark, may perhaps be accounted for, without bringing any violent charge of personal vanity, or want of natural sagacity, against the present inhabitants.

The coast of the English Channel, especially its more Western part, was, in much probability, the first part of the Island which was resorted to by civilized Foreigners; and its inhabitants, of course, took the lead, in the early stages of civilization in England; and were far advanced, perhaps, in urbanity and useful knowledge, while the inhabitants of the more central and Northern Districts remained in a state of barbarity and ignorance. Hence, in those days, they not only felt, but really possessed, a well grounded superiority.

But, through a series of subsequent circumstances, which it would not be difficult to trace, the inhabitants of the body of the Island have long since gained the lead, in what relates to the useful arts, and modern improvements: a fact which the mere Provincialists of this extremity of it do not ap-



pear to be yet sufficiently apprized of; or, somewhat unfortunately for their country, cannot yet allow themselves to acknowledge.

I endeavor to place this circumstance, in what appears to me its just light, the rather, as it has tended, more than any other perhaps, to prevent the country from profiting by modern discoveries.

4. The HABITATIONS of the District, immediately under notice, are superior to those of most other parts of the Island; owing chiefly, perhaps, to the MATERIALS of BUILDING being plentiful and good. *Stone*, is almost everywhere abundant; and *slates* of the first quality for covering are procurable at a small expence; and *lime* for cement is moderately cheap. Even the cottages are mostly comfortable, and sometimes neat. The farm buildings are generally substantial and commodious, compared with those of most Districts, for farms of similar sizes.

5. The FOOD of working people is somewhat below par. *Barley bread*, *skim-milk cheese*, and *potatoes*, are principal articles of food, among laborers and small working farmers. *Bacon* is a common article of food, in farm houses. Formerly, barley bread was prevalent at the tables of the middle

middle classes of society. The BEVERAGE is chiefly *cider*; or, during a scarcity of this, *beer*: the LIQUORS are a base kind of spirit drawn from the lees of cider, and smuggled brandy.

6. The FUEL of farmers and cottagers, in the inclosed country, is invariably *wood*; on the skirts of the mountains, *peat*, or *turf*, is in use. Lime is burnt chiefly or wholly with Welch *culm*, and Plymouth has a supply of *coals*.

7. The EMPLOYMENTS of the District are mostly those of *husbandry*. The little *mining* which has lately been done, has been carried on chiefly, I believe, with miners from the Western parts of Cornwall. At Tavistock, is a *Serge manufactory*, and the *spinning of worsted* employs, of course, some of the female villagers in its neighbourhood. Much worsted yarn, however, is sent out of Cornwall, to be woven in Devonshire; where *women* are employed in the *weaving of serges*.

8. PROVIDENT SOCIETIES, or BOX CLUBS. These valuable institutions were introduced into this District, about thirty years ago. In Tavistock and its neighbourhood, there is one or more, I understand, for *single women* (mostly serge weavers); and some of the

Men Clubs; I am told, make a provision for *widows*.

The encouragement of these Clubs is a National object of the first magnitude:—not more with a view to lessen the present heavy burdens of the poor, than to instil, into the lower classes of society, a principle of frugality, and a sense of social duties, which these Meetings, under suitable regulations, cannot fail of producing.

III. PUBLIC WORKS. The natural abruptness of the country renders public **EMBANKMENTS**, and **DRAINS**, unnecessary; and **INLAND NAVIGATIONS** difficult. So far as the tide carries up the vessels, so far navigation goes; but no farther, at present (1796). Nevertheless a navigable communication between the two seas is most desirable; as will be shown in the course of these Volumes.

The “**LEAT**,” or **MADE BROOK**, which supplies Plymouth with water, is one of the most useful and striking works of the District. An account of it will appear in the **MINUTES**.

**PUBLIC CORN MILLS** are usually supplied with water, by means of similar “**leats**.” These most antient of public works still remain, here, in their pristine state. The poor  
take

take their own corn to the mill, and there dress it themselves; the miller finding them dressing sieves; and the farmer of whom it is purchased, a horse, to take it and the female who dresses it, to the mill. Customs which mark very strongly the simplicity of manners, that still prevails, in this remote part of the Island.

“PASSAGES,” OF PUBLIC FERRIES, ACROSS the estuaries, are numerous.

The BRIDGES are few, and, in general, mean.

The ROADS of West Devonshire are, at present, most remarkable for their steepness. Less than half a century ago, they were mere gullies, which had been worn by torrents in the rocks; and which appeared in steps, as staircases, with fragments lying loose in the hollows. Speaking with little if any latitude, there was not, then, a wheel carriage in the District; nor, fortunately for the necks of travellers, any horses but those which were natives of the country.

At length, however, good turnpike roads have been formed, between town and town, throughout this quarter of the Island; and most of the villages have carriage roads opened to them; tho many of these by-roads, as

yet, are narrow, and abound with steep. In Devonshire, as in other mountainous countries, the first inhabitants crossed the hills, on foot, in straight forward paths. When horses came into use, the same tracks were pursued; and some of them have been continued, in use, to the present time.

**INCLOSURES.** This District has no traces of common fields. The cultivated lands are all inclosed; mostly in well sized inclosures; generally large in proportion to the sizes of farms.

They have every appearance of having been formed from a state of common pasture; in which state, some considerable part of the District still remains; and what is observable, the better parts of those open commons have evidently been, heretofore, in a state of aration; lying in obvious ridges and furrows; with generally the remains of hedgebanks; and with faint traces of buildings.

From these circumstances, it is understood, by some men of observation, that these lands have formerly been in a state of permanent inclosure, and have been thrown up again, to a state of commonage, through a decrease in the population of the country.

But

But from observations, made in different parts of Devonshire, these appearances, which are common, perhaps, to every part of the county, would rather seem to have arisen out of a custom, peculiar perhaps to this part of the Island, and which still remains in use, of lords of manors having the privilege of letting portions of the common lands, lying within their respective precincts, to tenants, for the purpose of taking one or more crops of corn, and then suffering the land to revert to a state of grass and commonage.

In the infancy of society, and while the country remained in the forest state, this was a most rational and eligible way of proceeding. The rough sides of the dells and dingles, with which it abounds, were most fit for the production of wood; the flatter better parts of the surface of the country were required for corn and pasturage; and how could a more ready way of procuring both have been fallen upon, than that of giving due portions of it to the industrious part of the inhabitants, to clear away the wood, and adjust the surface; and, after having reaped a few crops of corn to pay the expence of cultivation, to throw it up to grass, before it had been too much exhaust-

ed, to prevent its becoming in a few years profitable sward? In this manner, the country would be supplied progressively, as population increased, with corn and pasturage, and the forests be converted, by degrees, into common pastures, or HAMS.

The wild or unreclaimed lands being at length gone over in this way, some other source of arable crops would be requisite. Indeed, before this could take place, the pasture grounds would be disproportionate to the corn lands: and out of these circumstances, it is highly probable, rose the present INCLOSURES.

IV. PRODUCTIONS. In registering the present produce of the District, we will observe the same order, in which its natural characters were reviewed; and enumerate,

1. The products of its waters.
2. The produce of its soils.
3. The productions of its substrata.

1. Of its WATERS. The sea, which washes the Southern skirts of the District, is singularly productive. The market of Plymouth has long, I believe, been esteemed the first in the Island, for the abundance, variety, and excellency of its SEA FISH. Of late years,

however, this market has been the worse supplied, as the prime fish, caught by the fishermen in its vicinity, have been contracted for, by dealers, for that of Bath. And some share of the finny treasure, which these shores produce, is sent, I understand, to the London market.

In a political view, the PILCHARD FISHERY of Cornwall is the most worthy of attention. In some seasons, the quantities that are said to be caught are almost incredible; employing many vessels and hands in taking and curing them; and affording an article of foreign traffic, of no mean consideration.

The produce of the rivers of the District is chiefly SALMON: which resort to them, in great abundance; tho not in such numbers, as they do to some of the rivers, in the Northern parts of the Island.

A remarkable circumstance regularly takes place, with respect to the time at which Salmon enter the two rivers—the Tamer and the Tavey. They usually begin to go up the latter, in the month of February or March; but are not found in the former, until some two months or more afterward; and this notwithstanding the distance of their



junction from the sea; and notwithstanding the Tamer is the larger river.

The natural history, and habits, of this most valuable of river fish, is a subject of enquiry, not unworthy of public attention. Beside throwing into the market a considerable supply of human food, this species of produce brings in an income to individuals of many thousand pounds a year: public and private advantages, which might, in much probability, be doubled, by judicious regulations and laws, respecting the preservation and encouragement of this source of national produce; which occupies no portion of our lands, nor consumes any part of the produce of the soil; furnishes a considerable increase of nutriment, without incurring any counterdiminution; and is obtained at little expence of labor or attention.

It is a practice in every District of the Island, perhaps, for the dissolute part of those who live near the sources of rivers, to take Salmon in the act of spawning: a crime for which scarcely any punishment can be too severe. In destroying one, at this juncture of time, the existence of hundreds, perhaps thousands, may be prevented.

Some particulars, relating to this article of produce, will appear in the following MINUTES;—No. 3, 8, and 20\*.

2. The present produce of the SOIL is in some considerable proportion, WOOD; which fills the dells and narrow vallies; and hangs on the rugged sides of more insulated hills; and which grows in great abundance, upon the extraordinary fence mounds, which will be described.

The rough open pasture grounds bear little wood, strictly speaking. But the DWARF FURZE †, and the HEATHS, occupy no small portion of their surfaces.

Of the inclosed lands, in a state of Agriculture, a large proportion is in GRASS OR LEY HERBAGE, perhaps two thirds of the whole. The rest is occupied by ARABLE CROPS, and ORCHARD GROUNDS.

\* And for farther remarks, see TREATISE ON LANDED PROPERTY: subject SALMON FISHERY.

† The DWARF TRAILING FURZE. This plant is common to the more Western and Southern Counties. Its appearances and habits are so perfectly different from those of the ordinary species of Furze, and it preserves those distinguishing characters so perfectly pure and permanent, when intermixed as it frequently is with the tall upright species, that they may well be considered as distinct plants.

The ANIMAL PRODUCTIONS of the District are the ordinary domestic animals of the rest of the kingdom.

VIEWING these several productions of the soils of this District, in a political light, we find them to exceed its consumption; and to afford some supply to the national demands. A considerable portion of the wood goes to the supply of the King's ships, brewery, and bakehouses, at Plymouth.—Much barley is, I understand, some years, sent out of the District; and numbers of cattle, every year, travel Eastward, on their way to the markets of the metropolis; by the route which will be described; and, of sheep, some few may be drawn towards the same center. Beside, it is observable, that, of the cattle, sheep, swine, poultry, and a variety of vegetable productions, which find a market within the District, much goes to the supply of the dock yards and ships of war.

3. The products of the SUBSTRATA have been enumerated; as STONES, SLATES, TIN, LEAD, SILVER, COPPER.

Yet, notwithstanding the natural treasures with which the District has abounded, and which have been drawn from its bowels,

during a succession of ages \*, we do not find it either richer or happier, than other Districts of the Island, to which Nature has been less bountiful of subterranean wealth. On the contrary, we find, in the mining Districts, civilization and the arts in the rear.

This, perhaps, is a natural and inevitable consequence of mining ; which not only immerses the lower class in the most abject employment, and buries them in the depths of ignorance ; but, by exciting a spirit of adventure and speculation in the middle and upper classes, draws off their attention from the more regular and certain advantages,

\* Formerly, *this* District was a principal scene of MINING : but, of later years, little has been done ; until very lately ; when the advanced price of tin induced the adventurous to re-open some of the old mines, and to try their luck in new ones.

The MINES, which are worked at present, are chiefly in the Western parts of Cornwall.

1804. Some productive copper mines have of late years been discovered or re-opened, on the banks of the Tavey,—to the great injury of its fishery. Twice, already, have its shores, for some miles below the mines, been strewed with poisoned Salmon :—the effect, it is believed, of “ the white mundic water ” (heavy laden, it is probable, with arsenical matter) which is from time to time thrown out of the mines *immediately* into the river !

which accrue from agriculture, manufacture, and the other useful arts of life.

On viewing the subject in this light, it appears to be sound policy in the CHINESE GOVERNMENT, to suppress mining, and to direct the industry of its myriads of subjects to THE CULTURE OF THE SOIL, AND THE MANUFACTURE OF ITS PRODUCE.

#### V. THE FACE OF THE COUNTRY.

The infinite variety of surface which this District affords, the irregularly winding estuaries, and the rapid torrents, by which it is intersected, and the wild coppices that hang on the sides of its hills, down perhaps to the immediate margins of the rivers and estuaries, exhibit scenery the most romantic and picturesque. But the views generally want lawn to give them softness and beauty. When the meadows of Buckland, and the meek grounds of Maristow, blend their lawny surfaces with the wood and water, scenes the most delightful are formed.

The broader views that frequently present themselves are not less interesting. The grandeur of the distant mountains of Dartmore and Cornwall would give effect to less picturable foregrounds. Plymouth Sound, par-

tially hid by Mountedgecumbe (a prominent and striking feature seen from every knoll), forms another charming distance. A globular hillock, seated on the Eastern banks of the estuary of the Tamer, below the church of St. Budix, commands a circle of views, equal in richness and variety of visual effect, to any other this Island possesses. To the East, the church of St. Budix, with the sweetly wooded scenery of Tamerton Foliot, backed by the savage "Tors" of Dartmore. To the West, the estuary of St. Germans, lying as a lake, among the cultivated rising grounds of Cornwall. To the North, the estuaries of the Tamer and the Tavey, terminated with bold broken woody heights, and backed by the Cornish mountains. To the South, the lower part of the same estuary, including Hamoze, with the ships of war in ordinary; the church of Plymouth and the prominent features around it; the Sound, with ships under sail, skreened on the left with the cultivated hills of South Devonshire, on the right by Mountedgecumbe. A more interesting subject for a Panorama painting of rural scenery could not well be conceived.

## SECTION THE THIRD.

THE

PRESENT STATE OF THE DISTRICT

AS

PRIVATE PROPERTY.

THE SPECIES of property attached to land separates, in this as in other Districts, into two orders: namely,

I. Possessory property in the land itself.

II. Abstract rights arising out of it.

I. POSSESSORY RIGHT. LANDED PROPERTY puts on an appearance, here, very different from that which it wears in other parts of the kingdom. The FEESIMPLE is principally in the possession of men of large property\*. But instead of *letting* out their

\* TENURES. The COPYHOLD tenure, I understand, is not prevalent in this part of the Island. But an instance of LONG LEASEHOLD occurs in the District of the Station—in the township of Monks' Buckland:—the largest property in it having been, during the course of the last century (1804) sold; in small parcels, to any one who would purchase

their lands to tenants, at an annual rent equivalent to their value, they are *sold*, in separate parcels, or farms, generally for THREE LIVES, named by the purchaser; or ninety-nine years, provided any one of the parties, named, survive that period: the lessor reserving, however, a small annual rent \*, together with a heriot or other forfeiture, on the death of each nominee, similar to those attached to the copyhold tenure; which this species of tenancy, *or* tenure, very much resembles: it being usual to put in fresh lives, as the preceding ones drop off; receiving a fine or adequate purchase, for the addition of a fresh life, or lives †.

purchase at a fair price,—under *leases for five hundred years*: small chief rents being reserved by the lessor.

\* Termed a “CONVENTIONARY RENT”—by which means he is the better enabled to *convene* the tenants, at his courts, or audits; and make enquiries respecting the existing lives by which they hold.

† “WIDOWHOLD.” There are (or lately were) one or more parishes, in the Western quarter of Devonshire, in which the life of the widow is considered, and admitted, as a continuation of that of her deceased husband. Hence, it is not uncommon, when a life estate hangs on the single life of an unmarried man, for such a lessee to marry on his death bed,—a near relation, or any other woman whom he wishes to enjoy his estate in preference to his landlord.



This state of landed property, which is common to the WEST OF ENGLAND, forms one of the many striking features, that Rural Economy at present exhibits, in this part of the Island.

The advantages of this state of landed property are few ; its disadvantages many. It is a satisfaction to the purchaser to know, that, during his own life, and perhaps during that of his son, the land whose temporary possession he has thus purchased will probably remain in his family ; and theory suggests that, with such a hold, the improvement and enriching of *his own estate*—for as such it is ever *estimated*—must of course become the great object of his life. But unfortunately for himself and his family, as well as for the community, he has laid out his whole on the purchase, and has not a shilling left for improvements : nay, has perhaps borrowed part of the purchase money ; and has thus entailed on himself and his family lives of poverty and hard labor. Whereas, had he expended the same money, in stocking and improving a rented farm, he might have enriched his family, and have thrown into the markets a much greater proportionate quantity of produce. Beside, the possession depends, perhaps,

haps, on his own life, and he has a wife and a young family of children. He dies, and of course leaves them in a manner destitute: while, to add to their misfortunes, the bailiff of the manor, in the hour of their distress, deprives them of the best part of the pittance he has left them.

Another evil tendency of life leases is that of exciting a spirit of speculation and gambling, and of alienating the minds of men from the plain and more certain path of industry. Purchasing a life lease is putting in a stake at a game of chance. An instance fell within my own knowledge, in which two sets of lives have ceased, and of course the estate has been twice sold, while a woman who was excluded, through a *mere circumstance*, from being one of the nominees in the first purchase, is still living. And, on the other hand, there is a well known instance, in which the lessee, at the expiration of the term of ninety-nine years, tendered his lease, in person, to the descendant of him, from whom his ancestor had received it.

To the proprietor of an estate, this is, in many respects, a disagreeable species of tenancy. His income, as has been shewn, is exceedingly uncertain; and, what to a man

of sentiment is worse, it literally arises out of the deaths and distresses of the inhabitants of his estate: beside the unpleasant and unprofitable circumstance of having his lands in everlasting bondage. Let them lie awkwardly for the tenants, or intermixed with the lands of others, or in farms of improper sizes, he has no opportunity of adjusting or altering them. He can have no *hope* of two or three adjoining tenants dying at the same time. Nothing less than the plague, pestilence, or famine, can assist him in a measure so salutary, for himself and the community.

These disagreeable circumstances have induced several men of property to suffer the life leases of their estates to drop in; and, afterwards, to let their lands for an annual rent, agreeably to the practice of the rest of the kingdom.

This desirable change, however, can only be effected by men whose incomes are not wholly dependent on this species of property. Nevertheless, any man who is possessed of such property, and is not in distressed circumstances, may release the smaller farms from this unprofitable and impolitic state; and, in the course of two or three generations, the whole might be set at liberty, without

without sensible inconvenience to the several proprietors.

It is here to be observed, however, that an inconveniency sometimes arises to a proprietor of life leases, in suffering his farms to drop into hand; especially when the last life happens to linger. In this case, the land is exhausted, and the premises are stripped: for the property changes with the last breath of the dying nominee.

But, fortunately for both parties, there is an effectual mode of preventing this evil; namely, that of granting the lessee, or his representative, a restrictive lease, for a term of three or more years, to commence on the death of the last nominee: a liberal and wise regulation, which some few men make, and which common prudence requires. The interests of the landlord, the tenant, and the public, are thereby jointly benefited\*.

\* 1804. Several leases for three years, after the expiration of life leases, have been granted by my LORD HEATHFIELD: and one, recently, with a clause which may be adopted in other cases, under similar circumstances. The farm, in this instance, being in a good state of management, altho the life on which it hangs has been for some time deemed hazardous, the lessee agrees, under the penalty of twice the amount of the an-

II. ABSTRACT RIGHTS. Of the numerous claims to which the lands of this realm are liable, three only will be noticed, here: namely,

1. Manorial rights.
2. Tithes.
3. Poor's rate.

1. MANORIAL RIGHTS. There are two species of property attached to the manors of this District, which belong not to English manors in general. These are mines and fisheries.

The profit arising from MINES is either a sum certain, paid by the miner to the lord of the soil, for suffering him to break, encumber, and for ever destroy it; or some certain proportion of the mineral produced; as every fifth, tenth, or twentieth "dish."

Of the SALMON FISHERY of the District, some accounts will appear in MINUTES, 8 and 20.

## 2. TITHES.

nual rent to be paid during the said three years, to leave the premises in as good condition, at the end of the term, as that in which they were, at the time of ratifying the agreement: two indifferent persons of business being employed to view their then existing state. In every case, some restriction is requisite.

2. TITHES. It is, I believe, the universal practice, in the District under survey, for the Rector, whether lay or clerical, to send valuers over his parish presently before harvest, to estimate the value of his tithes. If the owner of the crop approves of the valuation, he reaps the whole of it: if not, the Rector gathers his tithe in kind: a circumstance, however, which, I understand, seldom takes place.

This mode of settlement is certainly more eligible, for all parties, with respect to the existing crop, than that of collecting tithes in kind. But, in regard to the discouragement of improvements in Agriculture, they are precisely equivalent.

1804. The foregoing, however, is not the universal practice of Devonshire. In the South Hams, at least, three shillings in the pound, rent,—that is to say, fifteen percent, calculating on the rent actually paid by the tenant to his landlord,—is taken as a fair consideration, by the Rector; the tithe of the farm constantly following, and as it were growing out of, the rent: a simple, reasonable, and liberal way of settling this precarious business, with profit to all parties;—the occupier, the Rector, and the commu-

nity : there being, under this wise regulation, no time, labor, nor produce lost ; nor any obstacle placed in the way of agricultural improvements.

In one parish in this District (West Devonshire) two shillings and six pence in the pound, on the *valued rent*, is taken :—the Rector sending round a confidential person to make the required estimate.

3. POOR'S RATE. It is worthy of remark, that, notwithstanding the wages of the country are low, as will hereafter appear, the parish rates are moderate. In Buckland, and the contiguous parishes, the poor's rate, on a par, is not now (1796) more than two shillings in the pound, rack rent.

This fact, perhaps, may be the best accounted for, in the circumstance of much of the wool, which the country produces, being manufactured within it : not, however, in public manufactories, by the dissolute of every age and sex, drawn together from all quarters, as if for the purpose of promoting profligacy, debility, and wretchedness : but in private families ; by men, women, and children, who, by this employment, are kept at their own houses, are enured to habits of industry, are enabled to support themselves, at all sea-

sons, and are always at hand, to assist in the works of husbandry, whenever the production, or the preservation, of the necessaries of life requires their assistance.

Manufactures carried on, in this rational manner, are highly beneficial to a country; while those which are prosecuted by detached bodies of people, in towns, or populous manufactories, may be considered as one of the greatest evils with which any country can be afflicted.

1798. I am well informed, that the late rebellion, in the North of Ireland, broke out in the large manufacturing towns; while country manufacturers remained in a state of industry and quiet.

Many substantial reasons might be adduced to show, that **AGRICULTURE AND MANUFACTURE SHOULD GO HAND IN HAND.**



THE  
RURAL ECONOMY  
OF  
WEST DEVONSHIRE;  
AND THE  
*EASTERN PARTS OF CORNWALL.*

**RURAL ECONOMICS** comprise three subjects, separate in their more essential parts, but closely connected in their ramifications, which blend, in such a manner, as to unite the whole in one distinct subject, and form the most useful branch of human knowledge.

**THE HUMAN SPECIES** receive their subsistence from the soil,—are, in reality, themselves a produce of it. In the more advanced states of population, their existence may be said to rest on the right application and management of the lands which they collectively hold in possession.

**LANDED POSSESSIONS**, in a state of accumulation, become too extensive to be profitably occupied by individual possessors; who,  
E 2 therefore,

therefore, parcel out their respective lands, among a plurality of occupiers, to whom some species of temporary possession is given, and they, in return, give some certain consideration for such temporary occupancy.

But before a LANDED ESTATE can be disposed of, in this manner, with due propriety, it is necessary to assign the lands it contains to their proper uses: as to separate those which produce, and are fit for producing *wood*, from those which are adapted to the purposes of *Agriculture*; and, this done, to divide the latter into suitable parcels, or *farms*; agreeably to their respective soils and situations. The farms thus laid out require *buildings, fences, roads, &c. &c.* suitably adapted to each. These arrangements and operations, added to the appreciation of the several parcels, the choice of proper persons to occupy them, the regulations and restrictions necessary to be understood by the parties, together with the unremitting care and superintendance, which an extensive estate and its occupiers require, form a separate and very important branch of Rural Management\*.

\* 1804. For a GENERAL WORK on this subject, see a TREATISE ON LANDED PROPERTY, lately published.

Again,—WOODLANDS, which were formerly committed to the care of farm occupiers, who reaped the undergrowth, as a produce of their holdings, the timber being reserved for the owners of the lands, are now generally, and very properly, detached from tenanted lands, and placed under the care and superintendance of woodwards, acting as assistants to the managers of estates; the whole produce, whether of timber or undergrowth, being reaped by the proprietor of the soil.

THIS MANAGEMENT OF GROWN WOODS is in itself an employment of some consideration, and, when united with the propagation of woodlands, whether by PLANTING or by SEMINAL CULTIVATION, forms the second subject of Rural Economy\*.

The last is AGRICULTURE; or the cultivation of farm lands; whether in the occupation of proprietors, or their tenants: a subject, which, viewed in all its branches, and to their fullest extent, is not only the most important, and the most difficult, in Rural Economics,

\* For a GENERAL WORK on this subject, see PLANTING and RURAL ORNAMENT; third edition, lately published.

Economics, but in the circle of human Arts and Sciences.

From this analysis it appears, that RURAL ECONOMY comprizes three separable subjects; namely,

First, Tenanted estates, and their management.

Second, The production and management of woodlands.

Third, Agriculture, or the management of farm lands.

Nevertheless, viewed in the synthesis, they form a distinct branch of knowledge, with which it is incumbent on every man whose fortune is vested in landed property, to be familiarly conversant.

## DIVISION THE FIRST.

## LANDED ESTATES,

AND THEIR MANAGEMENT IN

WEST DEVONSHIRE, &amp;c.

## I.

## ESTATES.

THE SPECIES of landed property that prevails in this District has been noticed.

THE SIZES OF ESTATES are various. There are a few of considerable extent.

THE PROPRIETORS are the DUKE of BEDFORD, who has a large estate lying round Tavistock; the EARL of MOUNTEDGE CUMBE has now a considerable property, on both sides of the Tamer. The DRAKE ESTATE, now LORD HEATHFIELD'S, is extensive; and Mr. HEYWOOD (now Mr. LOPES) has a large property in the District.

## 2.

## THE MANAGEMENT OF LANDED ESTATES.

IN a District where landed property is clogged with so cumbrous a burden as that of life leases, a general superiority of management cannot with reason be expected: nevertheless, it will be proper to examine the present practice of the District; which is not wholly under that encumbrance: beside, it is often as serviceable to the practitioner, to expose defects, as it is to point out excellencies, in practice.

The DIVISIONS of this subject, which require to be examined, on the present occasion, are,

- i. Laying out estates into woodlands and farm lands.
- ii. Laying out farm lands into distinct tenements or farms.
- iii. Farm buildings, &c.
- iv. Fences.
- v. Disposal of farms.
- vi. Forms of leases.
- vii. Rental value of land.
- viii. Times of entry and removal.

I. LAYING OUT ESTATES. In the distribution of lands to their proper uses, as into WOODLANDS and FARMS, little perhaps has been done, since the original laying out of TOWNSHIPS, in the manner already suggested. The steep sides of the hills have been suffered to remain in wood, the flatter, and more easily culturable parts, being converted to the purposes of husbandry. This, however, is not, at present, invariably the case: the tops, as well as the sides, of some of the swells, are still occupied by wood; and tho it may frequently happen that, where this is the fact, the land is equally as well adapted to that species of produce, as to cultivation; yet this is not always the case: and something, tho not much perhaps, still remains to be done in this department of management.

II. LAYING OUT FARM LANDS. In the distribution of culturable lands, into distinct holdings, the District under view may claim considerable merit. The farms, tho of different sizes, are many of them small; perhaps too many of them are of this description; but, in general, they lie well about the homestall; or rather, we should say, the homesteads have been judiciously placed within

within the areas of the lands ; not in villages ; as they too often are, in many parts of the Island.

III. FARMERIES. The SITUATIONS of homesteads, or farm buildings and yards, are generally well chosen ; as the side of a valley, or near the head of a coomb or dell : seldom in a low bottom. A suitable shelter, and a rill of water, appear to have been principal objects, in the choice of farmsteads.

In situations destitute of natural rills, "LEATS," or made rills, are cut, and have been time immemorial employed, in bringing what is called, in the pure language of simplicity, "potwater"—to farm houses, and hamlets of cottages, in upland situations : an admirable expedient, which is applicable in many parts of the Island : yet which, until of late years, in Yorkshire\*, has never been practised perhaps out of this extreme part of it. How slow has, hitherto, been the progress of rural improvements !

The PLANS OF FARMERIES, here, have little to engage particular attention.

The *Barn* is mostly small ; and is frequently placed against a rising ground ; one side or one end being sunk some feet below the

\* See YORK. ECON. Vol. I. p. 162.



surface of the slope ; having a door way level with the ground, on the upper side : for a purpose which will appear in speaking of the HARVEST MANAGEMENT. And another peculiarity of the Devonshire Barn is noticeable. Over the principal door (or folding doors, which are not uncommon) the roof is continued down some feet below the eaves of the building ; the rafters being supported by spurs resting against the door jambs, or the wall. By this simple and inexpensive contrivance, the doors are kept dry, and the drip of the eaves prevented from being blown upon the thrashing floor.

The *Cattle Yards* are mostly furnished with open sheds—provincially “*linhays*,” with rough mangers on the back parts, to hold fodder.—Sometimes these *linhays* are double: the same span roof furnishing two ranges of sheds, and serving two yards, separated by a fence partition, running along the middle of the shed :—a species of farm building, which might be adopted in many cases. These open sheds are used for cows, and young cattle ; oxen being generally kept in houses or hovels, provincially “*shippens*,” during the winter.

A “*pound house*,” or cider manufactory,  
and

and a store room, or *cider cellar*,—are essentials, in a Devonshire farmstead.

The MATERIALS OF FARM BUILDINGS are chiefly *stone*; mostly the light blue slate stone, which has been described. For farm offices, earthen walls—prov. “*cob walls*,” are common.

Indeed, in situations, where stone is not at hand, “*cob*” is a common material of farm buildings, throughout the WEST OF ENGLAND. Not only houses and offices, but yard walls, and even garden walls, are frequently built with it; and endure for a length of time; provided they are *covered*, so as to be kept dry. Single walls are *coped*\*; generally with thatch.

In building these walls, straw is mixed with the earth in a state of paste, and incorporated with it, by treading or otherwise, in a way similar to that used in making the clay floors of Norfolk. These walls are carried up in courses of eighteen inches, to two feet high, and fourteen inches to two feet thick; the preceding course being suffered to

\* Hence, perhaps, the original name was *coped wall*; which, by contraction, and the provincial pronunciation of *b* for *p*, would be aptly changed to *cob wall*.

stiffen, before the succeeding one be set on. I have seen in different parts of the West of England, cottages two stories high, with no other support for the joists and timbers, than these earthen walls\*.

In situations exposed to Westerly winds, the walls of dwelling houses, of every material, are frequently guarded with *slates*, put on scale-wise, as upon roofs, to prevent the "sea air" from penetrating the walls, and giving dampness to the rooms. In towns, the shells of houses are not uncommonly built of *wood*; framed; lathed; plaistered; and slated.

Houses fronted with well colored slate, put on neatly, and with "black mortar" (namely cement, among which pounded forge cinders have been freely mixed), are not unsightly. But smeared, in stripes or patches, with white mortar, oozing out of the joints, and spreading partially over the surface,

\* *Pisé*—the French earth wall—(without straw) has lately (1804) been introduced into Devonshire; first (I believe) by Mr. Recorder FANSHAWE, at Frankland, near Exeter; and has since been employed, on an extended scale, by my Lord HEATHFIELD, at Nutwell Court.

surface, as is commonly seen, the appearance is filthy.

In the use of *rough-cast*, or “slap-dash,” the Devonshire workmen are proficient. They render it pleasing to the eye and durable. It is sometimes formed with a species of shining gravel, found upon the morelands, which gives it, when the sun shines upon it, a splendid effect. It is usual, to draw cross lines over the surface, to give it the appearance of dressed stonework.

The COVERING MATERIALS of the District are *slates*\* and *thatch*—prov. “reed,” name-

\* BLUE SLATES. These are now become the prevalent covering of the District; tho many old thatched roofs still remain, in the more recluse parts of it.

For an account of the SLATE QUARRIES of the District, see the subject FOSSILS, page 19, N.

The slates are usually brought from the quarry, in the rough; and are shaped, provincially “dressed,” by the masons—slaters—or “helliers” of the country.

The “dressing” is done with a broad-mouthed, short-handled hatchet, or chopping knife; with a spike rising from its back.

The workman sits on the ground; with a short thin block of wood, standing on its end (with one fair face, and level at the top), before him. The ragged, shapeless “stone” being held with one hand, flat or nearly so, upon the top of the block, its edges are cut off, straight, with the hatchet, in the other: the workman striking down-

ly, unbruised straw; the grain being separated from the straw without breaking it; in the manner which will be described: a practice.

ward,—somewhat forward,—and evenly with the side, or face, of the block.

The two sides, and one end, of the slate being thus cut straight, and square as the eye can judge, a wooden gauge—notched at every inch—and with a shoulder at one end—is laid along it; and the greatest length that it will bear being ascertained, a slight perforation is made, by one tender stroke with the spike on the back of the hatchet, to show where the pin or nail hole is to be made; in order that each slate may be of some determinate length, or gauge.

Slates are, here, usually laid in mortar, and pointed beneath. I have known one instance of their being laid on, dry; and, then, plaistered beneath. And another, on the roof of an open cattle shed, in which they were laid on, without any mortar whatever. And, for a building into which the wind is freely admitted beneath the roofs, I am of opinion the last is the most eligible method. The cattle sheds at Buckland are covered in this manner. See MIX. 40.

The eaves are generally set with large heavy slates—prov. “rags”—of eighteen inches to two feet square—nailed to the rafters; and on these the largest of the common slates are hung with pins; finishing at the ridge, with those of the smallest size.

The ridge is commonly secured with ridge tiles—large, heavy, and in a good form.

For the *prices* of slates, and the *cost* of slate roofing, see the LIST OF RATES.

tice common, I believe, to the WEST OF ENGLAND. Straw thus preserved makes a neat and durable covering; and, when no other species of covering can be procured, it is eligible—much preferable to thrashed straw; which, being less durable, tends still more to the impoverishment of the lands that are robbed of it.

#### REFERENCES TO MINUTES.

- 22. On the coating, or rough-casting of buildings.
- 26. On the monastery barn of Buckland.
- On the influence of aspect on cement.
- 27. On watering farmsteads.
- On conducting rills, by a new instrument.
- 28. On the probable use of walnut leaves, in making drinking pools.
- 29. On laying out the farm yards of Buckland.
- On octagonal cattle sheds.
- 30. On hanging doors on stone.
- On the effect of rust in stone work.
- 31. Further on hanging doors on stone jambs.
- 33. Further on conducting rills.
- 37. On securing a leaning building.
- 40. On improving the farmstead of Buckland.
- 41. On timber for barn floors.

44. Some general principles, in laying out farm buildings, applied in practice.  
— On the general economy of a thrashing mill barn.

IV. FENCES. Nothing marks the rural management of this extreme of the Island more strongly, than the construction of its farm fences.

The banks, or foundations, of some of the old Devonshire “hedges” are mounds of earth, eight, ten, or more feet wide, at the base, and sometimes nearly as much in height; narrowing to six, seven, or more feet wide, at the top; which is covered with coppice woods, as Oak, Ash, Sallow, Birch, Hazel. These are cut as coppice wood, at fifteen or twenty years growth, and at more, probably, than twenty feet high, beside the height of the mound; together forming a barrier, perhaps thirty feet in height.

A stranger, unaware of this practice, considers himself as travelling perpetually in a deep hollow way; passing on, for miles, without being able to see out of it; tho the most delightful scenery may have accompanied him.

The ORIGIN of these extraordinary fences may not be difficult to assign. By clearing

the forests, in the manner which has been suggested, the natural fuel of the District was, of course, materially abridged; and, where the general face of the country was tolerably level, the sides of the vallies were too few, and insufficiently extensive, to supply this necessary of life\*. And it appears to me most probable, that these COPPICE FENCES were adopted to supply this defect of fuel; and they have proved, perhaps, the best expedient that could have been struck out. Many farms have no other *woodland*, nor supply of fuel, than what their fences furnish; yet are amply supplied with this; beside, perhaps, an overplus of poles, cord wood, faggots, and the bark of oak, for sale. Hedgewood is looked up to as a crop; and is profitable as such; beside the benefit received from the mounds and stubs, as fences and shelter.

The AGE of most of these fences is great beyond memory. Nevertheless, they are continued to be formed, to the present day. Indeed it may be said there is no other me-

\* At the time this measure was adopted, not a coal perhaps had ever entered the country; and peat, if any were used, was to be fetched from the distant hills.



thod of raising a live fence in use, in the District.

The METHOD of RAISING them is this. The base being lined out agreeably to the dimensions previously fixed upon, inclining walls, or facings, of thick turf, which is raised on either side of the foundation, are carried up; filling in between them, with the substratum: continuing to set fresh lines of turfy soil, and to fill in with the excavated materials of the foss, on either side, until the required height be reached; being careful to reserve some of the best of the loose mold for the top of the mound, to set the plants in. And to this end, it is proper, tho somewhat more labor, to remove, first, the turfy soil from the inner part of the base or foundation: thus gaining an additional supply of this essential requisite of a hedge mound.

To give the required firmness to the mound, an offset of six inches is left, between the foss or ditch and the first line of turf; and the inner face of the ditch is carried down with a slope, similar to or greater than that of the face of the mound. Finally, the outer side of the foss is sloped back with a gentle acclivity, not sunk down, steeply, as a ditch; the surface rising with an easy ascent, from the

foot of the base or foundation of the mound, up to the natural sward of the area of the inclosure.

This slope being sown with the seeds of herbage, and manured by cattle taking shelter under the mound, becomes productive; especially if it be covered with a little fertile mold, or a sprinkling of manure, in the first instance: so that a saving, rather than a loss, of *pasturable* surface is incurred, by this mode of fencing. For not only these slopes, but the faces of the mounds, afford their portion of *pasturage*; while the coppice wood growing on the top becomes, in most situations, of considerable value.

The method of PLANTING the mounds is that of plunging the roots of coppice plants,—as those of oak, ash, hazel, &c. collected in woods, rough grounds, or from demolished hedges,—in the prime mold provided for them, at the top of the mound: this being, generally, but improperly, somewhat rounded up, to receive them. For by that practice the waters of heavy showers are led toward the outer sides of the mound, and find a passage downward, between the facings and the filling or body of the bank; by which mean

the former are liable to shoot down, and leave the mound in ruin.

The plants are usually headed down; leaving stems (several perhaps on the same root or stool) about two feet and a half high, and some of them thicker perhaps than the arm. But ignorant planters, I have observed, leave the whole of the tops on! and of course lose the principal part of them. By thus leaving the stems of a sufficient height, a fence is immediately obtained. If, however, sheep are the pasturing stock, some slight guard or blind is necessary, to prevent them from scaling the mound.

The DIMENSIONS of new hedge mounds are various. What may be considered as the modern mound of a common farm fence is of the following dimensions. The base of the made bank is six feet wide, its height (measuring by the slope) four feet; narrowing to three feet at the top; the ditch or foss being sunk two feet below the natural surface of the ground: the base of the foundation (spread by the sloping and the offset on either side) measures about eight feet. The height of the finished mound six feet (measured on the slope); namely "four up and two down:"

this height being considered as requisite to a sufficient fence.

The price of raising such a fence mound has been, until of late years, two shillings and sixpence, the "land yard"—or provincial perch of eighteen feet: and sixpence a "yard" for plants and planting: together, not three shillings a statute rod. Since the rise of wages, the making of such a fence is worth about four shillings, a rod.

1804. On the barton or farm of Buckland, hedges to a considerable extent have been raised, of the following dimensions. The base of the bank eight feet; the height or length of the slope four feet, the width of the top five feet. The breadth of the offsets six to eight inches, the depth of the foss (measured by the inner slope) two feet, the width of the base of the foundation, between foss and foss, about ten feet. The cost five shillings and sixpence, the statute perch, for forming the mound:—gathering the plants, and planting them, being done by the day\*.

REMARKS. The best skill in forming these mounds lies in uniting the facing turves intimately with each other, and with the fill-

\* Many of the old hedges of this formerly monastic demesne far exceed those dimensions.

ings or body of the mound, whose entirety and stability they are intended to preserve. This is done by beating the turves, after they are firmly backed, with some heavy iron instrument, as the head of a mattock or a stone hammer, until every seam and crevice be closed, and the natural texture of the sward be completely broken; so as to render the entire face of the slope of one uniform texture; and the entire mound, as nearly as ordinary tools can make it, an evenly compact mass.

An art of planting coppice woods on hedge mounds consists in plunging the roots of the plants deep enough in the mound:—not only the roots, but a few inches of the stems, ought to be buried: and, finally, to leave the top of the mound somewhat hollow, or dishing: for the twofold purpose of avoiding the evil, noticed above, and of giving the waters of heavy showers a due tendency toward the interior of the mound; in order to induce the fibres to shoot downward, and to supply them with moisture in dry seasons; to the evil effects of which a tall mound is peculiarly obnoxious. A hedge mound of the size, and in the form here recommended, might even be copiously watered in a dry

F 4

season,

season, without danger; yet with convenience, and with benefit, not only to the wood plants, but to the herbage on the sides of the mound; by inducing the fibres to strike inward; and thereby to keep the turf in vigor, and bind together the entire fabric.

The ADVANTAGES of coppice fences are those of being an insuperable barrier to stock,—of affording an extraordinary shelter and shade to pasturing animals,—of giving a necessary supply of fuel, in a country where no other fuel than wood can, even at present, be compassed by common farmers,—and of being, with ordinary care in repairing them, everlasting. Instead of mouldering away, and growing less as they increase in age, the swelling of the roots, the falling of the leaves, and decayed boughs, and the shovellings of their bases thrown upon their tops, with fresh sods brought from a distance, perhaps, to make good accidental breaches, tend to increase, rather than to diminish, the mounds; so that the bulkiness of some of the old hedges may be owing to time, rather than to the original formation.

The DISADVANTAGES of the Devonshire hedges are their first cost, and the injury they do to *arable crops*, by their drip and shade,

as well as by preventing a free circulation of air. And their being liable to be torn down by cattle, when the adjoining field is in a state of pasture, is another disadvantage.

But every species of fence has its disadvantage; and whether, upon the whole, that under consideration is preferable to the ordinary live hedge of the kingdom, I will not attempt to decide. In an Upland District, and where the fields are of a good size, coppice fences are more eligible, than they would be, in a low well sheltered country, with small inclosures; and much more eligible in a District where wood is the only fuel, than they would be in a coal country.

To the sportsman, these fences are unfriendly; and, to an invading army, they would be most embarrassing: an extent of country, intersected by such barriers, would be, in effect, one immense fortification.

#### REFERENCES to MINUTES.

For practical remarks, on the management of coppice hedges, see the following MINUTES, 12 and 15.

For their probable use on mountain heights, see DISTRICT the THIRD—IMPROVEMENTS of DARTMORE.

For their evident use on wide exposed marshlands, see SOUTHERN COUNTIES—DISTRICT, ROMNEY MARSH.

And for general remarks on them, as SKREEN FENCES, see TREATISE ON LANDED PROPERTY.

V. THE DISPOSAL OF FARMS may be said to be threefold: namely,

Selling them for lives,

Letting them for a term, and

Occupying them in husbandry.

The last, namely, the practice of men of fortune OCCUPYING some considerable parts of their estates, appears to have been, until of late years, a prevailing fashion among the great proprietors of Devonshire. There is an instance of one noble family having kept in hand fourteen or fifteen hundred acres, for some generations past; and of another family having occupied seven or eight hundred acres, for more than two centuries; and, in these two instances, the lands, I believe, still (1796) remain in hand. But many other proprietors, finding little income arising from lands thus employed, and some one or more, it is asserted, having been brought into debt by their managers (I speak here of farms lying at a distance from the principal residences of their owners), such farms have



been wisely let or sold, to men who have a personal interest in their management.

These domains were probably kept in the occupation of their proprietors, with a view to set an example to the tenants of their respective estates, in the infancy of husbandry: and the state of management, in which we now find the District, may have arisen out of this circumstance. But men of fortune appear to have abandoned, long ago, this original intention, if such it were; and to have taken for granted, that their lands were in a state of perfect management\*.

THE SELLING OF FARMS FOR THREE LIVES, nominated by the respective purchasers, as it was the ancient, and once perhaps the universal practice of the District, comes next under consideration.

At present, one half, or two thirds of the lands of the District, probably, are under this species of tenure, or tenancy, or hold: the remainder being occupied by proprietors,

\* Some years ago (see Min. 25) a SOCIETY of AGRICULTURE was formed, in the SOUTH HAMS of DEVONSHIRE, by the spirited managers of that quarter of the county: a circumstance which will doubtlessly tend to disperse the seeds of modern improvement, over this department of the kingdom.

whether men of fortune or yeomanry; and by tenants, for a term certain, or from year to year.

The disposal of farms for three lives is generally by what are provincially termed "SURVEYS;"—a species of AUCTION; at which candidates bid for the priority of refusal, rather than for the thing itself; a species of sale common to every species of property. If the highest bidder does not reach the seller's price, the bidding is inconclusive: the seller names his price, and the highest bidder has the first option of choice, or refusal. If he refuse, the next highest bidder takes his choice, and so of the rest: a species of sale, which is very convenient to the seller.

The estimate value of lands, for three lives, is about eighteen years purchase of the neat rental value, or from fourteen to sixteen of the gross rent and taxes, which last life lessees usually engage to pay; together with a small annual rent; and generally a heriot, forfeitable on the death of each nominee, as has been mentioned in page 43.

The purchaser has the right of assigning, and of letting the premises to farm, from year to year, for a term of years, or during the term of the life lease; thus becoming

a sort of middle man, between the proprietor and the occupier.

The lessee for lives generally agrees to keep up the buildings, fences, gates, &c. &c. (the proprietor finding timber), or is liable to pay for dilapidations. All coppice wood and underwood, as well as fruit trees and other trees, except Oak, Ash, and Elm, are, generally, under certain stipulations, at the disposal of the lessee; and cannot be cut down, by the proprietor of the land, during the demise. But these stipulations vary on different estates.

On the expiration of a lease for lives, the lessee is allowed, by custom, a few days for clearing the premises of livestock, and forty days for dead stock—as grain, furniture, &c. but he cannot touch a bough, or a fixture, or remove straw, dung, &c. after the moment of extinction of the last life.

Arable crops on the ground, however, which were put in previously to the demise of the last life, belong to him who cultivated them: he paying the landlord, or the incoming tenant, for the “standing,” or ground rent. See *MIX.* 42 and 46.

But not so the produce of orchards; which, like herbage and coppice wood, being the  
natural

natural growth or progressive production of the soil, and not the immediate fruit of the husbandman's labor, belongs to the proprietor,—goes with the soil.

The LETTING OF FARMS, for a year, or a term of years, is similar in method of disposal, to that of selling them for lives: so forcible would seem to be the tide of custom\*.

In *selling* a farm, an auction is a suitable medium of disposal: the seller receives his price or security, before he delivers up possession; and the lessee, himself, being generally one of the nominees, is, in some measure, *done with*. It is three to one that the lessor will have no farther influence over him or his farm.

But the case is very different with a man, who is to pay his rent halfyearly, and to conform with a variety of covenants and regulations, which are necessary to the species of tenancy, now under consideration. In

\* The CONDITIONS of a SURVEY, for this purpose, contain a description of the farm, the term of years during which it is to be held, and the time of entry; with the heads of the lease under which it will be let,—specifying the reservations, restrictions, and covenants to be agreed to; together with the manner of bidding, and the security to be provided by the highest bidder, or the eventual taker, for the due payment of his rent.

this case, it is not more the *rent*, than the *man*, that is to be looked to, and chosen. Among candidates, at auctions, for letting farms, are generally adventurers, who want judgment, and men of desperate fortunes, who want a temporary subsistence; and these men will ever be the highest bidders; will ever outbid men of judgment and capital; such as will pay their rents, keep up repairs, and improve the lands; and such as ought ever to be, and ever are, the choice of judicious managers of estates\*. There is a fair market price for farms, as for their produce; and no man is fit to be entrusted with the management of an estate, who cannot ascertain the value of its lands, and who, having ascertained this, does not prefer a man of judgment and capital, to any *nominal rent*, which speculation can offer him. It may be said, with little latitude, that, in the end, it is equally detrimental to an estate, to over-rent it, as it is to let it beneath its fair rental value. This is an axiom of management which is well known to every man of landed

\* 1804. A striking instance of the folly of letting farms, for a term of years, by auction, occurred to my particular observation, since the above remarks were written.

property, who has persevered in paying attention to his own affairs; and which has cost some men no small share of property, respectability, and peace of mind, to come at the knowledge of.

The practice of letting farms by auction, in this District, is not difficult to be accounted for. It has grown in part out of the custom of selling farms by auction, as above-mentioned; and is in part owing to the circumstance of the immediate management of estates being in the hands of country attorneys; who are, professionally, unacquainted with the value of the lands they have to let, and who have valuable interests in the holding of surveys. The auction itself is, in the first instance, an item of charge, and throws the holder of it "into the way of business;" not once, perhaps, but repeatedly. The highest bidder may be an objectionable man: he may be too bad for the landlord, or too good for the steward. The biddings may, of course, become void; and a fresh survey be required to be held. At length, however, a suitable tenant is found; the leases drawn and paid for; and possession given.

It may be useful to pursue the possible effects of this plan of management. The

whole of the tenant's capital and credit having been expended in stocking and furnishing his farm, he is ill prepared for rent; and misfortunes overtaking him, his arrears accumulate, until a seizure may be deemed expedient. This, with the consequent sale of stock, a release, &c. &c. may become further items of charge, and moreover make way for a fresh series of surveys, and a fresh pair of leases. It is proper to add, however, that these intimations are not meant in censure of the law land stewards of West Devonshire, but to place in a strong light an imprudent principle of management.

Another singular trait, in the management of estates, in this District, may be proper to be mentioned. The agent, instead of receiving a salary adequate to his services, is suffered to make an exorbitant charge, upon the tenants, for their leases; each estate having its established impost.

This regulation, likewise, is evidently founded on fallacious principles. The interest of the agent ought ever to be connected with that of his principal. Whereas, by the practice now under notice, as well as by that of letting farms by auction, in the manner which has been mentioned, they are estrang-

ed from each other. Instead of its being the interest of the agent to promote that good order, punctuality, and spirit of improvement, which ought to be solicitously cherished on every estate, his best interests are connected with the beggary, and the consequent shifting of tenants; and, of course, with the derangement and eventual ruin of the estate.

Beside, farmers are not so inattentive to their own interests, as to omit to calculate the expence of the lease, while they are bargaining for the farm; and it is well known to those, who are conversant in the business of letting farms, that nothing more disgusts a good tenant, *a man who can have a farm anywhere*, than an exorbitant charge for his lease.

VI. FORMS OF LEASES. In the construction of leases, it would be unreasonable to expect to find anything superiorly excellent, in a District where the letting of farms may be considered as, in some measure, a modern practice. For altho it must ever have been in use, between middle men and under tenants, yet it must have been a secondary and subordinate branch of the management of estates; and as such, indeed,



it still remains. Beside, the forming of leases, being left to men who are unacquainted with the required covenants and regulation, necessary for promoting the interest of an estate, is another bar to excellency of construction.

The following are the HEADS OF A LEASE, under which one of the first farms in the country was let, a very few years ago.

LANDLORD GRANTS the use of the premises for twentyone years, at a fixed annual rent.

LANDLORD RESERVES the privilege of holding Courts (this being a manor farm) with the use of a parlour, bed room, and stable, one day and night, for the customary fee of two shillings; also the usual dinner and liquor, for the Court tenants, at one shilling each.

ALSO all mines, quarries, &c.

ALSO timber, game, &c.

ALSO the liberty of sowing the third crop of grain (which shall come in course to be sown, in the last year of the term) with eaver (raygrass) and clover, to be provided by the tenant.

ALSO a right of viewing the state of repair of buildings, &c. and, if necessary repairs are not executed within two months after notice

given, the landlord may execute them at the tenant's expence.

ALSO the power of re-entry, on the non-performance of the agreement.

TENANT AGREES to pay rent, taxes, &c.

ALSO to do all repairs; the landlord first putting the premises into tenantable condition.

ALSO to do suit and service at the Lord's Courts.

ALSO to lay on fifty double Winchester bushels of stone lime, or seventy sacks of sea sand, an acre, the first year of breaking up; to be mixed with mold, in a husband-like manner.

ALSO to take three crops of corn, for such dressing, and *no more!* these crops being Wheat, Barley, and Oats, *in succession!!* and to sow grass seeds with the last crop!!!

ALSO to keep up orchard grounds; the landlord first stocking them properly with trees: the tenant afterwards having the decayed trees for filling up vacancies.

ALSO to repair the mounds of hedges every time the wood is felled; and not to cut them under seven years growth; nor to cut rods, &c. but when the hedge is felled.

Also to the following

RESTRICTIONS. Not to break up meadow grounds, under the penalty of ten pounds an acre.

Also not to pare and burn the surface of other lands, under the same penalty\*.

Also not to grow Rape, Hemp, Flax, Woad, Weld, Madder, or POTATOES, unless for the use of his own family.

Also not to sell Hay, Straw, or Turneps; nor to carry manure off the premises.

Also not to depasture orchard grounds with horned cattle.

Also not to fell, lop, or top, any timber tree, under the penalty of ten pounds; nor any maiden tree or sapling, under that of five pounds.

Also not to assign the lease, without consent, &c.

Those who *bind* tenants to such a base system of management, as the tenant of this charming farm is bound (for eighteen years to come) are entitled to pity, rather than to censure: they copy leases from musty forms,

left

\* This farm lies somewhat to the Southward of *this* District; being within that of the SOUTH HAMS.

left them by their predecessors, as they copy black letter precepts out of Jacob and Burn.

The heads of a lease of a smaller farm within this District run thus :

LANDLORD agrees to repair, &c. \*.

TENANT to lay on a hundred bushels of lime, or one hundred and twenty seams (or horseloads) of sea sand, mixed with one hundred and twenty seams of dung, an acre, on all lands broken up for Wheat after Ley or Grass. And not to take more than a crop of Wheat, a crop of Barley, and a crop of Oats, for such dressing; but to sow over the Oats twelve pounds of Clover and half a bushel of Eaver, an acre; and not to mow the Clover more than once.

Also not to cut hedges under twelve years growth; and then when the adjoining field is broken up for wheat: and to plash the sides (or outer brinks of the mounds), and shovel out the ditches (or hollows at the foot of the bank), throwing the mold upon the mound, to encourage the growth of the hedgewood.

\* 1804. It has been, of late years, not uncommon, I understand, for the landlord, under a lease for a term of years, to keep in repair the *walls*, and the *roofs*; the tenant doing *inside repairs*:—an accurate practice. See NORFOLK, MIN. 64.

Also to preserve orchards: to keep them free from horned cattle: landlord agreeing to find young trees; tenant to fetch and plant them, and to carry two seams of dung or fresh maiden earth to set each plant in: being allowed the old trees for his trouble.

Also not to sell Hay, Straw, &c. except "Reed" (or unthrashed Straw).

Also not to assign over, &c. &c. &c.

1804. Since the publication of the first edition of this work, I have had the satisfaction of introducing a lease, on a new principle, upon my Lord HEATHFIELD'S estates, in different parts of this county: and altho it met with some little resistance on its first introduction, chiefly arising, I believe, from interested influence, not a single specific objection, from all the enquiries I have lately made, remains.

Instead of giving a lease for a long term, ending at a time certain; or of letting from year to year, for a time uncertain, the hold being terminable by *six months notice* from either party; a short lease (as for six years) is granted, but is not terminable, until *three years previous notice* has been legally given by one party to the other: so that while both parties remain satisfied with the connection,

on the terms agreed upon, the lease continues in force,—may be said to be perpetual. And whenever either party may think fit to dissolve it, the tenant has three years (at least) to recover any *extraordinary improvements* which he may have bestowed on his lands; and if that time be found insufficient for recovering the whole, a clause of remuneration gives him a right to the remainder: in order that no check may be given to the SPIRIT OF IMPROVEMENT.

A tenant holding under this species of tenancy, may farm with as much safety, as if he were cultivating his own lands. While the proprietor is secured, by restrictive clauses, to take place during the last three years of the term: in order that the farm may be left in such a course and state of management, as will induce a man of skill and capital to enter upon it, and carry on the improvements it may have received. Thus the tenant, the proprietor, and the community are jointly benefited.

( For farther remarks on this form of lease, see SOUTHERN COUNTIES, vol. II. p. 213.

And for the FORM AT LENGTH, see TREATISE ON LANDED PROPERTY, p. 372.

VII. RENT. The rent of the larger arable farms, on which husbandry is the principal object, is from ten shillings to twenty shillings an acre; according to the quality of the soil, its situation, and attendant circumstances. Small farms, with a large proportion of orchard ground, or watered meadow lands, lying to them, pay higher rents.

For the Devonshire practice of valuing land, see MIN. 46.

VIII. REMOVAL. NEW LADYDAY is the accustomed time of entry and transfer.

For several particulars relating to the MANAGEMENT of ESTATES, see the REFERENCES to MISCELLANEOUS MINUTES, at the close of this DISTRICT.

*DIVISION THE SECOND.*

WOODLANDS,

THEIR

PROPAGATION AND MANAGEMENT.

I.

WOODLANDS.

**I. THE SPECIES OF WOODLAND**, which is most prevalent in this District, is that which comes emphatically under the denomination of Woods: namely, a mixture of Timber and Underwood; the ancient law\*, which requires that a certain number of Timberlings shall be left standing, in each acre of Coppice wood cut down, being, here, more or less complied with; tho it were only that such standards should be taken down at the succeeding fall of Underwood, and others left in their stead. In consequence of this evasion there is, in effect, much Woodland

\* Of the 35th of Henry VIII?



in a state of COPPICE. And there is some in a state of TIMBER GROVE, with little Underwood.

The HEDGEROW WOOD of the District is invariably Coppice; with some few Pollards growing out of the sides, or at the bases of the mounds; which are mostly too high and narrow, and generally too much exposed, to support Timber Trees upon their tops,—were the tenants to suffer them to rise.

THE SPECIES OF TIMBER TREES are principally the OAK and the ASH, with some ELMS on the deeper better soils; also the BEECH and the SYCAMORE. But the Oak may be emphatically termed the Timber Tree of the District.

THE SPECIES OF COPPICE WOODS are the OAK, the BIRCH, the SALLOW, the HAZEL, the ASH, the CHESNUT; which last is found, in wild recluse situations, with every *appearance* of being a native. The WILD CHERRY, too, is found in Coppices: and some, but little, HAWTHORN.

THE HISTORY of these Woodlands is unknown: tradition is silent on the subject. They are, undoubtedly, the aboriginal produce of the soils they now occupy. They have no appearance of cultivation; except  
near

near habitations: and even, there, unless in a few instances, PLANTING does not appear to have been, at any time, the practice or fashion of the District.

THE ELIGIBILITY of the present Woodlands, in their present state, has been mentioned: some small portion of them ought, perhaps, to be converted to Farm Lands: tho, in the ordinary modes of conversion, they might not pay for the alteration: and there are considerable extents of unproductive high lands, which ought to be converted to Woodland. See MIX. 35.

## 2.

## THE PROPAGATION OF WOODLANDS.

THE SPECIES OF WOOD, proper to be raised on the bleak barren heights which are here spoken of as being eligible to be converted into Woodlands, appear to me evident. On the sides of vallies, sheltered from the cutting winds of this District, the OAK is undoubtedly the most eligible species of Wood. But, upon exposed heights, the Oak, even as Coppice wood, shrinks from the

blast; and, as Timber, makes no progress after a certain age; becoming stunted and mossy. The only Oak Timber, I have observed in the District, of any size, grows on the lower skirts of the hills. Whereas the BEECH flourishes, even as Timber, in very bleak exposed situations. And, I am of opinion, that, for COPPICE WOOD, on the bleak barren heights under notice, the BEECH, the HORNBEAM, and the BIRCH, would be most eligible: and that, for TIMBER, in such situations, the LARCH, alone, is eligible.

I speak, however, from a general knowledge of this valuable tree, in the soils and situations in which I have seen it flourish. For it does not appear to have been tried on the bleak barren soils of this District. Yet, seeing the extent of such soils, which it contains, and its situation with respect to the ship yards of Plymouth; and seeing at the same time, with almost moral certainty, that the Larch, in times to come, will be a principal article of ship building, in this Island, it is highly probable that whoever now propagates it, will exceedingly enhance the value of his estate.

1804. Since writing the above, I have  
seen

seen the LARCH flourishing, in very bleak situations, in this country.

## 3.

## MANAGEMENT OF WOODLANDS.

TO convey a comprehensive idea of this department of Rural Management, in the District now under view, it will be proper to speak separately, of

- I. Timber.
- II. Coppice wood.
- III. Hedge wood.
- IV. Bark.

## I. THE MANAGEMENT OF TIMBER.

The chief produce of Woodlands, here, being Coppice wood, rather than Timber, less is required to be said, under this branch of management. Indeed, judging from what has fallen under my notice, respecting the treatment of Timber, in this District, little more than censure can be fairly attached to it.

To the TRAINING of Timber, scarcely any attention appears to be paid. I have seen Oak woods irreparably injured, and for ever

rendered incapable of producing large Timber, for want of timely thinnings.

And in the only instance of FELLING Oak Timber, on a large scale, which came under my observation, the management, or rather mismanagement, was such as ought not to be suffered. Instead of clearing the ground, or of removing the underling and stunted, or the full-grown, trees, to make room for those which were in a thriving profitable state, the latter, only, were hewn down! many of them in the most luxuriant state of growth; throwing them, heedlessly, among the standing trees! thus adding crime to crime, and causing double destruction. Acts like these should be punishable; for it is not a waste of private property only; but, in the present state of Ship timber, and in the immediate vicinity of a dock yard, such waste becomes a public loss.

Enquiring into the cause of this outrage, I was told (and probably with truth, as nothing else could well explain it) that so many hundred trees had been sold, at such a price, the choice of them being left to the purchaser; who had a wide extent of Woodland to range over; and who, guided by the exorbitant price of Bark, chose, of course, the full-top-  
ped,

ped, fast-growing trees; as affording the most bark, and of the best quality.

1804. I reprint these observations, not from any desire of censuring whomsoever might occasion them; but as a general caution to inexperienced managers.

II. MANAGEMENT OF COPPICES. This forming a prominent feature in the Rural Management of the District, it requires to be treated of, in detail; under the following branches.

- |                    |                        |
|--------------------|------------------------|
| 1. Training.       | 4. Mode of Cutting.    |
| 2. Age of Felling. | 5. Mode of Converting. |
| 3. Disposal.       | 6. Consumption.        |

1. THE TRAINING OF COPPICE WOODS is not, I believe, attended to, farther, than to keep them free from brouzing stock, during the first stages of their growth. However, considering the advanced age at which Coppice wood is cut, here, much faggot wood, and perhaps other inferior wares, might be taken out with advantage to the rising Coppice. The Birch and the Sallow, quick growing woods, ought certainly to be checked, so as to prevent their overtopping and cramping the growth of the Oak. The great object in training Coppices is to give evenness and fulness to the whole. In a district,

however, where stakes, edders, and wicker hurdles are not in common use, the less profitable would be the thinnings of a Coppice. In the more advanced stages of growth, hoops are, here, a profitable article\*.

2. THE AGE OF FELLING COPPICE WOOD, in the ordinary practice of the District, is twenty years. The bark of the Oak is a principal object, especially at present; and this does not acquire, much sooner, a sufficient substance and maturation of juices, to fit it properly for the use of the tanner. It is oftener, I believe, suffered to stand until it be more than twenty years growth, than it is felled under that age. From eighteen to twentyfive years may, perhaps, be set down as the ordinary limits.

3. THE DISPOSAL OF COPPICE WOOD. The common medium of sale is the survey or auction: the proper mean, where large allotments of wood are to be disposed of, in the gross; provided men of property and com-  
mon

\* HOOPS for CIDER CASKS. The principal wood is Ash; but Chesnut and Wild Cherry are reckoned nearly as good. The price, in the rough, about 8*d.* a hundred weight. The time of cutting, December and January: the time of bending, May and June.

mon honesty can be drawn together as bidders \*. But, in this District, where the bidders at such sales are, many of them, men without property or principle, public auctions become a hazardous mode of disposal; as most men of property, in the District, I understand, have experienced.

This class of purchasers are chiefly working woodmen, who unite themselves into companies or sets, in order that they may compass, the better, the parcel on sale; afterwards, sharing it out among themselves; and each employing assistants to take down his own share.

1804. This practice is now on the decline, tho not yet extinct: men of property have of late years become purchasers of Coppice wood; employing wood laborers to harvest it.

The prices of Coppice wood, by the acre, are various; according to the age and quality. They have lately had a rapid rise, on account of the high price of bark; and the great demand for wood, which the war has occasioned. Formerly (within memory) four or five pounds an acre was reckoned a good

\* See YORK. ECON. Vol. I. p. 226.



price for wood of a middle quality, and twenty years growth. Within the last ten years, or less time, ten pounds an acre was esteemed a full price for such wood. Now (1794) it is worth fifteen pounds an acre; the purchaser paying *tithe*; which is usually 2s. 6d. to 3s. in the pound, upon the gross amount of sale\*.

4. THE METHOD OF TAKING DOWN COPPICE WOOD, in this part of the Island, is singular. The ordinary woods being cleared away, previously to the Barking season, THE OAK IS PEELED STANDING; all the hands employed continuing to peel during the spring run of the Bark. When a check takes place, the woodmen employ themselves in cutting down the peeled wood; until the midsummer run calls them again to the operation of peeling; which, indeed, may be said to last, without much interruption, throughout the summer; the wood being chiefly converted into saleable ware, during the winter months.

This unusual mode of proceeding gives a piece of Woodland, undergoing these operations, a striking appearance to the eye of a stranger,

\* Formerly, the *tithe* of Coppice wood was frequently taken in kind.

stranger, travelling through the country, in the summer season. The purchasers' shares are marked out in square plots; and these divided again into stripes of different colors: one white, with barked poles lying along upon the stubs! another brown,—the leaves of the early peeled poles, yet standing, being already dead, and changed to that color: a third mottled, having naked stems, headed with yet green leaves; while perhaps the remainder of each patch, reserved for another year's fall, appears in its natural green.

This method of taking down Coppice wood, however, has been practised, time immemorial; and, where Firewood and Bark are the principal objects of produce, a more eligible method would be difficult to strike out. The practice of suffering the peeled stems to remain upon the roots, in the first instance, as well as that of afterwards letting them lie upon the stubs, is theoretically bad. The fact however is, this practice, tho it may have been continued for centuries, has not destroyed, nor materially injured, the woods; which, tho not equal in thickness and evenness, to the Sussex and Kentish Coppices, are upon a par with those of the rest of the Island.

5. 6. THE CONVERSION AND CONSUMPTION OF COPPICE WOOD is, here, into *poles*, for uses in husbandry, as the roofs of sheds and hovels, rails, &c. &c.; *cordwood*, mostly for the use of ships of war; *faggots* of different sorts, for fuel, and for the use of the King's bake-houses, &c. at Plymouth.

The ordinary *price of cordwood*, in time of peace, has been about ten shillings a cord, of 128 cubical feet (namely 4, 4, and 8), and the poles and faggots in proportion\*.

III. THE MANAGEMENT OF HEDGE WOOD. This department of management is so exactly similar to that of Coppice wood, that it does not require a separate detail. The brush wood is cleared away, in early spring, and the Oak peeled standing, in the barking season.

IV. THE MARKET FOR BARK, after the tanneries of the country are supplied, is Ireland; to which it has, for some years last past at least, been shipped in great quantities. This appears to be a principal cause of the exorbitant

\* Formerly, CORDWOOD WAS SOLD BY WEIGHT; a practice which is not, yet, altogether obsolete. The price about 18*d.* a seam, or horse load, of three hundred weight.

exorbitant price, which, this useful article of manufacture has risen to of late years; and which threatens to reduce to a state little short of annihilation, the Oak timber of this Island, fit for Ship building.

REMARK.—THE PROCESS OF TANNING is peculiarly entitled, at this time, to the attention of the CHEMIST. The bark of the Oak, it is probable, acts principally as an astringent, on the texture of the hide; and might, perhaps, be equalled, or excelled, by other astringents, natural or prepared, if duly sought for, and attentively applied.

#### REFERENCES to MINUTES.

- 35. On the rental value of Coppice woods.
- On reclaiming Coppice ground, for cultivation.
- 36. On the disposal of Coppice wood.
- 41. On setting out Timber, for Barn Floors.
- 48. Precautions requisite to a sale of Timber.
- On setting out Timber for sale.
- Conditions of sales of Timber.
- 52. On pasturing young Coppice woods.
- 62. Generally, on setting out Timber for repairs.

## DIVISION THE THIRD.

## AGRICULTURE.

THIS most extensive branch of RURAL ECONOMY requires to be examined, in detail; agreeably to the plan which I have hitherto found it requisite to pursue, in registering the practices of other Districts; and conformably to the ANALYTIC TABLE OF CONTENTS, prefixed to this Volume.

## I.

## F A R M S.

THE NATURAL CHARACTERS of *Farms* appear, in a great measure, from what has been said of the Natural Characters of the *District*; and only require to be adduced, here, in order to bring them into one point of view, with the adventitious properties of Farms, at present observable, in this part of the Island.

The CLIMATE, in an *agricultural* point of view, is very uncertain. In a dry summer, the harvest is early, on account of the southerly situation of the District. But, in a moist season, it is sometimes very backward; owing to incessant drizzling rains, added to the coolness of the sea air.

The SURFACES of Farms, notwithstanding the uneven surface of the country at large, are less steep and difficult to work, than the Farms of many other hilly Districts; owing to the circumstance of the steeper sides of vallies being chiefly appropriated to wood.

The QUALITY of the SOIL has been described, as being of a slatey nature; mostly abounding with fragments of slate rock and other stones; and generally mixed with a portion of fertile loam.

The QUANTITY or DEPTH of SOIL is greater than the par of upland soils; varying, from five or six, to ten or twelve inches.

The SUBSOIL is generally a rubble, or broken slatey rock; absorbing water to a great degree; tho an excess of wet weather may sometimes cause a temporary surcharge. It may be said, however, in general, that the soil and subsoil are absorbent, clean, sound, and fit for all the ordinary purposes of Agriculture.

THE HISTORY of Farm Lands, in this District, has been hinted at, as having passed from the forest or unoccupied state, to a state of common pasture, through the medium of at least a partial cultivation; and, from the state of common pasturage, or hams, to the predial state, in which it now appears. But these suggestions arise, principally, from the present appearances of the surface, and from the other circumstantial evidences, mentioned above. These circumstances, collated with the different surveys that have been made, at distant periods of time, might bring this matter to a greater degree of certainty, than either of them can when taken separately.

THE PRESENT APPLICATION of Farm Lands. Viewing the District at large, Farms in general are in a state of MIXED CULTIVATION; comprizing *arable land*, *temporary leys*, *water meadows*, and *orchard grounds*: HERBAGE being a prominent characteristic; as will more fully appear in speaking of their management.

THE SIZES OF FARMS are, as they ought to be, *extremely various*. BARTONS (a name which perhaps was originally given to demesne lands, or manor farms, but which now seems to be applied to all *large* farms, in contradistinction

tradistinction to the more common description of holdings) are generally of a full size; as from two or three to four or five hundred acres of culturable lands. Ordinary farms run from ten to a hundred pounds a year.

#### GENERAL OBSERVATIONS.

THE humiliating situation in which this country is placed, at present (1795), through a misguided attachment to SPECULATIVE COMMERCE, and through a neglect, not less to be lamented, of the PERMANENT INTERESTS of the country,—has given us an opportunity of seeing the utility which arises from a GRADATION OF FARMS; and from having farmers of different degrees and conditions, to furnish the markets with a regular supply of grain.

Were the whole of the cultivated lands of the Island in the hands of small needy farmers, unable to keep back the produce from the autumn and winter markets, it is highly probable that the country, during the past summer, would have experienced a scarcity, nearly equal to a famine; and would, every year, be at the mercy of dealers or middlemen, during the spring and summer months.



On the contrary, were the whole in the hands of men of large capitals, a greater scarcity might be experienced, in autumn and the early part of winter, than there is under the present distribution of farm lands.

I do not mean to convey, that the present distribution of those lands is perfect, or precisely what it ought to be, in a political point of view. Nevertheless, it might be highly improper, in Government, to interfere in the disposal of private property. It is therefore to the consideration of proprietors of estates I beg leave to offer the following principle of management, in the tenanting of their respective estates: namely, that of not entrusting their lands, whether they lie in large or in small farms, in the hands of men who have not CAPITAL, SKILL, and INDUSTRY, *taken jointly*, to cultivate them, with profit, to themselves and the community; nor of suffering any man, let his capital be what it may, to hold more land, than he can personally superintend; so as to pay the requisite regard to the minutiae of cultivation\*.

The

\* For farther remarks on the SIZES of FARMS, viewed in a *public* and in a *private* light, see TREATISE ON LANDED PROPERTY, Sect. V.

THE PLANS OF FARMS have been spoken of as being generally judicious, in respect of having the farmstead, or buildings, placed within the area of the lands. The fields too have been mentioned, as being well sized; but sometimes, perhaps, too large, or out of proportion, on the smaller farms; owing to the expensiveness and *closeness* of the fences in use: and, owing, perhaps, to the same circumstance, private lanes, or driftways, are in some cases wanted. On the whole, however, the District is above par, with respect to the plans of its farms.

GENERAL REMARK. From this Analysis of Farms, it is plain that West Devonshire has many advantages, natural and fortuitous, as an AGRICULTURAL DISTRICT.

For a description of the Barton or Farm of Buckland, see MIN. 1 and 2.

## 2.

### FARMERS.

THE SCALE OF OCCUPIERS, in this Western District, is singularly extensive; reaching from the largest proprietor, down to the farm servant, or parish apprentice; who hav-

ing, by his temperance and frugality, saved up a few pounds, and, by his industry and honesty, established a fair character, is entrusted with one of the small holdings that are scattered in every parish; and who, perhaps, by persevering in the same line of conduct, ascends, step after step, to a farm of a higher order.

The QUALIFICATIONS of PROFESSIONAL OCCUPIERS, including small proprietors, life-leaseholders, and tenants, will not be found, on a general view, at present, equivalent to the natural and adventitious advantages of the District; nor such as are likely to give effect to those advantages; so as to raise its Rural Management to a par with that of less favored parts of the Island.

The PROPERTY of occupiers of this class is absorbed in life leaseholds. If a man can purchase a farm he will not rent one; and, in purchasing, he generally incapacitates himself from occupying his purchase, properly. There are, no doubt, many exceptions to this general position.

Their EDUCATION is another bar to improvement. Many of them, as has been intimated, have risen from servants of the lowest class; and having never had an opportunity  
of

of looking beyond the limits of the immediate neighbourhood of their birth and servitude, follow implicitly the paths of their masters.

Their KNOWLEDGE is of course confined ;  
and

The SPIRIT of IMPROVEMENT deeply buried under an accumulation of custom and prejudice.

There are, however, some few individuals, in the District, who are struggling to break through the thick crust of prepossession, under which the country seems to have been long bound down. But they have not yet obtained, sufficiently, the confidence of the lower class of occupiers. Their exertions, however, will tend to convince the latter that the established practice of the District may be deviated from, without danger.

### 3.

#### WORKPEOPLE.

NO inconsiderable share of farm labor is done by farmers themselves, their wives, their sons, and their daughters. On the

larger farms, however, workpeople of different descriptions are employed. They are either

- I. Laborers,
- II. Servants, or
- III. Apprentices.

I. **THE LABORERS** of the District are below par\*: many of them drunken idle fellows; and not a few of them may be said to be honestly dishonest; declaring, without reserve, that a poor man cannot bring up a family on six shillings a week and honesty. In addition, however, to these low wages, it is pretty common for farmers to let their constant laborers have corn, at a fixed price; and endeavor to give them piece-work,—to be paid for, by measurement, or in gross.

Nevertheless, the wages of the District, seeing the great rise in the price of living, appear to me to be too low; and what the farmers save in the expence of labor, they probably lose by pillage, and in the poor's rate. All ranks of people, **FARM LABORERS ONLY EXCEPTED**, have had an increase of income, with the increase of the prices of the

\* But by no means inferior to those of other Districts of this county, in which I have had opportunities of observing them.

the necessaries of life ; or, which is the same thing, with the decrease in the value or price of money. This may, in a great measure, account for the increase of the poor's rates, in country parishes, without bringing in the degeneracy and profligacy of the present race of working people, compared with the past ; tho some part of it, I believe, may be fairly laid to the charge of that degeneracy ; which, if the task were not invidious, it would not be difficult to trace to its source.

II. SERVANTS. A remarkable circumstance, in the economy of farm servants, in this part of the Island, is that of there being **NO FIXED TIME OR PLACE OF HIRING** : a circumstance, however, which, I believe, prevails throughout the West and South of England. They are hired either for the year, the half year, or by the week ; the last a very unusual method of retaining domestic or in-door farm servants, in other parts of the Island. When a servant is out of place, he makes enquiries among his acquaintances, and goes round to the farm houses to offer himself.

In the **RURAL ECONOMY** of the **MIDLAND COUNTIES**, I made some observations on this subject (see note, page 18, Vol. II.) before I had any knowledge of the practice of this

District. What I have since seen of it inclines me to decide in its favor. It is certainly more convenient to the farmer: and it is less degrading to the servants, than the practice of exposing themselves, for hire, in a public market; tho it may not, perhaps, be so speedy and certain a way of getting into place. But this may be a favorable circumstance, inasmuch as it may render them less fickle and changeable.

The WAGES OF SERVANTS, as those of laborers, are low, compared with those of most other Districts. The yearly wages of men run, at present (1796), from six to eight pounds: of women three pounds, or three guineas.

The MODE OF TREATMENT OF FARM SERVANTS, here, may be said to be a judicious mean between the extravagance of the Southern counties, and the opposite extreme of the Northern provinces.

III. APPRENTICES. It is a universal and common practice, throughout Devonshire, and, I believe, in the West of England in general, to put out the children of paupers, boys more particularly, at the age of seven or eight years, to farmers and others; and to bind them, as apprentices, until they be

twentyone years of age;—formerly, until they were twentyfour! on the condition that the master shall supply every necessary, during the term of the apprenticeship.

This is an easy and ready way of disposing of the children of paupers, and is fortunate for the children thus disposed of; as enuring them to labor and industry, and providing them with better sustenance, than they could expect to receive from their parents. To the farmers, too, such children, under proper tuition, might, one would think, be made highly valuable in their concerns, and, in the end, would become very profitable.

The contrary, however, is generally the case:—an unfortunate and indeed lamentable circumstance, which arises, in a great measure, I apprehend, from improper treatment. Instead of treating them as their adopted children, or as relations, or as a superior order of servants, whose love and esteem they are desirous of gaining, for their mutual happiness, during the long term of their intimate connection, as well as to secure their services at a time when they become the most valuable, they are treated, at least in the early stage of servitude, as the inferiors of yearly or weekly servants; are frequently subjected,



I fear, to a state of the most abject drudgery: a severity which they do not forget, even should it be relaxed, as they grow up. The ordinary consequence is, no sooner are they capable of supporting themselves, than they desert their servitude, and fill the provincial Papers with advertisements for “runaway prentices.”

There are, no doubt, circumstances under which it were difficult, or impossible, to render this class of servants, either pleasurable or profitable to their masters; such as the naturally bad disposition of the servants themselves, and the more reprehensible conduct of their parents, in giving them evil counsel. Nevertheless, it strikes me forcibly, that much might be done, *by a change of principle, in their treatment.*

When the unfortunate offspring of unfortunate parents fall into the hands of men of sense and discretion, they frequently turn out well, and become most valuable members of the community.

A more *natural* seminary of working husbandmen could not be devised; and the progress in life, that some individuals of this class have made, is a recommendation of the practice; which, under the proper treatment

of farmers, the encouragement of landlords, and the protection of Magistrates, might be profitably extended to other Districts; and become a prolific source of the most valuable order of inhabitants a cultivated country can possess.

1804. Some few years ago, my Lord HEATHFIELD adopted a regulation,—respecting the parish apprentices, which by the parochial law he is obliged to receive upon his demesne farms,—that I will venture to recommend to every master of such destitute children: namely, that of promising the several male apprentices (of different ages) ten guineas, and every female apprentice five guineas; to be paid at the expirations of their respective terms; provided they severally behave themselves with propriety; and faithfully serve out their respective apprenticeships.

Thus far, the regulation proffers every thing that is to be expected from it: and even one year's faithful servitude, at the ends of their several terms, will repay the premiums, thus offered for their moral conduct.

## 4.

## BEASTS OF LABOR.

## INTRODUCTORY REMARKS.

THE District under survey may be said to be undergoing a change, with respect to this department of its Rural Economy: a change which has been going on, slowly, for the last twenty years; but which has, as yet, made little progress.

Formerly, CARRIAGE of every kind was done entirely on the BACKS OF HORSES; except in harvest, when sledges, drawn by oxen, were sometimes used; also heaps of manure, in the field, were dragged abroad in small cart sledges, either by oxen or horses. Twenty years ago, there was not a "pair of wheels" in the country; at least not upon a farm; and nearly the same may be said at present. Hay, corn, straw, fuel, stones (for building, and the repair of roads), dung, lime, &c. are, in the ordinary practice of the District, still carried on horseback.

This, to a stranger, forms a striking feature of management. Before the invention,

or adoption, of wheel carriages, those modes of transfer were of course universal throughout the Island, and the reason of their being continued so long, in this District, has no doubt been, in part, the unlevelness of its surface. But there are other Districts, the cultured parts of whose surfaces are much steeper than those of Devonshire (for reasons already given); and the continuance of the practice, here, has been in a great measure owing to a want of judgment in laying out roads; or a want of spirit in executing them. There are farms of some hundred acres, lying perfectly well for wheel carriages; as level as farms in general throughout the Island; yet have not a wheel carriage belonging to them.

It would be unfair, however, not to observe, that there are many farms in this country, on which the use of "PACK HORSES" ought never to be laid wholly aside\*. And, in many other Districts, the same mode of

\* The banks of the Dart, in the neighbourhood of Totness, furnish an extraordinary instance of the use of Pack Horses; which could not, there, be well dispensed with. The roads to grounds are intolerably steep: altogether impracticable by wheel carriages. And in the present state of mixed private property, they could not be easily altered.

conveyance might be partially adopted; for the dispatch made, by pack horses properly used, is such as no one, who has not seen it, would readily apprehend †. Nevertheless, the practice, compared with that of wheel carriages, in situations which will admit of them, is altogether ineligible; and the prevalence of it at present is a strong proof of the backward state in which husbandry still remains in this remote part of the Island.

OXEN have ever been the PLOW TEAM of the District: sometimes with horses before them; but more generally alone: four aged oxen, or six growing steers, are the usual "plow" of the District.

Oxen are universally worked in YOKE; yet are

† In an instance noticed, in which a stout lad with two pack horses, and two men with three horses in a waggon, were carrying faggots nearly the same distance (the road of the one somewhat steep, of the other more level), the comparative dispatch stood thus: each pack horse carried nine faggots (twelve are a full seam), and made eight journies a day; thus transferring twelve dozen. The waggon carried eight dozen at a load, and made six journies; and consequently transferred just four times the number. But if the grass horses and the boy are calculated at sixpence each, and the stable horses and the men, at one shilling each, the disparity of expence will not be found very considerable.

are remarkably tractable; and step out with a pace, which a Kentish clown would think a hardship to follow, with his high-fed horse team.

The style of DRIVING an Ox team, here, is observable; indeed, cannot pass unnoticed by a stranger. The language, though in a great degree peculiar to the country, does not arrest the attention; but the tone, or tune, in which it is delivered. It resembles, with great similitude, the chantings, or recitative, of the Cathedral service. The plow boy chants the counter tenor, with unabated ardor through the day; the plowman throwing in, occasionally, his hoarser notes. It is understood that this chanting march, which may sometimes be heard to a considerable distance, encourages and animates the team; as the music of a marching army, or the song of the rowers. This being as it may, I have never seen so much activity and cheerfulness attending the operation of plowing, anywhere, as in Devonshire.

The native BREED of this District are somewhat too small, for heavy work. But, in the North of the county, they are larger, and fitter for the yoke; and are, indeed, on the whole, the best working cattle I have

hitherto seen. These breeds will be spoken of, more fully, under the head CATTLE.

Oxen are here worked to a full AGE: sometimes to ten or twelve years old.

I met with no SPAYED HEIFERS in the District. The art of spaying does not appear to be known in the country.

CART HORSES, since the introduction of wheel carriages, are beginning to creep into the District. They are mostly of the black, heavy-heeled, unprofitable breed. However, in the steep pulls of this country, a true-drawn, steady kind is required; but the hardy active breed of Suffolk appears, to me, to be better calculated for the soil and surface of this country, than the sluggish fen sort, which is insinuating itself into it.

But, in a country where draught oxen are of so excellent a quality, and where the drivers of ox teams are so expert, and at present so partial to them, it were pity almost to introduce any other animal of draught; unless under particular circumstances\*. It would

\* I have seen a pair of young steers, rising three years old, put before, as leaders, the second or third day after they had been broken into yoke; and, in a few days more, made perfectly tractable, in this intellectual capacity.

The *goad* is the instrument used in driving, when  
 oxen

would be as direct an affront to a steady good servant, in this District, to “ordain” him to go with a team of horses, as it would be to a Kentish plowman, to order him to take the charge of a team of oxen; and it might be a crime to do away so valuable a prejudice.

The HOURS OF WORK are well regulated. The plowteams make two journies a day, as in Norfolk: they go out before eight in the morning, and return at twelve. Go out, again, before two, and return before six: working about eight hours a day.

#### REFERENCES TO MINUTES.

11. On introducing the use of whip reins.
19. On shoeing oxen; and on rendering working cattle docile.
39. Remarks on plowing with two oxen in yoke.

oxen are used alone. But if horses are used before them, a strong kind of whip—a thong tied to the end of a pliant goad—is the ordinary instrument—the identical “*gad*” which is used in Yorkshire, when oxen and horses are worked together in a similar manner!



## 5.

## IMPLEMENTS.

IN a District whose Rural Management is behind that of many other parts of the Island, and whose present system of practice is probably of very antient origin, we must expect to find a peculiarity, rather than an excellency, in its Implements of Husbandry.

The WAGGONS which have been introduced, are of the West-country construction; with the outer rail bending over the hind wheel; in the same manner as that of the Cotswold waggon\*: a peculiarity of construction, which, I find, reaches from Gloucestershire to the Landsend; and which, in much probability, has been originally copied from a two-wheel carriage, that is still in use in Cornwall; and which may, possibly, have been heretofore common to the more Western counties:—

THE CORNISH WAIN ranks among the simplest of wheel carriages. It is adapted either to oxen or horses. It is a cart without a *body*; at least without *sides*; saving only two strong bows, which bend over the

\* See GLO. ECON. Vol. I. p. 57.

wheels, to prevent the load from pressing upon them. This Implement will be mentioned again, in DISTRICT the THIRD.

THE DRAY, or SLEDGE, of West Devon, is likewise found in the lowest rank of simplicity:—merely two side pieces, joined together with cross bars. It is large, strong, and useful, on many occasions.

THE “GURRY-BUTT,” “SLIDE BUTT,” or DUNG SLEDGE, of Devonshire, is a sort of sliding cart, or barrow; usually of a size proper to be drawn by one horse: sometimes it is made larger: I have seen four oxen drawing compost upon a fallow, in one of these little Implements; which might, anywhere, be made useful, on many occasions; especially in moving earth, stones, rubbish, or manure, a small distance, and on a steep lying surface. The sides and ends are about eighteen inches high, and are fixed; the load being discharged by overturning the carriage.

THE FURNITURE OF PACK HORSES varies with the load to be carried. Hay, corn, straw, faggots, and other comparatively light articles of burden, are loaded between “LONG CROOKS;” formed of Willow poles, about the thickness of sithe handles; and seven or eight feet long; bent as Ox

bows; but with one end much longer than the other. These are joined in pairs, with slight cross bars, eighteen inches to two feet long; and each horse is furnished with two pair of these crooks; slung together, so that the shorter and stronger ends shall lie easy and firmly against the pack saddle; the longer and lighter ends rising, perhaps, fifteen or more inches, above the horse's back, and standing five or six feet from each other. Within, and between, these crooks, the load is piled, and bound fast together, with that simplicity and dispatch, which long practice seldom fails of striking out.

Cordwood, large stones, and other heavy articles are carried between "SHORT CROOKS;" made of four natural bends or knees; both ends being nearly of the same length; and, in use, the points stand nearly level with the ridge of the pack saddle.

Dung, sand, materials of buildings, roads, &c. &c. are carried in "POTS;" or strong coarse panniers; slung together, like the crooks; and as panniers are usually slung; the dung, especially if long and light, being ridged up, over the saddle. The bottom of each pot is a falling door, on a strong and simple construction. The place of delivery

being reached, the trap is unlatched, and the load released.

Lime is universally carried in narrow BAGS; two or three of them being thrown across a

PACKSADDLE; which is of wood, and of the ordinary construction.

The PLOW,—provincially “SULE,” pronounced “ZULE,”—resembles, in general appearance, the old-fashioned Plows of other Districts; but has three notable peculiarities of construction. It has no rice or wrest; the moldboard standing some inches above the level of the chip, head, soal, or sill of the plow\*. This, in turning the whole ground, is sometimes an advantage; but, in a loose fallow, such a tool rather makes a rut than a furrow; half the soil, perhaps, remaining unstirred.

Another variation in the construction of the Devonshire Plow is still more singular. The sheath, breast, or stem is not fixed in

\* From SEUIL (the French term for *threshold* or *sill*—an apt archetype for what is commonly termed in English the *head* or *chip* of a plow) is probably derived the Devonshire provincial name, SULE: the epithet that once distinguished the particular species of plow that is now in use, having been retained as its generic or substantive term.

the beam; but serves as a regulator to the depth of the furrow; and is made longer or shorter, at the will of the Plowman; who fastens it, in the required position, with a wedge, driven into a notch, made across the upper end of the tenon, above the beam.

The third peculiarity of construction lies in uniting the principal handle to the soal, or sill. In the most old Plows, this handle is tenoned into the sill. But, here, the foot of the handle is crooked; shooting horizontally forward, in a line parallel with the sill; to which it is strongly fastened, by two thick wooden pins driven through them.

In all cases, where the old-fashioned soal is used, this is an admirable way of joining the handle to it; giving great strength and firmness of construction. There is some difficulty in finding pieces of wood, fit for this sort of handle; but, in converting top wood, the eye of a good Plow-wright is ever on the watch for them. For further remarks on this Implement, see *MINUTE 7*.

The rough *HARROWS* of this country—provincially “*Drags*”—consist of two parts; each of three beams; hung together with hooks and eyes; and drawn by the corner of the foremost: as they were formerly in the  
North

North of Yorkshire. They hang remarkably *steady* behind the team; but have not the *play* of looser Harrows.

THE ROLLER of West Devonshire has not yet been furnished with shafts, or a pole, to check it in going down-hill; notwithstanding the unlevelness of surface!

The "DRUDGE" is an Implement peculiar, I believe, to this part of the Island. It is a long, heavy, wooden-toothed rake; with the teeth broad, and set with the flat side foremost; drawn by oxen or horses, and used to collect the fragments of sward, loosened by the plow and harrow; for the purpose of burning it, in the manner which will be described, under the article SOD-BURNING\*.

The YOKE of Devonshire is of too valuable a construction to be passed without notice. It is by far the best I have anywhere seen. It is at once light and easy to the animal. The operative part of the WOODWORK, that which rests upon the withers of the Ox, is broad and gently convex on the under side, to sit easy; and hollowed out, above, to give it lightness. To prevent this thin

\* The "TORMENTOR" will be noticed, in DISTRICT the SECOND.

part from being split by the action of the bows in work, rivets are, or ought to be, run through it, horizontally, close to the outer sides of the bow holes. The species of wood is chiefly *Alder*, sometimes *Elm*.

Another most admirable part, in the construction of this Yoke, belongs to the DRAUGHT IRON; which, instead of having, as is usual, a single staple or eye, to receive the ring; the crown of the staple is enlarged, and is divided into three compartments or notches, like those of the draught iron of a plow; in order to give the weaker Ox the requisite advantage. An admirable thought; and equally good in theory and in practice\*.

The bows are invariably, I believe, of *Elm*; being brought from the Exeter quarter of the County, into this District: selling, here, at about 18*d.* a pair: while the neighbourhood abounds in *Ash* and *Sallow*, with which the farmers might make their own bows, or have them made, at much less expence.

Some of the TOOLS of this Country are not less peculiar, than are many of its Im-

\* Another peculiarity of the yoke is observable in East Devonshire; and will be mentioned in DISTRICT the SIXTH.

plements. The SHOVEL is pointed, in the manner of the hay spade of the North of England; resembling the marks on the suit of spades, in playing cards: which is a circumstantial evidence, that the tool under notice was once the common spade or shovel of the Island at large\*. Here, it still supplies the place of both spade and shovel: there being no such tool as either a spade or a shovel, of the ordinary construction, in the hands of farmers, or their laborers. I have traced this tool as far eastward as Wiltshire. In Dorsetshire, it is common.

It is furnished with a long, strong, crooked handle, the back of the bend being turned upward; and, in using it, the hollow of the bend is rested upon the thigh; which is usually guarded with a shield of strong leather, bound upon it.

This tool has many good properties. It enters any substance much easier than a broad-mouthed shovel or spade; and answers, in the hands of a Westcountry man, every purpose of the shovel, the spade, the yard scraper, and the dung fork of other Districts. As a substitute for the last, how-

\* Or are both Cards and pointed Shovels of *French, Norman, or Armorican* origin?



ever, it is less eligible, than it is for the three former.

There are various other peculiarities, in the shape and dimensions of Tools. Some of them will be mentioned, in treating of the operations to which they belong. Those which are here brought forward are sufficient to shew, demonstrably, that the Rural Management of this quarter of the Island has either had a separate origin, or has not partaken of the improvements and changes which that of the rest of the kingdom has undergone. Implements and utensils of husbandry, as of war, are among the best evidences of History.

#### REFERENCES to MINUTES.

- 7. Further on the Plow of Devonshire.
- On the improvement of provincial Plows.
- 27. A new Level constructed.
- 64. On the construction of a new machine, for watering turneps, &c.

## 6.

### THE WEATHER.

THE CLIMATE, or general state of the weather, in this extreme part of the Island, has been already spoken of. And

with respect to PROGNOSTICS, or a foreknowledge of the weather, at any time or season, I have gained no information, here. The BAROMETER appears to be little attended to; and, indeed, all thoughts about the weather, even of the morrow or the passing day, are considered as useless; until the misty summit of some oracular mountain announces approaching rain. See page 11.

It may be true, that in this peninsular situation, the weather is less certain, than in the more central parts of the Island; yet, from the observations I had an opportunity of making, I found the BAROMETER, and the SETTING SUN, to be of the same or a similar use, here, in forming a judgment of the weather, as I have ever found them, in other places; tho, in this country, which may be said to be situated within the region of rain, the changes from fair to foul weather are, no doubt, more sudden, than they are, in more easterly and central situations. Nevertheless, I am clearly of opinion, that a due attention to the barometer and the setting sun, in the summer months, would amply repay the occupiers of lands, for the time and attention they might have occasion to bestow upon them.

## REFERENCES to MINUTES.

9. On the rains of West Devonshire.  
 50. The seasons of 1799 detailed.  
 56. Those of 1800 noticed.

## 7.

## PLAN

OF

## THE MANAGEMENT OF FARMS.

## PREFATORY REMARKS.

AN account of the RISE AND PROGRESS of AGRICULTURE, in the several Districts of the Island, would form the most interesting part of its HISTORY.

That the Rural Managements, now found in different Provinces, have had distinct origins, or have been raised to the states in which we now severally find them, by very different circumstances, is most evident. But whether the obvious distinctions, which now appear, have arisen, from the circumstance of the first settlers of the Island having migrated from different countries; or from that of subsequent invaders having introduced their

respective systems ; or that of improvements having taken different routes, in different Districts,—is by no means a question that can be promptly answered.

By comparing minute details of the practices of different Provinces, with the minutiae of practice, observable in the several Countries of the Continent, something might be determined respecting this subject.

That the outlines of Management, in different parts, have arisen, in some measure, out of the nature of soils, and the state of occupancy in which they have happened to be placed, is probable, from the striking fact, that the general Plan of Management, now practised in the District under view, is, in outline, the same as that of the Midland Counties, situated at two hundred miles distance, and severed from it by Districts pursuing contrary practices. Both of them have been some length of time in a state of inclosure ; both of them are productive either of corn or grass ; and both of them have fallen into that routine of Management, which, viewed in the outline, will not, perhaps, be readily improved : namely, that of subjecting the lands chiefly to an alternacy of corn and herbage ; but preserving the bottoms of

vallies and dips, in a state of perennial grass or meadow land. And, what is remarkable, these lands, in both Districts, have been watered, time out of mind: but with this still more remarkable difference, the one was wholly overflowed, and kept covered with stagnant water, the other irrigated with streams of running water.

To assist us in gaining a general idea of the Plan of Management in West Devonshire it will be proper to view

- I. The present Objects of its Husbandry.
- II. The Course of Practice, whereby these Objects are attained.

I. The present OBJECTS of Husbandry in West Devonshire; those from which the Farmer expects to draw rent, labor, and income;—are

Corn,	Cows,
Potatoes,	Oxen,
Fruit Liquor,	Sheep,
Dairy Produce,	Swine.

The CROPS, at present in cultivation, are principally,

Wheat, and  
 Barley; with some  
 Oats; a very few  
 Peas; (no Beans;) some

Turneps; many  
 Potatoes; with at present much  
 Clover and Ray Grass; together with  
 Meadow Grass,  
 Pasture Land Produce, and  
 Fruit.

The LIVESTOCK of the District are

Working Horses,	Swine,
Rearing Horses,	Breeding Ewes,
Working Oxen,	Store Sheep,
Dairy Cows,	Fatting Sheep,
Rearing Cattle,	Rabbits,
Grazing Cattle,	Poultry.

II. COURSE OF PRACTICE. Lest it should be said that the Practice of a Country, which is behind most of the Kingdom, in Rural Improvements, cannot be a fit subject of minute description, it may here be proper to remark, that the Subject of Agriculture, viewed to its utmost limits, is not only extensive but abstruse; and that no ESTABLISHED PRACTICE can be so inconsiderable as not to furnish useful ideas, if fairly discussed. Beside, we have seen that the outline of its Plan of Management is in some measure right, and, by due investigation, we may be able to detect minutial practices,

which will throw fresh light on the general subject.

It has been mentioned, as the Practice of this District, to keep the cultured lands, alternately, in ley herbage, and arable crops. The latter have long been fixed and invariable; but the number of years allowed for the duration of the former depends on circumstances, and the judgement of individuals. Speaking generally of the District, more than half of its cultured lands are in temporary ley: besides the perennial leys or meadow lands; and beside the rough pasture grounds that are not under regular cultivation.

Dividing the arable lands into ten parts, five of these parts may, in giving a general idea of their arrangement, be said to be in ley or pasture ground, one under preparation for wheat, one in wheat, one in barley, one in oats, and one in ray grass and clover; following each other in the SUCCESSION, in which they are here set down: namely,

Pasture, five years,	Barley,
Partial Fallow,	Oats,
Wheat,	Herbage.

This has been the ordinary Course of Management, for the last fifty or sixty years; during which length of time, I understand,

herbage has been, more or less, *cultivated*: a circumstance that does credit to the Rural Management of the Country.

I have been informed by a man who well remembered the Practice of the Country, previously to the introduction of cultivated herbage,—that the arable crops were then the same as they are at present (or lately were), namely, wheat, barley, oats; after which the land lay “ten or twelve years;” —first, in a state of waste; afterward, in pasturage.

About twenty years ago, the cultivation of the POTATOE was introduced into this District; and TURNEPS have been more or less cultivated, for a much longer time; but not in a manner which reflects credit on their cultivators.

These two crops, being grown on ley grounds, have in some measure broken in upon the prior system of Management: so that, at this juncture, the District may be said to be losing its regular rotation of arable crops: and it must remain under an irregular Course of Management, until turneps and potatoes shall be introduced after wheat or oats, as a fallow crop for barley and ley herbage.



## REFERENCES to MINUTES.

6. Preliminary steps to right Management.
20. On the Objects of Husbandry, in West Devon.
38. Remarks on the Buckland plan.

## 8.

## MANAGEMENT

OF

## THE SOIL.

IN this department of the arable Management, the Husbandry of West Devonshire is very defective. The lands, in general, are foul and OUT OF TILTH. The leys are many of them covered with fern and thistles, a few years after they are laid down to grass, as if they had been, for ages, in a state of commonage; and when broken up, are equally disgraced by myriads of seed weeds.

This foul state of the Soil is not more owing to the small number of PLOWINGS it receives, than from the defect, which has been mentioned, in the construction of the PLOW, and the injudicious manner of using it. The  
plit,

plit, or plowslice, is carried too wide, yet the share is narrow; and the stern of the plow without a wrest to force open the furrow. Hence, in plowing broken ground, half the weeds are left uncut, and the lower part of the soil remains almost wholly unstirred; the moldboard only sliding off the upper part; thus covering up the uncut weeds, and giving the land the *appearance* of having been plowed. The consequence is, the weeds soon break through their thin covering, and take again full possession of the surface. I have seen turneps, after a fallow of three or four plowings, overshadowed with fern a foot high, before the turnep plants were fit for the hoe.

Another cause of imperfect tillage, in this District, is the UNRECLAIMED state in which much of its arable lands remain, with respect to large stones, and rocky obstructions of the plow; and which want nothing but industry to remove them; so as to give an even and sufficient depth of furrow.

The Devonshire Plowmen, however, have hit upon a much easier way of saving their plows from destruction and themselves from injury, than that of clearing the soil from stones. Instead of using an iron bolt, to

fasten the draught chain to the end of the beam, a wooden pin is substituted. When the share strikes against a stone, the pin breaks; and by this simple contrivance the neck of the plow and the teeth of the Plowman are freed from danger.

It is probable that, formerly, much has been done towards CLEARING THE GROUND FROM OBSTRUCTIONS OF THE PLOW; as a very ingenious method of freeing the soil from large hard detached stones has been introduced into practice: namely, that of *sinking* them below the soil; so as to give free range for the plow, above them. This is done by digging pits beneath them: an operation, however, which is somewhat dangerous to the workmen, and requires a degree of care and circumspection, in performing it.

CLEANSING SOIL FROM SEED WEEDS. I must not omit to mention, here, an incident of practice, which was related to me, in this District, by a friend of the farmer in whose practice it occurred. A field, particularly *subject to wild oats*, was effectually freed from them, by dunging it well, while under fallow, and by working it afterwards, so as to mix the soil and dung intimately together.

The consequence of this was a full crop of oats; which was mown for hay; and the soil ever after freed from these troublesome weeds.

This incident, tho not, perhaps, quite accurately stated (it is not probable that, with the imperfect tillage of this country, every individual seed should be brought at once into vegetation) shews the utility of WORKING A DUNGED FALLOW, before the crop be sown: a practice I have ever found highly eligible.

**SODBURNING.** The most noticeable particular of Management, in the Soil Process of this District, is that of “BURNING BEAT,” as it is provincially termed; answering in a great measure the paring and burning, or more technically, sodburning—of other Districts.

This operation in Agriculture has been practised, in this Western part of the Island, from time beyond which memory nor tradition reaches. In an old tract, which I saw some years ago in the British Museum, it is termed DEVONSHIRING, and it is to this day called Denshiring, in different Districts.

There are, at present, three distinct methods of separating the sward or sod, provincially the “spine”—from the soil. The one

is performed with a "BEATING AXE"—namely a large adze—some five or six inches wide, and ten or twelve inches long; crooked, and somewhat hollow or dishing. With this, which was probably the original instrument employed in the operation, large chips; parings, or sods are struck off. It is still used in rough uneven grounds; especially where furze or the stubs of brushwood abound. In using it, the workman appears, to the eye of a stranger at some distance, to be *beating* the surface, as with a beetle, rather than to be chipping off the sward with an edge-tool. This operation is termed "HAND BEATING."

The next Instrument in use is the "SPADE," resembling the paring spade, or breast plow, of other Districts: with, however, in some instances at least, a notable addition: namely a moldboard! fixed in such a manner, as to turn the sod or turf, as a plow turns the furrow slice: thus becoming literally a BREAST PLOW; a name which has probably been given to the Implement in this state; and continued to be applied to the spade or share, after the moldboard was laid aside.

In working with this tool, the laborer proceeds without stopping to divide the sods into short lengths; this part being done by women  
and

and children ; who follow, to break the turf into lengths, and set the pieces on edge, to dry.

The PRICE for "SPADING" is about three halfpence, a square perch, of 18 feet, or sixteen or seventeen shillings a statute acre.

Formerly, it is probable, this instrument was much in use ; but, at present, it appears to be chiefly in the hands of small farmers.

The instrument at present used, for separating the spine or grassy turf from the soil, by farmers in general, is the common TEAM PLOW, with some little alteration in the size and form of the share ; according to the fancy or judgement of the farmer or his plowman ; there being two different ways of performing the operation. The one is termed "Velling," the other "Skirting," or "Skirwinking."

For VELLING, the share is made wide, with the angle or outer point of the wing, or fin, turned upward, to separate the turf entirely from the soil.

For SKIRTING, the common share is used ; but made, perhaps, somewhat wider than when it is used in the ordinary operation of plowing.

In this mode of using the plow, little more than half the sward is pared off ; turning the

part raised, upon a line of unmoved turf; as in the operation of rice-balking, or half plowing. The paring of turf, in this case, is from one to two inches thick, on the coulter margin, decreasing in thickness to a thin feather edge, by which it adheres to the unmoved sward.

Having lain some time in this state, to rot or grow tender, it is pulled to pieces with “drags”—rough *harrows*, drawn across the lines of turf; and, having lain in this rough state, until it be sufficiently dry, it is bruised with a *roller*, and immediately harrowed, with lighter harrows; walking the horses one way, and trotting them the other; to shake the earth out more effectually from among the roots of the grass; going over the ground again; and perhaps again, according to the season, and the judgement of the manager; until most of the earth be disengaged.

The “BEAT,” or fragments of turf, being sufficiently dry, it is gathered into heaps of about five or six bushels each; either with the “DRUDGE,”—mentioned under the Section Implements,—first into rows, and then, drawing it along the rows, into heaps; or is pulled together with long-toothed *HAND RAKES*, adapted to the purpose. The former is more

expeditious, and requires fewer hands; the latter gathers the beat cleaner,—freer from soil; which is liable to be drawn together by the drudge.

The “BEAT BURROWS,” or heaps, being rounded, and shook up light and hollow, a wisp of rough straw,—a large handful,—is thrust, double, into the windward side of each heap: and, a number of heaps being thus primed, a match or flambeau is formed, with “reed” or straight unthrashed straw; one end of which being lighted, it is applied, in succession, to the loose ragged ends of the wisps of straw; which readily communicate the fire to the heaps.

The centre of the heaps being consumed, the outskirts are thrown lightly into the dimples or hollows, and the heaps rounded up, as at first; continuing to right up the burrows until the whole of the beat be consumed, or *changed*, by the action of the fire.

The produce of the first skirting being burnt, and spread over the surface, the operation is sometimes repeated; by running the plow across the lines of the first skirting: thus paring off the principal part of the spine; again dragging, rolling, harrowing, collecting, and burning, as in the former operation.



## GENERAL REMARKS ON SODBURNING.

HAVING formerly spoken, at some length, on this subject, the less is requisite to be said at present\*. Nevertheless, the practice of this country (to which I was a stranger when I wrote those remarks), tending to confirm the ideas which are therein offered; and this District being, in all probability, the fountain and source of the practice, in these kingdoms, it would be improper to dismiss a topic, which is of considerable importance to the rural concerns of the Island, without taking a retrospective view of the process, in this quarter of it.

There needs not a better proof, that the practice, under the guidance of discretion, is not *destructive* to soils, nor any way *dangerous* to Agriculture, than the fact, so fully ascertained here, that after a constant use of it, during, perhaps, a long succession of ages, the soil still continues to be productive; and, under management in other respects below par, continues to yield a rent equivalent to that drawn from lands of equal quality, in more enlightened Districts: and there ap-  
pears

\* See YORKSHIRE, Vol. I. p. 291.

pears to me strong reason to imagine, that, *under the present course of management*, sod-burning is essential to success. Indeed, instances are mentioned, and pretty well authenticated, in which men, who stood high in their profession, and of sufficient capitals, have been injured or brought to poverty, through their being restricted from this practice; which may be said to form a principal wheel in the present machine or system of the Devonshire husbandry. For it is observable, that the Wheat crops of this District, after the burning, liming, and one plowing, which will be mentioned in describing the culture of that crop, notwithstanding the accumulated foulness of the soil, already described, are, in general, beautifully clean; and this, tho' the succeeding crop of Barley may be foul in the extreme: a circumstance, perhaps, which would be difficult to explain, in any other way, than in the check which the weeds receive, from the burning. The imperfect tillage, of one plowing and a chopping, cannot be allowed to have much share, in producing this husband-like effect.

Let it not, however, be understood, that any facts, which are here brought forward,

are intended to shew the *necessity* of sod-burning, in this or any other District. To three fourths of the Island, the practice may be said to be unknown; yet in many parts of this unburnt surface of country, if not throughout the whole of it, the present state of husbandry is preferable to that of Devonshire; and, whenever CLEAN FALLOWS, and suitable FALLOW CROPS, shall be introduced, here, and judiciously mixed with the grain crops, agreeably to the practice of modern husbandry, burning beat will certainly be no longer required.

In fact, the upland soils of this country are ill adapted to the practice. The soil under ordinarily good management, is, in its nature, productive of clean sweet herbage; and, under a proper course of husbandry, never would become coarse and rough-skinned, so as to require this operation; which is, as has heretofore been remarked, peculiarly adapted to old coarse tough sward, whether of dry land or wet, light land or heavy; and, in much probability, to cold retentive soils, as often as a suitable rotation of crops will permit\*.

That burning the grassy sward of land acts

as

\* See YORKSHIRE, Vol. I. p. 293.

as a *STIMULUS* to the soil is every where observable: in this District, I saw a striking instance of it. A meagre thin-soiled swell, never worth half a crown an acre, has, by burning and liming, been stimulated to throw out, part after part, ample crops of wheat: which, however, were found to exhaust the soil, so completely, that no after crops of grain were attempted; but the land was suffered to lay down again to rest, and yet remains in a state of still less value, perhaps, than it was in, before it was broken up for wheat.

This, however, is not an evidence against the operation of sodburning; but the reverse. The value of the wheat, thus produced, was probably equal to that of the fee simple value of the land it grew on; which, if a grateful return, of part of this value received, had been made, would probably have been put into a much better state than it was in, before it underwent this profitable operation.

Does not lime, when used alone, act in some sort as a stimulus? Does not tillage act as a stimulus? Yet will any one assert that calcareous earths and tillage are unfriendly to agriculture?

From what I have seen, in this country,

of the effects of sodburning, I am more and more convinced, that, in many cases, and under discreet management, it forms a valuable part of British husbandry; and may become an instrument of real improvement, in places where it is not, at present, known; especially in bringing the WASTE LANDS of the Island into a proper course of cultivation\*.

POLITICAL AGRICULTURE appears to me to be highly interested in the continuance of this practice; which men, who farm in closets, seem desirous to extinguish. But let them theorize with caution; and go forth into the field of practice, before they venture to draw inferences, which may prove subversive of the public good they doubtlessly intend to promote.

MEN OF LANDED PROPERTY, however, ought to regard this practice, with a watchful eye. Through its means, a tenant has it in his power to enrich himself, at the expence of his landlord. And altho, while he is doing this, he may be enriching the Public; yet proprietors, considered as such, have an undoubted

\* For remarks on the means of CULTIVATING WASTE LANDS, see YORKSHIRE, Vol. I. p. 296.

doubted right to guard their property. But let them not, by an ill judged and narrow-minded policy, injure, at once, the Public, their tenants, and themselves. It may be prudent to restrict tenants, in certain cases, from the use of this practice; but to debar them from it, in all cases, would be equally impolitic, as to restrict them from the use of calcareous earths; or, as is too often the case, to debar them from the use of the plow, where the application of it would be beneficial to themselves, to their tenants, and to the community. This is, in truth, laying up their talents in napkins.

IN EVERY CASE, IN WHICH A LANDLORD GIVES UP SPECIAL ADVANTAGES TO A TENANT, HE OUGHT TO BE PAID DOWN A REASONABLE CONSIDERATION FOR SUCH ADVANTAGES; OR THE TENANT SHOULD BIND HIMSELF TO PAY, DURING A SUITABLE TERM, AN EQUIVALENT RENT.

#### REFERENCES TO MINUTES.

- 7. On the imperfect tillage of Devonshire.
- 11. On plowing with whip reins.
- 16. On freeing arable soils from stones.
- 17. On reclaiming them from weeds.
- General remarks on fallowing.
- 39. On plowing with two oxen, in yoke, with reins.

## 9.

## M A N U R E S

AND

## THEIR MANAGEMENT.

THE manures, at present in use, in this part of the Island, are,

I. Dung,

II. Sea sand, and

III. Lime\*.

I. DUNG. This is either YARD DUNG, or what is called "PLYMOUTH DUNG;" the latter arising from the scrapings of the streets, with ashes and offal of every kind, which populous towns afford, and which, when applied to lands that have not been accustomed to additions of that nature, seldom fail of producing, for a time at least, a favorable effect †.

In

\* On the coast, especially of Cornwall, the REFUSE of the PILCHARD FISHERIES, and sometimes DAMAGED PILCHARDS, in quantity, are used as manure.

† But see MIN. 60, on the transient effect of this species of manure.

In regard to the RAISING of YARD MANURE, I have met with nothing commendable, here. Farm yards are without form, and unguarded from extraneous water : nor are they supplied with mold or other absorbent substances, to imbibe and retain the superfluous juices of the dung.

II. SEA SAND. This has been a manure of the District, beyond memory, or tradition.

There are two SPECIES still in use. The one bearing the ordinary appearances of sea sand, as found at the mouths of rivers ; namely, a compound of common sand and mud. The other appears, to the eye, clean fragments of broken shells, without mixture ; resembling, in color and particles, cleaned bran of wheat.

By analysis, one hundred grains of the former contain about thirty grains of common siliceous sea sand, with a few grains of fine silt or mud ; the rest is calcareous earth (35 grains), mixed with mud and the animal matter of marine shells.

One hundred grains of the latter contain eightyfive grains of the matter of shells, and fifteen grains of an earthy substance, which resembles, in color and particles, minute frag-



ments of burnt clay, or the dust of common red bricks.

These sands are raised in different parts of Plymouth Sound, or in the harbour, and are carried up the estuaries, in barges; and from these, on horseback, perhaps five or six miles, into the country; of course at a very great expence: yet without discrimination, by men in general, as to their specific qualities. The shelly kind, no doubt, brought them into repute, and induced landlords to bind their tenants to the use of them; but without specifying the sort; and the barge-men, of course, bring such as they can raise, and convey, at the least labor and expence\*.

But the use of sea sand has been for some time on the decline, in this quarter of the county, and is now in a great measure superseded, by

III. LIME. This species of manure, I understand, has been more or less used, here,  
for

\* It is probable that the specimen first mentioned, is above par, as to quality. I have seen sand of a much *cleaner* appearance, travelling towards the fields of this quarter of the country: and, near Biddeford, in North Devonshire, I collected a specimen, under the operation of "melling" with mold, which contains eighty grains percent of clean flinty sand!

for about sixty years: a proof that, heretofore, the West of England stood forward in Rural Improvements.

The only SPECIES in use is burnt from a variegated STONE, or marble, raised near Plymouth; and carried up the different estuaries; along the banks, and at the heads of which there are kilns, wherein great quantities are burnt; by men who make a business of burning it.

The LIME KILNS of Devonshire are large, and of an expensive construction; some of them costing not less than thirty or forty pounds, each. But their duration is in proportion: one which has been built thirty years is still firm and sound on the outside. The walls are of extraordinary thickness; wide enough, on the top, for horses to pass round the kiln, and to deliver the stones.

The body or inside of the Devonshire kiln is not well formed. The sides are too straight; the cavity is not sufficiently oval,—is too conical,—too narrow in the middle, and wide at the top,—the contents, of course, hang,—do not settle down, freely, and evenly,—as they do in a well shaped kiln\*. The

\* 1804. The West Devonshire kilns are now undergoing the required alteration.

rim is guarded with a curb of large moor-stones.

The stones are brought up from the water side, on horseback, or upon mules or asses; and, being distributed round the top of the kiln, they are there broken, and thrown into it with shovels; without the extra trouble of carrying them in baskets: a saving, probably, which counterbalances the apparently extra expence of carrying up the unbroken stones, on horseback, instead of in carts: so that we have, here, as in many other instances in Rural Management, two roads, of similar length and expediency, leading to the same end.

The FUEL chiefly, or wholly, *Welsh culm*\*.

### Lime

For elementary remarks on the LIME FURNACE, see TREATISE ON LANDED PROPERTY.

\* 1804. I have lately observed, on the Southern skirts of Dartmore,—near Ilsington,—an instance of burning lime stone, with *faggots* (of furze) in a manner similar to that in which *chalk* is burnt, in the SOUTHERN COUNTIES: a practice which I find is not uncommon in that neighbourhood.

The stone is a hard black marble (similar to that of Chudleigh) in large blocks. The oven or fire place, is here built by masons:—the forming of it not being a mystery of limeburners, as it is in Sussex. The kiln, to which I more particularly attended (larger than the Sussex kiln) requires (I was told by an intelligent countryman)

Lime is SEPARATED into two sorts, at the kiln. Those who carry it to a great distance, on horseback, take only the clean knobs, or "STONE LIME;" the ashes and rubbish being sold, at a lower price, to those who have lands at a shorter distance from the kilns, under the name of "LIME ASHES." This is a very accurate practice, when lime is carried to a great distance\*.

Upon the whole, the manufacturing of lime may be said to be well conducted, in this country; and the PREPARATION of it, for manure, is entitled, at least on the score of industry, to still higher praise, and to a minute description.

Previously to fetching the lime, "earth ridges" are formed in the field; either with mold hacked from the borders of it, or with the soil of the area, raised with the plow. The earth thus raised is broken into small fragments, and formed into long narrow beds. Upon these earth ridges the stone lime is laid; and covered up with the outskirts of the beds.

to be kept on fire six days!—consuming in that time 6,000 faggots. This may or may not be the fact.

\* Lime ashes are also used for the cement of ordinary buildings: the sinder serving, in part at least, as a substitute of sand.

When the lime has burst the covering, and is found to be sufficiently fallen, the ridges are “melled;” the earth and lime are intimately mixed together; in a very ingenious and effectual manner. The workman begins at one end of the ridge; and, with a hack or single-ended mattock, hacks down the heap; mixing the whole intimately, by beating it with the *side* of the hack; raising it up again with the point, and again hitting it sideways, with a slight and dexterity to be acquired only by practice. When the two ingredients are sufficiently blended, the compost is thrown back, with a shovel, and formed into a roof-like heap; still continuing to burst any lumps which the hack had missed, with the back of the shovel, and to mingle the parts as evenly as possible.

In these ridges the compost remains, until the time of spreading.

Lime compost is SPREAD from the ridges, or angular heaps above described, by means of slide butts, or of wheelbarrows. When the latter are used, it is proper to harrow and roll the surface, before the operation commences.

GENERAL REMARKS ON THE APPLICATION  
OF LIME AS A MANURE.

THE right application of lime to the soil, has long appeared to me a subject which deserves the strictest investigation. In NORFOLK, marl being the prevailing calcareous manure, I paid the less attention to lime. In YORKSHIRE, lime has long been depended upon, as a principal agent, in the production of arable crops. In that District, therefore, I paid much attention to the subject\*. In GLOUCESTERSHIRE, it can scarcely be said to enter into the list of manures. But, in the MIDLAND COUNTIES, it has, for some time past, been in full estimation; and some considerable attention is paid to its application; especially in watering and turning over the load heaps, before they be spread out upon the soil †.

In the application of lime to soil, as a manure, the perfection of management appears to be, from what is at present publicly known on the subject, the incorporation of the two substances, into one homogeneous mass; or, at least, to mix the lime in a state

\* See YORKSHIRE, Vol. I. p. 328.

† See MIDLAND COUNTIES, Vol. I. p. 151.

of powder, with some portion of soil, in order to separate its particles, and prevent their adhering in lumps, and returning, in this form, to a state of chalk or marl: for altho Lime reduced to that state may not be lost to the soil, as a manure, it probably does not act as *Lime*, but as *Marl*; and, of course, a given quantity of Lime, laid on in whole stones or large fragments, will not produce the same effect, in a given time, as it would have done, had it been more evenly distributed,—more mechanically assimilated with the soil.

There are two widely differing methods of effecting this mechanical union. The one is to reduce the soil to a fine tilth; to spread the Lime evenly over it, in a state of powder; and to mix them together, WITH THE ROLLER AND HARROW, until the whiteness of the Lime disappears: suffering them to remain in this state, if the season will admit of it, until a fall of rain has carried downward the finer particles of the Lime, and impregnated the substance of the soil with the calcareous principle.

The other method is to mix the Lime, BY HAND, with a certain portion of soil collected

for that purpose; agreeably to the practice of the District under view.

In a favorable climate; in the summer season; and where a sufficient quantity of Lime can be readily collected; there can be no doubt as to the superiority of the first method: it is more expeditious, much less expensive, and infinitely more complete.

But, in a less certain climate and season, and where the business of fetching Lime goes on slowly,—continuing, perhaps, through the summer months,—the Devonshire practice, unless the Lime were lodged under cover, until the land were ready to receive it, is certainly the most eligible. The great objection to it is the labor and expence which it incurs. The “hacking of vurheads,”—the forming of “earth ridges,” the “melling,” and “setting about lime and earth” may be said to employ a set of laborers the summer through.

Experiencing the tediousness and inconvenience of these operations, and seeing the wetness and uncertainty of the climate, with respect to “burning Beat,” it struck me that much time would be saved, and a degree of certainty gained, by uniting the two operations of preparing Lime, and burning Beat:



namely, by burning the Beat with the Lime; and by mixing the Lime with the ashes and soil of the Beat: thus saving, on either hand, much labor; setting the season, as it were, at defiance (for the wetter the Beat the quicker is the operation of the Lime); and at the same time, destroying the roots and seeds of weeds, with the eggs of insects and animalcula of various kinds; and this, *perhaps*, with less injury to the vegetable matter of the Beat, than by the ordinary process of combustion. Strongly impressed with these ideas, I set about carrying them into execution. The result will appear, in MINUTE 32.

For remarks on coal ashes, as a species of manure, see MINUTE 60.

## 10.

### SEMINATION.

I GATHERED no *general* information, respecting this department of the arable Management, in the District under view. Every thing is sown broadcast. A modern drill made its appearance some years ago; but it has been laid aside.

The method of seminating the Wheat crop, here, is singular. It will appear in its place; under the head WHEAT.

## I I.

# THE MANAGEMENT OF GROWING CROPS.

THE Management of Crops during their Growth, is confined to HAND-WEEEDING, which is performed with ordinary care. The HOING of Field Crops has not yet been introduced: not even for TURNEPS! as will appear under that head.

The VERMIN of ARABLE CROPS are below par, in number and destructiveness.

GAME is kept within bounds: there are few Hares, and no Pheasants.

PIGEONS are not numerous.

ROOKS, in some places, are evidently too numerous.

SPARROWS are in considerable number; and require to be checked: a business which rests with Farmers; who can have no color of complaint against Gentlemen for encourag-

ing rooks, while the more injurious Sparrows are suffered to remain in force.

WILD DEER were formerly common, in the woods of this District, and were found very injurious to the bordering crops. But, through the good offices of the late Duke of Bedford, the country is now (1796) nearly free from them.

## I 2.

### HARVESTING.

THE Harvest Management, at present established in the District, has evidently risen out of the practice of carrying home harvest produce on horseback. For altho this practice has in some degree been laid aside, the operations of Harvest (that of carrying excepted) are the same as they were, before the introduction of wheel carriages.

Every article of corn produce is BOUND; even the rakings of barley and oats that have been mown! But this, in the horseback husbandry, was perfectly right. Sheaves, or bundles of any sort, are not only much fitter for loading between crooks, but are handier to be pitched, or rather flung, from the ground

or floor, to the top of the rick or mow, in the manner that will be described, than loose corn. I have seen rakings wasted; because there was not time to bind them, before the rain set in; tho waggons were standing by, to receive them.

Formerly, it seems, loose corn, which had been cut with the sithe, was "led" in "trusses,"—or large bundles, each a horse load, bound together with two ropes, and laid across a "panel" or pad saddle (without crooks), and steadied or "led" by a woman or youth, from the field. This was called "truss leading" or "leading"—a term which is common at this time, in the North of England, and in Scotland, for carrying, hauling, or drawing hay, corn, or other article, on a carriage; and which, perhaps, owes its origin to an obsolete and forgotten practice, of a similar nature, in those Provinces.

In a general view, the Harvest Management of this District is below that of many others: nevertheless it differs, in various respects, from that of every other part of the kingdom; and certainly merits a place, in a register of the present Practice of English Husbandry.

The particulars which require to be detailed are these :

I. Hewing Wheat, and Raking the Stubbles.

II. Setting up Shucks.

III. Making Arrish Mows.

IV. Turning Corn in Swath.

V. Binding Oats and Barley out of Swath.

VI. Carrying Sheaves on Horseback.

VII. Pitching them to the Mow or Stack;

VIII. The Form of Corn Stacks.

IX. Thatching Corn Stacks.

I. HEWING WHEAT. This is a kind of mowing with one hand. The "Yowing Hook" is formed much like the common sharp-edged "hand reaping hook" of this and other places; but somewhat larger every way—longer, broader, and stouter; with a hooked knob at the end of the handle, to prevent its slipping out of the hand.

With this instrument, the corn is struck at, horizontally, and almost close to the ground, with the one hand; while the other hand and arm *strike* it, at the same instant, about the middle of the straw; thus driving it, upright, against the standing corn: the workman taking a sweep, round as much as

will form a sheaf, and collecting the whole together, in the center, in a sort of leaning cone; finally striking the hook under its base, to disengage it entirely from the soil; but still supporting it, with the left or loose arm and the leg, until the hook be put beneath it, to lift it, horizontally, to the band.

In variation of this method, I have seen the hewer force his way up one side of a narrow ridge, against the wind, and back on the other side; thus collecting half a sheaf; and then fetching another half sheaf in the same manner.

This practice is not peculiar to the West of England: it has long been in use, in the Southern Counties of Kent and Surrey: where, however, it is considered as a slovenly and bad practice. If a crop of wheat be free from weeds, and stand well upon its legs, this method of cutting is expeditious and eligible enough: but if the corn be lodged or ravelled, or foul at the bottom, with green succulent weeds, it is altogether improper: indeed, in the former case, it requires expert workmen to make good work.

This method, it is true, affords longer straw (more and better "reed") than reaping does; and this may be another motive for

using it. But a *SITHE*, in good hands, will make equal or better work, is more expeditious, and cuts still closer to the ground.

To secure the scattered corn, which this loose method of cutting leaves upon the ground, women or boys collect and set up the sheaves; and are followed by women with *RAKES*, to draw together the loose corn: *GLEANING* being seldom permitted, until the shucks be out of the fields\*.

II. *SHUCKS* are here formed of ten sheaves, set up in an extraordinary manner. Nine of them are crowded together in a square pyramid, of three sheaves every way, and the tenth is put over them, as a cloak or hood.

This is evidently a bad practice. The close posture of the sheaves prevents a circulation of air among them; the center sheaf being wholly excluded from it. And, in most cases,

\* Another distinguishing trait of the *DEVONSHIRE HUSBANDRY* is marked, by the *HARVEST HOLLA*,—which is here given when the *cutting of wheat* is finished; and not according to the ordinary custom of England, when the last load of Corn is drawing home.

1804. The same custom is observable in South Wales; where much ceremony is used on the occasion. It is probably of *Celtic* origin.

cases, the covering is very imperfect; one sheaf, unless it is very large and the straw very long, is not sufficient to secure the rest from rain water; but rather serves to conduct it into the centers of the upright sheaves.

Shucks of ten sheaves, with eight set up in a double row, and with two inverted as hoods or thatch, are much more secure and eligible.

III. "ARRISH MOWS"—or Field Stacklets. In a late harvest, and in a moist climate, like that of West Devonshire and Cornwall, especially after a wet summer, which seldom fails of filling the butts of corn sheaves with green succulent herbage,—securing the ears from injury, and at the same time exposing the butts to the influence of the atmosphere, is, self-evidently, an admirable expedient.

They are of various sizes. Those which I have observed, generally contained about a waggon load of sheaves. But they may be made of any size from a shuck of ten sheaves to a load.

The method of making them is this: a sort of flat cone, or pyramid, being formed with sheaves set upon their butts, and leaning to-



wards the center, the workman gets upon them, on his knees; an assistant putting sheaves, in their proper places, before him; while he crawls round the "mow;" *treading* them, in this manner, with his knees, applied about the banding place; and continuing thus, to lay course after course, until the mow be deemed high enough: observing to contract the dimensions as it rises in height, and to set the sheaves more and more upright, until they form, at the top, a sharp point, similar to that of nine sheaves set up as a shuck; and, like this, it is capped with an inverted sheaf, either of corn or of "reed:" the principle, and the form when finished, being the same in both; namely, a square pyramid: a form which would seem to have been taken from the pyramidal shuck\*.

Where corn is put up into these little stacks it is considered as safe, and is suffered to stand some weeks in them. I have seen  
sheep

\* Have not these practices been imported from the Continent?

1804. Arrish Mows, or Field Stacklets, are equally or more prevalent, in Wales;—particularly in Pembroke-shire, and Carmarthenshire. Perhaps the practice is purely *Celtic*.

sheep feeding in the stubble, while the corn was standing in these piles †.

The only disadvantage, that is mentioned, of this mode of harvesting (which is applicable to oats or barley as well as to wheat), is that of mice being thereby liable to be conveyed from the field to the barn. But, quere, do field mice remain long in a barn? A more probable disadvantage is that of its rendering the corn difficult to be thrashed.

IV. TURNING CORN SWATHS. This I have seen done, BY HAND. The Corn, being gathered up carefully in the hands and arms, the turners face about, and spread it evenly upon fresh dry ground. This is an accurate mode of turning; and a good preparation for binding. But the turning of Corn Swaths is more generally done with slender poles; cut out of the hedges, six or eight feet long, about the size of a flail handle, and somewhat crooked: a tool which I have seen used in other Districts. It is incomparably preferable to the head of the Rake, or the tines of the Prong; being peculiarly well adapted to the purpose of *lifting* over the

† In Somersetshire, I have observed stubble Turneps growing between rows of Arrish Mows.

Swaths ; and ought to be everywhere in use\*.

V. BINDING CORN SWATHS. In general, however, the Harvesting of mown Corn is done in a slovenly manner. The mowing is roughly performed, and the binding executed in a still coarser way. In harvesting Oats, which had stood too long before they were cut, I have seen one fourth, if not one third, of the crop left shed upon the ground. In common practice, a very considerable share of the crop is harvested in the form of rakings ; so much being left on the stubble, after the sheaves are removed, that it requires to be raked *both ways* ; namely, to be gone over twice ; the second raking being done across the first.

In binding, the Swaths are rolled into "skoves," with short rakes ; the band stretched over the bundle ; the ends, one in each hand, forced beneath it ; the bundle lifted

\* I have elsewhere assigned my reason for descending to the Minutiæ of the Harvest Management. (See MID. COUNT. MINUTE 102.) The task of registering the Manual Operations of Husbandry is irksome in the extreme. And nothing but a full conviction of its utility could induce me to perform it.

lifted up, turned over, and the twisted ends of the band tucked in: an expeditious method.

If the crop be short, "reed" is used for binding it: it was with the utmost difficulty I had a field of barley,—which, through the thinness of the soil and dryness of the summer, was too short for bands, and which was clean, and in the highest order for stacking,—carried to the stack in waggons, without the expence and trouble of tying it up in bundles.

In a climate so uncertain as that of West Devonshire; and most especially in a late harvest; setting up mown corn in singlets, agreeably to the practice of the North of England, would, I am convinced, be the most eligible practice. For the method of setting up corn in this manner, see YORKSHIRE, Vol. I. page 253.

1804. I have since observed some instances of this practice.

VI. IN CARRYING SHEAF CORN ON HORSEBACK, the Sheaves are packed in, between the crooks, head to tail, with the butts outward, and carried up, even; piling the load considerably above the horse's back. The lower part of the load is laid in, by hand, the upper part piled up with a fork;

which being set firmly under one of the cross bars of the crooks, a rope, previously thrown over, is pulled down tight and fastened; the fork being a stay or purchase to pull against.

A string of horses being thus laden, a boy travels them soberly to the barn or rick yard; where they are unloaded, by pushing back the upper part of the load with the fork, throwing it over the tail of the horse, upon the floor, or to the ground, a cloth being generally spread to receive it\*: the crooks being finally cleared, by hand, in rather an immechanical manner.

The whole string unloaded, the boy mounts, and, standing upright between the crooks, trots, or perhaps gallops, his horses back to the field; frequently, to the no small dismay, or perhaps injury, of peaceful travellers. A somewhat uncivilized practice.

VII. PITCHING CORN SHEAVES. The Sheaves being thus left upon the floor or the ground, without any advantage from a carriage, an expedient (where the mow or stack rises to a height above the reach of an ordinary

\* Hence, the use of a door, with a platform and roadway, on the higher side of the barn: see page 59. I have seen a rick yard, on a similar plan,

nary fork) has been struck out, and brought, by practice and the emulation of young men, to an extraordinary degree of slight and expertness. In this case, the sheaves are *flung*, provincially "pitched" from the point of a prong, formed very narrow in the tines, over the head of the pitcher, who stands with his back to the mow; a boy placing the sheaves fairly before him. I have seen a man thus PITCHING SHEAVES, from level ground, up to the roof of a stack above the ordinary height, throwing them several feet above the reach of his fork.

The spring is gained, either by the arms and the knee jointly; or is done at arms length. When the height is very great, or the sheaves heavy, two men's exertions, it seems, are joined: one man placing the tines of his fork under the "stem" or handle of the other!

Much probably depends on the forming of the tines of the prong: they contract upwards to an acute angle: the sheaves, of course, part from them with a degree of spring, given by the straw compressed between them.

VIII. THE FORM OF STACKS. The stem is usually carried up square, and high; but

the roof is made very flat, and hipped, or sloped on every side: so that the roof, which in many Districts contains nearly one third of the contents of the stack, does not here, perhaps, contain a sixth part. The difficulty of pitching from the ground, and the excellency of "reed" as a thatch, may have assisted in fixing this prevailing fashion.

IX. THE METHOD OF THATCHING STACKS, in West Devonshire, is very judicious and effectual. The "reed" is spread thinly and evenly over the roof, and is fastened with "spars" or hazel rods, pegged down to the butts of the sheaves, and covered by the next course of "reed," in the manner in which real reed is laid, in Norfolk.

But, in Cornwall, I saw the reed fastened on with straw ropes, stretched horizontally, within a few inches of each other; as in the Highlands of Scotland!

GENERAL OBSERVATION. Upon the whole, the business of Harvest, except in as much as relates to the Field Management of mown Corn, and the forming of Wheat Shucks, may be said to be well conducted, in this District. It is true, that corn in general is here allowed less field room, or time between the cutting and the carrying, than it is in

most other places; but, seeing the uncertainty of the climate, in this peninsular situation, the deviation is evidently on the right side.

### 13.

#### THE MANAGEMENT OF HARVESTED CROPS.

IN this department of the Devonshire husbandry, there are two or three peculiarities of practice which require to be registered.

**HOUSING STACKS BY HAND** is not uncommon. Under the horse-and-crook system, it is perfectly eligible; and, where carriages are in use, it is comparatively more expeditious, than an East-countryman would readily allow. In an instance noticed, five men housed about eight loads of wheat, in seven or eight hours. Two men, upon the stack, bound the sheaves, in bundles of ten each, with ropes, and let them down, upon the shoulders of other two men, who carried them to the barn, from thirty to forty yards distance, and handed them up to the fifth man, on the mow. This remainder of a stack would have broken deeply into the day's



work of a team; and, in a busy time, would have cost twice the money that the wages of these five men amounted to; which, at a shilling a day, was not more than three or four shillings.

THE METHOD OF THRASHING WHEAT, in this District, and throughout the West of England, is too singular to be passed without notice. While straw continues to be used as thatch, the practice is highly profitable.

The object of this method of Thrashing (which is applicable to RYE, as well as to WHEAT), is to extract the grain from the ear, with the least possible injury to the straw. To this end, the ears are either thrashed lightly with the flail, or they are beaten across a cask, by hand; until the grain be got pretty well out of them: If the corn is smutty, the latter is the more eligible method.

The next operation is to suspend the straw, in large double handfuls, in a short rope, fixed high above the head, with an iron hook at the loose end of it; which is put twice round the little sheaflet, just below the ears, and fastened with the hook's laying hold of the tight part of the rope. The left hand being now firmly placed upon the hook, and pull-

ing downward, so as to twitch the straw hard, and prevent the ears from slipping through it, the butts are freed from short straws and weeds, with a small long-toothed rake, or comb. This done, the rope is unhooked, and the "reed" laid evenly in a heap.

A quantity of clean, straight, unbruised straw, or "reed," being thus obtained, it is formed into small sheaves, returned to the floor, and the ears thrashed again with the flail, or is again thrashed by hand over the cask, to free it effectually from any remaining grain, which the former beating might have missed.

Lastly, the reed is made up into large bundles—provincially "sheaves"—of thirty-six pounds each; with all the ears at one end; the butts being repeatedly punched upon the floor, first in double handfuls, and then in the sheaf, until they are as even, as if they had been cut off smooth and level, with a sithe, or other long edgetool; while the straws lie as straight, and are almost as stout, as those of inferior *reed*, or stems of the *Arundo*.

It is not for the purpose of thatch, only, that the straw of wheat is carefully preserved from the action of the flail; but for the pur-

pose of litter also ; it being found to last or wear much longer, in this capacity, than softly bruised straw ; which may be said to be already on the road of decay, and to have passed the first stage toward the dunghill.

Women sometimes assist their husbands in the work of thrashing wheat, in this manner ; as in beating it over the cask, or in raking out the loose straw ; as well as in making up the reed\*.

In thrashing BARLEY and OATS, the opened sheaves

\* In one instance, I saw a frame, for beating the ears over, instead of a cask ; the construction somewhat resembling that of a very wide, short, crooked ladder, supported nearly horizontally, with its convex side upward ; the cross bars being set edgeway, and a few inches from each other ; with an angular piece of wood running lengthway through the middle of the frame, and rising above the cross bars,—to separate, and spread with greater ease, the ears of the corn ; and thereby to render the strokes the more effective.

1804. THRASHING MILLS have of late years been making their way, rapidly, into Devonshire ; where they are used, not only in thrashing over the whole of the straw, as in the practice of other Districts, but, by a simple application, in “ making reed :” the ears, only, being exposed to the action of the beaters ; and are withdrawn when the grain is discharged. The operation, however, appears to be slow ; considering the labor and attendance it requires.

sheaves are piled on one side of the floor, and drawn over, heads-and-tails, to the other; the thrashers of the Western, as well as of the Northern, extremity of the Kingdom, *keeping stroke*;—and, here, this animating practice is sometimes extended to four thrashers working in the same barn; performing a peal, which, tho monotonous, is not displeasing to the ear.

“STRAW”—namely, FODDER STRAW—is here bound in very large, long, two-banded trusses; no doubt that it may be the more easily “led” to the place where it may be wanted. And where carriages are in use, the practice is continued.

The last particular of Practice, noticeable under the present head, is that of WINNOWER WITH THE NATURAL WIND. Farmers of every class (some few excepted) carry their corn into the field, on horseback, perhaps a quarter of a mile from the barn, to the summit of some airy swell; where it is winnowed, *by women!* the mistress of the farm, perhaps, being exposed, in the severest weather, to the cutting winds of winter, in this slavish, and truly barbarous employment. The obsolete practice of the Northern extremity of the Island, in which farmers

loaded their wives and daughters with dung, to be carried to the fields on their backs, was but a little more uncivilized. The machine fan, however, is at length making its way into the Western extremity.

## I 4.

## M A R K E T S.

PLYMOUTH, and its environs, form the metropolis of the District, in which its various products may be said to concenter. The consumption, there, depends much however upon the circumstances of War and Peace.

TAVISTOCK, nevertheless, has a good CORN MARKET: a large flour mill, in this place, is conducted with judgement and spirit.

The STOCK FAIRS of the District are chiefly those of Tavistock; where very great numbers of lean cattle, reared in Cornwall and West Devonshire, are bought up, by Somersetshire and other "East-country" Graziers. There are, however, several VILLAGE FAIRS, in this, as in other parts of the Island.

## REFERENCES to MINUTES.

5. Notices, at Tamerton fair.  
14. ———, at Plympton ———.

## W H E A T,

AND ITS

## PARTICULAR MANAGEMENT.

IN registering the minutial Management of this and the other crops of the District, I shall follow the same Plan of Arrangement, which I have, on every other occasion, found it right to pursue.

The SPECIES of Wheat usually cultivated is the common white Wheat.

SUCCESSION. It is universally sown on ley ground.

SOIL. It is grown on every sort.

The SOIL PROCESS is mostly that which has been described, under the *general head*, MANAGEMENT OF THE SOIL: namely, that of cutting or tearing off the sod, and burning it. But this is not invariably the practice: sometimes the Ley is broken up by a full depth plowing; which, I think, is called "rotting the spine." To this succeeds a sort of rough bastard fallow; the roots and rubbish, which harrow up, being burnt, if the weather be favorable.

**MANURE.** Formerly, SEA SAND and DUNG were in use. Now chiefly LIME, with perhaps a small portion of dung. The METHOD of LIMING has been described. See page 158.

**SEED PROCESS.** This is one of the many operations, belonging to the established practice of the District under survey, which have so little resemblance to the established practice of the Island at large, that they can scarcely be considered as belonging to British husbandry.

A mere Provincialist of the central, or the Northern, parts of the Island, might travel through all the countries of Europe, and not find practices more foreign to his own, than are those of Devonshire.

The TIME OF SOWING Wheat is late; the seed time continuing from October to near Christmas. The reason given for late sowing is, that "early sown crops are liable to weeds." This precaution, added to the burning and the lime (as before mentioned), accounts more fully for the cleanness of the Wheat crops of this District; notwithstanding the foulness of the soils, with respect to weed seeds. But in a backward and uncertain climature, late sowing cannot surely be altogether right.

The SEED PLOWING, which, in the ordinary practice of the District, is the only full depth plowing given for Wheat, takes place immediately previous to the sowing. The soil is, I believe, invariably laid up in narrow lands; and, in general, diagonally across the field\*. The usual width is four bouts, or eight plits; one plit, or narrow balk, being left standing †.

Previously to the sowing, the entire surface of the field is HACKED OVER, BY HAND! with large heavy hoes or hacks: each man taking two plits; which, in the seed plowing for Wheat, are plowed of a narrow width, and which, in this operation, are cut into square clods, the size of spits or spade bits:

\* Two reasons are given for this practice; either of which is a sufficient apology for it. On steep lying grounds, and when the hedges accord with the line of declivity, oblique ridges check the too rapid descent of rain waters, and prevent the soil from being washed away. The other (which from the observations I have made is less attended to) is that of endeavoring to lay the ridges north-and-south; in order that they may receive the sun's rays equally on either side of them. And other advantages might be added. See YORKSHIRE, ON LAYING LANDS ACROSS THE SLOPE.

† The practice of sowing Wheat on narrow ridges is common to the West of England: I have traced it to near Frome, on the border of Wiltshire.



and, it is very probable, the practice has grown out of the hand culture, which, in every country, doubtlessly, preceded the use of the plow.

THE QUANTITY OF SEED runs from two to two and a half Winchester bushels, an acre.

SOWN in separate ridges; and at one cast.

COVERED, with light harrows and two horses.

ADJUSTED, in an extraordinary manner. Until very lately, the interfurrows, with the narrow balks left standing in them, were universally hacked and shovelled out, *by hand!* The unplowed slips, having been reduced to fragments with hacks, were thrown over the ridges, or into hollows or vacancies, by the sides of the furrows, and the surface otherwise adjusted, with shovels. Now, it is become the more general practice, to open the furrows with the plow; a double mold-board plow being used by some farmers. The rows or ridgets of mold and clods, forced up by the plow, on either side of the interfurrow, are afterwards pulled upward, and the surface in general adjusted, with "haul-to's"—or three-tined dung drags; giving the ridges, with this rude tool, a degree of finish.

GENERAL OBSERVATIONS. It need not be repeated,

repeated, that the setting about, and the spreading, of lime and earth,—hacking over the ridges, and finally adjusting them, require a great supply of hand labor. Ten acres of Wheat put into the ground, in the manner of this District, take up more manual labor, than fifty acres sown in the ordinary way. Nevertheless, the labor is not wholly lost; the land, beside receiving additional tilth in the operation, is more evenly seeded, and with a less quantity of seed, than it would require without it; and, in a country where labor is plentiful and cheap, it might be wrong to withhold any part of it; so long as the present system of management shall be pursued.

The other operations, respecting the culture of Wheat, are sufficiently explained, under the GENERAL HEADS\*.

The PRODUCE OF WHEAT, by *the statute acre*, is estimated, on a par of years, at twenty Winchester bushels.

#### REFERENCES to MINUTES.

43. On an instance of blight, in a dry season.
56. On other instances of the same.

\* An instance of the berbery plant being injurious to the Wheat crop was circumstantially related to me, in this District.

## 16.

## BARLEY,

AND ITS

## MANAGEMENT.

AFTER what has been said, in describing the GENERAL OPERATIONS of the ARABLE MANAGEMENT, little remains to be added, here.

The SPECIES of Barley grown is chiefly, or wholly, the common LONG-EARED kind. Other sorts, it seems, have been tried, but have been given up for this.

The SUCCESSION. Barley succeeds WHEAT, or TURNEPS, or sometimes BARLEY itself: the last of the three grain crops, which the present system of aration *requires*, being in this case Barley, instead of Oats.

The SOIL. Barley is grown on all the better lands; which, indeed, are the best adapted to this grain. On the thinner soils, towards the Moorsides, Oats are more generally cultivated.

TILLAGE for Barley. After Wheat, two plowings, or rather one plowing and a half: after

after Turneps, one plowing; the stems of charlock and other weeds being previously burnt!

**MANURE.** Seldom any used, I believe, for Barley.

**SOWING.** **TIME OF SOWING**—April. **QUANTITY OF SEED**—four bushels and upward! **METHOD OF SOWING**—broadcast, above.

**WEEDING.** Universally, I believe, hand-weeded.

For **HARVESTING, THRASHING, &c.** see the **GENERAL HEADS.**

**PRODUCE** of Barley—from thirty to forty bushels an acre. It is, of course, a profitable crop; and ought frequently to be grown on lands, which are *forced* to produce Wheat.

17.

## O A T S.

**THE SPECIES** mostly black; as being least liable to be discoloured in this moist climate. **TILLAGE**, one plowing. **TIME OF SOWING**, February and March. **QUANTITY OF SEED**, five or six bushels. **PRODUCE**, not registered.

Indeed, the culture of this crop being in a considerable degree confined to the Moor-side farms, I paid the less attention to its culture.

## 18.

## TURNEPS.

NOTWITHSTANDING the unhusband-like manner, in which Turneps are still cultivated, in this District, it is more than half a century since they were introduced into field culture:—affording strong evidence of the supineness of the Devonshire husbandmen.

The SPECIES, various; but not excellent. The proper method of raising the seed does not appear to be understood, or is not attended to\*.

SUCCESSION. Turneps are invariably sown on grass land. There never, perhaps, had been an acre of turneps grown in the District, after a grain crop, until the practice was introduced, a few years ago, at Buckland.

\* For the Norfolk practice, in raising Turnep seed, see NORF. ECON. Vol. I. p. 278.

Buckland. Some account of the attendant circumstances will appear, in MINUTES, 18 and 23.

TILLAGE, &c. for Turneps, is the same as for Wheat. Namely, velling or skirting; burning; and one plowing.

FOR MANURE, the BEAT ASHES are chiefly depended upon.

THE SOWING is done generally, in July. The QUANTITY OF SEED, one to two pints.

THE HOING of TURNEPS has not yet found its way into the ordinary practice of the District. In Autumn, the Turnep grounds are as yellow, as Mustard Fields in May; and, in winter, as white with the opened pods of the Charlock, as stubbles in Autumn: the silvery pods and withered branches of the weeds, shading and almost hiding the green tops of the Turneps: not in the immediate District of the station, only; but in other parts of the County.

Many individuals, it is true, attempt to draw the weeds, by hand; piling them in heaps, upon the ground. But the whole crop, I apprehend, is rarely if ever gone through, in this way. And what is done, is probably done at a greater expence, than hoing would have incurred; yet without the beneficial

effect of setting out the plants, or meliorating the soil.

THE EXPENDITURE of TURNEPS is judicious. They are chiefly drawn, and thrown upon ley grounds, to cattle and sheep; or carried to stalls, for fattening cattle; agreeably to the Norfolk practice!

#### GENERAL OBSERVATION ON THE TURNEP CULTURE.

It is not fitting, nor likely, that this part of the Island, alone, should remain much longer a discredit to British Agriculture, in respect to the culture of this valuable crop. And yet, if I may judge from my own experience, the hand-hoing of turneps cannot readily be introduced. For altho, by personal attention, I succeeded equally to my expectation; yet, whenever that attention was called off, a relaxation or neglect of the operation took place: so rooted, and difficult to eradicate, is the custom of half a century.

If I were to venture to recommend any practice, to the Gentlemen who are now evincing a desire to urge their countrymen to accurate management, it would be to change, entirely, the present mode of raising Turneps; and to adopt that which has been

lately struck out, in the South of Scotland, and is now making its way, very rapidly, into the North of England: namely, that of sowing them on narrow ridges, similar to those in which potatoes are sometimes raised, in the District under view; and cleaning the intervals with the horse hoe: a method that appears to me singularly adapted to the shallower soils of Devonshire; which, in general, are well suited to the Turnep culture.

#### REFERENCES TO MINUTES.

- 18. Directions to inexperienced hoers.
- 23. On Charlock, as a food of cattle.
- 53. On Turnep, as a food of ewes and lambs.
- 64. On watering Turneps on ridgets; with a machine for that purpose.

#### MINUTES ON CABBAGES\*.

- 24. An ingenious method of cutting them noticed.
- 54. On planting them with mattocks.
- 64. On watering them, as above.

\* A crop which does not enter into the ordinary practice of the District.



## 19.

## POTATOES.

THE HISTORY of the Potatoe crop, as an object of field culture, in this Western District, furnishes another instance of the respect which its cultivators have long borne to established customs. It is not more than twentyfive years, if so much, since the entire Country, including, I believe, the markets of Plymouth, was supplied with Potatoes from the neighbourhood of Morton Hampstead, at the opposite end of Dartmore, and at no less than twenty miles distance from the center of this District, nor less than thirty miles from Plymouth and its dock yard! The film of prejudice, however, being at length broken or seen through, Potatoes were found to grow, and to produce their kind, at the West end, as well as at the East end, of Dartmore; and, now, the District raises enough to furnish its own consumption, and to supply the markets in its neighbourhood; tho the population, probably, has much encreased, during the lapse of five and twenty years.

It is reasonable to suppose that the people of Morton, while they monopolized, and practised as a mystery, the culture of Potatoes, during a length of time, would not be inattentive to the minutiae of cultivation; and it is equally probable, that the knowledge they acquired travelled Westward, with the operation. This being as it may, the culture of Potatoes is, at present, well understood, here; and, in one particular, at least, deserves to be copied.

The SPECIES of Potatoes, here as in most other places, are various; not only in shape, color, and farinaceous quality, but in the nature of their growth; the different sorts requiring different times of planting: a circumstance which is not, perhaps, sufficiently attended to, in other Districts.

SUCCESSION. Potatoes succeed, invariably I believe, Ley herbage;—broken sometimes at least, by two or three PLOWINGS; but BEAT BURNING is now, I believe (1804), more commonly used for this crop.

PLANTING. TIME OF PLANTING—March, April, May, or even June; according to the varieties or sorts which are cultivated: it being found that *each has its favorite season of planting*: and it is probable that, were

attention paid to the varieties of every other District, similar propensities might be discovered.

The METHOD OF PLANTING varies. Sometimes they are distributed in alternate furrows, and covered with DUNG. In other instances, they are planted on slips or beds; narrow ridges of mold being left between them, to earth up the plants, in the lazy-bed way.

The CLEANING of Potatoes is well attended to. They are hoed, or rather hacked; and I have seen those which have been planted in alternate furrows, earthed up, in a husbandlike manner, in ridgets.

Potatoes are TAKEN UP, in November, and December; and PRESERVED in "caves"—shallow pits,—filled, ridged up, and covered with straw and earth, agreeably to modern practice: see MIDLAND COUNTIES.

The FARM EXPENDITURE of Potatoes is chiefly, or wholly, on Swine. And, from the restrictive clause in Leases (see page 85), it is probable that even this is a modern mode of expenditure.

## 20.

## CULTIVATED HERBAGE.

IT has been already mentioned, that the cultivation of herbage is of more than half a century standing, in the District under survey\*. From this circumstance, and from the cultivation of Turneps, and the use of Lime as a manure, having been introduced about the same time, it would seem that, sixty or seventy years ago, a STAGE OF IMPROVEMENT took place: since which time the practice appears to have been stationary; and it is, of course, now fully prepared for another movement.

The PROPORTIONAL QUANTITY OF LEY GROUND, in the inclosed country, is full two thirds of the arable lands,—namely, the lands that are occasionally plowed,—considered as distinct from meadows, grazing grounds, and rough upland pastures. But, on the skirts of the moors and commons, which serve as summer pastures, the proportion is less.

\* In an old account of the Drake Estate is the following charge:—“ May y<sup>e</sup> 20th, 1723, pd. for 400lb. of Clover Seed, at 3½*d.* per pound, £5. 16. 8.”

The SPECIES of herbage which is here cultivated are chiefly RED CLOVER and RAYGRASS—provincially “Eaver:” but WHITE CLOVER, and TREFOIL, are occasionally sown.

SUCCESSION. In the ordinary practice of the country, cultivated herbage succeeds Oats, after Barley, after Wheat! A practice which we have seen, bad as it is, *enforced* by a restrictive clause in modern leases.

SOWING. The usual TIME is between the sowing of the corn and its coming up. The QUANTITY OF SEED 12lb. of Clover, and half a bushel of Raygrass.

APPLICATION. Mown the first year: afterwards pastured.

DURATION. Five, six, or seven years, in the inclosed country; less by the sides of the commons.

REMARK. The improvement, which is evidently wanted, in regard to this most important crop in the Devonian Husbandry, is that of cleaning the land, thoroughly, to receive the seed; either by a fallow, or a fallow crop, as turneps, &c.; agreeable to the practice of modern husbandry.

1804. Several successful instances of CULTIVATING LEY HERBAGE, WITHOUT the PROTECTION of CORN CROPS, have taken place on

LORD HEATHFIELD'S demesnes, of late years. A difficulty of practice, on rich lands that are in fine tilth, arises from the young seedling plants being overrun by *chickweed*; which matts on the ground and smothers them. But, by sowing *Rape Seed* with the seeds of herbage (as formerly recommended for cultivating herbage on Dartmore—see DISTRICT the THIRD) that evil may be avoided. The Rape plants are able to overcome the weeds, yet do not destroy the herbage; and moreover afford, almost immediately, valuable pasturage for sheep; whose tread, *in dry weather*, is serviceable to the young grasses.

## 21.

### GRASS LANDS,

AND THEIR

### MANAGEMENT.

#### I. SPECIES OF GRASS LANDS.

THE GRASS LANDS of this District may be classed under

1. MEADOW LANDS, or cool and frequently rich bottoms, or shallow dells; as well as

more upland sites, over which water can be spread; and which are kept in a state of MOWING GROUND\*.

2. GRAZING GROUNDS, or rich uplands, over which water has not been conducted; and which are kept in a state of PASTURAGE.

3. The TEMPORARY LEYS, just mentioned; which are used as MOWING GROUND, the first year; and afterward, as PASTURE GROUNDS. And

4. ROUGH UPLANDS, which sometimes, tho not frequently, occur on private property, and are kept in a state of coarse PASTURAGE.

## II. MANAGEMENT OF GRASS LANDS.

In the management of PASTURE GROUNDS, I met

\* MEADOW PLANTS. I collected most of them; but not with sufficient accuracy, as to their proportional quantity, to entitle the list to publication.

The species, found in the meadows of Buckland, are the ordinary species of meadow lands, in most parts of the Island; with, however, one remarkable difference: the meadow Foxtail (*Alopecurus pratensis*) is wanting!

The late accurate Botanist, and amiable man, Mr. HUDSON (Author of FLORA ANGLICA), had some seeds of this Plant collected, in the neighbourhood of London (at the request of our friend the late Sir FRANCIS DRAKE), and sown over these meadows; but without success. In the summer of 1794, I examined, with some attention, the part over which they were sown; but could not discover that any of them had taken root.

met with nothing noticeable; except the extraordinary foulness of many of the Leys; which has been already noticed, under the head—MANAGEMENT OF THE SOIL\*. I shall therefore confine my remarks, under this head, to MOWING GROUNDS, and more particularly, to

WATERED MEADOWS. The *origin* of the practice of watering Grass Lands, artificially, in this District, cannot be reached by memory; nor does tradition, I believe, attempt to ascertain it. There is a striking instance of the antiquity of the practice observable, on the Barton of Buckland. A hedge, in appearance some centuries old, winds by the side of a water course, evidently formed by art, for the purpose of conveying a rill, along the brow of a swell of rich Grass Land, which bears no mark of having ever been in a state of aration. From the winding direction, and the regular descent, or almost levelness, of this artificial rill, there is every reason to believe, that it was formed prior to the hedge; which may seem to have since (or at the time of forming it) been run along the upper side of it. From the circumstance of this farm having been monastic, one is led to conclude

\* MOLES are usually caught by the year.



that the practice was introduced under the auspices of the church.

But this by the way : History, ecclesiastic or profane, may perhaps furnish those who have leisure to look for them, with information on this subject.

- The *quantity* of watered lands, in this District, is, in some townships, considerable; while in others, where the vallies are narrow, and their sides are wooded, little watered ground is seen. There remains, however, much to be done in this respect. Perhaps, not half the lands that are capable of receiving this admirable improvement, enjoy it at present; and

The *management* of those which are subjected to the practice, whatever it may have been heretofore, is, at present, far from being accurate. The soil is imperfectly drained, and the water imperfectly spread over it. Presently before my going down into the District, a person of the first practice in it had been employed, to conduct the water over the meadows of Buckland; which had previously lain in a state of neglect. Nevertheless, I found them still in such a state, as induced me to have the whole laid out, afresh, under my own directions.

Yet,

Yet, the *effect of the water*, notwithstanding the neglect in which the watering of land is found, at this day, is such as I have no where observed; except in the neighbourhood of chalk hills. It gives a greenness and grossness of herbage, resembling that of the meadows in Wiltshire and Dorsetshire.

This led me to conceive that the slaty rocks, out of which the most efficacious of these waters filter, contain some considerable proportion of calcareous matter. But, from the experiments already mentioned, the proportionate quantity of calcareous earth, contained in these slate rocks, if any, appears to be very small,

Nevertheless, it might be dangerous to conclude, from this, that the waters under consideration do not contain a sufficient quantity of the calcareous principle, to enable them to produce the effect which we are desirous to account for. Indeed, it is not a knowledge of the component parts of the filtering stratum, but of those of the waters themselves, which is most desirable.

ACCURATE ANALYSES OF WATERS, whose effects are *known*, as MANURES, are very much to be desired. That different waters are as various, in their effects on vegetation,

as distinct vegetable and animal substances are, must be evident to every one who has made extensive observations on these effects. And CHEMISTRY might bestow on AGRICULTURE valuable assistance, by prosecuting enquiries of this nature\*.

The HAY HARVEST of West Devonshire has not much to recommend it, as a pattern to other Districts.

The *mowing* is, in general, ill done. The *sithe* is short, and laid in, with its point too near the handle. The unavoidable consequence is, the work goes on slowly, or lines of uncut herbage are left between the strokes. I have seen worse mowing, both of grass and corn, in this District than in any other. This censure, however, does not apply to the country, wholly. I have also seen good work in it.

The *Hay-making* of the District stands in a similar predicament. Some I have seen  
vilely

\* 1804. As a matter of science, such analyses would be valuable, in establishing a general theory of irrigation. But in practice, where a particular species of water is capable of being applied to a given soil, the land itself is the most eligible test.

For general remarks on this subject; and an easy method of forming a TRIAL GROUND; see TREATISE ON LANDED PROPERTY, Art. WATERING GRASS LANDS.

vilely managed; others conducted on the best principles of the art: namely, spread, turned, cocked in small cocks, respread, turned, recocked, or carried.

But, in these operations, a principal tool, the PRONG, is ridiculously too small; fitter for the hands of a Cook, than a Haymaker: the tines, even of those used for loading carriages, are not longer than those of a Man of War's beef-fork. But they were fashioned under the horse-and-crook husbandry, and where carriages are used, they still remain unchanged.

The *carrying of Hay in crooks* I have seen done in a neat and secure manner. The ends or faces of the load are carried up straight, and appear in folds, like those formed at the corners of waggon loads, in some Districts. This gives firmness to the load, and prevents its being scattered by the way.

The AFTERGRASS of meadows is, here, judiciously managed: it is suffered to grow to a full bite, but not to be overgrown, before stock be turned upon it.

I have seen cattle put into a meadow, immediately after the Hay was carried out of it, "to pick about the hedges:"—an accurate minutia of management. For the herbage,

which is then succulent and edible to store cattle, would, before the aftergrass were ready to be pastured off, become unpalatable, and be altogether neglected by cows or fattening stock, with fresh succulent herbage before them. It would be evidently wrong, however, to suffer them to remain in fresh mown grounds, after they have performed that intention.

See MIDLAND COUNTIES, MIN. 62, on this subject.

#### REFERENCES TO MINUTES.

- 21. On the rich grazing grounds of Milton Abbot.
- 27. On conducting rills, for watering pasture grounds and meadows.
- 28. On the probable use of walnut leaves, in making drinking pools.
- 33. Further, on conducting rills.
- 38. On the management of young temporary leys.
- On irrigating sloping grounds.
- 53. On the value of kept grass, for ewes and lambs.
- 61. On the effect of folding sheep on grass land.
- 63. Cursory remarks on mushroom rings.

## 22.

THE MANAGEMENT OF  
 ORCHARDS AND FRUIT LIQUOR  
 IN  
 WEST DEVONSHIRE, &c.

AFTER the ample detail already given of the Management of Orchards and Fruit Liquor in HEREFORDSHIRE, &c. \*, little may seem to be requisite, on the present occasion. But when, on examination, we find that the practices of the two Districts, especially with respect to Orchards, are so widely different, as to appear pretty evidently to have had separate origins, the propriety of registering the management of Devonshire, in detail, will be readily admitted.

In examining the practice of this District, I find it requisite to follow nearly the same steps which I took in going over that of Herefordshire; and to examine

First, Orchards.

Secondly, Fruit Liquor.

\* See GLOUCESTERSHIRE, Vol. II. p. 205.

I. ORCHARDS. The particulars which present themselves, on viewing this branch of the subject, in the present case, are

1. The introduction of Orchards into the District.
2. The quantity of Orchard grounds it contains.
3. The species of Orchard fruits.
4. The situations of Orchards.
5. The soils of Orchards.
6. The method of raising Orchard trees.
7. Planting Orchard trees.
8. The aftermanagement of Orchards.
9. The application of the ground of Orchards.

1. The first INTRODUCTION of Orchards, into this District, appears to be pretty well ascertained. One of the Orchards of Buckland is said to be the oldest in the country, and this is spoken of as being about two hundred years old.

Nevertheless, this Orchard is still fully stocked, and in full bearing! A fact which the Orchardmen of Herefordshire will not readily credit. A fact, however, which is perfectly reconcileable, when the practice of this District is explained \*.

2. The

\* This particular, with many others relating to the  
VOL. I. P present

2. The AGGREGATE QUANTITY of Orchard grounds, in this District, is considerable. For tho the Orchards in general are small, compared with those of Herefordshire, &c.; yet the Farms being also small, and each having its Orchard ground, the number is of course great. Nevertheless, the proportional quantity of Orchard grounds to culturable lands, is much less, in this than in the Mayhill District †.

present subject, I had from Mr. STAPLETON of MONKS' BUCKLAND; who may, I believe, be said to have a more accurate knowledge of the management of Orchards and Cider, than any other man in the country.

1804. From the same sensible, intelligent, and valuable man (whose exemplary life terminated a few years ago, in his ninetieth year), I gained a general idea of the AGE of the APPLE TREE, in this District. The age of some particular trees, which he remembered, from his childhood, as "old trees," he laid at one hundred and fifty years old. But these had been thrown on one side, by the wind, and their boughs had struck root; by which their youthfulness had been renewed. Seventy or eighty years he considered as the full age, on a par, of standing trees, in the climate, and under the ordinary management, of West Devonshire.

† ORCHARDS OF CORNWALL. The Cider country, I am well informed, does not reach more than half the length of the county. Below that, the sea air is injurious to Orchards; the land growing narrower, and there



3. The SPECIES of FRUIT is invariably the APPLE, when LIQUOR is the object\*.

For the Fruit markets, *Cherries*, *Pears*, and *Walnuts*, are raised in great abundance; especially in the township of Beer Ferries; which is said to send out of it a thousand pounds worth of fruit (including Strawberries) annually.

4. The SITUATIONS of Orchards are chiefly in vallies, and low lying grounds, near houses; not spread over the arable and pasture lands, as in Herefordshire and Gloucestershire. Nevertheless, there are grounds, not only well adapted for arable crops, but for water meadows, which are at present appropriated to Orchard produce. On the Barton of Buckland, there are twenty or thirty acres of land of the last description, encumbered with Orchard trees, which have never paid for planting and land room; and which ought forthwith to be (1804, have been) disorcharde: and there are other Orchard grounds in

being fewer vallies to shelter them, in the Western extremity of the county, than there are in the Eastern parts, and in Devonshire.

\* The soil, perhaps, is not adapted to the PEAR TREE, which affects a cool strong soil. See GLOUCESTERSHIRE, II. 229.

in the same predicament, on different parts of this estate: not arising so much, perhaps, from *locality*, as from *aspect*.

Part of the Orchards, here under notice, lie bleakly exposed to the North: part in the opening of a deep valley, in the current of the Southwest winds.

Much of the success of Orchards depends on situation. The Orchards which succeed best, in this District, are situated in dells or hollows, which are neither exposed to the bleak blasts from the Northeast, nor to the *sea winds*, from the West and Southwest. Deep narrow vallies, whose sides are precipitous, and neither fit for corn nor meadow, and which are not liable to the winds here noticed, as they blow across them, are singularly eligible for Orchard grounds; and there are many such, probably, which have not yet been planted\*. While, it is certain that much of the ground, which is at present in a state of under-productive Orchard, might be converted to a better purpose.

5. SOILS. The richest deepest soils appear

\* The RENT of ORCHARD GROUNDS, in genial situations, and when in "full bearing,"—while the trees are of a middle age, and in full vigor,—is from 3 to 5*l.* an acre.

to have been chosen for Orchard grounds. It is probable that the shallower soils of this District are unfit for fruit trees; but, where situation will admit, such as are encumbered with large stones, with good intervening soil, are singularly eligible; and, in some cases, I have seen them chosen.

6. PLANTS for Orchards are *raised*, either by nurserymen; or by farmers, for their own and their neighbours' use; or by cottagers for sale; or by landlords to supply their tenants. The management of nursery grounds, here, is above par. The intervals are not only dug over or turned in, from time to time, but are commonly covered with straw, weeds, brambles, or other vegetable matters, to check the rising weeds, and to assist in keeping the ground mellow and moist; as well as to meliorate the soil.

The most remarkable circumstance belonging to them, however, is that of *training* the plants,—with stems, not more, perhaps, than three or four feet high! A practice which is so different from that of other fruit-liquor countries, indeed, from that of almost every part of this Island, Devonshire and Cornwall excepted, that a stranger is inclined to con-

demn it at first sight, as being guided by ignorance or folly of the lowest degree.

Whether it has been adopted, originally, to avoid the ill effect of the winds, or to bring the fruitbearing wood near the ground, and thereby to gain a more genial atmosphere, for the fruit to mature in; or whether it may have arisen out of the practice of gathering crab stocks in the woods, and rough grounds, where they frequently take a low shrubby form, may now be difficult to ascertain: at present, the practice appears to be followed, merely, as an established custom. See So. Co. II. 192, on this subject.

The disadvantages of low fruit trees will be mentioned, in speaking of the *Application of the Land* of Orchards.

7. In the PLANTING of Fruit Trees, the Orchardmen of West Devonshire excel. A stronger proof of this need not be produced, than the circumstance of their keeping the same ground in a state of orchard, in perpetuity. As the old trees go off, young ones are planted, in the interspaces, without any apprehensions of miscarriage.

In *setting out* Orchards, the practice of Devonshire is not less *unique*, than it is in training the plants. A statute rod, namely

five yards and a half, may be taken as the ordinary *distance* between the plants! Some I have measured at not more than four yards apart: some few at six yards.

The most approved *mode of planting* is to remove the soil down to the rock, which seldom lies very deep, and to cover this, eight or ten inches thick, with a compost of fresh earth and sea sand. Upon this compost, in ordinary cases, the inverted turf is laid; and upon this the young tree is set; its roots being bedded in the best of the excavated mold; finally covering them with the ordinary earth raised in making the pit. A method which is altogether judicious.

The usual *guard* is formed with faggots of brambles, brushwood, or furze; letting them remain to rot at the foot of the tree. No stakes, I believe, are used. Indeed, the plants are generally so low as not to require them: especially in *filling up old Orchards*; as the old trees shelter the young ones from the wind. And the *planting of new Orchards* does not appear to be, at present, much in practice. I have not observed it, in more than one or two instances.

8. The AFTERMANAGEMENT of Orchards is confined to supplying the trees with fresh

brambles, furze, and brushwood, straw or weeds, to rot on their roots: not over the pasture of the feeding fibres, but round the stem (in such a manner however as not to touch it). Yet it is believed, by men who pay attention to these matters, that the growth and fruitfulness of the trees are much promoted through these means. Does the dead matter, by destroying the living herbage, become the means of a supply of air to the larger roots, and thus assist the sap in its ascent? The popular idea is, that these substances “find their way down to the roots\*.”

It will not be improper to relate, that I have heard the *canker* (the great enemy of modern Orchards) set at naught! Not, however, by a man on whose judgement I have a sufficient reliance, to become a voucher for the truth of his opinions. “A zeam of zand” applied to the root is an infallible remedy. “Common river sand, or the sand of Rooborough Down will do.” The canker he believes, is owing to too much “dressing,” or additional substances applied to the

\* For an instance of INVERTING THE SWORD of an Orchard, by way of meliorating the Trees, see the MINUTE 10.

roots; or to too great richness of soil, which he thinks the sand corrects or qualifies.

I register these ideas the rather, as they accord with my own theory of the canker: and in evidence of the truth of the theory, and the justness of the practice, the true Redstreak, or an apple, which, as well as the tree that bears it, resembles the Herefordshire Redstreak, formerly of so much celebrity, is still cultivated, here, with great ease and certainty\*.

The *pruning* of Fruit Trees, appears to be little attended to; after they are planted in the Orchard.

With respect to the *cleaning* of Orchard Trees, I have neither seen, nor heard, of any traces of such a practice. During the winter months, a West Devonshire Orchard, by reason of the lowness of the trees, perhaps, and the humidity of the climate, appears as if hung with hoar frost; owing to the white *moss* which hangs in ribbons from its boughs. The *Mistletoe* is not known to this District, nor, I believe, to any part of Devonshire or Cornwall †.

9. The

\* But see forward, p. 222.

† 1804. MISLETOE. I have attended particularly to this interesting fact. Yet from the observations and enquiries  
I have

9. The APPLICATION OF THE LAND of Orchards. Here lies the main objection to the Devonshire Orchard. The use of the land is in a great measure thrown away. Horses are suffered to run through Orchards, in winter, and calves are kept in them, in early spring; but grown cattle and sheep are, at all times, prohibited from entering them: while fruit is on the trees, the very swine are carefully kept out; even small pigs; lest they should gather the fruit as it hangs on the boughs! which, in a bearing year, bend to the ground, and probably rest upon it; while weeds, perhaps three or four feet high, shoot up among them, and, of course, overshadow the fruit.

Previous to the gathering season, the weeds are cut down with the sithe, and thrown to the roots of the trees; that the fruit may be found: an operation, however, which is too often neglected until the first windfalls have rotted on the ground; and a double destruction of hog food has taken place\*.

I have made, it does not appear to be an inhabitant even of the most Eastern parts of DEVONSHIRE: while, on its very borders, in SOMERSETSHIRE, it is common.

\* An idea prevails, here, that apples are not nutritious to hogs. It is very probable that apples, alone, would not be so; but considering the nature of the hog, with



II. FRUIT LIQUOR. Where the consumption of any article lies chiefly within the District of Manufacture, there is the less stimulus to excellency of management, than where a common market creates an emulation among those who supply it. From the Southern parts of Devonshire, more or less Cider is sent to the London market; but very little, from this Western District. Nevertheless, I have tasted Cider of a superior quality, made in West Devonshire. Indeed, its climature, in a moderately dry summer, seems to be much better adapted to the production of this species of Fruit Liquor, than is that of Herefordshire or Gloucestershire.

In taking a view of the West Devonshire practice, it will be proper to examine, separately, the following particulars.

1. The

respect to the heat and dryness of his habit, and the well known effect of acidulating his beverage; and seeing the avidity with which he devours fruit of every kind;—it is more than probable, that suffering store swine to pick up the early windfall fruit, previous to the first grinding, is much more eligible than letting it waste among the weeds and grass; which, if likewise thrown open to store swine, would be a farther source of profit to their owners.

- |                     |                |
|---------------------|----------------|
| 1. The Manufactory. | 6. Fermenting. |
| 2. The Fruit.       | 7. The Liquor. |
| 3. Breaking.        | 8. Produce.    |
| 4. Pressing.        | 9. Markets.    |
| 5. The Must.        |                |

1. The ordinary PLACE OF MANUFACTURE, —provincially the “ POUND HOUSE,” —is generally a mean shed or hovel, without peculiarity of form, or any trace of contrivance. On the larger Bartons, or where the Orchard grounds are extensive, appropriate buildings are fitted up, in different ways.

The only pound house, I examined, which has any claim to merit, in respect to *plan*, is that of Mr. STAPLETON of MONKS' BUCKLAND; which, tho not on a large scale, is, perhaps, in the arrangement or general economy of its more essential parts, as near perfection, as the nature of a Fruit-Liquor Manufactory will admit of, or requires.

The building is a long square, standing with its longer dimensions down a gentle descent. At its upper end is a platform or flooring of loose stones (the rubbish of a slate quarry), to receive the fruit, as it is gathered, and to give it the first stage of maturation, in the open air. The ground floor, of that end of the building, contains the mill and

press: and over it is a loft or chamber, in which the apples receive the last stage of maturation; and from which they are conveyed, by a spout, into the mill. The ground floor of the lower end of the building is the fermenting room, which is sunk a few steps below the floor of the mill and press room; a pipe or shoot conveying the liquor, from the press, into a cistern in the fermenting room.

Thus far, the plan may be said to be complete. If, over the fermenting room, an empty cask loft were fitted up; and, on a stage below it, a keeping room or store cellar were set apart for the fermented liquor; and, further, if a contiguous room, fitted up with a boiler, were made to communicate, equally, with the fermenting room, and the empty cask room, for the conveniency of coopering and scalding the casks; such premises might be said to be complete in all their parts.

On principles similar to those which are here suggested, I have made such alterations in the cider rooms of Buckland Place, as the situation of the buildings would admit of, without great expence. They are on the largest scale of any I have seen; and are probably,

bably, in many respects, the first suite of *private* cider rooms, in the kingdom.

2. FRUIT. The *species*, as has been said, is solely the APPLE, whose *varieties* are, here, numerous; tho not so endless, as they are in Herefordshire; the propagation of *kernel fruits* being less frequent, in this District. Many of the sorts are of old standing. The Golden Pipin, however, is going off; "it cankers and will not take;" so that the identity of the Redstreak may be doubted. See above, page 217.

In the *gathering* of fruit, there is nothing either excellent or peculiar; except in the circumstance of fruit being, here, gathered wet or dry: a circumstance which may have arisen out of the moistness of the climate, and out of the closeness and rough woody state of the orchards; in which, it were next to impossible, to collect dry fruit; unless in a remarkably dry season.

The *maturation* of the fruit, in the ordinary practice of the District, is carried on in large heaps, in the open air, or in the pound house, or other covered situation\*; where

\* Preparing a rough open flooring of stones, as mentioned above, is very judicious, when apples are matured

they remain, until they be sufficiently “come;” that is, until the *brown rot* has begun to take place.

3. BREAKING. Formerly, this operation was performed *by hand*: a practice which is still continued, I understand, in some parts of Cornwall. The apples being thrown into a large trough or tub, five or six persons, standing round the vessel, “pounded” them\*, with large clubshaped wooden pestils, whose ends are guarded, and made rough, to lay hold of the apples the better, with the large heads of nails.

At present, the ordinary *horse mill* of Herefordshire, &c. is in general use, here: and it has the same objectionable point in its manufacture, as that noticed in the Gloucestershire mills: namely the coarseness of the stone work. The *grinding* is of course imperfectly done †.

Lately, I understand, a *hand mill* has been introduced  
introduced  
in the open air; not only as keeping the base of the heap dry; but as communicating, perhaps, a supply of air, to the lower and central parts of the heap.

\* Hence, no doubt, the epithet “pound” is applied to the house, &c. in which the whole business of cider making is performed.

† See GLOUCESTERSHIRE, II. 299.

introduced into this county, and is making its way fast into practice; but it did not fall in my way to examine it †.

† 1804. A *horse mill*, on the same principle, is now in use, in the Exeter quarter of Devonshire. The operative parts consist of two horizontal wooden rollers, nine or ten inches in diameter, turning against each other, at the bottom of a hopper; in the manner of those of the oat bruiser, &c. Each roller is studded with firm points of iron, set in spiral lines round the roller: each point having a corresponding dint, or receptacle, in the opposing roller; into which recess it enters in the operation of grinding: a most ingenious and valuable thought. The points lay hold of the fruit, and impel it downward between the rollers; which, by that simple contrivance, may be brought to any required degree of nearness to each other; and they are of course set at such a distance as it is judged will bruise the *pulp* sufficiently for the press;—this being all that a common cidemaker, here, requires.

The dispatch made by it is very great. Two or three hogsheads, an hour, it is asserted, may be ground, with one horse, in this machine; which may well be deemed an ingenious improvement of the fluted iron rollers of the Mayhill District. See GLOCESTERSHIRE, Art. FRUIT LIQUOR, Vol. II. p. 298.

Neither of these machines, however, is well adapted to bruising the *rind* or the *kernels* of fruit. And some superior managers, here, I am told, being aware of this defect, run the pomage, thus roughly broken, down between plain, or nearly plain, rollers: an operation, how-

4. PRESSING. The old *Press* of the District, and which, I believe, is still much in use, by the smaller growers of cider fruit, is very ingenious and beautifully mechanical. It is an improvement of the simple lever; by adding a rider, or lever upon lever; at the end of which a weight is suspended. By this simple contrivance the acting lever is kept hard down upon the cheese, *and follows it as it sinks!* an advantage which no skrew press possesses.

As an improvement upon this (and with respect to power it certainly is such), a *skrew* is made use of to *pull down* the loose end of the lever; the other end of it, in either case, being moveable; and is fixed higher or lower, according to the height of the pile of pomage to be pressed: lowering it as the pile is lowered by pressing.

The last stage of improvement, or refinement,

ever, which theory suggests must be slow;—if the rollers be set close enough to crush the kernels, effectually.

Nevertheless, by these spirited advances it appears probable, that, by further study and perseverance, a mill, or mills, on these principles, may be brought so near perfection, as to equal, or excel, the *STONE MILL*, with respect to efficiency of execution; and greatly to exceed it, in regard to dispatch.

ment, of the lever press; for such it still is, in principle; is to furnish each end with a pulldown skrew; first the one end and then the other being worked, in the act of pressing; a small plummet being hung in the middle, to assist the eye of the workmen; lest, by acting too long upon one end of the lever, they should injure the worm of the skrew.

These skrew lever presses are made of an enormous size, whether with one or with two skrews: large enough to press four, five, or six hogsheads at once! the lever—provincially the “summer”—being equal in size to the deck beam of a man of war. Altogether an uncouth, unwieldy, monstrous implement.

The *method of pressing* is invariably that of piling up the pomage or ground fruit, in “reed” (unthrashed straw) in layers; those of pomage being some three or four inches thick, the reed being spread thinly over, and then another thin covering is spread across the first. Under the gigantic press above-described, the pile is four or five feet square, and nearly as much in height. On the top, a broad strong covering of wood is laid; and, upon this, the lever is lowered.



A pile so large, and of so frail a construction, requires to be pressed with caution, in the outset: a circumstance which renders the operation extremely tedious: one of the enormous "cheeses" of the larger presses taking two days to complete the pressing!

The pile having acquired sufficient firmness, the outsides are pared off, square, with a hay knife; cutting off all the loose spongy parts which evaded the pressure, and piling them upon the top of the cheese, to receive the immediate action of the press: or are reserved for "beverage;" being watered and pressed separately\*.

5. The Must, or expressed liquor, which comes off, from this mode of pressing, is extremely foul, compared with that which is strained through hair-cloths. It is, therefore, placed in large vessels or cisterns, for its feculencies to subside, before it be put into casks.

6. In the FERMENTING of Fruit Liquor, nothing of superior excellence, I believe, is to be learnt, from the ordinary practice of this

\* For a description of the Herefordshire Press, and the method of pressing in Hair-cloth, see GLOCESTERSHIRE, Vol. II. page 278, and 306.

this District. In the fermenting room of a farm, which has long been noted for its cider, I have seen an experienced manager,—who has for several years had the care of this cider,—racking “one side of the house to-day, and the other side to-morrow,” under a full conviction that it “would do them all good.” Under management like this, it must, of course, be mere matter of chance, if a cask of palatable liquor be produced. But cider of a superior quality being produced, as it were accidentally, under this ignorant treatment, it shews plainly how much might be done (indeed has been done\*) by knowledge and attention. However, while the consumption remains with the District, and while strength is the great recommendation of the liquor, such knowledge and attention might, in some measure, be thrown away.

7. The FERMENTED LIQUOR is laid up in HOGSHEADS, of *sixtythree gallons each*; or in PIPES, or “double hogsheads.”

8. The QUANTITY OF PRODUCE is not more than supplies the consumption of the District; of course,

9. The MARKETS for sale cider are the

\* Particularly by Mr. STAPLETON.

*towns*, and the *public houses* of the District; the *farmer's own consumption* being supplied by windfall fruit; by the washings of the "mock," or pomage, in scarce years; and by inferior cider.

The *price* of marketable cider, on a par of years, has been (1796) fifteen shillings a hogshead (of 63 gallons) for the must or unfermented liquor; and a guinea for fermented cider; which sometimes rises to two or three guineas a hogshead: and on the other hand, some years the must has been sold at five shillings, a hogshead, at the press.

GENERAL OBSERVATIONS ON ORCHARDS AND FRUIT LIQUOR. These prices, considering the smallness of the measure, compared with that of Herefordshire, make cider a more advantageous article of produce, here, than in the Mayhill District; and, in suitable situations, as on the rugged sides of vallies, sufficiently sheltered from cutting winds, there can be no dispute about the superior profitableness of Orchard Fruits, in a pecuniary point of view, to any other species of produce; and most especially to a small farmer, who attends personally to the whole

Q 3

business,

business, and whose wife and children are his assistants.

Nevertheless, on larger farms, where the management is left much to servants, and where cider, under any management, is but a secondary object, the business of making it interferes with the more important concerns of husbandry: even the business of harvest, and still more the cleaning of turnep grounds, are too frequently neglected to give place to fruit picking; and the breaking and pressing are, afterwards, not less inimical to the saving of potatoes;—and to the sowing of wheat, which, as has been shewn, requires all the hand labor the farm can afford. Besides, the “dressing” which ought to be applied to the arable lands, it is to be feared, is too frequently bestowed on the Orchard Grounds—for “how can dressing be bestowed to so good a purpose?”

Again, the drunkenness, dissoluteness of manners, and the dishonesty of the lower class, might well be referred, in whole or in great part, to the baleful effects of cider; which workmen of every description make a merit of pilfering: and, what is noticeable, the effect of cider, on the faculties of working people, appears to be different from that

of malt liquor. Give a Kentish man a pint of ale, and it seems to invigorate his whole frame: he falls to his work again, with redoubled ardor. But give a Devonshire man as much, or twice as much cider, and it appears to unbrace and relax, rather than to give cheerfulness and energy to his exertions.

Another more flagrant evil, which is laid to the charge of cider, is the *Devonshire colic*, analogous with the colic of Poitou. This violent disorder has been ascribed to the circumstance of the mills and presses of Devonshire, having *lead* made use of in their construction: and, under this idea, one of the presses, I had an opportunity of examining, was scrupulously formed without lead; the joints of the "vat" or bed of the press, being caulked with wool and cow dung, which is found to be fully effective, in this intention. But, in evidence of the improbability of lead being the cause of this mischief, a mill, which has been constructed a century at least, and which is cramped together by means of lead, being examined, it was found that no corrosion of the lead had taken place; even the marks of the hammer remained perfectly distinct. This fact I do not speak to from personal examination; but I received

it from an authority, on which I have every reason to rely.

From two or three striking cases of this disorder, to which I had an opportunity of paying some attention, it appeared to me to be the joint effect of cider, and of a vile spirit which is drawn, by the housewives of Devon, from the grounds and lees of the fermenting room. These dregs are distilled (of course illegally) by means of a porridge pot, with a tin head fixed over it, and communicating with a straight pipe that passes through a hogshead of water; the liquor being passed, twice, through this imperfect apparatus. It, of course, comes over extremely empyreumatic; and is drank in a recent state, under the appropriate name of "necessity."

The patient having brought on, by an inordinate use of rough corrosive cider, and by the quantity of acid thrown into the habit, a fit of the ordinary colic, has recourse to "necessity," in order to remove the complaint. The consequence is an obstinate costiveness, which generally continues for several days, attended with the most excruciating pain: and, tho' the first paroxysm is seldom fatal, repetitions of it too frequently are: first bringing on a loss of the use of the

limbs, particularly of the hands, and, finally ending in the loss of life; if the deprivation of life can be said to be a loss, under circumstances so distressful.

Notwithstanding, however, the accumulation of evils arising from the production, use, and abuse of cider, the men of Devon are more strongly attached to it, even than those of Herefordshire. Their Orchards might well be styled their Temples, and Apple Trees their Idols of Worship.

It is not my intention, or wish, to depreciate the Devonshire Orchards below their real value; but to endeavor to fix them at a proper standard: to lower them so far, in the estimation of owners and occupiers, as to prevent their interfering too much with the more important operations of Agriculture. I wish to see them confined to unculturable sites, and to have them considered, as they really are, a subordinate object of husbandry; in order that the occupiers of lands may bend their attention, with greater energy and effect, to the arable and grass-land managements: more especially to the watering of meadows; and, of course, to the removal of many of the present Fruit Trees:  
changing

changing them for a more certain, and, on a par of years, a more profitable species of produce.

## 23.

## H O R S E S.

THE native BREED, which are still seen on the mountains that overlook this District, are very small: much resembling the Welch and Highland Breeds; and, like them, are valuable as PONIES. The "PACK HORSES," or ordinary sort found in the inclosed country, are of a similar nature; but larger. The SADDLE HORSES, at present in use, are chiefly, I believe, brought into the District, from the Eastward. Of CART HORSES, no breed can yet be said to be established. See BEASTS OF LABOR.

The BREEDING of Horses does not enter much into the practice of this District; except on the skirts of the mountains.

## 24.

## C A T T L E.

THIS Species of Livestock are entitled to every attention, in a Register of the RURAL



ECONOMY of the WEST OF ENGLAND. The Breed of Devonshire may well be considered as the most perfect Breed of Cattle in the Island.

The Breed,                    The Rearing, and  
The Breeding,            The Fattening, of Cattle,  
will require to be spoken of in detail.

IN BREED, they are of the MIDDLE HORN-ED Class. There are numberless individuals of the Devonshire Breed so perfectly resembling the Breed of HEREFORDSHIRE, in frame, color, and horn, as not to be distinguishable from that celebrated Breed; except in the greater cleanness of the head and fore quarters; and except in the inferiority of size. The Cattle of Devonshire resemble those of SUSSEX; except in their greater symmetry of frame, and their being much cleaner in the fore end, and every where freer from offal, than the ordinary Breed of Sussex. The Devonshire Cattle resemble very much, in color, horn, cleanness, and symmetry of frame, a few of the more perfect individuals of the native Cattle of NORFOLK; but exceed them greatly in point of size. They are a mean between the Norfolk and the Herefordshire; some individuals approaching towards the former, others towards the latter; but,

but, taken in general throughout the county, they approach the Herefordshire much nearer than the Norfolk, with respect to size: being similar, in this and other respects, to the breeds of GLOCESTERSHIRE and SOUTH WALES.

These several breeds I conceive to have sprung from the same stock. Their color apart, they nearly resemble the WILD CATTLE which are still preserved in CHILLINGHAM PARK, in NORTHUMBERLAND; a seat of the EARL of TANKERVILLE: and it appears to me, that the different breeds, above noticed, are varieties, arising from soils and management, of the NATIVE BREED OF THIS ISLAND:—a race of animals, which, it is highly probable, once ranged it, in a state of nature; as the buffalo does, at this day, the wild regions of North America. The black mountain breeds of SCOTLAND and WALES appear to me, evidently, to be from the same race; agreeing in every thing, but color, with the red breeds that are here adduced. The *shorthorned breed*, it is well known, were imported from the CONTINENT; and the *longhorned*, it is more than probable, might be traced from IRELAND.

The Devonshire breed of cattle vary much, in the different Districts of the county, both

in size and mold. NORTH DEVONSHIRE takes the lead, in both these particulars; and its breed are, in both, nearly what cattle ought to be. In size, they are somewhat below the desirable point, for the heavier works of husbandry; but they make up for this deficiency, in exertion and agility. They are beyond all comparison the best *workers* I have anywhere seen.

If they are to be still improved, as WORKING CATTLE, it is by breeding from the largest of the North Devonshire, and the cleanest of the Herefordshire breed.

AS DAIRY CATTLE, the Devonshire breed are not excellent. Rearing for the East-country graziers has ever, or long, been the main object of the cattle farmers of this county. Nevertheless, I have seen some individuals of the breed, which evinced the practicability of improving them, as dairy stock: an instance will appear in DISTRICT IV.

AS GRAZING CATTLE, individuals, in every part of the county, shew the breed to be excellent.

In WEST DEVONSHIRE, the breed is considerably smaller, than in the Northern part of the county; and their quality, in every respect, is inferior.

In

In CORNWALL, the breed gets coarser; with somewhat larger and more upright horns\* : bearing a similar affinity to the true Devonshire breed, as the Shropshire cattle do to those of Herefordshire : a striking and interesting fact, to those at least who find gratification, in observing the different varieties, and affinities, of this valuable species of domestic animals.

THE BREEDING OF CATTLE. I had no opportunity of attending to the practice of NORTH DEVONSHIRE, in this particular. It is highly probable that a considerable share of attention has been paid, for some time past, to the choice of males, if not of females, also ; as it is not probable that accident should have raised them to their present excellency.

The "MOORSIDE FARMERS," of this neighbourhood, have little to answer for, in this respect ; most of the calves, they rear, are purchased ; either from the "in-country" farmers of their respective neighbourhoods, or are fetched from a distance : the calves of the dairy farms of East Devonshire and even Dorsetshire, are, I understand, bought in great numbers, by the farmers on the skirts

\* Resembling, in the turn of the horn, the wild cattle of Northumberland.

of Dartmore. The few which are bred, by these farmers, are, as far as my own observations have gone, of a small, clean, hardy sort; adapted to mountain pasture.

IN THIS DISTRICT (West Devonshire) the business of breeding cattle is conducted on the worst of bad principles. If a calf, which otherwise would be reared, discover symptoms of a fattening quality, it is "bussed;" suffered to run with the cow, ten or twelve months, in the manner of the *running calves* of Norfolk\*; and is then butchered. If a calf of this description fortunately escapes so untimely a fate, but should shew an inclination to fatten at two years old, it is indulged in its propensity. It follows, of course, that the individuals which reach the stage of maturity, and from which new generations are to be raised, are, as to fattening quality, the mere refuse of the breed: and nothing, but a strongly rooted inherent excellency of quality, could preserve them in the ordinary state, in which they are at present found †.

IN THE REARING OF CATTLE, I col-

\* See NORFOLK, Vol. II. page 121.

† I am here registering the ESTABLISHED PRACTICE of the District; not the spirited efforts of the few individuals who are endeavoring to improve it.

lected nothing, in this District, which is entitled to especial notice. The first year, the calves are kept within the inclosures; but, the next, are generally sent to the commons and hill pastures. Heifers are brought into milk at two and a half to four years old; according to circumstances. And steers are broke into the yoke, at two or three; according to their size and maintenance.

What steers the Moorside farmers do not want for their own work, are sold to the incountry farmers, who work them sometimes to eight, ten, or twelve years old. When thrown up, they are principally sold to jobbers; or to graziers, from the Somersetshire side of the county.

Thus a calf, dropt in the dairy District of East Devonshire or Dorsetshire, may be nursed at the foot of Dartmore, and reared on its hills; worked in West Devonshire or its environs; and be driven back, through his native country, to be finished on the marshes of Somersetshire, for the London market.

**FATTING CATTLE.** A portion, however, of the cattle reared in this country are fattened in it, or rather brought forward in flesh, for its own consumption. I did not

see what in Smithfield would be called a fat bullock, in the country; except some two or three which were finished, by a spirited individual, with the commendable view of appearing at the head of his profession, whether as a grazier, or a butcher; and his praiseworthy exertions shewed, plainly, what the cattle of Devonshire are capable of, under judicious and spirited management.

West Devonshire, however, is not a grazing District. Except some of the lands of Mylton Abbot, Lamerton, Tavistock, &c.—and these are confined within a narrow compass,—the soil is too weak for grazing. Its lands, in general, are better adapted to the purpose of bringing cattle forward, for after-grass, turneps, or oilcake, than for finishing them for market.

A peculiarity of practice in the SLAUGHTERING OF CATTLE, in this District, must not be left unnoticed. In most parts of the Island, it is customary for butchers to bleed calves, previously to their being killed. And a similar custom prevails, here, with respect to bullocks. Enquiring, of an experienced and intelligent butcher, the motive for so extraordinary a practice, he returned a satisfactory answer. It assists in giving that desirable

brightness of color, which attracts the eye, in purchasing beef on the shambles; and what is of much more advantage to the purchaser (as well as to the butcher), it makes the beef keep better, in warm or close weather; so that it operates as an advantage, both to the buyer and the seller. And it is highly probable, that, in the summer season, and for ill fleshed bullocks at all seasons, the practice might be found eligible, in other places. The trouble and difficulty of the operation, seems to be its greatest objection.

#### REFERENCES TO MINUTES.

4. On the mountain-skirt breed of Dartmore.
5. Some remarks on breeding; and on the breed of Devon.
20. On the Buckland stock.
23. On charlock, as a food for cattle.
52. On pasturing young coppice woods, with cattle.



## 25.

## THE DAIRY MANAGEMENT

OF

*WEST DEVONSHIRE, &c.*

THE OBJECTS of the Dairy of this District are

Calves.

Skim Cheese.

Butter.

Swine.

CALVES. They are either REARED; or are fattened, in the house, for VEAL; or are turned abroad with the cows, as "BUSSES" or GRASS CALVES\*: the last being a particular of practice, which generally pays amply; especially when the most promising calves are chosen for this purpose. But the mischievous tendency of the practice, in a general view, has been pointed out; and, conducted on the principles, on which it is here carried

\* Perhaps originally BOISES, or WOOD CALVES (in contradistinction to HOUSE CALVES); namely, calves suffered to run with their dams, in the woods, or forest lands;—the practice and appellation having probably originated, while the country was in the forest state, and have both of them been continued, since the present state of inclosure took place.

carried on, it cannot be too severely censured: I mean when followed by a *breeder*. When *rearing* is not an object of cowkeeping, the practice of FATTENING CALVES at GRASS, may frequently be eligible.

**BUTTER.** The particular of management, which most requires to be noticed, in the Devonshire Butter Dairy, is the singular METHOD OF RAISING THE CREAM; a practice which is, or lately was, common to Devonshire and Cornwall. This peculiarity consists in employing culinary heat, to assist in forcing up the cream, with greater rapidity and effect, than simply depositing the milk in open vessels, in the ordinary way, produces.

The milk having stood some time, in broad pans or vessels, either of brass or earthen ware, it is placed in these pans over a gentle heat;—generally over the wood embers of the ordinary hearth; but sometimes over charcoal, in stoves fitted up for that purpose;—and remains in that situation until it approaches nearly to boiling heat: the proper degree of heat being indicated by pimples, or blisters, which rise on the surface of the cream. The smallest degree of ebullition breaks the texture of the cream (probably oils &c), and mars the process; which is therefore

properly termed "scalding;" and the cream thus raised is termed "scald cream," or "clouted cream;" probably, from the tough cloth-like texture which it acquires by this process.

The cream thus raised, remains on the milk,—which is rendered very sheer, lean, and *blue*, by the process,—until the dairy woman wants "to make the butter:" another singular operation, in the Devonshire dairy. The clouts or rags of cream being thrown into a large wooden bowl, they are stirred about, by a circuitous motion of the hand and arm, until the butyraceous particles unite; leaving a small quantity of thick creamlike matter, or serum; answering to the churn milk of the ordinary butter dairy. In "scald cream dairies," no churn is in use\*.

The origin of so peculiar a practice may, perhaps, be traced back to the forest state. After the arts of producing butter and cheese were discovered; yet while, perhaps, each family

\* 1804. The following, I understand, are pretty general rules of practice, in CLOUTING CREAM. In summer, the milk is suffered to stand one meal (twelve hours) between the milking and the scalding; in winter two meals; and the cream, always, to remain twentyfour hours on the milk, between the scalding and the skimming.

family was possessed of no greater dairy than two or three cows; any process which enabled the proprietor of such a dairy to manufacture those valuable articles, with a degree of certainty, was embraced as eligible: and how could a more fortunate process have been struck out, than that of securing the milk and the cream from their natural propensity of entering the different stages of fermentation, than the application of fire; which, at once, secures the milk from acidity, and the cream from putrefaction; until a sufficient quantity of each can be laid up, for the purposes to which they are particularly appropriated?

But the disadvantages of this pristine practice are such as to render it ineligible, in the present state of cultivation. If, in the ordinary practice, the embers prove too weak, and an additional heat be required, fresh fuel is applied; whereby, if a scrupulous attention be not paid, the fatal ebullition may take place, and the cream be mixed with the ashes. While over the fire, especially if fresh fuel be added, the surface receives the more volatile parts of the fuel, with perhaps a portion of soot; and, after the pans are taken off the fire, while they stand in the

kitchen or passages to cool, before they be returned to the dairy, the cream is liable to the depredations of domestic animals; as well as to receive, in a variety of ways, additional dust and dirt †.

In West Dorsetshire, and the Eastern confines of Devonshire, where the scalding of cream had been in use time immemorial, the practice has lately given way to the ordinary method of raising the cream and churning it; owing to the circumstance of the butter of that District having found its way to the London market; as will be particularly mentioned, in speaking of the DAIRY DISTRICT.

In different parts of Devonshire and Cornwall, “raw cream dairies” are here and there scattered. Gentlemen, especially strangers who settle in the country, prefer “raw cream butter.” That made from scalded cream has frequently a smokey flavor, and wants the even waxlike texture, observable in well manufactured butter\*. Two

† I am here speaking of the ordinary practice of farmers—such as I have seen in the District: Gentlemen, and some dairy farmers, as has been before noticed, have stoves fitted up for this operation, which render the practice much more tolerable.

\* 1804. CAST-IRON MILK-TRAYS. Being aware of

Two reasons may be assigned for the natives of these counties persevering in the practice of clouting cream: Prejudice, or the attachment to established customs, may be considered as one. The other is their attachment to "scald cream," as a delicacy of the table: being used in forming the "juncates," for which this country is celebrated; and as a favorite addition to pastry of different sorts; which is usually served up with clouts of cream. And, if the West of England farmers prefer the pleasures of the palate to the profits of the dairy, it might be extremely unbecoming to censure them, for continuing their present system of dairy management.

**SKIM CHEESE.** I have not remarked any thing in the manufacture of this article of the Devonshire dairy, that has induced me to register the minutiae of practice. In the dairy,

an evil effect of *leaden* milk-trays (see YORKSHIRE, Art. MILK-LEADS), I was desirous to make a trial of iron, for the purpose of forming receptacles of milk: not only as being cheap and durable; but as being of a more wholesome and *sweeter* nature, than either lead or wood.

Five years ago the experiment was made, here; and has been found to answer every expectation.

By *tinning* the inside, it would be more easily kept clean.

which I had the best opportunity of observing, the cheese was not *genuine*. However, from general ideas which I gathered on the subject, it is evident, that scalding the milk is not unfriendly to cheese; and it may be worth the trial, whether scalding skim milk in general, previously to its coagulation, would not be eligible.

1804. Judging from the practice of an experienced North Wiltshire dairy woman, who had the management of the Buckland dairy, some years, I have no doubt left of the propriety of scalding skimmed milk, for the purpose of cheesemaking.

## 26.

### SWINE.

THE BREED, in this part of the Island, is the same long, thin-carcased, white kind, which has, pretty evidently, been once the prevailing, if not the only, breed of the Island\*.

In the REARING of Swine, the most remarkable circumstance is that of letting all the

\* See YORKSHIRE, Vol. II. p. 210; and GLOUCESTERSHIRE, Vol. I. p. 316.

the females remain *open*; and for a very sufficient reason: there is not, I understand (even yet, 1804), a Spayer, either of Cattle or Pigs, in the District of West Devonshire!

The food of rearing Swine, while young, is the refuse of the dairy, with turneps, clover, and even grass, or ordinary herbage, *boiled*!—A new idea, in the management of Swine. The food of larger store Swine is chiefly grass; they being not unfrequently driven to the same pasture with the cows, and brought home with them, at milking hours: and are kept on in this way, until they be two, or perhaps three, years old, before they be put up to fatten! under an idea that the bacon of old hogs goes farther, than that made from young ones; not calculating, perhaps, the expence of keeping them to that *extravagant* age.

The native breed of the country, it is said, do not fat kindly, under eighteen months or two years old; but, through the attentions of the late Sir FRANCIS DRAKE, the District is, at present, in possession of the first breed of farm yard Swine in the Island; namely, the best variety of the Berkshire breed.

The method of FATTENING SWINE, in this District, forms another of the many



singular practices which shew, that the Devonshire husbandry is not of *English* growth. They are shut up in a narrow close hutch, or closet,—called a “pig’s house,” in which they eat, drink, and discharge their urine and fæces; which are formed, of course, into a bed of mud, to sleep in; their bristly coats being presently converted into thick coats of mail: in which plight they remain, until they be slaughtered.

This extraordinary trait of practice is not to be ascribed, wholly, to neglect; but, in part, to a principle of management, which, it is highly probable, has been drawn from experience. “Fat pigs should lie wet; it keeps them cool: they are of a hot nature, and if they lie on dry warm litter, it melts their fat!” And, when applied to pigs shut up in a close place, without an aperture, perhaps, at which to draw in a little cool fresh air, there may be much truth in this theory: which, however, would be futile, if applied to hogs fatted in the ordinary practice of the Island; in which fattening swine have a close room (be it ever so mean) to lie dry, and sleep in, and an open one, or little yard, to eat, drink, discharge, and breathe in. The advantage of raising a larger quantity of  
manure

manure is, alone, a sufficient recommendation of the latter practice.

The MATERIALS OF FATTING are *Potatoes*, with *Barley* or *Oats ground*, or *Barley boiled*. If fuel be cheap, and the mill at a distance, boiling the *Barley* may be as cheap, and as little trouble, as having it ground.

The BOILING OF HOG FOOD, which makes a part of the established practice, in this District, forms, at least, a fit subject of experiment, in others. Where fuel is cheap, the practice may perhaps be found profitable.

## 27.

### SHEEP.

THE ESTABLISHED BREED of the Country, whether we examine it on the mountains of Devonshire and Cornwall, or in the cultivated country which lies between them, is uniformly of the MIDDLE-WOOLED CLASS.

What is observable however,—in describing a breed of Sheep,—their HEADS are variously characterized: some individuals are *horned*, others *polled*, or hornless,—provincially “*nots*;” and between these, there are individuals bearing a mongrel deformity

of head; as if they were really a mongrel breed, of recent debasement.

Nevertheless, they have been, beyond memory, the same as they appear, at present. And what strongly corroborates the idea of their being a distinct breed, they are found on the Northern skirts of Dartmore, about OKEHAMPTON, of a diminutive size: not larger than the heath Sheep of Norfolk. Yet, in uniformity of wool, in disparity of head, and in their general appearance, their size apart, they perfectly accord with the larger variety of what may well be considered as the ANCIENT BREED OF THE COUNTRY.

It is observable, that, in the different varieties of this breed, there are many individuals which bear so strong a resemblance to the present breed of Dorsetshire, as to leave little doubt of their having a natural alliance. And it appears to me most probable, that the horned Sheep of Dorsetshire, &c. have been originally drawn from the ancient breed of the Western mountains; by breeding from a selection of the horned individuals. While a polled or hornless breed, now seen in the South Hams, may well seem, from their resemblance, to have been raised, by a similar selection, from the hornless individuals of the same

same ancient stock. The encrease of carcase and wool, which they have acquired, is such as would naturally arise from mountain Sheep being transferred to the rich soils, and genial climature, of South Devonshire\*.

The true Dorsetshire (as they are called), OR HOUSE-LAMB BREED, are found, at present, in great purity, in the Vale of Exeter, and in East Devonshire: of which breed there are a few flocks, in *this* District; but not of the purest kind.

\* It may, with great show of probability, be said, that the Sheep of this country are a mixture of the two breeds abovementioned. But from whence, it might be asked, were these pure breeds imported? Where are the mother flocks? Supposing them to have been imported, and set down on the spots they now severally occupy, it must necessarily have been some centuries ago, to give time to their mongrel progeny to mold themselves to soils and situations; and it is very improbable, that, during the dark days of Agriculture, the two breeds should have been preserved distinct and pure, as we now find them; especially the horned variety. Beside, it will presently appear, that the idea of their having been brought to their present state, by SELECTION, is not only probable, but practicable.

Let it be understood, however, that what is here suggested, respecting this interesting part of the HISTORY of AGRICULTURE, in this Island, is intended to agitate the subject, rather than to settle the point.

The flock I found, at BUCKLAND, were of this description: but were in a state of neglect;—reverting fast back to the native breed of the country; both in carcase and head! But there being still a sufficiency of the truer breed left, to recover the flock from its degeneracy, it was thought more adviseable to improve them, as the House-lamb breed, than to change them for either of the more popular sorts, that are working their way, even into this remote part,—namely, the SOUTH DOWN and the NEW LEICESTERSHIRE.

I must not omit to mention, by the way, a circumstance attending the improvement of the Buckland flock; as it farther corroborates the idea of the horned sheep of Dorsetshire, &c. having been originally drawn from the ancient mountain stock. In 1791, the flock, viewed in the aggregate, bore a much stronger resemblance to the ordinary breed of the District, than to the Dorsetshire breed; especially in head,—a considerable portion of them being polled, or nearly so. Nevertheless, by a selection of females, and by employing males of the established horned breed of East Devonshire, there was, in 1794, scarcely a horned individual left, in the flock of five hundred: and, in that short  
space

space of time, a similar alteration of carcase took place.

The two breeds abovementioned, are at present, spreading, in all directions, over the face of the Island; and, in consequence, other breeds will probably be neglected or lost: and altho, in many respects, these two breeds may excel the Dorsetshire; yet they are neither of them suitable for the House-lamb farmers; who may hereafter find it necessary to give extravagant prices, for the only breed which will suit their purpose; and which may, therefore, turn out highly profitable, to those who now preserve it, in its purity.

Beside, the House-lamb breed, distinctly from that peculiar excellency, is, as grazing stock, a valuable breed of Sheep. The wethers, of the best sort; fat perfectly well, at two years old; and pay, perhaps, in a middle-soiled upland situation, as well as those of any other breed\*.

**BREEDING SHEEP.** From what has been said respecting the heterogeneous state, in which the ordinary flocks of this Country

\* These remarks are not intended more to explain my own motives, for preferring an established breed, than as hints to those who have similar flocks in their possession.

now appear, it is not probable that much attention has lately been paid to the SELECTION of either males or females; and, yet, no part of the Island would repay such an attention, better, than Devonshire; a principal part of whose lands are peculiarly suitable for Sheep.

THE TIME OF PUTTING THE RAMS TO THE EWES is very early, compared with that of most other Districts. In the lower parts of the District, the middle of July is the ordinary time; the lambs, of course, beginning to drop, about Christmas; the month of January being the principal TIME OF LAMBING.

In the TREATMENT of Ewes and Lambs, I met with little observable, in this District: kept grass is chiefly depended upon, as the food of suckling Ewes. Turneps are sometimes given to them: but it is found, here, as in other places, that altho Turneps furnish a flush of milk, and are beneficial to the Lambs, they do not, at the same time, afford sufficient nourishment to the Ewes; which never fail to sink in flesh, when fed on Turneps alone.

The usual TIME of WEANING LAMBS is May or June; except for the late dropped Lambs, whose dams did not take the Ram in due

season. These are suffered to run with the Ewes, and, if dropped very late, as in April, are generally consigned to the Butcher.

**QUÆRE,** May not a long continuance of the practice of breeding from the early dropped Lambs, and killing off those which are lamb-ed later in the season, have assisted in giving the remarkable propensity or habit, peculiar to the Sheep of this quarter of the Island, of admitting the male, at a time when the other breeds it contains are indifferent to the intercourse of the sexes?

**STORE SHEEP.** In the SHEPHERDING OF SHEEP, the particular which most merits observation, relates to the skill of the Devonshire Shepherds in the training of their DOGS: and something perhaps may depend on the nature or breed of these useful animals. This being as it may, I have not observed so much sagacity, activity, and subordination, in the Shepherd's dog of any other District.

This breed of dogs are somewhat shaggy, tall on their legs, and have very short tails; the colors are various; but mostly grizzled; some are of a sort of dun color;—others—a larger smoother kind,—I have seen of a black or dark color, marked with white.

The excellency of these dogs renders SHEPHERD



PENS, in a degree, unnecessary. If Sheep require to be looked over, or examined, as to be handled by the butcher, or to be dressed, or cleaned, tho' it may require an hour's confinement, they are driven into a corner, and closely pent up there, by one or more dogs, until the business be completed.

If an experienced Shepherd wish to inspect his flock, in a cursory way, he places himself in the middle of the field or piece they are depasturing, and, giving a whistle or a shout, the dogs and the sheep are equally obedient to the sound; the former fly from him, with their swiftest speed, while the latter, from every quarter, draw towards him in considerable haste, long before the dogs have time to approach them. The stragglers are driven in, by the circuitous route of the dogs; which keep flying round, from side to side, until the flock be gathered round the Shepherd, close enough, not only to be seen, but to be laid hold of, by him, if any thing wrong be suspected.

An objection would be raised against this practice, by the Shepherds of heavy, long-wooled Sheep; as tending to alarm, disturb, and injure the flock: but little of this is in fact produced: for, being accustomed to it,

from their earliest age, no alarm appears to take place. They will even follow the Shepherd about, as if they were sensible of his care and protection. But such is the effect of habit, over almost every species of the animal kingdom, when it is early induced, and when it is brought on by the example of parents, or intimates of riper years.

1804. So far from the agitation of Sheep being here considered as detrimental to them, it is, I understand, more or less used as a preventive of one of the most fatal maladies to which young Sheep are liable: namely, the blood, blackwater, braxey, &c.; almost every province having a separate term for it. I have long conjectured that it proceeds from a plethora, or fulness of habit; as it generally attacks the most thriving and lusty individuals; which may appear in perfect vigor, and be found dead, within the space of a few hours. A quantity of black or livid water, or *serum*, is usually found in the abdominal cavity; and the flesh presently becomes putrid.

The precaution used, here, is to drive them about, with dogs, early in the morning, while they are empty; keeping them in brisk motion, for some time. The agitation, it is pro-

bable, not only gives the required freedom of circulation; but the perspiration which such exercise must naturally promote, may assist in removing the cause of the disorder.

The SUMMER KEEP of Sheep, in the ordinary practice of the District, consists chiefly of the commons and rough pastures of the low country, or of the hills of Dartmore; to which Sheep are driven, in the summer season, from a considerable distance. Even some of the larger flocks are sent thither; especially, in a dry season, when the cultivated leys are burnt up. In WINTER, they are of course brought back to the inclosures; and to such keeping as the Farmer can find for them. Snow seldom lying long, on the lower grounds of this District, very little hay is given to store Sheep.

A striking feature in the management of Sheep, throughout Cornwall, and in the Western half of Devonshire, is that of OMITTING TO WASH THEM, PREVIOUSLY TO THE SHEARING!

This practice, like many other practices in husbandry, has its advantages and disadvantages. In this case the wool weighs heavier; but the price is lower, for "wool in the yolk," than it is for washed wool; so that

it probably makes little for or against the grower; and, to the manufacturer, tho it may require somewhat more labor in cleaning, there is a saving of soap, which more than makes up the loss of labor. Wool which has been washed on the Sheep's back, requires soap, to cleanse it properly for manufacture; but in unwashed wool, the "yolk," or yellow egg-colored matter which is lodged among it, precludes the use of any additional detergent. Thus it becomes, to the manufacturer, a matter of no great importance, whether Sheep be washed or not.

It is observable, however, that wool shorn in the yolk, is liable to take a considerable degree of heat; a circumstance which, if made the most of, may be highly serviceable to the farmer; but the process of fermentation having ceased, it is probable, that not only the weight decreases very rapidly, but that the quality of the wool, loaded with so much dirt, likewise decreases. Beside, if the place of growth and the place of manufacture, be, as they too frequently are, distant from each other, the additional weight is an objection to the practice under notice: which, tho it may be perfectly right, in a District that manufactures its own wool,

cannot perhaps be generally adopted, with propriety.

1804. The weights of washed and unwashed wools are nearly as two to three:— a circumstance of some consideration, when distant carriage is required. The price of unwashed wool, this year, is about 11*d.*; that of washed, about 16*d.*

IV. FATTING SHEEP. Little is required to be said on this subject.

The DESCRIPTION of Sheep, fattened, includes wedders, aged ewes, and mountain sheep, bought in for this purpose, by the in-country farmers.

The MATERIALS OF FATTING are grass,— particularly the aftergrass of young leys,— turneps, &c. The MARKET, chiefly Plymouth and its environs.

#### REFERENCES to MINUTES.

53. On the spring food of Ewes and Lambs.

61. On folding sheep on grass land.

For the CORNISH breed of Sheep, see DISTRICT the THIRD.

For the Sheep of DARTMORE, see that District; also DISTRICT the FOURTH (Env. of Okehampton): and MINUTE 45.

## 28.

## RABBITS.

I OBSERVED only one Rabbit Warren in the District,—which is now stocked; with a small one, that has been diswarrened. Nevertheless, there appears to me to be much land in the West of Devonshire, &c. which would pay better in a state of Rabbit warren, than in any other state of occupancy. I mean the higher weaker lands, and where the sides of the hills have a sufficiency of loose earth or rubble, for the rabbits to burrow in. The markets of Plymouth, and its Dock, would not fail to take off the produce.

An objection to Rabbits, in or near the inclosed country, lies in their being destructive to the large hedge mounds of this District; in which they burrow, and become a species of vermin, difficult to extirpate; scooping out the inside; where they make their lodgements; generally with an entrance on each side, and a third or perhaps a fourth, on the top. But if warrens were sufficiently fenced in the Yorkshire manner, and the fences properly attended to, this objection

would lose much of its weight. The warren I saw, on the skirts of Dartmore, had no sufficient fence to prevent the Rabbits from straying.

## 29.

## POULTRY.

THE only circumstance that struck me, in Devonshire, with respect to this petty article of Livestock, was the scarcity of Eggs, compared with the number of FOWLS. The markets of Plymouth, I understand, are supplied with eggs, in some considerable part, from the North of Devonshire; from whence they are sent, twenty or thirty miles, by land; and this while, to common appearance, there are a sufficient number of Fowls kept, within ten miles of it, to supply all its wants of this article.

This circumstance did not strike me, until I had observed the practice of Scotland; where, from no greater appearance of Fowls, the quantity of Eggs consumed in the country, and the immense quantities sent, especially from Berwick, to the London market, are almost incredible.

These

These extraordinary facts led me to a closer examination of this subject, than I had, therefore, thought it entitled to; and it evidently appears, that the whole disparity of produce may be traced to a disparity of management.

In Scotland, Fowls in general roost in the warm smokey cottages of their owners; are nurtured, and *forced* in a hot house. The consequence is, they produce Eggs in every season; and, generally speaking, the year round. The Gentlemen of Scotland, seeing the superiority of the Cottage Fowls, in their productiveness of Eggs, have removed the comparative sterility of their own, by keeping them, literally, in HOT HOUSES; built on a similar principle to those in which exotic plants are conserved: flues being formed in the walls; with niches or small recesses, on the inside, for the Fowls to lay and breed in: with roosts for them to rest on at night.

The same sort of fecundity is well known to be produced, by the warm livery stables of London.

On the contrary, in Devonshire, Fowls roost in the cool open air; frequently in trees; *in a state of nature.*



The Fowl, in its native woods, probably, bred only once a year; and, of course, produced Eggs at no other season; and, I think, we may fairly infer, that the nearer they are suffered to approach that state, the less fruitful they will prove.

## REFERENCES

TO

## MISCELLANEOUS MINUTES,

IN

## WEST DEVONSHIRE.

4. Remarks on the names of hundreds.
- The Plymouth leat, or made brook, noticed.
5. A remark on surveying a District.
6. Preliminary steps to rural improvements enumerated.
7. A general principle of improvement.
10. Further of viewing a District.
13. The Plymouth aqueduct; its description and origin.
- General remarks on made streams.
20. On constructing river guides.
- 25. On societies of agriculture.



*DISTRICT THE SECOND.*

THE

SOUTH HAMS

OF

DEVONSHIRE.

INTRODUCTORY REMARKS.

THE knowledge which I gained, of this District of the WEST OF ENGLAND, was collected in passing through it repeatedly, in my journeys to and from West Devonshire; in an EXCURSION purposely made, in the autumn of 1791, to examine into its Natural Characters, and to mark how far its Rural Management differs from that of the District, which circumstances had assigned me as my principal STATION; and in viewing a part of the DRAKE ESTATE, which lies within the SOUTH HAMS.

The EXCURSION was made from IYX-BRIDGE, a rich and romantic situation, at  
the

the foot of the Dartmore mountain, to MODBURY, and KINGSBRIDGE; thence to TOTNESS and its fertile environs: and from thence,—returning by a different route,—to Ivybridge.

In describing the Natural Characters, and the Outlines of Management, observed in this District, I shall, here, as on other occasions, pursue the method which Nature and Science dictate.

## GENERAL VIEW

OF

## THIS DISTRICT.

**SITUATION.** The South Hams form the Southernmost point of the Department of Country which is the subject of the present Volumes. Its NATURAL BOUNDARIES are Dartmore (and detached Heights, on its Southern skirts) on the North; Plymouth Sound, on the West; and the Estuary of the Dart, on the East;—the English Channel sheathing its Southern point:—its OUTLINE, or figure, being somewhat triangular.

**EXTENT.** Estimating the base of the triangle at thirty miles, and its perpendicular

at fifteen miles, we have an area of two hundred and twentyfive miles; but if we include the rich valley of the Dart, which runs up towards Ashburton, we may set down the extent of the South Hams at two hundred and fifty square miles, or one hundred and sixty thousand acres.

**ELEVATION.** The tide flows up the estuaries,—with which the District is deeply indented on every side—except the North,—a considerable way within its area: nevertheless, the tops of the hills of which the District may be said to be composed are elevated considerably above the Sea. Viewing it with regard to Agriculture, it is truly an Upland District. The bolder swells, towards the center of it, might be termed Heights; altho, in comparison with the Mountains that overlook them, they are Hillocks of a pigmy order.

**SURFACE.** Viewed from even the midway stages of the Dartmore Hills, from whence almost every acre of the South Hams is distinctly seen, the Surface appears flat, or barely furrowed with water courses,—a broad flat of marshes, or an extent of low vale lands!

But in crossing the country, the Traveller  
finds

finds endless difficulties, arising from the great inequalities of surface. It is billowy in the extreme. Some of the swells are nearly semiglobular. The South Hams are the Stroudwater Hills of Gloucestershire, without wood,—or the most billowy passages of the Chalk Hills of Kent or Surrey, intersected with hedges. Round Totness, the ground is most strongly featured; being there divided by deep vallies; and from thence to the feet of the Dartmore Hills, a similar style of ridge and valley is observed; corresponding with the surface of the more Western District.

- **WATERS.** The Hills of the South Hams, as those of West Devonshire, are well watered. Springs are seen to pour forth their limpid rills from the sides of the swells, and frequently from near their summits. The waters from these springs collect in the vallies, and form rivulets and minor rivers; five or six of which have their estuaries, advancing some miles within the area of this favored District\*.

\* How well situated are the South Hams, and especially, their Northern margin, for MILLS of MANUFACTURE.—Yet, fortunately for Agriculture (as will presently appear), there is not at present, I believe; one within its area; and but very few on its margin: owing, probably, to the expensiveness of fuel, in this part of the Island.

The **DART** is a stream of considerable magnitude. The rest mere brooks, at dead water; but swell into rapid torrents, in the times of floods. The **YALM**, at Ivybridge, is a mountain torrent of the first rank.

**SOILS.** To convey the best idea, I am able, of the soils of this fertile District, I will adduce the remarks which were made, at the different times of examining them.

**IVYBRIDGE TO KINGSBRIDGE.** The Soil uniformly fertile. The tops of some of the hills are rich grazing ground! Other hills are leaner and less productive. But I observed not a field worth less than ten or fifteen shillings, an acre. The whole ride is worth twenty shillings, on a par! much of it forty shillings, an acre, to a Farmer. The sides of the hills are excellent corn land;—the bottoms rich meadows. Some little red soil is seen, in this ride.

**KINGSBRIDGE TO TOTNESS.** The nature and appearance of the country are much like those observed, between Ivybridge and Kingsbridge; excepting a high swell or swells, the soil of which is much inferior to any, in the foregoing ride:—The produce furzey, inclinable to heath: one of the Chudleigh Hills, or a mass of the Dartmore mountain,

thrown in here. Much red soil appears in this ride. The water of the road, in some places, red almost as blood:—in this respect, differing from West Devonshire, and partaking of the District of Torbay. See MINUTE 51.

ENVIRONS OF TOTNESS. The soil of these Hills is rich in the extreme,—even to their very summits! most rich grazing ground. Autumnal grass, near a foot long, now reclining on the ground; as gross, and as darkly green, as the autumnal herbage of the Vale of Berkley.

TOTNESS TO IVYBRIDGE. The soil similar to that of the central and more Southern parts of the District; but, on the whole, not so good.

IVYBRIDGE. A rich plot of ground to the East of the Yalm: a deep loam on a sort of gravel: worth, to a Farmer, thirty or forty shillings, an acre.

SHERFORD ESTATE. The Country is at present so completely burnt up, with the inveterate drought of this summer (1794), that no accuracy of judgement can be formed of it. The soil, in general, is evidently of a superior quality. But judging from the present parchedness of the crops, some parts of it are as



evidently too shallow: a defect which appears to be common to many of the lands of the South Hams.

**GENERAL OBSERVATIONS.** From the sum of these particulars, it is evident, that this District, with respect to soil, ranks high among the fertile Districts of the Island. There are very few, of equal extent, to place in competition with it.

**SUBSOILS.** In the South Hams, as in West Devonshire, SLATEY ROCK, and SLATE-STONE RUBBLE, are the prevailing Substrata: with, however, a few variations in the former, which are not observable in the latter. A vein of LIMESTONE runs along the Northern margin of the South Hams; in different parts of its area, a deep red ochrey LOAM is observable; and, at the foot of Dartmore, a sort of GRAVEL is met with. But these variations are only incidental; and it may be said of this District, as of West Devonshire, that its lands are clean and sound, adapted either to corn or grass;—inclining towards the extreme of absorbency, rather than to that of retentiveness.

**TOWNSHIPS.** Some of those on the Northern margin of the District, at the feet of the Dartmore Hills, are very extensive: a

circumstance which has probably arisen from the unreclaimed state of their lands, at the time they were distributed into Townships. But the more remarkable circumstance of the lands of the area of the District—of lands so dry, rich, and habitable as those of the South Hams—lying in Townships above the ordinary size, may be more difficult to be accounted for. Perhaps, the best reason that can be assigned for it is their having been kept long in a state of open pasture; as their name would seem to import; and were thinly inhabited, when Townships were laid out; their present state of inclosure and cultivation being of comparatively modern date.

TOWNS, &c. PLYMOUTH and its Environs have the same influence on the Western margin of the South Hams, as they have on West Devonshire. And the sea port of DARTMOUTH draws off some part of the produce of the Eastern quarter.

The more inland market towns are TOTNESS, PLYMPTON, MODBURY, and KINGSBRIDGE: with several considerable VILLAGES\*.

\* It may be remarked of the towns and villages of Devonshire, that they are often very extraordinarily situated,—*across steep-sided vallies!* The streets, it would

**INLAND NAVIGATION.** The Estuaries, which have been mentioned, afford convenient passage to small vessels; and, perhaps, preclude the use of Canals, while the Country remains in its present state. From Kingsbridge, considerable quantities of corn and cider are said to be shipped off. Small mast vessels reach Totness. And Aunton Gifford, a finely situated Village, has its Estuary; which, however, like the rest, is shrinking from the spot, where, in much probability, it formerly gave rise to the Village or Town, which it has now deserted. But some rich marsh lands, which it has left in its stead, more perhaps than recompense the loss.

**ROADS.** On the Roads, as on the Soils, of the South Hams, I will transcribe the extemporary remarks which I find in my journals.

**EXETER TO PLYMOUTH.** The Road, tho generally too narrow, is in many parts exceedingly well formed, and well kept. The materials blue marble, and a hard rust-colored stone. In some places, the barrel of the  
Road

seem, as the roads, have been, originally, the wood tracks, or driftways, of the pastoral tribes. Modbury is a striking instance.

Road might be termed the segment of a marble cylinder. But the lofty hedges, on either side, are not only intolerable nuisances to the Traveller, whom they seclude; but, in many parts, are injurious to the Road. The Magistrates have, therefore, a double motive for enforcing the law; so far, at least, as to strike off the side boughs which contract the lanes, and overshadow the Road; and, in suitable parts, as at the more abrupt bends, to keep the brushwood down to the banks;—at once, to let in currents of air, to dry the road when wet, and to disperse the dust when dry; and, at the same time, to disclose the beauties of their Country, to those who travel through it. Beside, by obliging their tenants to prune the hedges of the *Roads*, they might see the utility of the practice, and might be induced to extend it to *Farm* fences in general\*.

IVYBRIDGE TO KINGSBRIDGE. The Roads are most intricate; numerous, narrow, and crooked; and rendered similar in their appearance, by the same tall banks, and taller hedgewood, which are common to the District; and this without guide posts to assist

\* See the MINUTES, 12 and 15, on this subject.

the stranger: especially in the bye roads, where they are the most wanted. They are likewise most unlevel,—braving the steep, where side-long roads would be equally near.

ENVIRONS OF TOTNESS. The private Roads, to grounds, how steep! straight in the face of the steepest part of the hill! First, no doubt, foot paths; still horse paths. Some of them too steep, even for sledges.

TOTNESS TO IVYBRIDGE. The Roads much better laid out in this, than in the other rides. They frequently lead along the tops of the hills, and wind across the vallies. There is much level road, and comparatively little that is steep. The materials stone; beaten tolerably small,—and covered, when fresh laid on, with earth or rubbish, to bind the rough materials; and thus to render the road immediately travelable: this being one of the few instances, that I have met with in common practice, of this most eligible method.

STATE OF INCLOSURE. The entire District, some small plots excepted, is in a state of permanent inclosure; and mostly in well sized fields, with straight fences; except against public lanes; which are in general winding; as if they had been formed to confine such fortuitous roadways, as we

frequently see deviating across forests, and other open commonable lands: a fact which renders it highly probable, that the District was inclosed from a state of common pasture; or from a state of pasture lands intermixed with temporary arable inclosures; such as have been already particularly noticed. See page 31.

**HEDGEROWS.** The **DANMONIAN FENCE** is common to the South Hams. High mounds surmounted by coppice wood. Not a Hedgerow Tree, nor a Pollard is seen, in a hundred square miles! As naked of Hedge Timber, as the recently inclosed lands of Leicestershire. Perhaps the sea air is an enemy to Hedgerow Trees. Or the high mounds of this Country are not fit to receive them. Or the life-lease tenure has an interest in preventing their rising.

**PRESENT PRODUCTIONS.** Along the Northern margin of the District, and on the steep rugged banks of the Dart, plots of **WOODLAND** are observable:—also more or less about Places, and the larger farmsteads. But speaking generally of the South Hams of Devonshire, they may be said to be destitute of wood; except what grows on the hedge banks. Yet the fuel of the Country is wood;

and it is, I believe, abundantly supplied with that necessary article, from its Hedges: a circumstance which would no longer appear extraordinary, if we were to calculate the proportional quantity of the lands of the District, which they occupy.

The Produce of its FARM LANDS varies in different parts of the District. Not only the bottoms or cooms, in almost every part, are kept in a state of *permanent grass*; but, in some parts, the sides, and even the summits, of the swells, particularly about Totness, are preserved in the same state. And altho I observed no extensive plots of such lands, as there are about Mylton Abbot and Lamer-ton; yet, taking the District throughout, the proportion of permanent grass land, in the South Hams, is considerable.

#### THE APPEARANCE OF THE COUNTRY.

Notwithstanding the extraordinary beauty of the ground, or natural surface, of this District, it is far from being rich in picturable scenery. Square fields, and straight lines of Hedgewood, how profitable soever they may be to the farmer, and pleasurable to a mind reflecting on their utility,—are not grateful to an eye, viewing them in the light of Ornament.

This,

This, however, applies most closely to the area, or more central parts, of the South Hams. The Northern margin is finely diversified. In the valley of the Dart, about Totness, the views in every direction are fine. Compositions the most striking might here be caught: Below Kingsbridge too, the scenery is fine. And from Modbury Church, in the area of the District, some lovely views are seen: winding cooms, backed by the rugged scenery of the Northern margin, and distanced by the mountain heights of Dartmore. But an eye delighted with the wilder scenery of nature, will find, on the banks of the Yalm, above and below IVY-BRIDGE, the fullest scope for its gratification.

**TENANCY.** Lifeleasehold is the prevailing Tenure, or Tenancy, of the South Hams, as of West Devonshire.

**POOR'S RATE.** An evidence of the mischiefs which MANUFACTURES are capable of entailing on Agriculture, stands conspicuous, at present (1791), in this District.

Some years since, a woollen manufactory, of considerable extent, was set on foot, at Modbury, and carried on with spirit, and with success to the individuals who prosecuted it. But their end being answered, the



manufacture ceased, and all the vice and debility, which it had drawn together, were left as a load upon the parish. The consequence of which is, I am informed, the Occupiers of lands, within the township of Modbury, are now paying five shillings in the pound, to the poor, while those of the surrounding parishes do not pay two shillings.

THE  
**AGRICULTURE**  
 OF  
 THIS DISTRICT.

**FARMS.** Most of the CHARACTERISTICS of the Farms of the SOUTH HAMS appear in the foregoing Remarks, on the present state of the DISTRICT at large.

The SIZES of Farms, here, are various; the South Hams resembling, in this and other respects, the more Western parts of this quarter of the county. Fifty pounds, a year, rack rent, is esteemed a middle-sized Farm. One hundred pounds, a year, a full-sized one: with,

with, however, some "BARTONS" of greater magnitude.

**FARMERS.** In a country which is principally divided into small Farms, it would be unreasonable to look for many of that valuable order of men, who are usually styled **CAPITAL FARMERS.** At the fair of Plympton, or at the market of Kingsbridge, I saw no appearance of men of this rank in society. Nevertheless, men of enlightened minds are familiarly spoken of. Indeed, from some modern improvements, which will appear in this detail, to have been introduced into the District, we might safely conclude, without other evidence, that it possesses men, who think for themselves, and act without the authority of their ancestors.

**BEASTS OF LABOR.** These are **OXEN,** **HORSES,** and **ASSES:** the last being not uncommonly used for pack loads.

The **PLOW TEAM** is four or six oxen; or four light, or two heavier oxen, with two horses before them; or three, or in some instances, only two, horses,—with a boy, or a man, to drive, or lead them.

A **ROAD TEAM** I do not remember to have seen, out of the more public roads, and very few in them. **PACK HORSES,** I believe, are

the prevailing, or universal, means of transfer; whether of produce, of manure, or of materials in general.

**IMPLEMENTS.** The **WAGGON** and the **CART** may be said to be wanting, in the South Hams; which, in this particular, appear, from every thing I have seen and heard, to be behind West Devonshire. I have seen building stones carried on horseback along the finest road in the kingdom; close by the side of which they were raised; and conveyed to a neighbouring town, through which the road passes.

In the **PLOW** of this District, I observed no deviation from that of West Devonshire; except in the addition of a *foot*, in one or more instances.

**MANAGEMENT OF FARMS.** The only observable deviation, in the general management of the South Hams, from what may be styled the genuine **DANMONIAN HUSBANDRY**, lies in the proportion of corn crops to temporary ley grounds, on the lands that are subjected to an alternacy of corn and herbage.

In West Devonshire, the regular distribution has been broken, in some sort, by the introduction of **TURNEPS** and **POTATOES** \*.

In

\* See page 138.

In the South Hams, the breach has been made still wider, by the introduction of CLOVER LEYS FOR WHEAT, and the practice of SOWING WHEAT AFTER TURNEPS.

How long these practices have been introduced, I did not learn. But from their not having yet reached the more Western District, it is likely they are of modern date. And altho I observed them in several instances, they are probably not yet introduced into the ordinary management, even of this District.

The CROPS of the South Hams are the three corn crops of *Wheat*, *Barley*, and *Oats*. The *Pulses* are sparingly, if at all, cultivated in the District. *Beans*, at least, are imported, in quantity. Some *Turneps*, a few *Potatoes*, and *cultivated herbage*, form the rest of its arable crops.

MANAGEMENT OF SOILS. Very little struck me, in this department of management, as differing from the practice of West Devonshire. The same velling, burning, and one plowing of ley grounds, for *Wheat* and *Turneps*, are observable: with, however, in some cases, an additional species of tillage; which, tho partially used, throughout this

quarter of Devonshire, did not fall under my inspection, in the more Western District.

This operation in tillage, has for some length of time, I understand, been practised here, under the ludicrous name of “tormenting.” It is performed with a SUBPLOW\* of many shares, which are fixed in a triangular frame, supported by wheels; these shares, or SUB-HOES, working a few inches beneath the surface;—in the manner of the Kentish NIDGET. See SOUTHERN COUNTIES, Sect. IMPLEMENTS.

The only instance, in which I particularly examined it in use, was on a ley ground which had been velled, &c. for Turneps, to be sown on one plowing: the tormenting being done previously to the plowing; for which it is an admirable preparation; as not only separating the roots of weeds, but breaking the soil, and rendering it the more obedient to the harrow. As a preparation for Wheat, to be sown under similar circumstances, the operation, perhaps, may be found equally eligible †.

## MANURES.

\* See MINUTES OF AGRICULTURE, in SURREY.

† 1804. I have found it of great use, as a preparation to the seed plowing, for Barley, after Turneps that have been eaten off late in the season.

**MANURES.** The same manures, and the same management of them, are common to the South Hams, and to West Devonshire. The use of SEA SAND is fast declining. LIME is in full repute, and is managed, I believe, without deviation, agreeably to the method which has been described. And BEAT BURNING, tho prohibited by some, is still in high estimation.

**WHEAT.** A NEW VARIETY of Wheat has lately been raised in this District, and is likely to become a favorite sort \*. This improvement, having been made by a Farmer, or a Farmer's son, and adopted by professional men, is a strong evidence that the bonds of prejudice are at length broken.

**SUCCESSION.** *Burnt ley ground* appears to be still the prevailing matrix for Wheat. But, as has been mentioned, *Clover leys*, and *Turnep lands*, are now more or less sown with this crop.

**The TIME OF SOWING.** In going over the District, in the latter end of October, I had an opportunity of observing this particular. Sowing was then commencing. But, in general, the lime and earth still remained, in

\* For an accurate method of RAISING VARIETIES of Wheat or other grain, see YORKSHIRE, Art. WHEAT.

roof heaps, unspread : and, in many places, among Turneps, uneaten off. Some Clover leys were then breaking up, and, in one or two instances, men and women were hacking over the plowed ground, to receive the seed \*. November is probably the principal season of sowing. But it is thought "very well if they finish by Christmas." Can this be right? Is the practice peculiarly adapted to the climate of the South Hams? Or is it pursued, to counteract the foulness of the soil †? Or is it merely a bad practice, that wants to be improved?

**TURNEPS.** In the South Hams, as in West Devonshire, Turneps are still universally grown, after temporary Ley; except a few that are sown in autumn, on Wheat stubble. I met with no instance, nor could I hear of any, in which they were sown after Wheat or Oats, of the preceding year; agreeably to the prevailing practice of England.

Nor did I see or hear of an instance, in which Turneps were cleaned, and set out at suitable distances, with the hoe, as in that practice.

**GRASS LANDS.** The SPECIES of Grass land,

\* See p. 185.

† Wheat stubbles, in general, were then in full herbage.

land, here, as in the more Western District, are

*Mowing grounds*, or meadows; which are partially watered, throughout the District;

*Grazing grounds*, or rich upland pastures; which were remarked, more particularly, about Ermington, Aunton, and Kingsbridge; and, most especially, about Totness; and

*Pasture grounds*, or the ordinary temporary leys of the Danmonian husbandry.

In the MANAGEMENT of Grass lands, I perceived nothing which gave me reason to apprehend, that it differs from that of WEST DEVONSHIRE.

ORCHARDS; &c. This is the principal fruit-liquor District of Devonshire. But, as I had so favorable an opportunity of making myself master of the Devonshire practice, in the place of my residence\*, I had the less occasion to attend to it, in the South Hams: whose practice, from what I saw of it, is the same as that of West Devonshire; except in the greater attention which is paid, in the former, to the process of fermentation. But the Herefordshire practice being still far superior, in this respect, to that of South Devonshire; and having already given an ample,

\* See Note, page 209.



and, I believe, an accurate detail of that practice, it is the less necessary to resume the subject, here.

In the proportionate QUANTITY of ORCHARD GROUNDS, the South Hams, in like manner, resemble the West of Devonshire. A stranger, in riding across the country, would not suspect it to be a fruit-liquor District. No such extensive plots of orchard ground, as meet the eye in travelling through Herefordshire, &c. and in some parts of Kent, are seen in South Devonshire. Nevertheless, the farms being small, and each having its Orchard, the aggregate quantity is considerable. The trees being low, and confined chiefly to the vallies, and perhaps overtopped by tall hedgerows, account for the little show they occasion.

A minutia of practice in the DISPOSAL OF APPLES, for household purposes, may not be too trivial to notice. In the ordinary practice of the kingdom, they are sold by *measure*: but, here, not unfrequently by *number*: a shilling a hundred being esteemed a moderate price.

CATTLE. The BREED is that of *Devonshire*: excepting a few, in the hands of individuals,

dividuals, of the *short-horned* breed. See MINNUTE 5.

The South Hams are not emphatically a BREEDING District. Corn, rather than Cattle, appears, to a stranger passing through the Country, to be the principal object of the Farmers of the South Hams. Many of the working Oxen, that are seen in this District, are, no doubt, purchased of the Moorside Farmers. See page 240.

SHEEP. I observed some considerable flocks, on the West side of the District; and smaller parcels on the East.

The BREED varies as to *head*. On the East side of the District, particularly about Totness, I observed a thick carcassed, long-wooled kind; uniformly polled, and with mottled or grey faces. See page 253.

## RETROSPECTIVE VIEW

OF THE RURAL ECONOMY OF

SOUTH DEVONSHIRE.

IN taking the foregoing View of the SOUTH HAMS and their Rural Management, some reflections have arisen, which it might be wrong to suppress.

Viewing the state of husbandry, in the aggregate, and including the modern improvements of individuals, it approaches nearly to the medium of that of the kingdom at large. The permanent grass lands appear to be mostly well kept, and are many of them partially watered. The lands subjected to aration are not strikingly foul; nor do they appear, *superficially*, to be greatly in want of tillage.

Nevertheless, one who has been accustomed to the more fertile parts of Norfolk, of the Midland Counties, and of other fertile and well cultivated Districts,—and to ob-

serve, in the autumnal months, the plenty which everywhere presents itself,—the spacious barn, and well stored rick yard, with herds and flocks seen in every direction,—is struck with the apparent deficiency of produce, whether of corn or of cattle, in travelling over the South Hams, at the same season.

This apparent deficiency is, no doubt, in a considerable degree, owing to the smallness of the farms, and to the farmsteads being much secluded in the vallies. But similar appearances are observable, in the fairs and markets of the District. And I am, of opinion, that its produce, at present, is far from being adequate to its natural advantages.

Viewing the District of the SOUTH HAMS, and its PRESENT STATE OF HUSBANDRY, in the detail; a few modern improvements,—chiefly perhaps of individuals,—only excepted; they perfectly agree with those of WEST DEVONSHIRE. In SOIL, SURFACE, and ESTABLISHED PRACTICE, they may well be considered as the SAME DISTRICT; and the following remarks are applicable to the whole of the inclosed lands of

#### SOUTH AND WEST DEVONSHIRE.

IT may be right to premise, that notwithstanding the apparent deficiency, in respect

to produce, the lands of this quarter of Devonshire pay a rent, equal to what would be esteemed their fair value, in better cultivated Districts. This seeming contradiction is to be reconciled, by the circumstance of the Danmonian practice having few high-fed horses to support;—by the lowness of wages, and by the frugality of living, among working farmers;—by a ready market, and much water carriage;—and, still more, by the favorable circumstance of lime being freely used, on a soil that is not yet saturated with the calcareous principle.

Among the numerous IMPROVEMENTS, of which this Division of the West of England is susceptible, the following have occurred to me, in taking a retrospective view of the foregoing registers of its present practice. Many of them are noticed in these Digests. Nevertheless, I think it right to bring the whole together, here; for the greater ease of those who may be disposed to promote the prosperity of this favored part of the Island.

In the FORM OF FARM YARDS much is to be done; especially in providing proper receptacles for manure; to prevent its most valuable parts from being dissipated. In some few cases, I have seen the water, from dung  
yards,

yards, led over grass lands. But unless a reservoir be formed, to collect such water, in order to throw it over the land, in a large body, its effects are very confined and inconsiderable. For hints on this subject, see **MINUTE 40.**

In the **MANAGEMENT OF HEDGES**, I am of opinion much improvement may be made, by pruning the sides, so as to prevent their drip and shade from destroying the under growth of the mounds, and the crops on either side of them; as well as to promote the upward tendency and strength of the wood, which grows on the tops of the mounds; whose extent, being limited, can only throw out a certain quantity of produce; and it is but reasonable to conclude, that so much of the nourishment, as is suffered to be expended on the spreading outside boughs, is lost to the more useful stems, which rise upon the top. See **MINUTES 12, and 15,** on this subject.

A proper **FORM OF A LEASE**, for a term of years, appears to be much wanted; such a form as will encourage improvements, and give encreasing value to estates;—instead of that which is at present in use. See page 82, also p. 87.

In the application of lands to their fittest uses, something remains to be done. There are many sites which would pay for PLANTING, and some, which are now in a state of woodland, that would pay for clearing. See page 57, also MIN. 35.

The USE OF WHEEL CARRIAGES may be profitably extended to many of the farms, both of the South Hams, and of the more Western District.

The ordinary PLOW of these Districts is susceptible of very essential improvement: and the TURN WREST PLOW would be found highly useful, in cultivating the steeper lands of this broken hilly country.

But the greatest improvement, which these Districts appear to be capable of receiving, lies in the SUCCESSION OF ARABLE CROPS. The present practice of taking three corn crops in immediate succession, as well as the paucity of tillage which the land receives for these three crops, (and even perhaps the ineffective form of the plow!) doubtless arose from the difficulty which was experienced, at the time this practice was established, in the RE-NEWAL OF THE SWARD, after fallows, pulse crops, or more efficient tillage. Even the practice of drawing the weeds of Turneps, instead

instead of cutting the ground over with the hoe, may have originated in the same experience.

But now, that the art of **CULTIVATING SWARD** is known, and practised, such a mode of procedure is become improper: for the cleaner the soil, and the finer the tillage, with the more certainty and effect may sward be cultivated.

In the Midland District, where the soil is retentive of moisture, and where the Turnep crop, and breeding flocks of sheep, are less eligible, than they are, on the absorbent soils of Devonshire, there is a better plea for persevering in a similar practice. See **MIDLAND COUNTIES**, Sect. **CULTIVATED HERBAGE**; and the **MINUTE** thence referred to; where the reader may find this interesting subject discussed.

In the **MANAGEMENT OF THE SOIL**, very much requires to be done. The first step is to clear it from obstructions of the plow; and the next to rescue it from the dominion of weeds, to which much of it may well be said to be, at present, subject; and some of it to a redundancy of water. In other words, it requires to be **WHOLLY RECLAIMED** from a state of nature and neglect.



This reclaim is to be effected, by **FREE CLEAN FALLOWS**; or **FALLOW CROPS**, whether of **ROOTS, HERBAGE, OR PULSE**; according to the circumstances of the respective lands, and the state of foulness in which they are found.

Another obvious improvement, in the soil process, is that of driving **TWO OXEN**, with **WHIP REINS**, in all the lighter works of tillage; carrying a width of **plit or plowslice**, in proportion to the state of the soil, and the strength of the animals. See **MIN.** 39.

An evident and great improvement, in the **FARMYARD MANAGEMENT**, is that of **bottoming** the dung yard with mold: a practice by which a rich source of manure, for grass land, is obtained, without loss of dung to the arable crops: or, if the mold be mixed up with the dung, in the spring, a most valuable compost is formed; fit, in the course of the year, for any purpose of Agriculture; and this at the trifling cost of collecting the materials; which may frequently be done, by means of back carriage; and always at leisure times.

It is at least an object of experiment, in this uncertain climature, to try the effects of **EARLY SOWING**, on clean reclaimed land.

The

The present method of **SETTING UP WHEAT**, on the stubble, in this country, is very ineligible, compared with that of the North of England. See page 170.

In the **HARVESTING OF BARLEY AND OATS**, especially in a wet and backward season, the practice of the Northern Provinces would, I am of opinion, be found very advantageous. See page 174.

The **WINNOWING MILL**, and the proper method of using it, require to be introduced.

The **TURNER CROP** of this country is, at present, discreditable to English Agriculture. The practice of East Norfolk is, perhaps, the best which this District could eventually adopt. For a minute detail of that practice, see the **RURAL ECONOMY OF NORFOLK**: but see also page 193, foregoing.

In the **MANAGEMENT OF LEY GROUNDS**, something is evidently requisite to be done: many of them, at present, are shamefully unproductive. If the Norfolk plan of management were wholly adopted, and the duration of the leys confined to one whole year, sowing them with Wheat the second, they might with strict propriety be mown for hay, the first year. But should they be continued, as at present, in pasture grounds, during five,

six, or seven years, every effort should be made, to prevent so ruinous an operation from being necessary; or, if it cannot be wholly prevented, its injury should be rendered as light as possible, by mowing early, before the taller herbage has had time to destroy the undergrowth, and injure its own roots.

The quantity of WATERED GRASS LAND may doubtless be much increased; and the present practice of watering be very much improved.

Some considerable portion of the present ORCHARD GROUNDS, it is very probable, may be converted, profitably, into watered mowing grounds. And many unproductive sites be converted, with still greater profit, to Orchard grounds. See page 212.

In the treatment of the present Orchards, one improvement is most obvious; namely, that of training up the trees, in such a manner, that yearling cattle may pasture among them, during summer; and Swine, the year through; except during the gathering season. In the pruning and cleaning of Orchard trees, there is likewise full scope for improvement.

To the MANUFACTURING OF CIDER, the  
Devonshire

Devonshire Orchardmen might bend their attention with profit, by turning their produce to the best advantage. Their soil, and their climature, especially in a moderately dry summer, are more friendly to the apple, than are those of Herefordshire or Gloucestershire. And, were the arts of manufacture as well understood, here, as in the Mayhill District, I am of opinion, that the cider of Devonshire would outrival that of Herefordshire, at the London market\*. However, while cider remains a mere article of beverage, there is less encouragement to excellency of manufacture, than there would be, were it fashionable, as a substitute for wine.

The South Devonshire Husbandmen, however, have an object of improvement lying open before them, which will repay them, ten fold, for their attention, compared with any advantage that can arise from their Orchard grounds, or their fermenting rooms. This important object of their attention is the BREEDING OF LIVESTOCK; whether Cattle, Sheep, or Swine.

I am of opinion, that the rental value of the lands, of this part of the County, may

\* For a minute detail of the Herefordshire practice, see the RURAL ECONOMY OF GLOUCESTERSHIRE.

be increased, exceedingly, by a due attention to the improvement of these three species of domestic animals, only. And seeing the facility with which it may be effected,—since there are superior breeds, of cattle and sheep at least, within the limits of the County,—there remains no color of excuse for delaying so valuable an improvement.

Finally, I will beg leave to suggest, in addition to the hints which are here considered offered, that if the Gentlemen of this Country, who have lately formed themselves into a Society, for the purpose of promoting its Agriculture, will assist the PROFESSIONAL part of their Countrymen, in the establishment of SUBSTANTIAL PRACTICES, their country, for ages to come, may have cause of gratitude for their patriotic exertions.

*DISTRICT*

**DISTRICT THE THIRD.**

**THE**

**MOUNTAINS**

**OF**

**CORNWALL AND DEVONSHIRE.**

**PREFATORY REMARKS.**

**THE MATERIALS** which I collected, respecting these Mountain Tracts, were obtained in different ways.

What relates to **CORNWALL**, I gathered in an **EXCURSION**; undertaken for the purpose of gaining some general ideas, relating to this remote part of the Island.

But, with respect to **DARTMORE**, and its uncultivated Environs, the information I am possessed of arose, **INCIDENTALLY**; without any premeditated plan of survey. Indeed, these wild uncultivated lands resemble, so much, the mountainous parts of Scotland, and the North of England, on which

the broad lines of nature remain unobliterated, that a minute examination was the less required, by one who has been accustomed to read her works; and whose only desire, in this instance, was to extract a few leading facts\*.

My sources of information being thus distinct, I will preserve the materials separate, and, first offer a Transcript of my CORNISH JOURNAL, as it was hastily formed, at the time of making the Excursion (in AUGUST 1791); whether it relate to the MOUNTAINS or the LOWLANDS of Cornwall.

AN

\* 1804. Since the first publication of these volumes, I have repeatedly crossed the forest of Dartmore; and in different directions. In one of my journies I noted what rose to the eye, in travelling. The sketch will appear in No. 45 of the following MINUTES.

AN  
EXCURSION  
IN  
CORNWALL.

THIS Excursion was made, on horseback, by CALLINGTON and LESKARD, to BODMIN; and back by LAUNCESTON and TAVISTOCK.

BUCKLAND to BODMIN.

23d August 1791.

The ELEVATION of the Country, in this ride, is high: the road leads, most of the way, along the skirts of the Hills, between the Mountains and the broken cultivated Country towards the Sea; and, in passing between Leskard and Bodmin, it crosses over the chain of Mountains which run through this Peninsula; but not in an elevated part. Some very high hills are seen to the North of the road:—Hinksdon, a depressed Cone, with a Prospect Place on the top, is seen at



great distances. Many ragged *Tors*, of the true mountain cast, are observed in this ride.

**CLIMATE.** On the hangs of the Mountains, corn is still green; but in the lower lands, harvest is now at its height:—more than half cut, and some carried.

The **SURFACE** is exceedingly broken, into sharp ridges, and deep, steepsided vallies; especially on the lower declivities of the general range of hills; as between Callington and Leskard. On the upper parts, as between Leskard and Bodmin, the swells are more rounded, and the vallies wider and less steep.

The **SOIL** is very various, as to quality; but even the tops of the lower mountains are far from barren; supporting numerous herds of cattle, as well as many sheep:—much more productive of grass, than the heaths of Yorkshire; tho every part produces more or less heath. Between St. Ives and Leskard, and below this toward the Sea, is a tract of charming land: five or six quarters of barley, an acre, are now harvesting\*. The *species*  
of

\* There are, I understand, other tracts, on the more Western Coast of Cornwall, of equal or superior fertility to the tract above mentioned: particularly towards the two extreme points,—the Lizard, and the Landsend.

*of soil* appears to be the same as that of West Devonshire.

The **SUBSOIL** is also similar:—namely, a slaty rock, and a kind of rusty rotten slate, or rubble.

**RIVERS.** Several large Brooks pass from the Mountains, southward, to the Sea.

**NAVIGATION.** None of the Estuaries stretch up so high as this road. That of Looe reaches within a few miles of Leskard.

The **ROADS** are of stone, and in some parts extremely well kept. The gates few, and the tolls moderate. Toll Roads are now formed between most or all of the market towns. The Roads of Cornwall were, formerly, very rough and dangerous; especially across the open heaths, among the Mines! Yet, at the first introduction of toll Roads, in this country, obstinate riots took place.

**MINES.** Some, but not many, in this ride. They are now, I understand, chiefly confined to the Western parts of the County.

The **MANUFACTURE** of the District, I believe, is principally Woollen Yarn, for the Devonshire Serge-makers and Clothiers.

The **TOWNSHIPS** appear to be large,—with numerous Hamlets.

The **PRODUCE**, of the Inclosures, is mostly

*Corn.* The *Heaths* support the cattle in summer, and great part of the winter months. The principal requisite consequently is Straw, to feed them with in the depth of winter. Some *Meadows* appear in the bottoms; but little inclosed *upland grass* is seen: and but very little *Woodland*; except in the Dingles, at the heads of the vallies, next the heaths.

**INCLOSURES.** The Mountains and their skirts are open:—the lower lands all inclosed. The **FIELDS** are well sized, and well formed.

**FENCES.** The banks thinner and lower, than in West Devonshire; but of the same form.

The **BUILDINGS** are mostly of Stone and Slate: some “Cob”—or Mudwall.

**CROPS.** Wheat and Barley, with some Oats and Turneps (unhoed), with a little Clover and upland Ley. But not a Bean nor a Pea (unless harvested), in this ride.

The **CATTLE** are of the West of England breed: bred and kept on the heaths, in great numbers, from yearlings to aged Oxen: working these, occasionally, from the heath!

The **SHEEP** of the heaths are tall, and ill formed: some polled, some horned: yet, apparently, all of the same old stock: the

Ewes are now at rut: the Rams are mostly large-horned, like those of the Dorsetshire breed.

BEASTS of LABOR. Some Oxen and Horses in carriages. But Pack Horses seem still to be much in use.

IMPLEMENTS. A singular kind of two-wheel carriage, for Horses or Oxen, is here in common use; especially, I believe, to carry harvest produce upon. It is called a "WAIN;" and is a hay cart, or wain, without sides: having only two arches bending over the wheels, to keep the load from bearing upon them! with a wince, behind, to tighten the rope. How simple; and, being low, how easily loaded! I met two on the road, laden with wool; each, with two oxen at the pole, and two horses before them.

MANURE. Lime and Beat ashes are universal. A considerable portion of the country is now set with roof heaps of Lime, and with velled Beat, now burning. A great quantity of earth, I see, is burnt. All, no doubt, for Wheat. Theorists I find are, here, against burning the soil; but Farmers, in general, I understand, are for it.

The TILLAGE is apparently better, here, than in Devonshire. About Leskard, the

land appears to be in a good state of cultivation.

ORCHARDS evidently diminish, as the distance encreases, Westward.

WOODLANDS.—Very few: some distant Oak coppice. Peeling on the stub extends into Cornwall.

ORNAMENT. The views are frequently picturesque: but they cloy, through a frequency of repetition, and a degree of sameness.

HARVESTING.: Busy “handreaping:” saw several *women* at work. Make shucks of ten sheaves: nine in a square, and one as a hood, as in Devonshire. But, unless the straw be long, and the hood sheaf be made large and straight, the covering is evidently incomplete. Mow chiefly with bows; but cradles, I see, are to be sold. About Bodmin, the Wheat in general seems to be made into “*arrish mows*,” or field stacklets, of about a load each.

FURZE. There are two distinct species, or varieties, now in full blow. The lower skirts of the uncultivated hills are gilded with them. One of them is the creeping sort, which is common to the Southern Counties; the other is called the “French Furze;” and

Tavistock, I understand, has long been a market for Furze seed\*.

The GENERAL STATE OF HUSBANDRY, in some parts of this ride, is above mediocrity; except in the culture of Turneps. Between St. Ive and Leskard, is a passage of as well cultivated land, as most in the kingdom.

TOWNS. *Callington* is a small market town; and a *borough*. *Leskard* is a large, populous, decent-looking place, and would appear respectable in any part of the Kingdom. It is likewise a *borough*. *Bodmin*, tho one of the County towns, is much inferior, in size and respectability. This, too, is a *borough*.

### BODMIN to BUCKLAND.

24th August.

The ELEVATION of the Country is very great, between Bodmin and Five-Lanes, over Bodmin Down, and Temple Moor. Some very high points of view are reached. Saw the cliff and the estuary of Padstow. In a clear day, both seas are observable (near

\* Which is sold in London, under the name of "French Furze Seed!" See PROVINCIALISM, FRENCH NCT.

Fowey and Padstow). Some remarkable rugged mountains are seen towards the North coast: "Roo Tor" and "Brown Willy" being spoken of as the largest. Passed "Dossmary Pool," a small lakelet, about a mile in circumference, upon the higher part of these heaths; and crossed a quaking bog; which has formerly, no doubt, been a lake. From the elevations surmounted in this ride, and from the top of the castle of Launceston, perhaps half of Cornwall, and a very large portion of Devonshire, are seen over: the whole a strongly featured country.

CLIMATE. Some Wheat *upon* the hills is still quite green. The harvest, in this elevated situation, is in general very late;—sometimes, being prolonged, till after Michaelmas\*.

SURFACE. About ten miles of the upper part of the heaths, over which this road passes, is tamely billowy; the swells resembling those of the Downs of the Southern Counties; with lofty mountains on each hand; a charming ride,—*in fine weather*. The remaining ten miles, to Launceston, and from thence to Buckland, is the same abruptly  
broken

\* The information of an intelligent fellow-traveller.

broken country, which prevails throughout the more cultivated parts of the two Counties.

The SOIL towards Bodmin is of a mean quality; nevertheless, the Downs and Moors, are thickly stocked with Cattle and Sheep; especially with the former: saw on one of the higher knolls, some hundreds in a herd! doubtlessly, to enjoy the coolness of the situation.

Launceston is situated among well soiled; but steep hills. At Milton *Abbot*, is a plot of the finest grass land in the Kingdom! Grazing ground of a very superior quality. The Midland Counties cannot shew better. Also about Lamerton, and Tavistock, are some good grazing lands.

**MINES.** There is no "mine" within sight of this ride. But two or three considerable "stream works" are seen: one of which I stopt to look into. In a stream work, there is no "lode" or body of ore; the tin being lodged in small particles or fragments, among the earth (at two or three to twenty or thirty feet deep) which is washed by a rill or stream, conveyed, by art, to the required spot\*; the

\* Query, Have STREAM WORKS given rise to "LEATS," or made Streams, in this Country? Are they of Roman, or of British, origin?



metal and stones remaining; while the soil is carried away with the stream: thus annihilating the *land*, in the most complete manner ingenuity could devise.

**RIVERS.** The Tamer and the Tavey: also the heads of some of the Southern rivers.

The **ROAD** in general is good. For a considerable way, the stones are covered with a kind of rough sand, or small gravel, apparently, the loose materials of which granite is composed; making an admirable road.

**INCLOSURE.**—The moors are open: except some small inclosures, about Temple, &c. Cultivated lands are every where inclosed.

**PRODUCE**—as before.

**MANUFACTURE.**—Yarn.

**BUILDINGS.**—Stone and Slate. At Launceston the houses are mostly faced with Slates: some of them three or four feet square. The Church is of Moorstone, deeply and richly sculptured! substantial, and beautiful, as a Gothic building: the labor must have been immensely great; seeing the hardness of the material—a shining granite.

**FIELDS**—as before.

**FENCES** increase in bulk, toward Devonshire; swelling to their fullest magnitude, at Buckland Place.

**CROPS**

**CROPS**—as before; excepting the grazing grounds of Milton and Tavistock.

**CATTLE.** The Moor stock are of the West of England breed: saw some oxen which would fat to sixty or seventy stones (of 14lb.) on these heathy mountains!—all in very good store condition.

**SHEEP.** The same tall, aukward sort, as about Bodmin.

**GOATS.** Saw several browsing on furze. I was told that numbers are kept in Cornwall, for milking; some herds consisting of a hundred head; and that Goats' and Kids' flesh are not uncommon in the Cornish markets.

**BEASTS OF LABOR**—as above.

**MANURE.** Beat ashes, and "sea sand;" a fine *shell marl*; which is brought in great quantities from the North coast, by the Padstow river, to within three miles of Bodmin; and carried, by land, many miles.

**TILLAGE**—as before.

**HARVESTING**—the same.

**STATE OF HUSBANDRY,**—much the same:—somewhat inferior.

**ORCHARDS** increase, toward Devonshire.

**WOODLANDS.** Observed few, in Cornwall; except on the banks of the Tamer.

**ORNAMENT.** The mountain views are extensive and grand: those from the lower points are frequently picturesque.

**TOWNS.** *Temple*, a DESERTED VILLAGE! the only one I have any where seen. Some years ago, not a single person lived in the township! (a Curacy appendant to Blisland;) and only one little farm house is now inhabited:—the ruins of half a dozen more; the body of the Church down; the Chancel remains. **GOLDSMITH**, surely, must have travelled this road!

*Launceston*\*—provincially and universally, throughout the country, "*Laanson*," or "*Laanston*," is a well looking place; but awkwardly situated; on the brink and side of a very steep hill! The street leading to Newport is as steep, almost, as the roof of a house.

The

\* 1803. AUGUST. CALLINGTON to LAUNCESTON. A truly Danmonian passage. The whole line (the Western foot of Hinksdon excepted) is an inclosed cultivated country; similar to that of West Devonshire. The same style of country spreading several miles, westward, from the banks of the Tamer; and corresponding with the lower banks of that river, towards the Sea: the valley of the Tamer, on the Cornish side, being interrupted by the Hinksdon mountain; which is separated from the more central mountains of Cornwall, by a valley or broad line of cultivated lands.

The castle, which has been a very strong fortress, commands some charming views. *Newport* a paltry *borough*:—a mean-looking hamlet; belonging to the parish of St. Stephen's; a village which stands opposite to Launceston. *Mylton Abbot* a charming situation. *Tavistock* is also well situated; and was heretofore celebrated for its *abbotry*!

GENERAL OBSERVATIONS. I am agreeably disappointed with respect to Cornwall. From what I had seen on the banks of the Tamer\*, I expected to have found, as I went farther Westward, a wretched country, wretched roads, wretched towns, wretched accommodations, and wretched inhabitants. On the contrary, the country, whether in point of soil or cultivation,—except the higher mountains, and they are good in their kind,—is above mediocrity. The roads, their unlevelness apart, are among the best in the kingdom. The towns, substantial and neat. The accommodations, equal to any thing met with, out of the great roads. The inhabitants, intelligent, civil, are said to be extremely hospitable, are affable, clean in their appearance, and many of the men handsome in their per-

\* See No. 3 of the following MINUTES.

sons. What most disgusts a stranger, in travelling through Cornwall, is the inordinate number of its boroughs; and this impropriety lies not with the people of Cornwall. There are none indeed more sensible of it, than the inhabitants themselves.

DARTMORE,

# DARTMORE,

AND ITS

## *UNCULTIVATED ENVIRONS.*

THE Incidents, which led me to a knowledge of this District, are various. I had repeated occasions to traverse the WESTERN SKIRTS of Dartmore. I purposely ascended the SOUTHERN HEIGHTS, to view the striking features which that side of it exhibits, and to catch a bird's view of the District of the South Hams. I crossed the SUMMIT, in travelling between Morton and Buckland. And I skirted the NORTHWESTERN MARGIN, in passing between Tavistock and Okehampton. I have, therefore, had opportunities of seeing almost every square mile of its surface, and of observing its natural characters, in different and distant parts.

The SITUATION—of this uncultivated tract of country, is towards the Western side of Devonshire ; being, in part, separated from

the Cornish mountains, by the cultivated banks of the Tamer: but, to the North of Tavistock, the skirts of Dartmore, and those of Hinksdon, may be said to unite: for altho they are strewed with plots of cultivated lands, there is no regular line of separation; and the same mixed country spreads wide, toward the North, between Launceston and Okehampton. On the South, lies the fertile District of the South Hams:—and a continuation of the Chudleigh or Hall Down Hills, broken in a most striking manner, separates it on the East, from the vale of Exeter.

The **EXTENT** of these wild lands is not easy to estimate; there being no determinate line, on the Northwest quarter. A circle of twenty miles diameter would, perhaps, comprize the whole extent of the open lands, in this part of Devonshire; exclusively of the inclosed lands, which lie intermixed among them. Admitting this supposition to be sufficiently near the truth, to give a general idea of the extent of those open lands, we may say that they cover more than three hundred square miles of surface,—include about two hundred thousand acres.

In **ELEVATION** above the sea, these lands are greatly varied. The extended sum-

mit of the main body of the mountain is raised, in a singular manner, above the surrounding country; especially on the South side. Looking down, even from the midway stages, upon the South Hams, an upland District, the comparative elevation is so great, as to render the idea of difficulty, in travelling across the latter, ridiculous. (See p. 271.) Nevertheless, the sea washing, in a manner, the foot of the mountain, its positive height is inconsiderable, compared with that of many less mountain-like masses, which occur in the more central parts of the Island. On the North side, the stages are lengthened, and the general descent is much less abrupt. The outskirts, round Brent Tor, and towards Launceston, form an extended flat, mean in elevation, compared with the towering heights, which overlook it on either side\*.

\* The conical hillock of BRENT TOR, pointed with rugged rocks, and surmounted by a Church! rises in the center of this wide flat. From the grounds of Buckland, this hillock assumes the character of a mountain height of considerable magnitude; and, in navigating the Sound of Plymouth, it is used as a landmark, at more than twenty miles distance: yet, in reality, it is but an inconsiderable hillock. A proof of the extraordinary levelness of this passage of country.

LAUNCESTON CASTLE, crowning a higher, but more rotund eminence, is another striking feature of the same broad face of unreclaimed nature.



The SURFACE of Dartmore proper is truly mountainous. The composition is grand; the lines in general lengthened, and the features large: not abrupt and broken, like the minor hills of Devonshire. Nevertheless, the summits of several of the higher swells of Dartmore are truly savage, and rendered finely picturesque, by reason of immense piles of stones, or huge fragments of rock, thrown confusedly together, in the most grotesque manner: sometimes crowning the knolls, but oftener hanging on their brows; especially on its Western front: while the precipitous surface of the Southern hills takes a more smooth and polished form; being frequently molded into beautiful bosoms; prominently rising into globular swells, with ample well turned vallies between them.

In some parts, the surface is thickly strewed with stones; which, in many instances, appear to have been collected into piles, on the tops of prominent hillocks; as if in imitation of the natural Tors.—The “*stone burrows*,” of Dartmore, resemble the *cairns*, of the Cheviot and Grampian hills; and are, perhaps, equally of *Celtic* origin\*.

The

\* These artificial piles of stones I have more particu-

The WATERS of this tract of mountain are merely the torrents, which pour down its furrowed sides, in every direction. The DART is the most considerable stream that owes its support to these hills.

The SOILS of those unreclaimed lands are greatly above the par of mountain soils, in the Island at large. They are superior to those of the Highlands of Scotland, and very superior to those of the North of England. Some of the higher swells, it is true, are covered with black moory earth; and in the vallies between them, peat bogs are frequent, and dangerous; not only to strangers who travel the cross roads, but to pasturing stock. And, in many parts, the soil is much encumbered with stones; which, in some, occupy, perhaps, half the surface. Nevertheless, there are extensive tracts, even of the upper grounds, that enjoy a loamy soil, nearly free from stones, and of a sufficient depth for cultivation: wanting nothing but a genial climature, and a proper supply of manure, to render them valuable, as arable lands. And soils of still better quality are observable, on some of the marginal Com-  
larly observed on the hangs, and summits, of the Southern hills of Dartmore.

mons; tho, on others, those of inferior value may be found.

The SUBSOILS are equally various. I have observed, in a few instances, a stoney rubble, or foul YELLOW GRAVEL, resembling that of the Yorkshire mountains; also a friable, BROWN RUBBLE; and, even on the higher hills, LOAM, of a sufficient depth for every purpose of land.

The PRESENT PRODUCTION of Dartmore and its uncultivated environs may, with some little licence, be said to be HERBAGE! —greensward! even of the highest bleakest hills; more or less intermixed, however, with HEATH; which, indeed, chiefly occupies some of the worst-soiled parts of the mountain; while on the lower grounds, the FURZE, particularly the trailing kind, is prevalent. There is little if any wood, I believe, on the unappropriated parts of this tract of country: the FUEL, used by the bordering inhabitants, being the produce of the peat bogs, and the black moory soils; as in other mountainous Districts\*. The

\* Some of the PEAT is of a superior quality; admitting of being CHARRED; and in this state, is used by BLACKSMITHS, instead of pit coal.

1804. On the Southern skirts of Dartmore, this prac-

The APPLICATION of the pasturable produce, which this uncultivated wild at present throws out, is to CATTLE, SHEEP, and HORSES,—and some few RABBITS.

The RIGHT of DEPASTURING belongs to different interests. A considerable part of the mountain is FOREST LAND, subject to the superiority of the DUCHY OF CORNWALL. The outskirts, and parts of the hills, are appendant to the MANORS of the adjoining country; the right of pasturage being vested in the appropriated lands of those manors. And beside this intrinsic right, over their respective commons, many of these lands, as well as others in the vicinity of the moor, have a prescriptive right, on the forest, by paying an inconsiderable sum—a few pence—annually, under the name of *Venvil money*, to the Duchy\*. The Duchy, nevertheless, tice is now on the decline, or is nearly extinct: owing probably to the supply of coals having of late years been more ample, on that side, than it was formerly. But, on the Northern borders, towards Okehampton, the practice, I am well informed, still prevails.

\* VENVIL. This word evidently appears (from a manuscript setting forth the rights of the parish of Mavey) to be a contraction of *ven* and *vield*; the provincial pronunciations of *fen* and *field*: the said prescriptive right being claimed over the fen, or boggy ground of the forest, or chace, for FUEL, and over the hills, or open field, for PASTURAGE.

preserves the right of stocking the forest lands, by *agistment*: and stock are sent, in numbers, from distant townships; paying a very low price for their pasturage: not more than a shilling, eighteen pence, or two shillings, a head, being paid for the summer's run of cattle!

Beside the CATTLE thus brought together, by agistment, great numbers are reared, by the Venvil tenants, on the verge of the forest; under a routine of practice that has been mentioned. See p. 238.

The SHEEP, being drawn together, from various quarters, differ as to breed. On the Southern parts of the mountain, the polled breed of the South Hams is mostly seen. But, on the Northern and Western sides of it, the partially horned breed, which has been noticed, is prevalent; corresponding, in general appearance, with the established breed of the Cornish mountains;—but of a better frame. In winter, those sheep are drawn down to the inclosed country; where the ewes drop their lambs; returning with them, in the spring, to their mountain pasture.

Hence, the leading OBJECT of the MOOR-SIDE FARMER is to raise fodder enough

for his cattle, and to preserve grass enough for his sheep, to supply them, during the winter months; depending, almost wholly, on the commonable lands, for their summer maintenance; his milking cows and rearing calves excepted. Working oxen are, everywhere, seen on the commonable lands, both of Devonshire and Cornwall: their work, under this treatment, being of course moderate\*.

The PRESENT VALUE of these lands appears, from this general view of their application, to be far from inconsiderable. I had not an opportunity of estimating the aggregate of the stock they support. But an eye, accustomed to observations of this nature, may readily discover, that, in a POLITICAL LIGHT, these uncultivated lands are, at present, of some estimation. For admitting that a Moorside Farmer, by the assistance of these lands, in supporting his stock eight or nine months of the year, is enabled to rear, and forward to market, twice the number of cattle and sheep (or even one fourth of such

\* Store Cattle are foddered with straw (generally in the house) in the night; and turned out upon some neighbouring common, in the day time: so that the farm has nothing but straw to provide for them.

additional number), that he could without their assistance,—the aggregate encrease of produce to the community, would be found, on calculation, to be worthy of public regard. And, in a PRIVATE point of view,—if one may judge from the good estimation in which Venvil farms are held\*,—from the extraordinary prices which the “Moorside men” give for rearing calves,—namely, fifteen to twentyfive shillings, at three days old! a price which they nowhere else bear (1796),—and from the comfortable livelihoods which the smallest of these farmers are enabled to make,—those lands are not, at present, wholly thrown away.

Nevertheless, tho they are doubtless of considerable value, at present, it does not follow that they are, at present, in their most valuable state.

To speak, in positive terms, of the means requisite to the

### IMPROVEMENT.

of this uncultivated tract of country, might be

\* In the paper noticed foregoing (see Note, p. 326), the value of the privilege of *fen and field*, on Dartmore, is estimated at one third of the value of the farms of the township; which is situated on the immediate margin of the forest. This, however, is the estimate of claimants.

be presumptuous, in one who has confessedly given it only a cursory incidental examination. But it has also been premised, that the passage of country, under consideration, is of a species similar to the Moors of Yorkshire, and the mountains of Perthshire,—both of which I have examined with attention, and have, at different periods of time, separately digested my ideas, with respect to their improvement: circumstances which enable me to speak, with greater confidence, on the improvement of the moory mountains of Devonshire; whose distinguishing characteristics lie, chiefly, in the superiority of soil and climature, compared with those of the unreclaimed lands of Yorkshire and Perthshire.

In suggesting hints for the improvement of Dartmore and its uncultivated environs, it will be proper to consider the mountain, or forest lands, separately from the commons, and lower grounds of the extensive flat which has been mentioned; as they appear to require somewhat different principles of improvement.

In the improvement of the HIGHER LANDS, the leading objects appear, to me, to be WOOD and HERBAGE. Their *climature*,



I apprehend, unfits them for the profitable production of CORN: and a want of *manure* is another bar to this species of produce. Nevertheless, there may be dips and unreclaimed vallies, which, as *limited home grounds*, might admit of a course of arable management.

But speaking generally of these lands, the first mean of improvement is pretty evidently that of PLANTING, or otherwise covering with wood, the STONY SURFACES: not more to encrease the value of these particular parts, than to improve the climature of the whole\*. The *Birch*, the *Mountain Sorb*, and the *Larch*, if judiciously propagated, would flourish, I apprehend, on the bleakest exposures. While the *Beech*, the *Ash*, and *Oaken coppice* would doubtlessly thrive, in more sheltered situations.

To improve the HERBAGE of the freer surface of these exposed lands, various means might be suggested.

Running high FENCE MOUNDS across the  
current

\* Particularly, on the higher parts of grounds that incline to the Eastward, or the Southeast; where the plants would gain foothold, before the Westerly winds could injure them; and presently afford shelter to the lands lying beneath them.

current of the Southwest winds, and planting or sowing them with Birch, perhaps with Hornbeam, Mountain Sorb, Elder, Holly, Furze, Broom, &c. in the manner recommended (see p. 70); making the top of the mound hollow, or concave, to collect and retain moisture, and to skreen the seedlings, or young plants, in their tender state. It were impossible, perhaps, to conceive a better fence, for bleak mountain lands, than the ordinary hedge of Devonshire. The mound is an immediate fence and shelter; and the coppice wood, as it grows up, cannot fail, from its relative height above the adjoining lands, to IMPROVE their CLIMATURE; and encourage, in a particular manner, the *growth of herbage*; beside being, at the same time, singularly friendly to pasturing stock. The only doubt, as to the propriety of raising such fences, across the bleak lands of Dartmore, lies in the expence of doing it: for, great as the positive advantages would doubtless be found,—if the expence of raising them overbalanced these advantages, such means of improvement would be altogether ineligible to be prosecuted, by *Individuals*; however profitable the effect might be to the *Public*. The freer, better-soiled parts of

Dartmore, I am of opinion, would pay Individuals, amply, for this **CARDINAL IMPROVEMENT**.

To change the present produce to more profitable pasturage, either in the open or an inclosed state, different means might be pursued.

**BURNING OFF THE HEATH** of the black moory parts, and pasturing them hard with sheep, would tend to extirpate the heath, and bring up herbage in its place. The Cheviot hills of Northumberland, and similar hills in the South of Scotland, were probably brought to their present state of green turf, by this means.

**SODBURNING** the more loamy soils, sowing **RAPE AND GRASS SEEDS**, and **FOLDING OFF THE PRODUCE**, with sheep, would be ready means of meliorating the herbage.

If, by the intervention of Hedge mounds, the climature of these Hills could be rendered sufficiently genial for the maturation of **RAPE SEED**, and should their soils be found sufficiently productive of this valuable crop, the propriety of erecting such fences would no longer remain doubtful; as a full crop of this grain would amply repay any reasonable expence that could be incurred by inclosing;

and the inclosure would amply recompense the loss, which the soil could sustain, from the exhaustion of *one grain crop*: grass seeds being, in course, sown with the rape seed, or over the plants in the spring; or a due portion at each season.

By DRAINING the springy slopes of hills, and particularly the peatbogs, the produce of those parts might be very materially improved.

By WATERING such parts of the lower slopes as can command water, the herbage, no doubt, might be considerably bettered. But very much would depend on the quality of the water; and this experience would readily prove.

By MANURING, something may doubtlessly be done, towards the melioration of the herbage. The vegetable mold of the peatbogs, either in a crude recent state, or in the state of ashes, would, with moral certainty, be found serviceable to the loamy soils. And earthy substances, which, if sought for, might be found, could not fail of producing beneficial effects, on the black moory lands. It is needless to add, that if Lime could be brought to these lands, at a moderate expence, there would be little risque in the free

use of it. With its powerful aid, even CORN might be produced, on many of the lands under notice; but whether with *eventual* advantage, either to the Proprietor or the Public (unless on a small scale), is a matter of great uncertainty. HERBAGE appears to be the primary object of cultivation; and every species that is seen to thrive in similar situations, should have a sufficient trial.

The most profitable STOCK for these lands, in the state of improvement above suggested, would probably be found to be *young Cattle, Sheep, and Rabbits*. The breeding and rearing of *Mules* may be tried, with great probability of success.

There appear to be many situations in which RABBITS would be most eligible. Seeing the local situation of these weak-soiled lands,—between the markets of Exeter and Plymouth,—and the favorable turn of surface, which Nature has given to many of them, for the propagation of this species of farm stock, it is rather extraordinary that RABBIT WARRENS should not be more common, in this country, than they appear to be at present. But, perhaps, the true reason has been already assigned. See page 264.

In the improvement of the **LOWER GROUNDS** of this extensive tract of unreclaimed lands,

**CLIMATURE** is the first object of attention. It is well known to those who have embraced opportunities of observing natural effects, that the Climature of an extended and naked plain is frequently more severe and chilling, both to the animal and the vegetable creation, than that of a billowy surface, of much greater elevation. The wind, in passing over the latter, is broken into eddies, and its effects are thereby softened: beside, let the blast blow from whence it may, some part of such a surface will always afford a degree of shelter to animals, that have free range over it; and even vegetables, that are fixed, enjoy by turns, as the wind shifts, the advantages of its shelter:—while, over an extent of naked level surface, the current rushes forward with unabating force; and let it set from whatever quarter, vegetables and animals are equally exposed to its unrelenting severity. Some Oaks, scattered over the flat of wild lands now under consideration, might be adduced, with numberless other facts, in evidence of the truth of this theory. They are cut down flat, as with an edge-tool. Had

they stood on the heights of Maker, exposed to the immediate sea blast, they would not probably have suffered more.

Hence, in this situation, as on the hills, the first step towards improvement would be to convert to WOODLAND, such parts as are unfit for cultivation; and to raise COPPICE HEDGES across the line of the most mischievous winds, as skreens to the culturable lands.

In a Climature thus improved, and with a sufficient supply of LIME, at a moderate price, I am of opinion that some considerable proportion of these flat lands might be subjected, with profit, to a course of arable Management. But without a plentiful supply of Lime, or other calcareous MANURE, it appears to me more than probable, from what I have seen of these lands, that very few of them would pay for cultivation, as arable lands.

I am therefore of opinion, that, without the assistance of INLAND NAVIGATION, this extensive tract of Country must necessarily remain in its present state, or be improved as pasture grounds, in the manner which has been already suggested, for the higher lands of Dartmore.

Viewing this wide extent of Country,

which, with moral certainty, might be highly improved, by means of a plentiful supply of LIME:—viewing, next, the numerous tracts of uncultivated lands between Okehampton and Biddeford, which are evidently still more improveable, as will presently be shown, and by the same MANURE:—and, lastly, viewing the extensive tracts of Woodland, seen in passing between the places last mentioned, and the value of SHIP TIMBER at Plymouth;—there can be little risque in saying, that there is no other passage of Country, in the Island, in which the LANDED INTEREST calls equally loud for Inland Navigation, as the line between PLYMOUTH and BIDDEFORD.

And seeing, at the same time, the length, and still more the uncertainty, of the passage, between Wales and the port of Plymouth, by sea; and the quantity of CULM which is now used for burning Lime, on the banks of the various estuaries that branch out of it, as well as COALS for the use of Plymouth and its neighbourhood,—it appears, that the INTERESTS of TRAFFIC are also concerned.

Finally, admitting, what I believe is known to be a fact, that it is the bulky articles, here particularized,—namely; LIME, COALS, and



TIMBER, not the Boxes and Bales of Trade, that render Inland Navigation profitable,—it may be fairly concluded, that no Line of Canal is more likely to *pay*, than that now under consideration.

The proper direction of the Southern part of the Line is evident. The TIDE flows within the Estuary or Mouth of the TAVEY: and where the Tide ends, the CANAL should commence; winding up the valley of the Tavey, to TAVISTOCK; a branch being thrown off, up the valley of the Walkham, to HARRA BRIDGE, for the use of the extensive Commons in that neighbourhood, and to catch the use of the public road which there crosses the valley. Above Tavistock, the main line would still wind with the valley of the Tavey, to the FOOT OF THE DARTMORE HILLS (a most desirable point to be gained),—and thence bend across the uncultivated flat, towards OKEHAMPTON.

In travelling between Tavistock and Okchampton, I observed (between Lydford and the latter place) that the road was repaired with LIMESTONE!—black marble: a circumstance which renders it more than probable, that the raw materials of improvement lie

within the field to be improved; and that FUEL only will be wanted, to render the prosecution easy and profitable:

Without intending to censure the supineness, which has lately prevailed in this Country, with respect to the permanent improvement of its surface, I will not hesitate to say, that had advantages, like those which are here adduced, occurred within the interior of the Island, they would long ago have been seen and embraced: and that whenever the spirit of enterprise, in this extreme part of it, shall shift its ground, from MINING, to AGRICULTURE, the Improvement which is here pointed out will be carried into effect.

*DISTRICT*

## DISTRICT THE FOURTH.

# NORTH DEVONSHIRE.

### PREFATORY REMARKS.

AN accurate Definition of what is familiarly called "NORTH DEVON," or "the North Country," I shall not attempt to give. It is generally applied, I believe, to the Country lying towards the North Coast; round Biddeford, Barnstaple, and South Moulton. But the District to which this name aptly applies, is situated between the Mountain of Dartmore and Bristol Channel;—comprizing a wide extent of Country: diversified, it is true, in soil and surface; but it has no distinct separation of parts, large enough to warrant its being divided into separate Districts.

As the only opportunity I had of collecting information, respecting this District, was obtained by an EXCURSION, undertaken for the purpose of viewing its prominent features, and of remarking the overt practices,

which meet the eye of every Traveller, who looks attentively round him,—I will not attempt a digested Register, either of the District, or its Rural Management; but offer a Transcript of my Travelling Journal\*.

The route which I thought it proper to take, was from OKEHAMPTON to HATHERLEY, TORRINGTON, BIDDEFORD, BARNSTAPLE, SOUTH MOULTON, and across the Country to DULVERTON (to catch a view of Exmoor and the fine scenery of its Environs); and thence, to BAMPTON and TIVERTON.

\* It is, however, with diffidence and some reluctance, I adopt this mode of publication. And I have only to say, in its behalf, that the series of remarks, which are here published, arose from facts and reflections, that occurred, in passing through the District under review; and were in general *dictated* while the several subjects of Remark *remained under the eye*.

The defective style, in which they appear, is the convenient one of a Journal,—or *verbal sketch book*. It is concise; and the pronoun, or the verb, which may frequently be wanting, is readily to be *understood*. If the first person were used, egotism would disgust: if the second (as it is in the ordinary style of Journals) sense would be sacrificed.

OKEHAMPTON  
AND ITS ENVIRONS.

SUNDAY, 14 SEPTEMBER, 1794.

THE TOWN,—well sized and respectable; considering the recluseness of its situation,—is seated in a deep bason, broken into three parts, by the narrow wooded vallies of the Oke and its two principal branches: the former winding towards the North, the latter spreading wide to the East and West; and embracing, as with arms, the Northern point of the Dartmore Mountain; which here forms a flattened stage, of considerable extent and elevation; overlooking the town, and forming one side of the bason in which it is situated. The face of the steep is finely hung with wood;—mostly large full-headed Oaks; being part of the ancient demesne lands, belonging to the Castle of Okehampton; whose ruins still occupy a peninsular hillock that faces this bold woody steep; being divided from it by the Western branch of the Oke. The scenery truly alpine.

Sheep, of a diminutive size, are grazing among the ruins of the Castle. Various in

head, as those of West Devonshire and Cornwall. Some of them resembling very much, in head and carcase, the size apart, the improved breed of Dorsetshire.

The site of the Castle, and the steep rugged height, on the face of which it stood, appears to be composed of slaty rock, similar to that of West and South Devonshire.

Upon this eminence, and on the Western brink of the Bason, stands the principal Church of Okehampton: proudly situated; and forming a good object from the opposite height; making one feature of a fine landscape.

The entire Environs, and the views from them, are rich and beautiful; but the scale is small. A truly monastic situation;—rich and recluse—yet, I believe, without the vestige of a monastery!

The fertile swells are now loaded with grass; and some of them stocked with good Cows, of the North Devonshire breed. But little corn; and most of this is still in the field. The North side of a Mountain District is naturally liable to a backwardness of climature.

## OKEHAMPTON

TO

## TORRINGTON.

(Seventeen Miles.)

MONDAY, 15 SEPTEMBER, 1794.

ASCEND, by a steep ill conducted road, the Western banks of the Oke, and leave the cultivated Environs, at one mile from the Town.

Delightful morning!

The Okehampton hounds are gone out, towards the hills of Dartmore; another pack now pass the carriage, towards the opposite hills. A finely wild sporting country.

Enter an extensive furze-grown Common; apparently well soiled, and the subsoil rotten slate. Land fit for almost any purpose of Husbandry.

Several plots of these open lands are now sod-burnt and liming for Wheat! The entire Common lies in narrow ridges, as if it had undergone the same operation, and been suffered

ferred to lay down again to rest, after one crop of corn had been thus taken.

The Stock, now on this ill applied tract, are small Sheep; similar to those near Okehampton.

A rich Valley opens to the right: to the left a mixed Country; marked by the Church of Innerley: a pleasing tho gayly colored object. But the morning is fine; and Nature, also, appearing gay, a white-washed steeple assimilates with the scene.

Enter an inclosed, but rough, upland Country.

Farm houses and Cottages mean: mostly of mud and thatch.

Hedge mounds in the manner of West Devonshire; but not, in general, so high.

See red soil, in the valley to the right.

More furze-covered Commons;—highly improveable: a waste of property to suffer them to remain in their present unproductive state. A plot of Wheat stubble, on one of these Commons, discovers, in its own strength, that of the land.

Some rubbishly ill bred Cattle. The natural produce of commonable lands.

Cross a cold clayey Dip; and enter more



extensive Commons. Thousands of acres of dwarf furze, which ought to be supplanted by Wheat, Beans, and Clover\*.

Some Timber Trees are seen scattered over the Inclosures.

A grass field velled for Wheat; as in the South of Devonshire.

The spring and the autumn furzes are here intermixed, as in Cornwall and West Devon.

A billowy, wooded, Kentish view opens on the left.

A newly planted Hedge mound. The plants as thick as the arm, and cut down to two or three feet high, as in West Devonshire. The Hedgewoods Birch, Hazel, Ash.

Enter a cold-soiled Woodland District. An instance of Scotch Firs planted on this cold retentive soil!

Still more extensive tracts of dwarf furze. Not only the Commons, but some Inclosures, are cropped with this unprofitable plant; the whole of these furze grounds lying in narrow Wheat ridges.

The

\* In 1800, much furze ground appeared to have been reclaimed, since 1794. Several corn stubbles, and clover-leys, were then observable.

The common Sheep, here, are small and mostly polled.

A large parcel of hewn Timber, fit for Ship Building, collected by the side of the road.

The subsoil of these Commons is a red clayey gravel.

Enter an inclosed, red soiled plot of Country,—the immediate Environs of

HATHERLEY: a mean market Town: mostly or wholly built with red earth and thatch. Some of the houses white-washed, others rough-cast. Observed Reed in sheaves; as in the Western parts of the County.

A beautifully wooded Dip breaks, to the left: the valley of the Torridge.

Leave the red soil, about a mile from Hatherley. The subsoil a deep grouty rubble: red as oker.

Enter a cold, vale Country. The subsoil a pale colored clay.

A narrow flat of river-formed land.

Buildings are here entirely of clay.

Four Oxen, two Horses, two Men, and a Boy, at one plow!

Cross the Torridge.

A shameful fall of young Timber\*.

\* 1800. The slender young timberlings, which were then left standing, are, now, most of them dead, or in a

A charming broad wooded Bason, here opens to the West,—between Hatherley and Sheepwash ;—the Banks of the Torridge :

And, now, a wide flat of Marshes, on the right ; apparently in a wild, neglected, unproductive state.

Heuish, Sir James Norcliff's, appears on the opposite banks of these marsh lands.

A bad Turnpike road traces a high ridge of cold white clay,—commanding a strongly featured country.

Ridges of Lime and Earth, for Wheat, are common in the adjoining Inclosures.

Coppice Hedges universal.

Descend, by a steep road, into a well soiled Dell. The subsoil slatey rubble, or rotten slate rock.

Very few Orchard Grounds in this Country.

Ascend “ Padstow ” ( Petrockstow ) Hill : an insulated eminence ; commanding a fine circle of views. To the South, the Mountain of Dartmore rising boldly to the eye, and forming a remarkably strong feature from this point. To the East, the rising banks of the Torridge and the Taw ; apparently, well soiled,

stunted unprofitable state. The statute that requires such standards to be left ought to be repealed. See page 90.

soiled, and well cultivated; the foreground of this view, the Valley of "Marland"—or or Marshland, in a state of neglect,—much of it occupied by furze; to appearance, highly improveable. To the North, a ridge of well soiled arable upland. To the West, a finely wooded District. How delightful the morning! with the Lark in full song:—and with hounds in full cry!

A distant view of the North Country, now begins to open.

The lands, here, are wholly inclosed: mostly in large square *Devonshire* Fields.

Passed the first Cart: drawn in the Cleveland manner! three horses; one in the shafts, the other two abreast, and guided by reins: loaded with bark, for the port of Biddeford; to be there shipped for Ireland.

Cross a well timbered Hollow. Much valuable Ship Timber, in this District.

Close, steep, woody lanes,—how tantalizing and tiresome to a Traveller!

Enter a well soiled passage; mostly arable. Some plots of Turneps and Clover.

Very few Field Potatoes in this passage of Country.

A Box: Winscot: the first *House* I have passed near, in this stage.

Still a well soiled arable Country. Farms seemingly of good size; and not ill cultivated.

Observe several good Horses, in this District.

Another passage of good upland Country. Skirted by a cold rushy bottom.

Meet a string of Lime Horses, from Biddeford; eight or ten miles.

Lime, here, a prevailing manure.

Hedge mounds increase in height: this, altogether, a South-Devonshire-like District: productive heights spreading wide:—rotund swells checkered with Coppice Fences.

An extensive view opens to the left.

Instance of a cropt Hedge. What a loss to the Traveller, that the practice is not prevalent!

Large white Pigs, in a good form.

A fine view of the Valley of Torrington bursts upon the eye.

Orchard Grounds encrease.

A charming back view of the Valley above Torrington: well formed ground, happily enriched with wood and water.

An extensive and rich view, to the right, including the Eastern banks of the Taw.

An instance of limed Grass land.

Drag down a long steep hill to the Bridge of Torrington\*.

### GENERAL REMARKS.

THE Townships in this stage, appear to be of the middle size. The Churches, in general, tall and conspicuous.

Of the State of Inclosure, it may be said, that about half the lands, which fall immediately under the eye, are inclosed; the rest, in coarse furzy Commons, capable of great improvement.

The Fields are generally well shaped, and well sized; as in West and South Devonshire.

The Fences, throughout, are similar to those in the Southern parts of the County. But the Mounds are somewhat narrower and lower.

Woodlands extensive. Oak the prevailing wood. Much fine Timber: much also in a state of Coppice.

The Orchard Grounds are few and small.

The Arable Crops appear, by the stubbles,

\* How unfortunate that a train of circumstances should have led the road into its present unlevel line; while the direct Valley of the Oke and Torridge lies open to receive it.

to be chiefly Wheat and Oats: but altogether small, in proportion to the Grass Lands and Furze Grounds which occupy this Line of Country; especially towards Okehampton.

The Climature is somewhat forwarder than about Okehampton. The crops mostly harvested.

The preparations, now going on for the next year's crop of Wheat, are the very same, here, as in the South of Devonshire; namely, ley ground, burnt and limed.

Very few Cattle, or Sheep, are seen in the Inclosures; which are now full of grass.

The state of Husbandry, on the whole, is considerably below par\*.

#### TORRINGTON

\* 1803. AUGUST. From LAUNCESTON, by HOLS-WORTHY, to TORRINGTON.

The major part of this singular Passage bears no affinity to the rest of the Country. The surface is almost a dead flat of mean, cold, water-shaken land! Heath and rushes appearing to be its natural produce. Now, partially inclosed,—in part open. A wretched Country to farm in; and lies too far from water carriage (at present) to be planted; even if timber of any sort would thrive upon it.

In travelling over this unpromising Passage, it struck me forcibly, from the appearances of its surface, that COALS, it is not improbable, are lodged beneath it. At least, if Coals are to be found, in Devonshire, this, I am of opinion, is the most likely part wherein to search for them.

## TORRINGTON AND ITS ENVIRONS.

THE TOWN is proudly situated, on the brink, and in part steeply hanging on the brow, of the Eastern bank of the Torridge. It is a large inland Market Town; but has no thoroughfare to support it. There is no posting inn, in the place! and only one chaise kept for hire. Nevertheless, the Town is neat, and the people alive. Circumstances to be accounted for, only, in the many fa-

Between Launceston and Holsworthy, the Country is mostly of the above description.—Round Holsworthy (a small market town) lies a circumscribed plot of valuable land; the site of the town being well chosen.—But, on leaving its environs, a continuation of cold heathy Commons, and large water-chilled Inclosures, is entered upon. These, however, are again interrupted by the fertile banks of the Torridge (here, a mere brook). But, leaving these, the cold weak Country recommences, and reaches to the more important banks of the Torridge and the Oke united; in the neighbourhood of Torrington.

Here, a truly Devonian style of Country breaks upon the eye, and extends as far as the eye, from this elevated point of view, can reach: including the fertile District between Torrington and South Moulton;—affording a broad view of what might be termed the NORTH HAMS of Devonshire.



mily residences, which appear in its neighbourhood, and which seldom fail to meliorate the manners of every class of those, who fall within the sphere of their influence.

The view from the site of the Castle—now a Bowling Green—is uncommonly fine. A wooded amphitheatre, richly diversified: with a lengthened bend of water in the middle ground:—and with fox hounds in the woods!

## T O R R I N G T O N

TO

BIDDEFORD\*.

(Seven Miles.)

MONDAY, 15 SEPTEMBER, 1794.

A WELL soiled Common near the Town; stocked with small neat Sheep.

Pass between fertile Inclosures: a rich and beautiful Country.

Cross a lovely wooded valley: thriving Oak Timber; well thinned and set out.

A small Yorkshire plow. The first I have observed in the County.

The

\* For travelling notes between TORRINGTON and BARNSTAPLE, see MINUTE 55.

The surface broken, abruptly, into hill and dale: a Danmonian passage: wooded Cooms rising from the narrow Valley of the Torridge, which winds at some distance from the line of road.

Surmount a clean upland Country. The substratum brown rusty rock.

Reach the summit of the ridge: a furze-grown waste. A broad view of the Bristol Channel meets the eye; with extensive land views, on either side. On the one hand, Hartland Point and Lundy Island,—a prominent and striking feature; on the other, the high lands of the Coast, above Ilfracomb, &c.; with Exmore in the distance.

Descend towards Biddeford. Meet strings of Lime Horses, with pack saddles and bags of Lime. Also two-horse Carts, with Lime and Sea Sand.

GENERAL REMARK.—This Passage of Country, in Soil, Surface, and apparent General Management, perfectly resembles the South-western parts of Devonshire.

## BIDDEFORD AND ITS ENVIRONS.

TUESDAY, 16 SEPTEMBER, 1794.

THE Town is awkwardly situated, and meanly built. And, in vacant spaces between the streets, immense piles of furze faggots rise, in the shape of houses; making the houses themselves appear smaller than they really are.

These dangerous piles of fuel are for the use of the pottery, for which this Town is noted:—chiefly, or wholly, the coarser kinds of earthen ware\*.

The Bridge of Biddeford is an extraordinary erection: a high thick wall, run across the river or narrowed estuary; with Gothic gateways, here and there, to let the water pass.

The tide out: many men employed in loading pack horses, with sand, left in the bed of the river †: and, in every vacant corner

\* 1803. Those alarming nuisances have been judiciously removed, away from the Town, to the opposite banks of the Torridge.

† For the quality of this sand, see note, page 155.

corner about the Town, composts of earth, mud, ashes, &c. are seen. *Shell sand* is said to be plentiful on the coast; but little, if any of it, is brought up this river!

On the shore of the estuary, opposite to the Town, are several lime kilns, now in full work. Numbers of pack horses, and a few carts, loading, or waiting for loads. The stone is chiefly, and the culm with which it is burnt wholly, brought across the channel, from the coast of Wales. The kilns are similar to those of West Devonshire. This lime is carried fourteen or fifteen miles; chiefly on horseback;—for manure.

#### STROLL UPON THE HIGHLANDS, TO THE SOUTH AND WEST OF THE TOWN.

The subsoil of the skirts of the hill is a Slate rubble. A base kind of Slate is used as a covering.

Some charming views, from the midway stages of this eminence. To the North, the conflux of the estuaries of the Taw and the Torridge,—backed by the cultivated hills of the coast. To the South, a beautiful bend of the narrowing estuary of the Torridge, losing itself in the winding wooded valley of that river; skreened, on either hand, by

wooded heights, and backed by wilder distances. Each of these views is worthy of the pencil. The former is grand—the lines ample;—but the latter is more picturable, as a landscape. The home views, on every side, are pleasing. The surface finely broken; resembling that in the environs of Bridport; but the features are larger, and the lines less abrupt.

The soil, of this midway of the swell, is a fertile well colored loam; on a pale and stronger subsoil.

The whole country is inclosed; mostly in large fields, with coppice fences—cut down by the wind: a circumstance more favorable to the admirers of natural landscape, than to the husbandman.

No hedgerow timber: but a few groups of trees are scattered on the hills. The steep banks of the Torridge are chiefly hung with coppice wood.

The farm produce is principally grass; with some little corn; and most of it still out!

The stock, observable from this station, are cattle and sheep. The former in herds, as if the farms were large. The sheep are above the middle size,—and mostly polled.

Nearer the summit of the hill, the land is

colder, and the herbage coarse: abounding with super-aquatic weeds. But the summit itself is again dry, sound, and tolerably well soiled.

A wide circle of views are seen, from an Object House (in ruins) near the summit. A very extensive view opens to the Southeast; but the horizon is too hazy to trace it to its farthest distance. To the Southwest, a strongly featured upland District; large well turned cultivated swells, separated, and the face of the country diversified, by winding wooded vallies, in the best style of Kent or Herefordshire; with tall and stately towers of Churches scattered over the wide spreading scene.

On the upper stages of this eminence, and in descending its Western declivity, I observed many young horses; much of the Yorkshire breed; but somewhat shorter and thicker.

Also some good North-Devonshire cows.

#### BIDDEFORD MARKET.

A few fat, and some store cattle; with three or four heifers and calves. The heifers rather small; but neat; and with remarkably fine bags! the most promising appear-

ance of milk, that I have observed, in the Devonshire breed of cattle.

A few sheep, and two or three colts (weaned foals) in halters.

The Corn Market well filled with long two-bushel bags; chiefly of wheat.

The shambles full of good mutton;—with a scanty show of beef.

Salmon in considerable plenty; but no sea fish!

The womens' market well supplied.

Cart-loads of country bread, exposed in the market place, for sale. A market article, this, which I have not before *observed*.

#### STROLL UPON THE RISING GROUNDS, ON THE NORTH SIDE OF THE TOWN.

These grounds are separated from the hill on which the Town is situated, by a creek of marshland, in its natural state, as formed by the tide; excepting a plot of seven or eight acres, which is now embanking: an operation, which, if it were carried on, with *proper exertion*, could not fail to pay three-fold for the money expended. If the men, who are employed upon it, may be considered as a sample of the *Laborers* of North Devon, they

they exceed, in laziness, their countrymen of the West.

A low bank, thrown up across these marshlands, furnishes, at once, a safe road, and gives effect to a TIDE MILL, situated near one end of it.

A rich loamy soil to the very summit of this hill: a narrow ridge.

A good view of the Bay of Barnstaple, and its finely diversified coast: here, a flat shore; there, steep lofty cliffs.

Some charming near views are seen from these grounds. Tapley (Mr. Cleveland's) a fine situation, is seen with advantage.

The entire environs are studded with *houses*: some of them substantial; others neat. Yet still we find the Town itself a contrast to Torrington. The influence even of half a score families is not sufficient to burnish the appearance and manners of a small seaport Town, in a remote situation.

GENERAL REMARKS.—The climature of this District is evidently later than that of West Devonshire: much of the corn, grown in it, is yet out!

There are few orchards in these environs.

Several carts appear; but no waggons. Pack horses are chiefly prevalent.



The state of husbandry is on a par with that of the rest of the County; or in some degree superior: a laudable assiduity, in collecting and mixing manures, is singularly conspicuous.

On a general view of the District, at this season, it resembles South Devonshire, so much, with respect to natural characters and Farm Management, that, in a register of their Rural Economy, they might well be considered as one and the same District; excepting an observable superiority in the breeds of cattle and horses, in this part of the county; and except a somewhat freer use of wheel carriages, here, than in the South Hams, and West Devonshire.

## BIDDEFORD

TO

BARNSTAPLE.

(Eight Miles.)

WEDNESDAY, 17 SEPTEMBER, 1794.

ANOTHER broken billowy District: high rotund swells, separated by deep narrow vallies.

The

The materials of these hills appear to be chiefly rotten slate, or rusty slate-stone rubble, similar to that of West Devonshire and Cornwall.

Creeks of marsh land branch out of the estuary: the soil of these marshlets is somewhat redish. Now stocked with cattle. But they are at present in a rough unreclaimed state, and appear to be highly improveable.

The road is of stone, and remarkably good.

The stems of corn stacks thatched with reed.

Leave a sweet woody dell, on the right.

A stuccoed barn: mud-wall plastered.

A breed of remarkably tall white Pigs.

Roof heaps of lime and earth compost, on unbroken sward. Q. For Wheat?

Pass over a well soiled upland country: the substratum earthy slate, up to the soil.

A few stone buildings observable.

High mound coppice hedges full of growth.

The timber trees, *on this side of the County*, are remarkably shorn with the *Northwest* wind.

The wide valley of the Taw opens to the view, and the nature of the Country changes, from sound clean soil, to cold aquatic land;—alder swamps, rushy inclosures, and rough

furze grounds ; with much oak wood. The coppices in general healthy ; but the timber much injured by the coldness of the substratum, and the winds from the sea. One wood is completely stag-headed : what a waste of property to let it stand.

Meet several flocks of "Exmore" lambs ; many hundreds ; invariably horned ; and, mostly, even in carcase ; on their way to the Northwest of Devonshire, and the North of Cornwall, to their winter pastures.

An instance of coppice wood, on a flat surface ; as in Kent and Sussex : the first instance of it, I have observed, in the West of England.

Enter on a long and rather steep descent, into the vale, or valley, of Barnstaple.

A large field breast-plowed, and now burning.

Still a cold-soiled, well wooded District. Much furze-grown rough ground ; which appears to be very capable of improvement.

See a heath-covered knoll, to the right. Good cows ; mostly of a dark blood-red color.

Toward the foot of the hill, the land improves.

A broad flat of meadows and marshlands occupies the base of the valley.

**Good**

Good grazing cattle, in rich marshes.

Some large houses are seen among the fine scenery on the opposite banks of the valley.

Cross the Taw, and enter Barnstaple; by a bridge similar to that of Biddeford.

**GENERAL REMARKS.**—The climature improves; no corn observable in the field, in this stage.

The produce—arable crops, grass, wood, roughets of furze, and coarse herbage.

Townships—apparently large.

The whole Country inclosed;—mostly, in large square fields.

The farms apparently of a good size.

The fences truly Danmonian.

The cattle, which appeared, are of a good sort. But not superior to what I expected to have seen, in this neighbourhood.

No Sheep observed, in the inclosures:

Nor wheel carriages, on the road.

In the general state of husbandry, nothing *new* struck me, in this passage of country.

The most obvious improvement, of which it appears to be capable, is that of draining, burning, and fallowing, the cold rough lands.

## BARNSTAPLE

AND ITS

## ENVIRONS.

THE day is incessantly rainy, and ill calculated for pedestrian examinations.

The Town is respectable. The streets are wider and better laid out, than those of old Towns generally are. Many of the houses are substantially built with bricks. But the covering, here, is of the same mean-looking slate, as that which is in use at Biddeford.

Leith carts and Highland sledges (or implements very much resembling them!) are seen in the streets of Barnstaple.

Some small craft in the river, and in a creek which washes one side of the Town. And two small vessels on the Stocks.

Pilton, a pleasant village, adjoins to Barnstaple.

A bold Promontory, which rises abruptly in the center of the broad valley, above the Town,—severing the Taw from the Brook of Pilton and its sweetly winding woody Dell,—forms a striking feature, among the assemblage of picturable scenes, which the environs of Barnstaple *appear*, even through the dim medium of rain, to be capable of affording.

BARN-

BARNSTAPLE  
TO  
SOUTH MOULTON.

(Eleven Miles.)

WEDNESDAY, 17 SEPTEMBER, 1794.

A RICH flat of meadows and marshlands, above the Town; nearly a mile wide: evidently formed by the tide and floods.

The Country, on either side, picturably broken, and well wooded.

Some fine Cows now in the meadows.

Sea-sand compost is here in use.

Pass through Newport, a large village.

The Buildings chiefly Earth and Thatch; but some Bricks, Stone, Slate, and Pantiles are in use.

The breed of very tall white Pigs still continues.

Meet more Exmore Lambs going Westward to their wintering grounds.

The day is set in for rain; yet the appearance of the Country is delightful beyond description. Perhaps rain, as varnish, mellows the Views.

The substratum, here, is slaty rock; worn into hollow ways.

Lofty swells productive to their summits, as those of the South Hams.

The prevailing subsoil is slaty rubble.

A valley opens to the left; richly soiled, well cultivated, and stocked with fine cattle.

Some large orchards in this valley.

Close woody hedges, with some timber in them.

The roads are in a shameful state: evidently injured by the hedges. Why is not the Law enforced? In this Country, where woodlands abound, and where coals may be had at a reasonable rate, no serious evil could arise were all the hedges in it shorn to their mounds.

Sea-sand composts are still seen by the side of the road (5 miles from "Barum").

A small waste hillock appears to the right.

The substratum, now, a mass of rock, broken into checkers,—and rising to the soil.

Get a broad view of the rich and beautiful

#### VALLEY OF SWIMBRIDGE.

A large flock of Sheep appear on its base.

Instance of Oats now green as Grass! the second instance observed?

A wide view opens to the East ; but is curtailed by the hazyness of the atmosphere.

Rich grass land, to the summits of the swells.

The Valley of the Taw opens, at some distance to the right : a wooded District.

A fine back view, from KERSCOT HILL, of the Estuary and its banks : broad, but grand, and picturable \*.

An obvious improvement, in the line of road. The hill is crossed, when its base might be traced nearly on the level.

The fields in this Country, as in the South of Devonshire, appear to be large in proportion to the Farms.

A breed of small sheep ; apparently with fine wool.

Rock and slate rubble rise to the soil of rich grass land.

\* 1803. This view, when suffused with a brilliant atmosphere, is magnificent beyond the description, either of the pen or the pencil. It comprizes, not only an ample valley of great richness and beauty, with its lofty and finely diversified banks, its fair town and villages, its river and winding estuary, but unites with these a strongly featured inlet of the sea—the entire Bay of Barnstaple—well defined, by its high cliffs and rugged promontories : the Isle of Lundy, seen in far distance, giving additional feature to this richly composed and well poised NATURAL LANDSCAPE.



Grazing Cattle, on the higher hills; as in the South Hams.

Meet "a pair of wheels:" the first from Biddeford!

The road improves.

A sweet Country; but most difficult to be *seen!* A distant view, at length opens to the East.

Black Limestone road: tolerably good.

Philly, Lord Fortescue's noble place, breaks at once upon the eye: a finely wooded bason. The Timber abundant, and seemingly well set out.

A herd of young cattle, and a flock of sheep, in the grounds about the house.

The Farmery large; bespeaking a suitable extent of demesne in hand.

A very deep quarry of black Limestone. Similar in appearance, to the Chudleigh marble: but the color is less bright.

This capacious quarry is not less than fifty feet deep. The stones are brought up from the lower depths on horseback; and the water is raised by a horse pump.

Pass a string of two-horse carts, guided with reins, in the Cleveland manner! Has a colony of Clevelanders formerly settled in

North Devonshire, and brought with them their carts and horses ?

Vile roads again : and in the neighbourhood of a great man's residence ! But, perhaps his Lordship's Lime Work is the principal cause of the evil. The color of the materials, and the state in which they at present lie, give them every appearance of roads to Coal pits\*.

Still an inclosed, well soiled Country.

A stately Tower, proudly situated, appears in front ;—SOUTH MOULTON.

Mount a rich well turned swell, and enter the Town.

1803. Interesting as this stage appeared, from a close carriage, and seen through a murky atmosphere, it has still greater attractions, when viewed from an open carriage, on a clear summer's day. It certainly is, to an admirer of the rich and beautiful in cultivated nature, one of the most pleasing drives in the Island.

\* 1803. The site of the quarry is now a flourishing plantation, and the public road, in the neighbourhood of CASTLE HILL, in the highest state of keeping.

## SOUTH MOULTON

AND ITS

## ENVIRONS.

THURSDAY, 18 SEPTEMBER, 1794.

THE TOWN, which consists of a spacious, newly built Market Place, surrounded with inferior streets, caps a rotund hillock, situated among other hillocks of a similar nature, and wearing similar appearances;—rich and beautiful in a superior degree.

The soil a fertile loam,

The subsoil pale rubble, or rotten slate, or a kind of soft checkered rock.

Some wood in the vallies; but not an acre of unproductive land to be seen in the neighbourhood.—One of the finest farming Districts in the Kingdom.

Walked towards the Barton of Great Hill, to view Mr. Trigg's Breed of Cattle; which is reckoned one of the first in this neighbourhood. And the District of South Moulton is spoken of as the first, for the North Devonshire breed\*. Saw

\* 1804. This valuable breed of Cattle has of late years been widely spreading over the face of the kingdom;

Saw six of his Cows. All of them good. One of them superior to the rest: remarkable in the carcase; well loined, wide at the hips, and square in the quarters; with a fine head and bone. The horns also fine, and shorter than ordinary. The color a lightish blood-red; the rest darker, and mostly with smokey faces. All of them low on their legs: a size between the Gloucestershire and the Herefordshire.

The day is too tempestuous, to keep the field: and I have already gained a sufficient idea of the North-Devonshire breed of Cattle. A farther examination might gratify; but could not instruct: they are evidently a superior variety of the middle-horned breed; and are of course one of the first breeds of Cattle in the Island.

and it might take possession of many parts of it, with great profit to the country. The purest fountain of this breed is now in the neighbourhood of BARNSTAPLE.

## GENERAL OBSERVATIONS,

ON THE COUNTRY BETWEEN BIDDEFORD AND  
SOUTH MOULTON, INCLUDING  
THEIR ENVIRONS.

IN a general view of this Line of Country, —whether we attend to the height or formation of its surface,—to its soil, its substrata (a short passage on the West of Barnstaple excepted), or their present produce,—to the state of inclosure, the size or shape of fields, or the nature of their fences,—to the species of arable crops (no trace of the bean crop or other article of pulse now observable), or the manner of producing them (so far as it appears at this season),—or to the livestock or animals of labor (except as above excepted, see p. 363)—it so perfectly resembles the Districts of South Devonshire, that they might be conceived to have once been united; and to have been forcibly separated, and thrown into their present situations, by the Mountain of Dartmore, in one of Nature's convulsive paroxysms, having broken them asunder, and placed itself in the breach.

SOUTH MOULTON

TO

DULVERTON\*.

(Thirteen Miles.)

THURSDAY, 18 SEPTEMBER, 1794.

AT less than two miles from the Town, leave its fertile Environs.

A pretty, but unproductive; valley to the left: alders, rushes, and rough grounds.

Climb the side of this valley. The substratum close rock, up to the soil: no inter-

\* 1803. From SOUTH MOULTON, by CHUMLEIGH, —towards Crediton and Exeter.

The same style of country prevails between South Moulton and Chumleigh, as that which characterizes the environs of the former. But the unlevelness of the road is intolerable!—enough to put even a patient traveller out of love with the country.

Chumleigh in embers! still glowing! (20 August.) Full two thirds of the town burnt to the ground! Not only the thatched roofs and timbers, but the walls (of earth and straw) took fire, and increased the conflagration!

Southward of Chumleigh, a similar turn of surface continues; but the richness of the soil decreases, to within a few miles of Crediton; where a different style of country commences; and will be mentioned, in speaking of the VALE of EXETER.

vening rubble, or other earthy subsoil: the land lean, and the produce weak: a contrast to the neighbouring lands; though the *soils* appear to be similar.

Another rainy day, with a storm of wind.

Meet a *drove* of cart horses, and a string of saddle horses, on their way to the Fair of Barnstaple:—the property of a Dorsetshire Dealer.

Mount a rough furze-grown height,—an extensive Common,—and catch a broad view to the South: apparently, a cold infertile District.

Bend to the left, from the Tiverton road; and enter narrow woody lanes, barely pervious, by a carriage.

Break out of this pass, into other Commons; and nearly approach the heaths of Exmore; a narrow valley only intervening.

EXMORE, in this point of view, is without feature; appears as a flat, or at most, a tamely billowy heath. Its hills scarcely rise above the cultivated swells that environ them. This side of it, at least, has not a trait of the Mountain character.

Wind along the brink of the valley. The opposite banks are apparently well soiled and well

well cultivated; tho they form the immediate skirts or margin of the Moor.

Some wooded Dells branch out of the valley.

Sheep on these Commons;—similar to those of West Devonshire and Cornwall!—part horned; part hornless.

See corn in arrish mows; or small field stacks.

Trace a ridge of cold land; a woodland soil; and leave a similar dip to the right.

Enter and skirt a wide fern-grown Common: large plots of fern now in swath. Also dwarf furze, and some heath. The soil deep and culturable.

Approach still nearer the Exmore Heaths: now crimsoned with blossoms; which brighten as the day clears up.

The soil of the Moor Skirts is somewhat red. Laid out in large square Danmonian Fields. Much of it in a state of arable land: a few Turneps.

The valley widens, and breaks into well soiled hillocks. The two parishes of East and West Anstey appear to be in a good state of culture. Several plowed fields; apparently clean fallows.

Meet strings of Lime Horses; from Bampton Lime Works.



Several instances of good young Cattle, of the North Devon Breed.

Building Materials—Earth and Thatch: an entire suite of new Farm Buildings, just finished, of these materials.

Lose sight of the Exmore Hills; but still keep the brink of the valley; having enjoyed a tolerably level road for seven or eight miles!

Holly abounds in this cold-soiled situation: it is frequently seen to mix with the Alder.

Leave the high ground, and descend into the valley. The Subsoil slatey rubble.

Stirring Wheat Fallows, with four oxen: the first oxen, and the first plow, I have *seen* at work, in North Devonshire!

Narrow Wheat ridges, as in West Devonshire.

The road, of black Limestone, is narrow, but well laid out.

Thick polled Sheep, as in the South Hams.

Instance of watering Grass land: the first I have *observed*, in North Devonshire.

“Dunstone,” and good Grass land, as about Moulton.

A Lime kiln: black stone, lodged among “Dunstone,” or soft checkered Rock.

Some tolerably large Orchards; with low *Devonshire* trees; tho within the County of Somerset.

Another

Another Sea, or rather Bay, of rich Daumonian swells.

Approach DULVERTON; by another Gothic bridge.

## DULVERTON

AND ITS

### ENVIRONS.

THIS small Market Town is situated in a deep narrow valley;—chiefly near its base, but partly climbing up its Eastern bank. The Church conspicuous and neat; and the place altogether, has a plain, neat, and pleasing appearance. Immediately below the Town is Pickston, a small place, belonging to the Ackland family.

The approach from Moulton is singularly pleasing. Pickston, a plain-dressed place, first meets the eye; and immediately the Town, equally unsuspected, bursts abruptly into the sequestered scene: a rich and beautiful bason, hemmed in on every side; the valley to the North being closed with steep winding banks hung with Coppice wood; and, on the other hand, the rising grounds and woods of Pickston form an impervious

skreen; the Exmore Hills just showing themselves above the middle ground of the view; a meek, modest, lovely little picture.

#### WALK UPON THE HILL ABOVE THE TOWN.

A charming view, from the midway of the steep, of the valley below (in this point of view, also, closed in as a bason), including Pickston.

Reach a deserted place of view, on the summit of the hill; and catch a most interesting detail of the winding valley of Dunsbrook; the eye tracing it within the wilds of Exmore: steep, narrow, and thickly wooded; with a narrow base of water-formed land, waving with the stream; a finely alpine scene.

At a sharp bend of the valley, immediately under the eye, and facing a long reach that points to the Northwest, the Coppice wood is cut down, by the wind, in a very singular manner; even at this distance—twelve or fifteen miles—from the Sea. But the bleak air of Exmore may, alone, be equal to produce the effect.

The soil of this eminence is dark-colored and fertile, to its highest ridge.

Large fattening Wedders are now grazing upon it. Some

Some fine Cows, on a neighbouring swell. Whichever way the eye is turned, it is caught by something that appears rich or beautiful. But perhaps its judgement has been warped by meeting with more than was expected. The style of scenery is singular. There is much in the situation of Dulverton that reminds me of Blair of Athol; tho, in scenery, they somewhat differ.

## DULVERTON

TO

## TIVERTON.

(Thirteen Miles.)

THURSDAY, 18 SEPTEMBER, 1794.

PASS under Pickston House, a low white building, within a deer paddock.

Many sheep observable, in the bason of Dulverton: all thick-carcased, and polled.

Observe several wheel carriages,—carts, and waggons,—on this road, and in Dulverton: on their way to and from Minehead, and other parts of the Coast.

Three-wheeled barrows, drawn by horses, are used in setting about manure.

Beginning

Beginning to sow wheat. Shovel out the interfurrows; as, formerly, in West Devonshire.

The valley contracts, and the tall impending trees, with which its sides are hung, appear to close it, as below Blair\*. But, breaking through this *pass*, a wide valley, diversified with bold rotund knolls, is entered.

Lime horses are seen creeping up the steep sides of the hills.

More good Cows in the valley.

The road good, and the day fine.

The soil of this passage is redish;—the subsoil rubble, the lower stratum rock: seldom-failing criteria of fertile land.

Leave the valley, and surmount a rough furze-grown height.

A few large Beeches scattered over this District.

Catch a good back view of Exmore, and seem to leave it.

A wide view opens to the Southwest.

Still keep the hills; a well soiled, upland District.

See the Exe, at some distance, winding at the foot of a tall, steep, wooded bank; a passage

\* A Seat of the DUKE OF ATHOL, in the Perthshire Highlands.

sage of natural scenery that is sketched with a broad free pencil.

Descend precipitously into another fertile and recluse plot of Country;—the beautiful Environs of Bampton.

BAMPTON—a small mean market town; overlooked by an extensive Limework, whose ragged excavations and heaps of rubbish seem to conspire with the town to disfigure this sweetly designed passage of Nature. But the face of a Country cannot be disfigured to a better purpose, than that of contributing to its improvement. These works are said to have been carried on, time immemorial, for the purposes of husbandry.

The strata of these Quarries lie steeply shelving. The Limestone lies in thick strata of large irregular blocks; divided by thin seams of redish base stone; and by thicker strata of brown earth; some of it soft and light as soot! and soils the fingers as soot or oker; having every appearance of a valuable pigment. The workmen call it “rotten stone.”

The stone, in general appearance, resembles that of Chudleigh; darkly colored, and interspersed with white veins; but the Bampton stone has a purplish cast, sparkles with

bright particles, and is of a looser texture, than that of Chudleigh.

The rubbish of the Quarries is carried out on horseback; and the stones drawn up to the kilns, in three-wheeled HORSE BARROWS;—which, an old Laborer tells me, have been used, in this Country, beyond remembrance.

The construction and dimensions of one of these barrows are as follow: The form is that of the common old-fashioned wheelbarrow of most Districts. The sides are nearly upright, but spread somewhat outward, and project behind the body of the barrow; being there shaped into handles; for the purpose of moving it, by hand; or adjusting it, readily, to the required situation. The hind wheels are fitted upon a square axle, which is placed under the hind part of the body of the implement; and which turns round with them, as that of the Highland, and Cumberland cart. The fore wheel has a drag chain adapted to it, to check the motion of the carriage in descent. The three are nearly of the same size and construction: namely, each a circle of thick plank, about two feet diameter, and bound with iron. The width of the body of the barrow is three feet, behind, two feet six inches, before, and

four feet long. The depth of the sides, and of the head and tail boards, twelve inches. The headboard leans somewhat forward, over the fore wheel; which is rather smaller than the hind ones, and turns on iron spindles, inserted in the part of the sides which project before the body of the barrow; as in the ordinary wheelbarrow. The draft is by common crane-neck staples, fixed on the outside of the fore part of the implement, near the pivots of the fore wheel\*.

The fuel of these Limeworks is Welch culm, fetched, by land, from Watchet, sixteen miles.

Draw the kilns, with heartshaped shovels; formed of parallel bars, as the gridiron; the interspaces suffering the ashes and small lime to drop through; thus cleaning the stone lime, at an easy expence of labor. The price of stone lime, three shillings the hogshead;—of the ashes, two shillings, for the use of the

\* **BAMPTON BARROW.** This implement might be used with great advantage, on many occasions; especially in moving earth, or other heavy loose materials, a short distance. It is more manageable, by hand, than the "Slide Butt" of West Devonshire, and carries a much greater load. I traced it from Dulverton to Tiverton; and saw one near Taunton. I have not observed it, in any other part of the Island.



Mason! The hogshead being eight Winchester bushels.

Several orchard grounds are seen in the neighbourhood of Bampton.

Ascend a long steep hill, and catch another back view of Exmore, and of the finely diversified environs of Bampton and Dulverton.

Reach a rough, improveable, red-soiled height; from which Dartmore, for the first time, is seen entering in the view.

The Exe still continues to wind among high upland swells, which rise on either side of it: the surface gently billowy; the Downs of the Southern Counties, or the Wolds of Yorkshire, in a state of inclosure.

The Soil, Subsoil, and Road, red.

A dunged fallow: the first observed, in this journey.

Field stacklets common.

Pass between Beechen coppice-hedges.

The VALE OF EXETER bursts open, with fine effect. Also a broad view of the more Eastern confines of Devonshire presents itself.

Now, a rich Vale view, of the Bradninch quarter of the Vale of Exeter, is spread under the eye.

Descend, by a long broken steep, to TIVERTON.

REMARKS.—The elevation of this passage is very great, for a well soiled cultivated District. The higher lands appear to be nearly equal in elevation to the Exmore hills; yet

The climature is forwarder than that of the North coast, whose lands lie lower: the harvest, here, is entirely finished.

The surface is billowy, in the strictest sense: no regular ridge and valley. The river and brooks seem to wind among the hills.

The soil, in general, is rich and productive, as that of Vale Districts; except the very summits of a few of the highest hills.

The subsoil, of the best lands, is invariably a slaty rubble; the under stratum, a loose rock, broken into checkers or long-cube pieces, of sizes according to the depth at which they lie; enlarging in size as the depth increases; until the rock becomes close and firm. The *substance* of this rock, whether entire or broken, appears to be similar to that of Slate; but wants its laminated *texture*.

The subsoil and the base of the lands of South Moulton are equally insensible to the marine acid.

#### FURTHER GENERAL REMARKS ON

### NORTH DEVONSHIRE\*.

THE Inhabitants, throughout, appear to be civilized and intelligent; the lower class differing much, in these respects, from those of the mining country.

Their fuel—wood and Welch coals.

Their employments—husbandry, and the worsted manufactory.

The Farmers appear to be of the middle and lower classes: mostly, plain, decent-looking, working Husbandmen, of twenty to fifty or a hundred pounds a year. I saw few, if any, which appeared to be of the superior order of Farmers.

The woodlands are mostly in a state of coppice.—Some timber; but not much large Ship timber observed; except between Okehampton and Torrington.

The

\* For former Remarks, see page 375.

The Orchard grounds of this District appear to be inconsiderable, compared with those of the other Districts of Devonshire.

No Rabbit Warren fell under the eye; indeed the lands, passed through, are in general too good for that application.

To Apiaries, however, the goodness of the lands cannot be an objection; yet I observed few, scarcely any, Bees, in this large tract of country!

The state of Husbandry, from this cursory view of it, appears to be superior to that of South Devonshire; and on a par with that of the kingdom at large. To the management of Livestock, especially Horses, Cattle, and Swine, North Devonshire, it is probable, has, for some length of time, paid more than ordinary attention.

# PROVINCIALISMS

OF

## WEST DEVONSHIRE.

A.

**APPLE DRAINS**, or **APPLE DRONES**: wasps  
(the ordinary name).

**ARRISHES**: stubbles.

**ARRISH MOWS**: field stacklets. See p. 170.

B.

**BALL**: a common name of a field; as Hill Ball,  
Broom Ball, &c.

**BALLARD**: a castrate ram.

**BARKER**: a rubber, or whetstone.

**BARTON**: a large farm. See page 105.

**BEAT**: the roots and soil subjected to the operation of "burning Beat."—See page 145.

**BEATING AXE**: see page 143.

**BEEN**: a with, withey, or band: a twisted twig.

**BEESOM** or **BIZZOM** (*Spartium Scoparium*):  
the Broom plant: hence a name of the sweeping broom of the housewife.

**BEVERAGE**: water cider, or small cider.

**BLIND NETTLE** (*Galeopsis tetrahit*): wild  
hemp.

**BURN-BEATING**. See page 142.

**BURROW** : a hillock, or heap ; as “ Stone Burrows ”—“ Beat Burrows : ” hence, probably, Barrow—(*Tumulus*), and Borough (Burrow) a corporate place.

**BUSHEL**,—of corn : two Winchester bushels.

**BUSS** : a grass calf. See page 343. N.

**BUTT** : a close-bodied cart ; as dung butt, or wheel cart ; gurry butt, or sledge cart : ox butt ; horse butt.

**BUTT LOAD** : about six SEAMS, or horse loads.

### C.

**CADDEL** (*Heracleum Sphondylium*) : cow parsnip.

**CESS** or **ZESS** : a mow, in a barn.

**CHEESE** : the pile of pomage, in making cider.

**CLAW-ILL** : the foul, in the feet of cattle.

**CLOUTED CREAM** : cream raised by heat.

**COB**, or **COBWALL** : mudwall. See p. 60.

**COCKS** : cockles.

**CONVENTIONARY RENTS** : the reserved rents of life leases. See page 43. N.

**COOM** : a valley ; from the Celtic *cwm*. See p. 12. N.

**COTHE** : the rot, in sheep.

**COURTLAGE** : farm yard.

**COUSIN BETTY** : a female changeling, real or counterfeit, who goes about the country to excite charity ; as she does in Yorkshire,—under the same name !

**CROOKS** : a furniture of pack horses. See p. 124.

**CROW BAR**, or **BAR IRE** : an iron crow.

**CULVERS** : pigeons.

**CULVER HOUSE** : pigeon house, or dove cot.

## D.

**DASHELS** (*Cardui*): thistles (the ordinary name).

**DEADS**: the subsoil, or under stratum. See **MEAT EARTH**.

**DOWSE**: chaff (in common use).

**DRAGS**: large harrows.

To **DRAW**: to carry, or convey, hay or corn, on a waggon or sledge: most proper. Doubtlessly, from dray or draw—a sledge.

**DRAY**: a sledge, for light produce, as hay or straw.

Q. A corruption of Draw? or its prototype?

**DRUDGE**: a large team rake. See p. 128.

**DURNS**: door jambs.

## E.

**EARTH RIDGES**: see page 158.

**EEVER** (*Lolium perenne*): raygrass; from the Celtic *efer*.

**ETH**—is in common use, as the termination of the third person singular: **HATH**, **DOTH**, are also in ordinary use.

## F.

**FAIRIES** (pronounced "VAIRIES"): weasels.

**FERN WEB** (*Scarabæus Horticola?*): a small chaffer; injurious to the apple while very small.

**FETTER LOCK**: fetlock of a horse; by corruption, perhaps, Foot lock; which is a solecism.

**FLAP DOCK** (*Digitalis purpurea*): Fox Glove.

**FRENCH NUTS**: walnuts\*.

**FRITH**:

\* Not, perhaps, as having been imported from *France*; but as being *large*. In like manner the *large furze* is here termed

FRITH: brushwood.

FUR-HEADS, or FURROW-HEADS: the borders, or head lands, of a plowed field.

## G.

GALE: a castrate bull.

GREENSIDE: grass, turf, greensward.

GREY BIRD: the thrush; no doubt, in contradistinction to the Black bird; both being birds of song, and nearly of the same size; a simple, apt distinction.

GURRY BUTT: dung sledge. See page 124.

## H.

HACK: a one-ended mattock.

HAM TREES: hames.

HAMWARDS: straw or rush collars, for horses.

HANDBEATING: see page 143.

HANDREAPING: ordinary reaping; contradistinct from HEWING.

HAUL; or HAAL; the hazel.

HAUL-TO: a three-tined dung drag.

To HEAL: to cover; as with slates.

HEALING or HELLING: the slate covering of a roof; also the operation of slating: hence,

HELLIER: a slater.

HEFT: weight, pressure, or bearing: a common term, in provincial architecture.

HERBERY: a cottage garden; a herb garden.

termed *French furze*, in contradistinction to the *dwarf furze*; agreeably to the usage of the Celtic language; which was formerly spoken, here. See page 311.



- HEWING**: a method of cutting wheat. See p. 167.  
**HINE**; or **HIND**: bailiff, or farm steward.  
**HOG COLTS**: yearling colts.  
**HOGS**: yearling sheep.  
**HOLM** (*Ilex Aquifolium*): holly.  
**HOME SKREECH**: the mistletoe thrush.

## I.

- INSIDE**;—is here used as a preposition: thus—  
 “one of the three bullocks, *inside* the gate:”—  
 a provincial idiom, which is, now (1804) creeping  
 into newspaper language; either through  
 Devonshire editors, or *French* translators.  
**IRE**: iron.

## J.

- JUNCATE**, or **JUNKET**: coagulated milk; eaten  
 in the undisturbed state of coagulation: with  
 sugar, spices, and clouted cream.

## K.

- KEER**: the wild sorb, or mountain ash.  
**KEEZER**: a sort of sieve.  
**KING GUTTER**; a main drain.

## L.

- LAND**: *freehold*; in contradistinction to *copyhold*,  
 or *life leasehold*.  
 To **LEAD**: to carry “trusses,” on horseback.  
 See page 166.  
**LEAR** or **LEARY**: empty; as an unloaded cart or  
 waggon.  
**LEAT**: an artificial rill, rivulet, or brook. See  
 Vol. II. p. 160. **LENT**

**LENT ROSE** (pl. LENT ROSEN): the Narcissus;  
or Daffodil.

**LINHAY**: an open shed.

## M.

**MASTS**, or **MESS**? Acorns.

**MAWN**; a hamper.

**MAZED**: silly—idiotic.

**MAZZARD**; or **WILD MAZZARD**: the wild  
cherry.

**MEAT EARTH**: the soil; cultivated stratum;  
or corn mold. See **DEADS**.

To **MELL**: to mix, as lime and earth.

**MESH**: a gap, in a hedge.

**MILT**: a disease (a species of "rot") in sheep.

**MOCK**; pomage, or ground fruit.

**MORES**: roots, whether of herbs or trees (the  
ordinary name). Q. the etymon of *moors*?

**MOW**: a rick or stack. See **CESS**.

**MOWHAY**: stackyard.

**MUX**: dirt; **MUXEY**, dirty.

## N.

**NECESSITY**: a base kind of spirit. See p. 232.

**NOT** or **KNOT**: polled, as sheep.

## O.

**OAK WEB** (*Scarabæus Melolontha*): the Chaf-  
fer, or Maybug.

To **ORDAIN**: to order.

**ORDAINED**: intended (common).

**OVERLAND FARM**: a parcel of land without a  
house to it.

**OUTSIDE** : here used as a preposition. See **IN-SIDE**.

## P.

**PARK** : a farm field, or close : so in Wales, and in the Highlands of Scotland. **Q.** From *parrag*, Welch and Erse? which is used in the same sense.

**PASSAGE** : ferry ; the ordinary name.

**PICKSEY** ; or **PIXY** : a fairy : **PIXIES**, fairies.

**PIKE, PEEK, or PICK** : a prong or hay fork.  
**Q.** Analogous with war pike?

**PILM** ; dust : **PILMY**, dusty.

To **PITCH** : to fling sheaves upon a stack or mow.  
See page 175.

**PLANSHER** : a chamber floor.

**PLOW** : a team of oxen.

**PLUM** : light and puffy, as some soils.

**POOK** : a cock of hay.

**POTTS** : furniture for pack horses. See p. 125.

**POTWATER** : water for household purposes.

**POUND, or CIDER POUND** : a cider mill. See page 223.

**POUND HOUSE** : cider manufactory. See p. 220.

## Q.

**QUILLETT** : a croft, or grass yard.

## R.

**RAW CREAM** : cream raised in the natural way : not "scalded," or "clouted."

**RED HAY** : mowburnt hay ; in distinction to "green hay," or hay which has taken a moderate

heat; and to "vinny hay," or that which is mouldy.

**REED**: unbruised straw, of wheat or rye.

**RIX**; a rush: **RIXEN**, rushes.

**ROO**: rough.

### S.

**SCALD CREAM**: cream raised by heat; clouted cream. See page 245.

**SEAM**: a horse load; or three hundred-weights.

**SHARE**: crop, or cut, of meadow grass, or other herbage; probably a corruption of **SHEAR**.

**SHEEDWOOD**: rough poles of topwood.

**SHIPPEN**: an ox house.

**SKIRTING**: see page 144.

**SKOVES**: reaps, shoves, grips, or bundles of corn;—unbound sheaves.

**SLAPDASH**: roughcast, or liquid coating of buildings.

**SLAT-AXE**; or **TWO-BILL**: a mattock, with a short axe end.

**SLIDE BUTT**: dung sledge. See **GURRY BUTT**.

**SMALL**: low, as the water of a river, &c.

**SOG**; a quagmire: **ZOGGY**, wet, boggy.

**SOUANT**: fair, even, regular (a hackneyed word).

**To SPADE**: to pare, or breast plow.

**SPARS**: thatching rods, or twigs.

**SPINE**: turf, sod, sward.

**SPIRE** (*Arundo*): reed.

**STAFF**: a measure of nine feet; half a customary rod; perch, or pole.

- STEM: the handle of a fork.
- STICKLE: steep, as a road; or rapid, as a stream.
- STROLL: a narrow slip of land.
- STROYL: couch, or other weeds; or roots of weeds: especially what harrow up, or rake out of the soil; whether in the field, or in the garden.
- SULE,—pronounced “ZULE;” a plow (the only name). See page 126.
- SURVEY: a sort of auction. See page 76.

## T.

- THEESE: this.
- THICK, or THICKY (th as in thee): that; as “thicky there.” (A common expression.)
- To TILL; or TEEL: to sow and harrow in the seed; to seminate.
- TO: *at*; as “when were you to Plymouth?” Also *with*; as “I mean to teel it *to* wheat.” I intend to sow it *with* wheat.
- TONGUE-TREE: the pole of an ox cart, or waggon.
- TOR: a ragged pointed hill; as “Brent Tor,”—“Roo-Tor,”—“High-Tor.”
- TORMENTING: sub-plowing, or sub-hoing. See page 287.
- TRONE: trench or drain.
- TRUSSES: bundles of corn or straw, to be “led” on horseback. See page 166.
- TUCKER: fuller.
- TUCKING MILL: fulling mill.
- TURF: peat.
- TWO-BILL. See SLAT-AXE.
- VAGS:

## V.

**VAGS**: turves, for fuel. Q. A corruption of Flags? See PROV. of NORFOLK.

**VAT**: the bed of the cider press.

**To VELL**. See page 144.

**VENVIL**: a contraction of FEN and FIELD; fuel and pasturage. See page 326. N.

**VETTY**: apposite, suitable;—opposed to WISH.

**VINNY**: mouldy.

**VUR-HEADS**: earth collected, for “melling” with lime; see Fur-heads.

## W.

**WANTS**: moles.

**WHITAKER**: a species of quartz. See p. 18.

**WHITE WITCH**: a good creature, which has the power of counteracting the evil designs of Black Witches. Such kind spirits formerly were found in Yorkshire: and are still spoken of, there, by the same name!

**WISH**: inapt, bad, unfit, as “wish weather,”—or any “wish thing,”—as a stone, or a piece of timber, ill suited to the purpose for which it is applied or required (another hackneyed epithet).

**WRING**: the cider press. Quere, has the juice of the mock, or pomage, been formerly *wrung* out of it?

## Y.

**YOKE of OXEN**: a pair of oxen.

END OF THE FIRST VOLUME.







