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THE

Henry C. Taylor.

RURAL ECONOMY

OF

YORKSHIRE.

VOL. II.

THE

YORK & HARRIS

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RURAL ECONOMY

~~YORK & HARRIS~~

VOL. II

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RURAL ECONOMY

Henry C. Taylor.

OF

YORKSHIRE.

COMPRIZING THE

Management of Landed Estates,

AND THE

PRESENT PRACTICE of HUSBANDRY

IN THE

AGRICULTURAL DISTRICTS

OF THAT COUNTY.

By Mr. MARSHALL.

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VOL. II.

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У ОУЧАЩИХСЯ

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СЛОВАРЬ РУССКО-УКРАИНСКИЙ

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ANALYTIC TABLE

OF

CONTENTS

OF THE

SECOND VOLUME.

SECT. XV. Wheat and its Management, 1.

Introductory Remarks.

I. Species, 2.

1. The Varieties of Winter Wheats, in Cultivation, here, 3.

2. Spring Wheat has been tried, 4.
The proper Time of sowing it.

II. Raising Varieties, 4.

Conjectures on the Origin of the present Varieties.

The Gardener's Method of Selection.
Instance of a new Variety being raised, 6.

The Method, in this Case, registered.
GENERAL REMARKS on Raising and Improving Varieties of Grain, 8.

III. Preparing Seed Wheat, 10.

Formerly Brine and Lime were used.
Now a Preparation of ARSENIC is in Use.

The Mode of Preparation with Arsenic described, 11.

The Expence of this Mode of Preparation, 13.

IV. On the Mildew or Blight.

Meslin not liable to it.

Rye believed to be a Preventive.

Sect. XVI. Rye, 14.

Species.

Formerly much grown.

Its Culture declining.

Chiefly owing to the Use of Lime.

Sect. XVII. Barley, 15.

Species cultivated.

In the ancient Husbandry of the Vale, Barley
was malted by the Growers, 16.

Sect. XVIII. Oats and their Management, 17.

The Varieties now cultivated here.

1. Poland Oats.

2. Friezeland Oats; a valuable Sort.

3. Siberian, Tartarian, or REED OATS.

Remarks on this Variety or Species.

Soils appropriated to Oats, 19.

Quantity of Seed, usually sown, is very great.

The Produce is extraordinary.

Thrashing Oats, 20.

A new Method lately adopted.

Description of this singular Practice, 21.

Advantages of this Practice, 23.

Sect. XIX. Pulse, 24.

Sect. XX. Turneps, 25.

The Culture barely established, in the Vale.

An eligible Method of drawing them, in
Use, 26.

Sect. XXI. Rape, or Coleseed, 27.

A prevailing Crop of the Vale.

I. Succession.

II. Soil and Management, 28.

III. Manure.

IV. Semination.

V. Management while Growing, 29.

Transplanting explained.

AN IMPROVED CULTURE proposed, 30.

VI. Harvesting, 32.

A PUBLIC RAPE THRASHING de-
scribed, 33.The Inconveniences of the Practice
enumerated, 38.

A Variation

A Variation of Practice instanced, 39.

A new Practice introduced, 43.

Instance of the slow Progress of Improvements, 44.

The Use of PROVINCIAL REGISTERS.

VII. Markets, 45.

VIII. Produce.

GENERAL OBSERVATIONS on the Culture of Rape Seed.

Note on its Exhausting Property, 47.

SECT. XXII. Potatoes, 48.

I. Species and Varieties, 49.

Varieties are temporary.

Remarks on declining Varieties.

Observations on the Disease of Curl Tops, 50.

The Method of Raising Fresh Varieties from Seed, 51.

Remarks on Selecting Varieties from Seedling Plants, 52.

On Selecting Subvarieties from Rootling Plants, 53.

II. Succession, 54.

III. Soil and Tillage.

IV. Manure, 55.

V. Plants and Planting.

Formerly, whole Potatoes were planted.

Now, large Cuttings, from large Potatoes, and why.

Method of Planting with the Plow, 56.

VI. Cleaning the Crop, 57.

VII. Harvesting it, 58.

VIII. Preserving the Roots, 59.

ARCHED VAULTS suggested as Receptacles.

IX. Markets and Application, 60.

X. Produce.

XI. Effects of Potatoes on Land.

GENERAL REMARKS on Potatoes, as a Fallow Crop, and as a Food of Farm Stock,—compared with Turneps and Cabbages, 62.

SECT. XXIII. Flax, 64.

- I. The Species cultivated in the Vale, 65.
- II. Succession and Soil.
- III. Tillage and Manure, 66.
- IV. Semination.
 1. Time of Sowing.
 2. Preparing the Seed Bed.
 3. Quantity of Seed.
 4. Covering the Seed; with Remarks.
- V. The Growing Crop, 67.
 - The Nature of its Growth.
 - The Necessity of an even full Crop, 68.
 - The Enemies of Flax.
 - A partial Crop should be plowed under.
- VI. Management of the Produce, 69.
 1. Time of Harvesting.
 2. Criterion of Ripeness.
 3. Method of "pulling."
 4. Method of Watering, 70.
 5. Method of "Rating."
 6. Operation and Price of "Swingling," 71.
- VII. Market for Flax, 72.
 - GENERAL OBSERVATIONS ON Flax, as a Crop in this Island, 73.

SECT. XXIV. Tobacco, 75.

- A Considerable Quantity, lately grown in Yorkshire.
- The Fate of its illegal Cultivators.
- A certain Quantity allowed to be grown, 76.
- A Sketch of its Culture, as practised here.

SECT. XXV. Cultivated Herbage, 78.

- The Species of Herbage cultivated.
- The Modes of Cultivation.
- I. Temporary Leys, 79.
 - Remarks on Clover Leys, as a Matrix for Wheat.
- II. Mixed Perennial Leys, 80.
 - The ancient Practice of Leying.
 - The Effect of Nature's Practice, 81.
 - That Practice now become improper.
 - REMARKS ON Cultivating Perennial Leys, 82.

The Choice of Herbage, here, 83.
 Hay Seeds, until lately, much
 sown, 84.
 Raygrafs variously estimated.
 Its Merits set forth, 85.
 A Summer Blade Grafs wanted, 86.
 "Ribgrafs" in good Estimation,
 here, 87.

The present Mixture of Seeds.

The Management of young Leys in-
 judicious, 88.

GENERAL REMARKS ON Leying and
 Breaking up old Ley Grounds, 89.

Tenants have not a permanent In-
 terest in Perennial Leys.

They are, therefore, the Land-
 lord's Care.

Grass Lands and Hedges are simi-
 lar in this Respect, 90.

A Line of Conduct suggested, 91.

III. Sainfoin Ley, 92.

This District is singularly favorable
 to the Study of Sites, fit for its
 Culture.

Its great Success about Malton.

The Soil and Subsoil analyzed, 93.

Remarks on the Pasture of Sain-
 foin, N. 93.

Its Success near Brompton.

The Soil and Substrata analyzed,
 94.

Its Miscarriages about Pickering, 95.

The Pasture of Sainfoin examined.

REMARKS ON the Field of Pasturage,
 most acceptable to Sainfoin, 97.

The Propriety of previously exami-
 ning the Substrata, 98.

The great Advantages of Sainfoin,
 on a Soil it affects.

SECT. XXVI. Natural Herbage, 99.

General View of the Subject.

I. Species of Grass Lands, 100.

1. Lowland Grass, 101.

Situation.

Soil.

Herbage.

- CATALOGUE of LOWLAND PLANTS,
103.
Produce of these Lands, 107.
Rent.
REMARKS on the Folly of Keeping
them in their present State.
Instance of the Use of a MADE SHORE.
2. Upper Grass Grounds, 109.
Situation.
Soil.
CATALOGUE OF PLANTS, 110.
Produce, 113.
Rent.
3. Upland Grass.
Situation.
Soil, 114.
CATALOGUE OF PLANTS.
Produce, 118.
Rent.
These Lands are ill adapted to pe-
rennial Ley.
- II. General Management of Grass Lands, 118.
Objects of the Grass Land Husbandry, 119.
Operations incident to it.
1. Draining.
2. Clearing.
Methods of Removing Anthills.
3. Dressing, in the Spring, 120.
REMARKS ON THE MOLE, 122.
REMARKS ON EARTHWORMS, 123.
4. Weeding Grass Lands, 124.
Knobweed and Ragwort destroyed, by
pasturing with Sheep.
Docks destroyed by Swine, or by
Mowing, or by old Age.
REMARKS ON THE AGE OF PLANTS, 125.
5. Manuring Grass Lands.
Dung seldom applied.
Foddering on them, chiefly practised.
REMARKS ON TEATHING GRASS LANDS,
126.
Instance of Sheepfold being ineffica-
cious, *in winter*, 127.
Lime is not in common Use for Grass,
128.
A successful Experiment with it, 129.
A remarkable Effect of Bleaching with
Lime, on Grass Land.

III. Management of Mowing Grounds, 131.

General Economy of Hay Grounds.

1. Spring Management, 132.
Remarks on the Time of Shutting up.
2. The Hay Harvest, 133.
 1. Mowing.
 2. Making, 134.
Remarks on Pyking, 135.
Operation of Making.
 3. Preserving, 136.
Method of Stacking in the Field.
Drawn together with Horse Drags.
Horse Drags likewise used in
Cocking.
Form of Field Stacks.
Capped, only, with Thatch.
Fenced with large Hurdles.
 4. Expenditure of Hay, 140.
Mostly consumed on the Farm.
3. Aftergrafs.
Expenditure, here.
Time of Breaking.
REMARKS on the Economy of After-
grafs, 141.
Eating it off, in Autumn.
Preserving it, until Spring, 143.

IV. Pasture Grounds, 143.

1. Spring Management, 144.
GENERAL REMARKS, on this Depart-
ment of Management.
2. Stocking Pasture Grounds, 148.
On mixing Stock.
REMARKS on the DUNG OF HORSES
AT GRASS, 149.
On Proportioning Stock to Land, 150.
3. Summer Management, 151.
GENERAL REMARKS on the Manage-
ment of Summer Pastures, 152.

SECT. XXVII. Horses, 154.

Introductory Remarks.

On the Influence of Soil and Climature.
Estimated Number, reared in East York-
shire, 155.

- I. Breed in the Vale, 156.
 Formerly, strong Saddle Horses.
 Next, Capital Hunters.
 The Change effected by a mere
 Circumstance.
 The Horse Jalap noticed.
 Now, Coach Horses are chiefly bred,
 157.
 Also some Cart Horses, 158.
 Remarks on the evil Tendency of
 the last Breed.
- II. Breeding Horses, 159.
 Much neglected, even in Yorkshire.
 Suggestions for its Improvement, 160.
 Remarks on the King's Plates, 162.
 A Tax on Cart Horses suggested.
 The Spaying of Mares intimated.
- III. Making up Horses, 164.
 The Age of Making up for Market.
 This Mystery is practised by different
 Men.
 On the Advantages of Making up
 Horses on a Farm, 165.
- IV. Markets for Horses, 165.
 Malton Horse Show described.
 The Purchasers there, and the Prices
 given, 166.
- V. Treatment of Worked Horses, 167.
 On Turning out Hunters to Grass,
 in the Day-time, in Winter.
 Minute on this Practice, 168.
 On Turning out Horses to Grass, in
 the Spring;—an excellent Regu-
 lation respecting it, 171.
- SECT. XXVIII. Cattle, 172.
 Introductory Remarks.
 The ancient Economy of the District.
 A Change effected, by Inclosure, 173.
 Its present State, as to Cattle.
- I. Breed, 174.
 Its Succession of Breeds mentioned.
 The ancient Black Breed.
 A Black and White Breed.
 The Craven or longhorned Breed.
 The Dutch or shorthorned Breed.
 The present improved Breed, 176.
 The

The Effect of Management on Breed, 176.
 Dimensions of an Ox of the present Breed
 of the Vale, 177.

A fresh Variety now entering the Vale, 178.
 The Teeswater Breed described.

Thoughts concerning its Improvement, 179.

Note concerning the Improvement of the
 Breed of the Vale, 180.

REMARKS on the Criteria of Breeds.

The Horn a permanent Character.

Its Pretensions as a Criterion, 182.

The Eye the safest Criterion of Health
 and Constitution, 183.

II. Breeding Cattle.

1. Bulls.

A Bull Show, in East Yorkshire:

Instance of a Gentleman keeping a Bull
 of a superior Breed, for the Use of
 his Tenants.

2. Breeding Cows, 184.

1. Rearing them.

2. Purchasing them.

Favorite Points.

Dimensions of a Vale Cow.

3. Treatment of Cows, 185.

Highly kept.

Their Difficulty in Calving, 186.

The Skillfulness of the Vale Farmers, in
 this Particular.

4. Markets for Cows, 187.

III. Rearing Cattle, 187.

1. Calves.

1. Time of Rearing.

2. Points of a Rearing Calf.

Remarks on WHITE CATTLE, 188.

3. Castrating Calves, 189.

A fatal Disorder thought to arise
 from doing it improperly.

Method of Cure, N. 189.

Proper Method of Castration, 190.

4. Treatment of Rearing Calves.

Never suck their Dams!

2. Yearling Cattle, 191.

3. Twoyearold Cattle.

Age of Breaking in Steers, 192.

Age of Bringing in Heifers.

GENERAL REMARKS on this Subject.

IV. Fattening

IV. Fattening Cattle, 194.

The Vale is not a grazing District.

Instance of great Profit by Fattening.

Dimensions of a Fatted Cow, 196.

Note on Mensurating Cattle, 197.

The Yorkshire Clothiers buy by Measure.

A Weighing Machine proposed as an Appendage to every Market Place and Fair Stead, N. 197.

GENERAL REMARKS on the present SCARCITY OF CATTLE, in this Island, 198.

SECT. XXIX. Dairy Management, 201.

I. Calves.

On fattening Calves without suckling.

II. Butter, 202.

A Principal Object of the Vale Husbandry.

A Wise Regulation of the Cheesemongers Company, respecting this Article of Produce.

A pernicious Effect of scouring Milk Leads, 204.

Description of the Yorkshire Milk Bowl, N. 204.

The Barrel Churn of the Vale described, 205.

The Firkins described.

Method of putting the Butter down into Firkins, 206.

Times of sending to Market.

The Prices for the last ten Years.

III. Skim Cheese.

The Method of Manufacture not entitled to Detail, 207.

The Use of the CURD MILL.

The Curd Mill described, N. 208.

The Consumption of Skim Cheese.

The Prices, for the last ten years.

IV. Hog Liquor, 209.

The Produce of a Dairy Cow, in the Vale, estimated.

SECT. XXX. Swine, 209.

The ancient Economy, with Respect to Swine.

The Practice has undergone a Change.

The present Breed, 210.

Instance of a valuable, weed-eating kind.

Markets for Bacon.

SECT. XXXI. Sheep, 211.

Their general Economy, in the Vale.

Also in the Morelands.

I. Breeds, 212.

The old common Stock of the Vale.

The improved Breed of the Vale, 213.

The Means of its Improvement.

The Teeswater or Mud Breed, 214.

The Moreland Breed described, 215.

Their Resemblance with the Norfolk Breed, 216.

Their closer Affinity with the Scotch, and REMARKS on this Connection, N. 215.

II. Breeding, 216.

Time of putting Ewes to the Ram.

A Practice respecting Twin Lambs.

Remarks on the Food of Ewes, at Lambing Time.

On Trimming the Udders, &c. of Breeding Ewes, 218.

A General Remark on Breeding Flocks.

III. Management of Store Sheep, 219.

The Practice of Salving.

Its Rise not ascertained.

Its Intentions enumerated.

Instance of Deviation, 220.

The Practice described, 221.

The Expence calculated, 223.

IV. Markets, 224.

For Wool.

Weights and Values of Fleeces.

For Carcases, 225.

The recent Rise in the Price of Sheep, strongly evidenced, in the Moreland Breed.

SECT. XXXII. Rabbits, 226.

Not a Staple Produce of the Vale.

An Argument in Favor of Rabbits, as
an Article of Farm Stock, 227.

This corroborated by the High Rent
of Rabbit Warrens.

SECT. XXXIII. Poultry, 228.

SECT. XXXIV. Bees, 229.

The Produce of the Vale is of an infe-
rior Quality.

The Effect of the Flowers of the Heath.
Instance of moving Hives to Pasturage.

A general Mortality in 1782-3.

An extraordinary Circumstance attend-
ing it.

Conjectures respecting this Circum-
stance, 231.

OBSERVATIONS ON THE NATURAL
HISTORY OF BEES.

THE

WOLDS OF YORKSHIRE.

GENERAL VIEW of this DISTRICT, 235.

The Situation and Outline described.

The Extent 500 square Miles.

The Substructure probably Chalk.

The Subsoil a Chalky Rubble.

The Soil a Calcareous Loam, 236.

The Climature is cold, for want of Shelter.

The present State of Inclosure, 237.

RURAL

RURAL ECONOMY of this DISTRICT,

238.

- I. The Estates mostly large, 239.
- II. Tenancy : Leases becoming common.
- III. Rent.
Depends on Breaking up Sheep Walk.
Remarks on this Subject.
- IV. Removals take place at Ladyday or Mayday,
- V. Buildings mostly substantial, 241.
- VI. Planting, 246.
A Spirit lately evinced.
The Beech recommended, 242.
- VII. Farms, 243.
- VIII. Objects of Husbandry, 244.
- IX. Succession irregular.
- X. Manual Labor, 245.
Few Day Laborers on the Wolds.
- XI. Team Labor, 245.
Singular Practices of the Wolds.
- XII. Implements, 247.
- XIII. Manures.
- XIV. Harvesting.
Every thing mown against the Standing Corn,
and bound in Sheaves.
- XV. Farmyard Management, 248.
- XVI. Markets.
- XVII. Turneps, 249.
REMARK on Sodburning old Sward; for Turneps.
Application of Turneps, 250.
Method of eating them off, improper.
Net Hurdles described, 251.
- XVIII. Sheep, 251.
Size of Flocks.
Breed.
Instance of a fatal Change of Breed, 252.

XIX. Rabbits, 252.

- Great Size of Warrens.
 Good Land appropriated to Rabbits, 253.
 General Economy of a Rabbit Farm.
 Management of the Wold Warrens, 254.
1. The Effect of rich Soils on Rabbits.
 2. Burrowing Grounds.
 Mostly on the Sides of Hills.
 Instance, on a Flat.
 An Auger used in Making Burrows, 255.
 3. Warren Fences.
 Sod Wall the prevailing Fence.
 A Brook is not a Fence against Rabbits.
 4. Sort of Rabbits, 256.
 The Silverhaired in good Esteem.
 5. Method of Taking.
 With the Fold Net.
 With the Spring Net.
 With the "Tipe" or Trap, 257.
 The last, a new and masterly Method, described.
 Sort the Trap Rabbits.
 The due Proportion of Males.
 Caution required in using Traps, 258.
 The Numbers taken, at once, very great.
 6. Markets, 259.
 For Carcafes.
 For Skins.
 Average Price.
-

H O L D E R N E S S.

Not examined in 1787, 260.

A Transient View in 1791, 261.

C L E V E L A N D.

A View of the DISTRICT, 262.

Outline nearly oval.

Extent more than 100 square Miles.

Surface, nearly flat.

Soil uniformly tenacious.

Its Objects of HUSBANDRY, 263.

The Road Team of Cleveland.

The Description and Merits of this singular Team.

T H E

E A S T E R N M O R E L A N D S.

GENERAL VIEW of this DISTRICT, 264.

The Uncultivated Parts here examined.

Climature extremely bleak.

Extent, from 300 to 400 square Miles, 265.

Fossil Productions, 276.

Subsoil mostly Sand, formed into a Pan.

Soil, or superficial Covering, is a Black Moor, 267.

Remarks on the VEGETABLE MOLD OF MOUNTAINS.

Natural Produce, Heath and "Bent," 268.

CATALOGUE OF MORELAND PLANTS.

RURAL ECONOMY of this DISTRICT,
271.

Livestock.

Proportion of Sheep to Acres.

Present Value of these Lands, 272.

The Improvements which have been attempted, 273.

On the Northern Margin.

On the Southern Skirts, 275.

HINTS

HINTS for the IMPROVEMENT of the
EASTERN MORELANDS of YORK-
SHIRE, 277.

The Principle of Improvement, 278.
The Objects, Wood and Herbage.

I. Plantations, 278.

The Probability of Success, 279.
The Sites proper to be planted.
The Species of Trees.
The Method of Planting.

II. Cultivated Herbage, 280.

The Objects, Sheepwalk and Rabbit Warren, 281.
The Species of Herbage.
Manures, 282.
Underdraining.
Watering.
An Evidence of these Lands being improveable,
The IMPROVEMENT of a Part of them offered
to the Consideration of GOVERNMENT, 285.

A LIST OF RATES

I N

THE VALE OF PICKERING, 287.

P R O V I N C I A L I S M S

O F

E A S T Y O R K S H I R E.

Introductory Remarks on this Dialect of the
English Language, 303.

A Glossary of more than a Thousand Words, 305.

THE
RURAL ECONOMY
OF
YORKSHIRE.

15.

WHEAT.

INTRODUCTORY REMARKS.

IN NORFOLK, a CORN country, whose husbandry may be taken as a standard for other LIGHT-LAND DISTRICTS, I studied the various processes, of each ARABLE CROP, with attention; and have endeavored to describe them with minuteness. But to pursue a similar conduct, in a country where GRASS LAND prevails; where corn is, of course, only a *secondary* object; and where, through the diversity of soils, and the present

VOL. II.

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state of inclosure, no regular management of arable crops, sufficiently excellent to be held out as a pattern, is established,—would be an impropriety. Nevertheless, in a country where improvement stands on tiptoe, eager to discover and bring into practice every thing which wears the aspect of superior utility, it would be still more improper to pass over the INDIVIDUALS of the ARABLE CROPS, without notice.

Their GENERAL MANAGEMENT has been already described, under the foregoing general heads. What remains to be done with respect to EACH CROP is, to register such PARTICULARS, as I judge may be of service, in the advancement of the plan under execution.

The particulars which strike me as being noticeable, under the present head, are,

- I. The species of wheat ;
- II. The raising of new varieties ;
- III. Preparing the seed ;
- IV. An opinion respecting mildew.

I. THE SPECIES of Wheat, cultivated at present in the District, are,

I. TRITICUM *Hybernum*; WINTER WHEAT: of which there are the following VARIETIES:

I. “ *Zealand*

1. "*Zealand Wheat*:" chaff white, without awns *; ears somewhat large; grain white and full-bodied; straw long and reedy. This sort is well adapted to weak and middling soiled land. In a rich soil, especially in a moist season, it runs too much to straw.

2. "*Downy Kent*:" chaff white, downy, and awnless; ears of the middle size; grain white and small; straw short. This kind is best adapted to good land; in which it generally yields abundantly, notwithstanding the smallness of the grains.

3. *Common White Wheat*. The two preceding sorts seem to have almost banished the "old white wheat" of the District—the *white Lammas* of other districts.

4. *Hertfordshire Brown*. Chaff white,—grain red,—straw of a middle growth: resembling the *Kentish white Cosh* of Norfolk.

5. "*Yellow Kent*." Chaff somewhat red; grain white! ears large; straw stout.

6. *Common Red Wheat*. This, like the old white, appears to be now nearly extinct.

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2. TRITICUM

* All the varieties of *Triticum Hybernum*, which I have yet observed, have a few short awns, towards the top of the ear.

2. TRITICUM *Æstivum*; SUMMER WHEAT;—generally known by the name of SPRING WHEAT.

In the Whitby quarter of the *Morelands*, this species of wheat has been cultivated many years. It was introduced into the *Vale*, a few years ago; but it does not seem to gain an establishment here. It has, however, been sufficiently tried to ascertain *the proper month of sowing*: namely, *April*.

II. RAISING VARIETIES. It is probable, that time has the same effect upon the varieties of wheat, and other grains, as it has on those of cultivated fruits, potatoes, and other vegetable productions.

In every country, I find new varieties of corn gaining footing, and old ones giving place to them. Fashion may influence a few individuals to *introduce* a new variety; but it is not likely that fashion, alone, should induce a body of professional husbandmen to *discard* an old one.

In GARDENING, varieties are endless; and fresh ones are annually making: not perhaps so much by accident, as by industry. Thus to produce an early PEA, the gardener marks the plants which open first into blossom, among the most early kind he has in
cul-

cultivation. Next year, he sows the produce of these plants, and goes over the coming crop, in the manner he had done the preceding year, marking the earliest of this earlier kind. In a similar manner, new varieties of APPLES are raised, by choosing the broadest-leaved plants, among a bed of seedlings, rising promiscuously from pippins.

HUSBANDMEN, it is probable, have heretofore been equally industrious in producing fresh varieties of CORN; or whence the endless variety of WINTER WHEATS? If they be naturally of one and the same species, as Linneus has deemed them, they must have been produced by climature, soil, or industry; for although nature sometimes sports with individuals, the industry of man is requisite to raise, establish, and continue, a PERMANENT VARIETY.

Of late, the raising of varieties has perhaps been little attended to. Transferring those already established, from one part of the kingdom, or from one part of the world, to another, has alone, perhaps, produced the recent changes in the several Districts. The only instance in which I have had an opportunity of tracing the *variety* down to the

parent individual, has occurred to me in this District.

A man, whose observation is ever on the wing in the field of husbandry, having perceived, in a piece of wheat, a plant of uncommon strength and luxuriance, diffusing its branches on every side, and setting its closely surrounding neighbours at defiance; marked it, and at harvest removed it separately.

The produce was fifteen ears, yielding six hundred and four grains, of a strong-bodied liver-colored wheat, different in general appearance from every other variety I have seen. The chaff smooth, awnless, and the color of the grain. The straw stout and reedy.

These six hundred grains were planted, singly, nine inches asunder, filling about forty square yards of ground; not in a garden, or in a separate piece of ground, but upon a clover stubble; the remainder of which was, at the same time, sown with other wheat, in the common way: by which means *extraordinary trouble and destruction by birds* were equally avoided.

The produce of these forty yards was two gallons and a half, weighing twenty pounds
and

and a half, of prime grain, fit for seed; besides some pounds of seconds. One grain produced thirtyfive ears, yielding twelve hundred and thirtyfive grains.

The second year's produce being sufficient to plant an acre of ground, the variety was of course sufficiently established.

This, the fifth year, I have seen it grow in quantity; but the season being moist, and the soil good, it was most of it lodged. The crop upon the ground is abundant; seventy full shocks an acre. But the produce of Zealand wheat, in the same piece, is equal to it; and, on examination, I think the grain of this is better, its skin is somewhat thinner. Nevertheless, the variety under notice may rank with the first of the present day. For an inferior soil, it may perhaps be found highly eligible.

It is observable, that the quality of this variety *improves*. Its color and skin, this year, notwithstanding the unfavorableness of the season, are finer than they were the last and the preceding years.

GENERAL REMARKS ON RAISING AND
IMPROVING VARIETIES OF GRAIN.

Its intrinsic value, however, would not have been a sufficient inducement for describing the circumstances of its rise, had not these circumstances pointed out, at the same time, the *practicability*, as well as an *easy and speedy method*, of raising new varieties, and of improving those that are already known.

What deters *Farmers* from improvements of this nature, is principally the mischievousness of BIRDS; from which, at harvest, it is scarcely possible to preserve a small patch of corn, especially in a *garden*, or other ground, situated near a *habitation*. But, by carrying on the improvement, in a *field of corn, of the same nature*, that inconveniency is got rid of.

In this situation, however, the *botanist* will be apprehensive of danger, from the floral farina of the surrounding crop. But, from what observation I have made, I am of opinion his fears will prove groundless. No evil effect of this nature occurred, in the instance above recited, although the cultivation has been carried on among *white wheat*. But this need not be brought as an evidence: it
is

is not uncommon, here, to sow a mixture of *red* and *white* wheats together, and this, it is confidently asserted, without impairing even the *color* of either of them.

The same mode of culture is applicable to the IMPROVEMENT OF VARIETIES; which perhaps, would be more profitable to the husbandman, than raising new ones, and much more expeditious.

Formerly, it was the practice, in the improvement of cattle, to *cross* with other breeds; but modern breeders, who have brought the art to a high degree of perfection, pursue a different method: they pick out the fairest, of the particular breed or variety they want to improve, and prosecute the improvement with these *selected individuals*.

In every field of corn, let the variety be ever so pure, and ever so well adapted to the soil and situation, the same inequality, in the beauty and goodness of individuals, is observable, as in a herd of cattle; and it is the business of the corn farmer to avail himself of so suitable an opportunity of improvement, by *selecting such individual plants as excel in vigor and productiveness*, under a moral certainty that such individuals are peculiarly adapted to *this* soil and situation.

III. PREPARING SEED WHEAT. In the Rural Economy of NORFOLK, I have mentioned an improvement in the use of salt and lime, as preventives against smut. Here, a singular remedy is made use of, for that purpose; singular I mean as to this District, in which, alone, I have found ARSENIC used, as a preventive of that troublesome disease.

Formerly, brine and lime were the usual preparation, here, as they still are in almost every District of the Island. How long arsenic has been in use, or how the use of it was introduced, I have not learnt with sufficient accuracy. One person (whose accuracy might be safely relied on, were not his evidence corroborated by my own occasional observation) has used it more than twenty years, invariably, and with uniform success. He cannot say that, during that time, he has not had a smutty ear of wheat upon his farm; but he asserts, with confidence, that since he prepared seed wheat with arsenic water, he has not experienced a sensible injury from smut. The same or a similar strength of evidence might be obtained, probably, from an hundred individuals in this neighbourhood.

Its EFFICACY, I believe, is not doubted, by any one who has given it a fair trial; but there are some who, through apprehensions of *danger* from the carelessness of servants, or from their own absentness, or under an idea that an arsenical preparation is hurtful to the seedsmen, are scrupulous about using it.

Whether the *last* has, or has not, any foundation in truth is, at present, a matter in dispute. The person abovementioned has not, during his twenty years practice, experienced any inconveniency, either to himself, his servants, or his live stock; not even to his poultry. Nor have I heard of a single accident having arisen, from the use of it, in any part of the District.

I do not mean to comment upon this practice: suffice it for me to register such facts as have occurred to me respecting it, and to give the process; leaving the reader to form his own judgment, in regard to the propriety of using it.

This preparation is made by pounding the arsenic, extremely fine, boiling it in water, diluting the decoction, and drenching the seed effectually in the liquor.

In strictness, the arsenic should be levigated, sufficiently fine to be taken up and
washed

washed over with water, reducing the sediment, until it be fine enough to be carried over in the same manner.

The usual method of preparing the liquor is to boil one ounce of *white arsenic*, finely powdered, in a gallon of water, from one to two hours, and to add to the decoction as much water, or stale urine, as will increase the quantity of liquor to two gallons.

In this liquor, the seed is, or ought to be, *immersed*, stirring it about, in such manner, as to *saturate*, completely, the *downy end* of each grain.

This done, and the liquor drawn off, the seed is considered as fit for the seed basket, without being candied with lime, or any other preparation.

If, however, any danger arise to the seedsmen, from sowing seed thus prepared, (which I believe is merely ideal) it probably arises from the superfluous moisture of the seed, in this state, entering the pores of his hand. Candying the seed, with lime, would not only absorb the redundant liquor, but would render the seed more pleasant to the hand in sowing, and more distinguishable by the eye, when cast upon the ground.

A bushel

A bushel of wheat has been observed to take up about a gallon of liquor. The price of arsenic is about sixpence a pound; which, on this calculation, will cure four quarters of seed. If no more than three quarters be prepared with it, the cost will be only a farthing a bushel; but to this must be added the labor of pounding and boiling. Nevertheless, it is by much the cheapest preparation we are at present acquainted with.

IV. THE MILDEW OF WHEAT. It is a received idea, in this District, that MESLIN,—provincially, “masshelson,”—(a mixture of wheat and rye, formerly a very common crop in this neighbourhood, and still remains to be so in the Morelands) is never affected by the blight, or “mildew:”—and that the nature of *rye* is such, that a very small quantity of it, sown among *wheat*, prevents this frequently destructive effect.

This, *if well founded*, is a most interesting fact; not only in HUSBANDRY, but in the VEGETABLE ECONOMY. I register it, merely, as a popular opinion, among professional men.

16.

R Y E.

THE ONLY SPECIES of rye, cultivated in these kingdoms, is the *SECALE cereale* of Linneus; of which two varieties are cultivated in this District.

1. BLACK RYE; formerly the only sort.

2. WHITE RYE, or DANTZIC RYE; introduced into this country, about half a century ago, and is now the almost only kind which is cultivated.

Before the use of LIME was prevalent, much rye was grown on the lighter lands, upon the margin of the Vale; and, in the Morelands, scarcely any other crops, than rye and oats, were attempted. Now, rye is principally confined to the Moreland dales; and, even there, the *alteration of soils by lime* has been such, that wheat is become the more prevalent crop.

Nevertheless, on light sandy Moreland soils, rye is generally more profitable than wheat; and the bread which is made from a mixture

mixture of the two grains, is here esteemed more wholesome, to persons in general, than that which is made from wheat alone.

17.

B A R L E Y.

THERE ARE FOUR SPECIES of barley, cultivated, more or less, in this District.

Common barley, — *hordeum distichon*, — long-eared barley.

Battledoor barley, — *hordeum zeocritton*, — sprat barley.

Big, — *hordeum vulgare*, — four-rowed barley, or spring barley.

hordeum hexastichon, — six-rowed barley, or winter barley.

The first and the third are the sorts which are, now, principally cultivated: the first, in the Vale; the third, in the Morelands; or, in the Vale, when the season of sowing is driven very late. Formerly, "BATTLE-DOOR BARLEY" was a common crop; but at present it is almost out of cultivation. The WINTER BARLEY is new to the District; and

and it does not seem to be yet generally understood,—that it ought to be *sown in autumn*.

In the open field state, barley was grown in the “wheat field,” alternately with wheat.

One circumstance, respecting the ANCIENT HUSBANDRY of this crop, deserves to be registered; as it serves to shew the alteration which time has the power of making, even in the business of husbandmen.

Less than a century ago, I believe, barley was not saleable, until it was MALTED. Public malt-houses, and the business of a maltster, were equally unknown: *every farmer malted his own barley*, or sold it to a neighbor who had a MALT KILN; an out-office necessary, in those days, to every considerable farm.

The fuel, used on this occasion, was chiefly brakes, cut off the neighbouring commons: a certain day of cutting being fixt, to prevent any man from monopolizing more than his share.

When malted, it was saleable; and the surplus of the consumption of the neighbourhood found a market at Whitby, Scarborough, and other towns of the District.

Now,

Now, even *public malt houses* are unknown; the entire business of malting being in the hands of professional MALTSTERS; who buy the barley of the farmer, and sell him the malt which he may want for his own private use; as in most other Districts.

18.

O A T S.

LINNEUS includes the whole tribe of cultivated oats in the species *AVENA sativa*.

The VARIETIES formerly cultivated, in this District, were the "SLOW OAT" and the "HASTY OAT;" both of them considered as of Scotch extraction.

At present the sorts principally in use are,

1. "POLAND OAT:" a short, plump grain; but the thickness of its skin seems to have brought it into disrepute among attentive farmers. Mostly single; no awn; straw short.

2. "FRIEZLAND OATS:" These appear to be, at present, the favorite of the country;

and with good reason: they afford more straw, and are thinner-skinned, than the Poland oat. Mostly double; the larger sometimes awned; the awn placed high.

3. "SIBERIAN OATS,"—more generally known by the name of TARTARIAN OATS. This is evidently a distinct SPECIES, unnoticed by Linneus. Each flower frequently contains three perfect florets; never less than two, and a pedestalled rudiment. Sometimes three perfect grains and a rudiment. The panicle, too, varies essentially from all the varieties of *AVENA sativa*. *AVENA arundinacea* would be a proper term for it. The grains of this species are thin and small; the largest awned; the small ones awnless; the straw tall and reedy.

The REED OAT may be said to be, here, fairly in the hands of husbandmen; a circumstance which I have not observed, elsewhere. But it does not seem to be in sufficient estimation, to secure an established footing in the District. The grain is light, and the *straw* too much like *reed*, to be affected by cattle.

The particulars which are noticeable in the cultivation of oats in the Vale are,

The soil.

The quantity of seed.

The

The produce.

A singular mode of thrashing.

SOIL. The rich lands, in the western division of the Vale, are peculiarly affected by oats. There have been instances of sowing them, six or seven years successively, on the same land. This, however, has been where the land has previously lain long in grass. The soil, principally, a rich sandy loam; a soil singularly productive of OATS; but not of *wheat*: which, in these soils, generally runs too much to straw.

QUANTITY OF SEED. Five or six bushels, and even a quarter of oats, an acre, are here sometimes sown! On some soils, it is found, that the more seed, the greater in proportion is the produce. A prudent man, however, ought, in my opinion, to ascertain, by comparative experiments, *the extent of his soil*, before he sow, on a large scale, more than six bushels of oats, an acre.

PRODUCE. Ten quarters of oats, an acre, have been grown, on a piece of many acres. Seven or eight quarters, an acre, throughout a large farm, has not unfrequently been produced. One Vale farmer, last year, sold and sent to market a thousand quarters of oats.

THRASHING. A novel practice has of late years taken place, with respect to the thrashing of oats: not in barns, or under cover, as heretofore, and as the operation is still carried on, in every other part of the island; but, in the field, or the stackyard, IN THE OPEN AIR!

This new method of thrashing oats, took its rise, probably, from the ordinary one of thrashing rape, in this district (a process which will be explained, in its place); the oats, at the outset, being all thrashed on *cloths*. But, now, it is common, I find, to thrash them on a piece of plain *sward*, or other level ground, *without a cloth!* it having been found, from experience, that if pigs and poultry be employed, to pick up the few which the broom leaves, the waste is inconsiderable.

What may seem equally strange, this business is frequently done, at harvest; the oats being carried immediately from the field, in which they grew, to market!

This, however, is less extraordinary when we are acquainted with the market, which is always open, for new oats, in this country. The manufacturing parts of West Yorkshire use principally oaten bread; and new oats are coveted for oatmeal. This accounts for
their

their high price at harvest, here, compared with that which they bear, in other places; and this was probably the inducement, which led to the singular expedient under notice.

The conveniency of thrashing them, in the *field*, being by this means discovered, the practice was easily transferred from the field to the *stackyard*.

In one instance, to which I more particularly attended, the operation was thus conducted. A cloth was spread upon the ground (first made smooth) by the side of the stack of oats (in a stackyard). A boy threw the sheaves, off the stack, upon the cloth. One man opened and spread the sheaves, turned them when requisite, and threw off the straw when sufficiently thrashed. Four men being kept continually thrashing.

In another, the oats were carried from the field to a grass inclosure, and stacked in a place convenient for the expenditure of the straw. In this case, the floor was a circle of close-pastured greensward; about ten yards diameter; the opened sheaves being spread, in a ring, with their heads toward the center, eight or ten thrashers trod this ring, with a slow pace. One side sufficiently thrashed, the other was turned uppermost, and the

straw, at length, shook off the circle. Women were employed at the floor, while two men stacked the straw, as it was thrown off; and while others were employed, on the opposite side of the ring, in winnowing the oats, with a machine fan.

In a third, the oats were carried immediately out of the harvest field to the thrashing-floor, without a previous stacking. In this case, also, the floor was a ring of greenward;—beaten firm and smooth, with flails, before any corn was laid upon it. The waste is little, compared with the expence of a cloth.

The straw was, in every case, stacked loose; to be cut out, as hay: the common practice, I understand, when oats are thrashed abroad.

When the straw is thus freed from the corn, at harvest, and is stacked in good order, it takes a heat in stack, and is said to make excellent fodder. Cattle will sometimes get forward in flesh, upon such straw, alone.

But this happens, in the rich-land quarter, mentioned above. And, query, has not *a rich soil* a similar effect upon the *straw*, as it has upon the *hay*, which is grown upon it? The hay of Lincolnshire or Gloucestershire will

will fatten large bullocks, which that of Norfolk would barely support.

The ADVANTAGES held out, in favor of this method of thrashing oats, are those of dispatch, and the saving of barn room; or the saving of carriage. A person who had a large quantity of oats upon an off-farm, some miles from his place of residence, without a barn upon it, gave a shilling a quarter for thrashing, *in harvest*; a busy time. Had not this expedient been practised, a barn must have been built, or an inordinate quantity of carriage would have been requisite.

The chance of bad weather seems to be the only OBJECTION to this practice. But there is always plenty of straw to cover up the *corn* with; and it is found by experience, that a little rain upon the *straw* does not make it less affected by cattle; at least not perceptibly.

IN SOME CASES, the practice is, beyond dispute, highly eligible in this country; and might, I have not a doubt, be profitably extended, to many other Districts of the Island.

19.

P U L S E.

NOTHING particularly noticeable has occurred to me, in this District, respecting any of the species of cultivated pulse; excepting that it is a pretty common practice to sow beans and peas (grey peas) together, under the name of "BLENDINGS." Sometimes "FITCHES" (probably a gigantic variety of the *ERVUM lens*) are sown among beans. These mixtures are found to increase the crop; and the component species are readily separable, with the sieve.

Formerly "LENTILS," the true *ERVUM lens*, were a common crop in this neighbourhood; but they are gone into disuse.

20.

TURNEPS.

TWENTY YEARS ago, the turnep crop was a stranger, in this District. Even yet, it is far from being an established crop.

Nevertheless, there are some men whom the spirit of improvement has stimulated to the turnep culture; and who may rank among the best turnep farmers, in the kingdom; those of Norfolk excepted.

It must not, however, be expected that, after the ample detail I have given of the NORFOLK PRACTICE, much *new* matter can be collected, from the practice of this District. I have met with only one particular which merits notice; and which, though a simple and eligible piece of management, I do not recollect to have met with in Norfolk.

In the instance of practice under notice, the *largest* of the turneps are *drawn and carried*

carried off, for fattening cattle; and the *small* ones *eaten upon the ground*, with sheep; especially with ewes and lambs, in the spring.

This practice eases very much the labor of drawing, tailing, &c.—and gives the small turneps room to grow, in the early part of winter; and to shoot freely in the spring.

If the small ones be eaten off *in winter*, the soil is rendered free for the plow, as if the whole had been drawn and carried off. And in this particular only, rests the superiority of the Yorkshire practice; one instance of practice in Norfolk having been noticed, in which the large ones were drawn, and the small ones suffered to stand *until spring*. See NORFOLK, Sect. TURNEPS, Art. DRAWING.

RAPE.

21.

R A P E S E E D.

THIS is the only District in which I have met with rape (*BRASSICA napus*—Coleseed) cultivated for its SEED.

It has long been the practice of the Vale; where large quantities have been annually cultivated; and where the cultivation of it is, I believe, equal at least to that of any other District.

It therefore merits a full and minute description, in this place.

The requisite divisions of the subject are,

- I. Succession.
- II. Soil and Management.
- III. Manure and Management.
- IV. Semination.
- V. Management while growing.
- VI. Harvest management.
- VII. Market.

I. SUCCESSION. Rape is generally sown on SWARD. In the richer parts of the
Vale,

Vale, it is sometimes sown on FALLOW, like turneps; and, sometimes, it is ventured upon the STUBBLE of an arable crop; but, unless the soil be clean and rich, seldom with success. On MAIDEN SWARD, as that of commons, or old grazing grounds, it generally turns out a very profitable crop.

II. SOIL, &c. Various as are the SOILS of this District, it is sown on EVERY SPECIES; and, generally, with a success proportioned to its *richness*; the *specific quality* of the soil being considered as immaterial; provided it has lain long in SWARD; and provided the sward be reduced, and the soil ameliorated, by "PARING AND BURNING." See the Article SODBURNING.

III. MANURE, &c. The ashes of the sward, with generally a sprinkling of LIME, are the universal and only manure, for rape on sward. The ashes, I believe, are principally depended upon for the rape; the lime being rather intended for succeeding crops.

IV. SEMINATION. The TIME OF SOWING, July: early enough to get a strong *leaf*, and late enough to prevent its running up to *stem*, the first autumn. QUANTITY OF SEED, one gallon an acre; sown generally

rally on the rough plit of one plowing (see SODBURNING); the seed being brushed in, with a thorn harrow.

Sometimes, the tops of the plits are lightly scarified, with a pair of tined harrows, before the seed be sown; and sometimes they are neither harrowed before, nor swept after the sowing!

V. MANAGEMENT WHILE GROWING. I have heard of one or more instances of rape being HOED, with five or six inch hoes. but that is not the practice of the country. Neither hoing, nor weeding, of any kind, I believe, is usually bestowed on the rape crop.

One practice, however, in this stage of the management of rape, deserves notice. The practice here meant is that of "TRANSPLANTING:" namely, filling the vacant patches (with which rape too frequently abounds) with plants drawn from the parts that are overstocked.

This work is generally done, by women, who put in the plants with dibbles.

Plants thus removed seldom fail to take root; but they ripen somewhat later than the unmoved plants. Nevertheless, the practice is highly eligible.

The

The time of transplanting is October.

If the whole, or a principal part of a land, or a large patch,—happen to miss,—the PLOW is sometimes used in transplanting.

In this case, the plants are laid, or placed in a leaning posture, by women, in every second furrow, about a foot apart in the furrows. The roots are of course covered with the next plit; and a second plit being added, another row of plants are laid against it. The distance, therefore, is about eighteen or twenty inches, by twelve; and this, in good land, is found to be sufficiently near.

The expence of transplanting rape, in this manner, has been found, on accurate observation, to be about four shillings, an acre: namely, eight women, at sixpence a day each.

This expedient leads to an operation which would, in my opinion, be a valuable IMPROVEMENT IN THE CULTURE OF RAPE SEED.

The great objection to this crop, and that which deters many judicious men from cultivating it, is the length of time it occupies the soil. Being sown in July or August, the whole tribe of biennial weeds have time to establish themselves, before winter; and not
being

being reaped, until July or August following, they have time to mature and shed their seed.

The grasses, and strong-rooted weeds of every kind, likewise gain, in that time, a degree of possession, which is difficult to be set aside. The soil, too, gets out of tilth, by lying so long a time without plowing.

ONE PLOWING, IN AUTUMN, would remove, or greatly alleviate, those evils. The biennials would thereby be extirpated; the grasses and strong-rooted weeds be checked; and the soil be preserved in tillage.

The operation which strikes me, as being singularly eligible to be adopted, is that of TRANSPLANTING THE WHOLE CROP.

The *method* I should propose is this: draw, from the *first land*, a sufficiency of plants to plant the *last land* with, and bury their roots in a vacant ground, until wanted.

Plow the first land (thus burying the weeds and the refuse rape) and, at the same time, stock it, in the manner above described, with plants, drawn from the second land.

The first land finished, supply the second with plants from the third, and so on, till the whole be finished; planting the last land with the plants in reserve.

Besides

Besides the ADVANTAGES already set forth, the entire piece would, by this means, be furnished with *prime plants; equal in strength; and regular in distance.* Hence, the soil would not only be *evenly* occupied, but the crop would *ripen equally*: The large and uniform distance of the plants, too, would give free admission to the *hoe*:—even a narrow *horse hoe* might be used between the rows.

Thus, the foulest crop which farmers have to deal with, might, for a small expence, be rendered a FALLOW CROP of the first estimation.

If sodburnt land were managed in this manner, the first or seed plowing ought to be very shallow; across the ridges (if any); and the second, or transplanting plowing, longway of the lands, across the first plowing; gathering up the ridges dry against winter.

A manured fallow, a rich wheat stubble, or other land sufficiently clean, and in sufficient heart for rape, might be planted with it in a similar manner; raising plants for this purpose in a detached seed bed.

VI. HARVESTING. Rape is generally RIPE in July; sooner or later, according to the season. It is considered as fit for cutting when

when the forwardest of the seed has begun to turn black.

It is universally CUT with sickles, by women ; who, in the ordinary management of the country, lay it in broad thin “ reaps,” upon the tops of the stubble ; which they generally cut about a foot high, or as high as the lower branches will allow.

In these “ reaps,” — shoves or open sheaves,—it lies until the sap be pretty well DRIED out of the greenest, and the ripest is ready to open its pods. If it lie too long, much of the prime seed will be lost in the field ; if it be thrashed too green, much will be left in the pods, and that which is thrashed out will be difficult to cure.

The METHOD OF THRASHING (which has been practised in the Vale, perhaps, ever since rape has been cultivated in it) will require more description than I can well persuade myself to bestow upon it. But a PUBLIC “ RAPE-THRASHING,” conducted as it is in this country, is one of the most striking scenes which occur in the field of Rural Economy. Contending armies can scarcely exhibit, to the distant eye, greater tumult ; nor can the parade boast of better discipline,

than may sometimes be observed, in a well conducted rape thrashing.

If the quantity to be thrashed be large, as twenty or thirty acres, the whole country, for many miles round, are collected. The days of thrashing are considered as *public days*; the lord of the harvest keeping *open field*, for all who choose to enter; ample provision of meat and drink being made, for this purpose. A wake or a fair is not a scene of greater jollity.

It is not common, however, for unbidden guests to go to these rural meetings, without assisting, or at least offering their services to assist, in forwarding the business of the day. But to make sure of hands, for the more laborious departments, men and women are previously retained, with wages over and above the spoils of the feast.

Also previous to the day of thrashing, a "rape cloth," — "carrying-cloths," — and other necessaries, are to be provided. The cloths are in the hands of a few men, who let them out, at so much a day, or so much an acre. A rape cloth, of the largest size, measures twenty yards square: weighing more than half a ton weight. Hessian is the usual

usual material of which it is made. The hire of such a cloth is 15s. a day.

Also, before the thrashing, the rape and the stubble are to be cleared away from the place (or places, if the piece be large) where the thrashing floor is to be made; the clods being taken off, and the hollows filled up, where the cloth is intended to be laid.

The business of the day is thus conducted: The men are divided into carriers, thrashers, and floor-men. Women fill the carrying-cloths; and boys hold them while filling. These cloths are made of canvas, about six feet square, with poles fixt on two opposite sides (in the manner of a rolling map); openings being left, in the middle, between the poles and the canvas, for two men to run their arms through, one on either side; the poles resting, by their middles, on the men's shoulders; the cloth filled with rape hanging between them. In these cloths the whole of the crop is carried to the thrashing floor.

The floor-men are divided into layers-on, turners, takers-off, rake-men, riddlers, &c. &c. &c.

The rape to be thrashed is spread thin upon the cloth, in a circle, as large as the cloth will contain.

The thrashers move continually in this ring; marching with a slow step, in pairs, and in two divisions; the individuals of each division following one another, as closely as the nature of their employment will allow them.

The first division are preceded by the layers-on, and followed by the turners; and close upon the rear of the second division follow the takers-off; who with wooden-tined forks shake and throw-off the straw; which is piled in heaps, by others, with longer implements.

Finally, the rake-men run off the seed, with the heads of their rakes thrust before them; forcing the seed into recesses formed within the ring, or upon the corners of the cloth; where groups of fillers, riddlers, &c. &c. are employed in separating the seed, from the principal part of the pods, and short straws, which beat off in thrashing; while others are equally busy in putting the unwinnowed seed into bags, and carrying it to the "pie" or the waggon.

Toward the close of the day, when the straw has risen in mountain piles of almost silver brightness; when the field of employment appears on its largest scale; when
every

every department is in full work ; and when every individual is animated, and not yet fatiated, with the *entertainments* of the day ; the rape thrashing affords the contemplative mind a pleasing sight ; and would afford the pencil a picturesque subject.

The two divisions of thrashers, moving in close phalanx, with flails nimbly brandishing, sometimes in open view, sometimes partially hid among the piles of straw ; the clothmen busy and attentive to their various employments ; the team drawing off the loaded seed ; the carriers, from every hand, pressing to the thrashing floor, with their seemingly cumbrous loads ; and the distant groups of fillers, scattered on every side of the foreground ; could not fail of affording matter interesting to the painter ; especially in a country where a suitable offscape is seldom wanting.

It were almost pity that a scene, at once so picturesque and so truly rustic, should sink into oblivion, as in all probability it will, in a short course of years. A more frugal management is growing into esteem ; and it is highly probable that, in a few years, *public* rape thrashing will be discontinued, and, in a few years more, be forgotten.

The seed is CURED (that is, takes the heat which is incident to all recent vegetables) in the chaff or pods—provincially, “pulls”—either on a barn floor, a granary, &c. or in “PIES” built in the field, for this purpose, with plaited straw.

The form is that of a corn bushel; the diameter, seven or eight feet; the height three or four feet. This large straw basket-like receptacle is filled with rough feed, to the brim, topped up, in a conical form, with straw, and the whole secured with a coat of thatch.

This is more generally done, when the markets happen to be low, at the time of thrashing; as, in these pies, the seed may be kept any length of time; provided a sufficient proportion of pulls be retained among it; and provided the size of these receptacles, and consequently the quantity of seed deposited in them, be not too large.

When the feed has done heating, and a market offers, it is sold, carried to the barn, winnowed, and sent to market.

The INCONVENIENCIES of *public rape thrashing* now require to be mentioned. The bustle and hurry, so dissimilar to the placid routine of husbandry, which are unavoidable

on these occasions, are disagreeable to most men; the expence, too, is sometimes unreasonable; the hazard by weather considerable; and the waste which is generally made by the over-affiduoufness of unskilful volunteers, are all of them objections to the practice.

Besides, the *straw* and the *pulls* are, in this case, little less than wasted, being usually *burnt in the field* for their ashes, which are very few in quantity, and the neat profit arising from them inconsiderable.

The season too is inconvenient: whether in hay time or harvest, every other employment, however necessary, bows to the rape thrashing.

It were no wonder that inconveniencies, such as these, should induce sensible men to devise a more eligible management of this profitable crop. Yet such is the infatuation of an established custom, that there has not, I believe, been an instance of more than one deviation, originating in the *Vale*, during the centuries of time which rape may have been cultivated within it.

In this instance, the rape was HARVESTED AS WHEAT;—reaped, bound, shucked, carried into the barn, *cured in the straw*, and

thrashed out when markets and conveniency required.

Binding it, while yet in a flexible state, secured it from the waste, by shedding, which is more or less incurred, by handling loose reaps, in a dry parched state, with the pods ready to open on the slightest touch.

By *setting it up* in stooks, the waste committed by birds was much lessened, especially that by wood pigeons, which, settling upon the reaps, beat out tenfold what they eat; whereas, in shucks, that which is beaten out runs down into the sheaves and is saved.

In *carrying*, a tall pole was fixed at each corner of the waggon, and a large cloth thrown over them, hanging in a bag to receive the load, and to catch the shedded feed.

To prevent *waste in the barn*, the floor of the mow was covered with SOFT HAY, which stops the running of the seed, and off which it may be easily gathered, or thrown upon the thrashing floor; whereas *straw*, being more open, admits the seed to run down among it, and is the cause of considerable waste.

The *expence*, under this management, is comparatively much less, than it is in a public thrashing;

thrashing ; more especially, if the piece to be harvested be small ; as four or five acres, for instance, which create as great a bustle, and cause almost as great an expence, as twice that quantity.

By an accurate account of the expence of five acres of rape, harvested in the usual manner, some years ago, the expence appears to be 23s. an acre. The same quantity would now, under the present price of living, and the present style of treating upon these occasions, cost from thirty to forty shillings an acre.

By an account, equally accurate and particular, it appears, that four acres and three quarters, harvested as wheat, a very few years since, cost only 16s. 6d. an acre, tho' thrashed out in harvest.

Reaping—three women, at 8d. each	2 0
Binding—a man 2s. a boy 6d.	2 6
Carrying—three loads, at 18d.	4 6
Thrashing—three days <i>in harvest</i> , at 2s. 6d.	7 6
	<hr/>
	16 6

But the saving of expence is far from being the greatest saving by this practice. The VALUE OF THE STRAW, to cattle in winter,

winter, is found to be very considerable. The *stover* (that is, the pulls and points of the straw broken off in thrashing) is as acceptable to them as hay; and the *tops* of the *straw* are eaten with avidity, “nearly equal to oat straw, better than wheat straw.”—If it be well got, the *smaller butts* will be eaten up clean. The *offal* makes excellent litter for the farm-yard; and is useful for bottoms of mows, stacks, &c. &c.

If we consider the nature of rape, how nearly it is allied to the turnep, and how grateful to cattle while in a green state, it is no wonder that the pods, and finer parts of the stems should be acceptable to them, in a state of dryness. Setting fire to the whole in the field is a barbarous practice which ought to be exploded.

Objectionable, however, as the common mode of harvesting rape, in this country, undoubtedly is, it has, during time immemorial, been implicitly adhered to (the instance last-mentioned only excepted) until this year (1787), when an IMPROVEMENT has taken place, which bids fair to effect a revolution, in this department of the husbandry of the Vale.

In this improved method, the rape is all BOUND IN SHEAFLETS, about half the size of wheat sheaves, with green underling plants of rape, or with long grass or other weeds, with which the stubble of rape too generally abounds.

These sheaflets are laid lightly upon the tops of the stubble to dry, not set up in stooks, as in the instance above noticed. When they are half-dry, they are, or ought to be, turned; and when fully dry, are STACKED IN THE FIELD.

The sheaves are *carried* to the stack in sledges; each sledge being furnished with a cloth or large bag, supported by a tall frame, rising about four feet above the body of the sledge, which is light and drawn by one horse. These sledges are loaded, that is to say, the bags are filled, by women, and are taken to the stacks, by boys riding upon the horses. A large cloth is spread by the side of the stack, for emptying the sledges upon; which is done by overturning them; so that no time is lost, either by the sledges, or the stackers. A large field of rape is soon got together, in this way.

When it is thus *secured in stack*, and has taken its *beat in the straw*, it remains at the
option

option of the owner to thrash it when, where, and in what manner he pleases; that is, as markets, leisure, and other circumstances may direct him. It is observable, that rape seed, *cured in stack*, generally turns out a fine sample.

One thing relative to this practice is too remarkable to pass unnoticed. It has been an *established*, and, I understand, the *ordinary practice*, during many years, of a District (the Egton quarter of the Morelands) situated not more than ten miles from that part of the margin of the Vale (Lockton) at which it this year made its entry!

This is a striking instance of the slow progress, which practices in husbandry, howsoever excellent, have hitherto made, in travelling from one District to another.

HOW ESSENTIALLY NECESSARY, THEN, IT IS TO REGISTER THEM, ACCURATELY AND FULLY, IN THE DISTRICTS OF THEIR ORIGIN, OR IN PLACES WHERE THEY HAVE REACHED THE HIGHEST DEGREE OF PERFECTION, AND TO DISTRIBUTE SUCH REGISTERS, RECIPROCALLY, AMONG THE VARIOUS DISTRICTS OF THE ISLAND.

VII. MARKETS. There are no oil mills in the Vale. The only market is Malton, from whence rape seed is sent, chiefly I believe, into the manufacturing part of the county, where oil mills are numerous.

The PRICE, ten to thirty pounds a last, of ten quarters.

VIII. The PRODUCE of a middling crop is four quarters an acre: five quarters an acre have not unfrequently been produced.

GENERAL OBSERVATIONS ON THE CULTURE OF RAPE SEED.

The fluctuation of price, which rape seed is subject to, being in some measure, perhaps, influenced by the success of the Greenland fishery, and the hazard to which the crop is exposed, render it in a degree *uncertain*.

FROSTS, in spring, when rape is in blow, or in the critical state between the blossoming and the formation of the pods, are its greatest enemies. In the spring of 1783 much mischief was done by frosts, in May. One person had a piece of twenty acres almost destroyed by it. In the beginning of May, this crop promised eight or ten pounds an acre: the soil rich, the crop on the ground good, and the price above par. In the wane of May, the twenty acres were offered for
 twenty

twenty pounds! a loss of one hundred and fifty to two hundred pounds, in one article; and perhaps in one night!

But every crop is subject to hazard, and to a fluctuation in price; and although rape be liable to be cut off by frost, it rarely is destroyed by that means. Upon the whole, it may be considered as one of the most profitable crops in husbandry. There have been instances, on cold unproductive old pasture lands, in which the produce of the rape crop has been equal to the purchase value of the land.

This productiveness, or, in other words, the profitableness of the rape crop, is, however, held out by some men as an objection to its culture, under an idea that it must impoverish the soil.

Does not every *productive* crop *impoverish* the soil? Yet who will argue that good crops are less eligible than bad ones? A good crop enables the farmer to replenish and meliorate his soil, with manure and tillage, which ought (generally speaking) always to be in proportion to the recent productiveness of the soil, and to the state of foulness and tilth, in which the nature of recent crops have placed it.

If,

If, in the culture of rape, the soil be permitted to lie undisturbed, either by the plow or the hoe, from seed time to harvest, suffering weeds of every species to mature and scatter their seeds, and to gain an establishment in the soil; and if, at harvest, the straw be burnt in the field, and the ashes be sent to market, rape is in truth an impoverishing crop.

But were the soil to be plowed, in autumn, and to be hoed during the ensuing summer; and were the straw, &c. instead of being burnt, to be consumed in the farmyard, as fodder and litter, I am of opinion that rape, in many cases, would be the most eligible crop the farmer could make choice of*.

POTA-

* Whether oleaginous or farinaceous crops—whether five quarters of rape or five quarters of wheat an acre—incur the greater impoverishment of soil, is a subject which is yet in the hands of theory. While the food of vegetables, and the vegetable economy at large, are so little understood, as they appear to be at present, all argument respecting the comparative impoverishment of the soil, by different species of vegetables, must be futile.

22.

P O T A T O E S .

CONSIDERABLE quantities of Potatoes are raised, in the District under survey. Almost every man, let his farm be ever so small, cultivates potatoes in the field: not in the ordinary method, practised in most Districts of the kingdom: not with the *spade*, but with the PLOW: a practice which has been followed, invariably, for near a century. I do not mean to speak of it as a practice peculiar to Yorkshire; but, I believe, there is no other county in which it is so prevalent. It therefore merits particular notice here.

It will be necessary to consider separately,

- I. The Species or Variety.
- II. The Succession.
- III. The Soil and Tillage.
- IV. The Manure used.
- V. The Seed and Setting.
- VI. Cleaning the Crop.
- VII. Harvesting.
- VIII. Preserving the Roots.
- IX. Pro-

IX. Produce.

X. Markets; or Application of Produce.

XI. The Effect of the Potatoe Crop on Soils.

I. There is only one SPECIES of Potatoe —*SOLANUM tuberosum*: — but the VARIETIES of that species are endless. Every county has its favorite kinds; though very different from one another. To enumerate the sorts, of any particular District, would be filling the page with barbarous terms, without conveying any useful information to the reader.

The VARIETIES of potatoes are temporary, in every District; having their entrances and their exits. The rough-skinned “Rusiaty” of this District was long a favorite; but is now, I believe, with many others that have flourished for a time, entirely lost.

There is some reason to believe, that the disease, which has of late years been fatal to the potatoe crop, in this and other Districts, under the name of the CURL, or “CURLED TOPS,” has arisen from too long a continuance of *declining varieties*. Be this as it may, it appears to be an opinion, established here, by some years experience, that *fresh*

varieties, raised from seed, are not liable to that disease.

This matter, however, may not yet be sufficiently ascertained, to be registered here as a fact. This disease made its appearance, some years ago, with more or less effect, in, I believe, every part of the kingdom. In some parts of it, its continuance was short; its effects have ceased; and are now almost forgotten. In one instance (which I may have occasion to mention in another place), its removal was, in all probability, owing to the introduction of new varieties.

The District under survey furnishes a remarkable instance, respecting this disease. The Morelands are, at present, in a manner free from it; while the Vale is still, in some degree, infected with it. Plants procured, from the Morelands, remain free from it, in the Vale, *the first year*; but, being continued, become liable to the disease.

The disease of curled tops is seldom obvious, at the first coming up of the plants; but attacks them as they increase in size; the entire top becoming dwarfish and shrivelled, as if affected by drought, or loaded with insects: they nevertheless live, and increase, though slowly, in size; but the roots
are

are unproductive. Some crops have been almost wholly destroyed by this disease.

Where the attack has been partial, *weeding out the diseased plants*, as they failed, is said to have had a good effect. And, *it is said*, the Morelanders got rid of the disease, through this means.

The method of RAISING POTATOES FROM SEED is known to some intelligent husbandmen, here. The prevailing method is this:—In autumn, when the apples are beginning to fall spontaneously, they are gathered, by hand, and preserved, in sand, until spring, when they are mashed, among the sand, or among fresh mold; separating the seeds, and mixing them evenly with the mold. As soon as spring frosts are judged to be over, they are sown, in fine garden mold; and, as fast as the plants get into rough leaf, and are strong enough to be handled without injury, they are transplanted, from the seed bed, into another bed of fresh rich mold—in rows, which are kept clean, during the summer. In autumn, bunches of small potatoes are found, at the roots of these plants; varying in size, the first year, from the hazel nut to the crab. These being planted, next spring, produce potatoes of the middle size; but

they do not arrive at their fullest bulk, until the third or the fourth year.

Where the use of the stove, or the garden-frame, can be had, this process may be shortened. The seeds being sown within either of these, early in spring, the plants will be fit to be planted out, as soon as frosts are gone; by which means the size of the roots will be much increased, the first year; and will, in the second, rise nearly to perfection.

Potatoes, raised from seed, are a miscellany of endless varieties. Sometimes, these varieties are planted promiscuously; sometimes, particular varieties are selected.

IN SELECTING VARIETIES, from seedling potatoes, two things are to be attended to; the INTRINSIC QUALITY of the potatoe, and its PRODUCTIVENESS. If these two desirable properties can be found, in one plant, the choice is determined. To this species of attention, and industry, we are indebted for the many valuable kinds, which have been, and now are, distributed throughout the Island.

It is observable, however, that varieties of potatoes, like those of corn, are *partial to particular soils* and situations. Hence, the propriety of *husbandmen* raising potatoes from seed;

feed; as by this means they obtain, with a degree of moral certainty, *a sort adapted to their own particular soils and situations.*

But it has been already observed, that *varieties degenerate*: the old favorite sorts of this District were driven, until some of the individual plants barely produced their seed again.

Whoever has attended closely to the work of taking-up potatoes, must have observed, *the great inequality in the productiveness of individual plants.* The difference in the produce of adjoining roots, where no disparity of soil can influence, will sometimes be three or four fold. Hence, it is evident, that each variety has its SUB-VARIETIES; through whose means, it can hardly be doubted, the *parent variety* may be *improved*, and its *continuance* be *prolonged*.

Thus, the farmer has another mean in his power, of improving the quality and productiveness of his potatoe crop, by IMPROVING VARIETIES, or, in other words, SELECTING SUB-VARIETIES, superiorly adapted to *his* soil and situation.

Every attentive cultivator of this valuable root must be acquainted with the wide difference, in *net profit*, between a *full* and

even a *middling* crop. The rent of land, the seed, and the labor are the same, whether the produce prove great or small. How imprudent, then, to propagate an unproductive kind, when the means of obtaining a productive one are so easy and obvious.

II. SUCCESSION. In the common practice of the country, potatoes are cultivated as a FALLOW CROP FOR WHEAT: the cleanest part of a stubble, or other ground, intended to be summer fallowed for wheat, being set apart for potatoes. They are seldom planted on SWARD; the common predecessor of the potatoe crop, in most other places. It is, however, understood, here, that they do best upon "FRESH LAND:" that is, land which not been too long under the plow.

III. SOIL and TILLAGE. Formerly, potatoes were confined to *light friable loams*: and the sorts which were cultivated, in those days, might require this restriction: now, they are grown in all soils; different varieties being found partial to different land. It is observed, however, that let the sort be ever so well adapted to the soil, *heavy cold land* seldom gives light well flavored potatoes.

The soil is broken-up, in winter or spring, and worked-over, two or three times, with
the

the plow and harrow, as for turneps ; getting it as fine, as the nature of an early spring fallow will admit of.

IV. MANURE. DUNG : generally long strawy dung ; which is set in heaps, upon or near the patch to be planted ; previously to the seed plowing. The quantity is twenty to thirty cart loads, an acre.

V. SETS and PLANTING. Formerly, it was the common practice of the District to plant *whole* potatoes. In taking up potatoes, they were sorted, into large, small, and *sets* ; which were of the middle size.

At present, that practice is, I believe, entirely laid aside : it being the custom, now, to *cut* potatoes, into more than one set : namely, middle-sized ones into two, large ones into three or four ; leaving the cuttings much larger, than is done in most other Districts ; where eight or ten single-eyed sets are sometimes cut out of one potatoe.

The reason given for the use of LARGE CUTTINGS is, that the young plants may acquire, at the outset, a strong vigorous habit, and thereby be enabled to throw out and maintain a sufficient number of roots and branches. And the reason I have heard given for using large potatoes, in preference

to smaller ones, is, that "large ones are more likely to produce large ones again." The reasoning, in both cases, appears to be good.

The sets being prepared, the *seed plowing* is given. In this plowing, the land is laid up in ridgets, similar to those in which gardeners leave the soil, in the operation called trenching, when it is not intended to be immediately cropped. The width of these ridgets depends on the judgement of the planter; from two and a half to three feet is the usual width.

This operation is performed with a COMMON PLOW, in the way in which rice-balking, raftering, or half plowing, is usually done; endeavouring to leave the bottoms of the drills *straight, narrow, and clean*. One strong horse, if the soil be light and fine, or two horses, one before the other, if otherwise, is the best team for this work. Horses abreast are apt to foul the drills. The usual depth of the drills is that of the cultivated soil.

In these drills, the sets are dropt, by women or boys, at twelve to eighteen inches distance, according to the judgement of the farmer. If the quantity of land be given, and the number of sets be indefinite, twelve inches may be a sufficient distance; but if, as is generally

generally the case here, the quantity of land be greater in proportion, than the number of sets, the farther they are planted asunder, the greater will be the produce in proportion to the plants.

While one party are planting, another are carrying on the dung, in scuttles; either scattering it regularly along the drills, or applying it partially to the plants; covering each set with its due portion of manure. This may appear to be a tedious business; it certainly is a dirty one: but not so tedious as inexperience may suggest. If the loads be broken into three or four heaps, and these be distributed conveniently, five or six women will plant and cover an acre, a day, in this manner.

The plow closes the business of planting: the ridges are either returned upon the plants and dung, with a common plow, or are split, with a double-mold-board plow; in either case, raising the soil into ridges, over the drills of potatoes.

VI. CLEANING THE CROP. As soon as the young plants make their appearance, the land is harrowed, lengthway of the ridges; to tear up the seed weeds which grow upon their crowns, and to smother those in
the

the trenches, with the mold. In a short time afterward, the plow, with the share broad and sharp, is run through each interval, and the rows cleaned with the hoe. In a few weeks more, the intervals are again stirred, with the plow, throwing the earth towards the plants, and the hand hoing repeated. If leisure and the depth of the soil will permit, a second earthing may be given; and, when the plow and the hoe are no longer able to find admittance among the tops, hand weeding is, or ought to be, made use of.

By these means, land may be as effectually cleaned from *seed weeds*, as by fallowing; and no man, who has any regard for his own interest, or for his character as a farmer, would ever think of planting potatoes, in a bed of *couch and thistles*.

VII. HARVESTING. Formerly, potatoes were taken up with the *plow*; endeavouring to get the share below the potatoes, and to overturn the ridges. But, without great care, many potatoes were cut, in this operation, and many more unavoidably buried; so that picking, again and again, was necessary; and, at last, some were left in the land.

At present, the prevailing practice is to take them up with common *dung forks*: an operation

operation which is, at once, effectual; and which is by no means so tedious, when potatoes are grown in ridges, as when in the ordinary way, the entire ground is to be dug over. In ridges, the roots are distinct, and are easily laid bare; being open on three sides, with free vent for the mold. The fork being forced down behind them, the whole tubers are at once exposed.

VIII. The way of PRESERVING POTATOES, here, has been either to bury them, in deep pits, within the ground; or to house them, in a barn or other out-building, guarding them on every side with straw. The dangers to be guarded against are *frosts* and *wet*.

At present, (the evil effects of *deep pits* having been discovered) the growing practice seems to be that of laying them in long ridge-like heaps, upon the *surface* of arable ground, and covering them up, with the surrounding soil, ridged-up in a roof-like form.

A LONG ARCHED VAULT, running end-way into the side of a hill (or the side of a pit or other hollow) with a door at the end, level with the ground below; with a road over the top; and with one or more shooting holes,

holes, similar to those of coal vaults under the streets of towns, would be an eligible receptacle for potatoes.

IX. MARKETS and APPLICATION.

In this part of the District, few potatoes go to *market*, except for sets in the spring.

Nor is the *application* of potatoes to *fattening stock* extensive. In *this* District, swine are almost the only species to which they are applied. Some few are given to cows.

But in the bottom of the VALE OF YORK, great quantities have, of late years, been applied to the FATTING OF CATTLE. They are, I believe, invariably given to them raw; with alternate meals of hay or ground barley: the method of fattening, with potatoes, being similar to that of fattening, with turneps.

X. PRODUCE. The quantity of potatoes grown upon an acre, under the management above described, I have not been fortunate enough to ascertain, with sufficient accuracy. It is much less than what arises from old grass land, dug over with the spade, and filled with plants, as is the practice of the MIDLAND COUNTIES.

XI. THE EFFECT OF POTATOES ON LAND. Various are the opinions of professional men, on this subject. One as-
fects

serts that they are *great impoverishers of the soil*; that they are *hurtful to the corn*, and *ruinous to the grass*, which succeeds them. Another is clearly of opinion, that they are *friendly to corn*, and *not enemies to grass*.

The dispute may, perhaps, be settled, satisfactorily, in this manner.

The potatoe contains, indisputably, a great quantity of nourishment; and is therefore, perhaps, as indisputably, a great exhauster of the soil.

But the quantity of vegetable nourishment carried off, in the potatoe crop, is not the only cause of exhaustion: it is notorious to common observation, that this crop leaves the soil in a singularly *friable fertile state*; causing an abundant produce of the crop which succeeds it.

If, taking the advantage of this *prodigality of the soil*, the husbandman keeps cropping it, year after year, with corn,—and, when it will no longer answer his unreasonable expectations, lays it down to grass,—it is no wonder that it should be unproductive: for having lavished all its riches on an *ungrateful occupier*, it is of course reduced to the extreme of poverty.

On the contrary,—if, after a crop of potatoes well dunged for, only one or two crops of corn be taken, and the land laid down to grass, *while yet in a state of fertility*, the potatoe crop is, to vulgar apprehension at least, friendly to the crops which succeed it.

Hence it follows, that land which has been cropped with potatoes should, presently afterwards, be laid down to grass; or should be *timely replenished*, with a quantity of manure, *proportioned to the degree of exhaustion it has undergone*.

GENERAL OBSERVATIONS.

The value of POTATOES as a FALLOW CROP, and as an article of FOOD FOR CATTLE, compared with TURNEPS and CABBAGES for the same purposes, may be considered thus:

Potatoes are *more nutritious*, and, in the opinion of those who have used them, fat cattle much *quicker*, than either turneps or cabbages. Potatoes, too, being secured from the severities of winter, are a more *certain* article of fattening, than turneps or cabbages; both of which are liable to perish, under an alternacy of frost and thaw; and the turnep, inore particularly,

ticularly, is locked up, or rendered difficult to be come at, during a continuance of snow or frost. Turneps and cabbages, if they out-weather the severities of winter, occupy the soil in the spring, when it is wanted to be prepared for the succeeding crop; while potatoes, if properly laid up, are a food which may be continued without inconveniency, until the cattle be finished, or the grass has acquired the requisite bite for finishing them in the field.

On the other hand, potatoes are a disagreeable crop to cultivate: the planting is a tedious dirty business; and taking them up, may be called the filthiest work of husbandry; especially in a wet autumn; and still more especially, on a *tender tenacious soil*: while, upon *weak thin land*, the extraordinary quantity of manure, which is requisite, renders them impracticable to be cultivated, on a large scale, in ordinary situations.

Upon the whole, it appears to be evident, from the information I am at present in possession of, that the three crops under consideration are each of them superiorly eligible, when they are cultivated on the soils, to which they are peculiarly, and respectively, adapted.

A strong

A strong tenacious soil is equally unfit for potatoes and turneps, while it is singularly adapted to CABBAGES:

Light, shallow, unproductive soils are equally unfit for potatoes, and cabbages; while, with good husbandry, TURNEPS may be grown on them with advantage.

Rich, sound, deep, sandy loams are acceptable to the three. But the POTATOE appears to be possessed of some superior properties, which render it, at least, an object of experiment, in CLEAN RICH SOILS, as a fallow crop on a large scale, and as a food of farm stock.

23.

F L A X.

WITHIN the last twenty years, a considerable quantity of flax has been grown, in the Vale. The richer parts of it are not ill adapted to this crop; but whether these parts are now gone over, or whether the restrictions of landlords have checked the spirit
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of cultivation; the culture of it is, now, evidently on the decline.

The flax crop, however, being confined to a few individual Districts, it may be proper to give the outline of its management, in this; although it cannot here be called a staple crop. I will just mention,

1. The Species cultivated.
2. Soil and Succession.
3. Soil Process and Manure.
4. Semination.
5. Vegetating Process.
6. Management of the Produce.
7. Markets.

I. SPECIES. We have only one SPECIES of cultivated flax—*linum usitatissimum*.—The variety, cultivated here, is the blue, blow, or lead-coloured flax—provincially, “BLEA LINE.”

II. SOIL and SUCCESSION. Flax requires a RICH DRY SOIL. Deep fat sandy loam is perhaps the only soil, on which it is here cultivated with advantage.

OLD GRASS LAND, bearing this description, is considered as the properest matrix for flax. It is not unfrequently, however, sown on ARABLE LAND; and, when the soil is in heart,

dry, friable, and free from weeds, with good success.

III. TILLAGE and MANURE. The SOIL PROCESS generally consists of a *single plowing*, whether of sward or of wheat stubble.

In the latter case, however, it is mostly bad management. If line be sown on *old corn-land*, it ought, in general, to be *cleaned from weeds*, and rendered *perfectly friable*, by a well worked FALLOW.

MANURE is, I believe, seldom, if ever, set on, immediately for the line crop.

IV. SEMINATION. 1. The TIME OF SOWING, May. 2. The PREPARATION OF THE SOIL. Much depends on the state of the soil at the time of sowing. It should neither be very wet nor dry; and the surface ought to be made as fine as that of a garden bed. Not a clod the size of an egg should be left unbroken. 3. QUANTITY OF SEED, two bushels an acre. 4. COVERING THE SEED. Sometimes, the surface is raked (after being first harrowed) with garden or hay rakes. If, at the same time, the clods and other obstructions, which could not easily be reduced, were drawn into the interfurrows, the operation would be still more complete.

A light

A light hand roller, used between the final harrowing and the raking, would assist much in this intention.

V. The VEGETATING PROCESS depends, chiefly, on careful WEEDING; an operation which ought to be performed, with great scrupulousness. Hence, land which is sown with flax should be made as free from weeds as possible; otherwise, the expence of weeding, or the injury to the crop, becomes considerable.

If, through a *droughty season*, the plants come up in *two crops*; or if, by any other accident, or by mismanagement, the plants be *too thin* upon the ground, the crop is irreparably injured.

The nature of flax is such, that where it has room at the root, or whenever it gets its head above the plants which surround it, it sends out *side branches*, and loses, in a great measure, its *upward tendency*. But its goodness, as a crop, depends on its running up, with *one single stalk*, from the root to the seed. *At whatever height it ramifies, there the length of line terminates*. The branches are necessarily worked off in dressing; and the stem itself, unless it bear a due proportion to the

bulk of the crop, is likewise worked out among the refuse.

Hence, the necessity of having an **EVEN, FULL CROP.** Clods, before the sowing, by making the seeds glance in falling, prevent the surface from being evenly feeded; and those which remain, when the seeds are in the ground, prevent them from rising regularly. The infant plants, unable to pierce the clod, form themselves in a circle round it, leaving a vacancy in the center, favorable to their early ramification.

This being the nature of the plant, a *second coming up* seldom rises to profit; for, being overgrown by the spreading plants of the first crop, it remains weak, short, and underling, and, at pulling-time, is left standing upon the land. Thus, by a drouthy seedtime, the entire crop may be spoiled.

Nor is drought the only enemy of flax: it is liable to injury from *spring frosts*; and is sometimes attacked, even when it is five or six inches high, by small white *slugs*; frequently stripping off the leaves to the top, which, bending down with their weight, they will sometimes draw into the ground; thus in part checking, and in part destroying the plants.

If,

If, at the time of weeding, a piece of flax do not *promise fair for a crop*, it is always bad management to bestow upon it further labor and expence. A crop of turneps, or of rape will generally pay much better, than such a crop of flax.

VI. MANAGEMENT OF THE PRODUCE.

1. The TIME OF HARVEST, in this climature, is generally the latter end of July, or the beginning of August.

2. CRITERIA OF RIPENESS. . If the crop be intended for line of the first quality, the time of pulling is when the seeds are fully *formed*, but not yet ripe. If the *seed* be suffered to *mature*, the quality of the flax is lowered; the filaments are harsh, and the cloth, made from them, will not take a good color in whitening.

3. The "PULLING" is done by laying hold of the full-sized plants, near the top, and drawing them up, or rather breaking them off, by the roots. One hand is used in pulling, while the other receives the handfuls; until as much is collected, as both hands can grasp. Some short underling plants are then gathered for a band, with which a sheaflet is formed.

4. These sheaflets are collected into heaps, and immediately taken to the WATERING PIT, in which they are completely immersed; first by treading, and afterwards by loading them with fods, or other heavy materials.

The immersion is, or ought to be, carefully attended to; for that which happens to be exposed, above the surface of the water, is materially injured.

The "steeping" is continued a longer or shorter time, according to the weather and other circumstances. It ought to lie, until it be sufficiently tender, without being rotten; but to catch this state requires a nicety of judgement, which can be learnt from practice, only. It generally lies about ten days in steep; sometimes a fortnight.

5. From the "line pit" it is carried to the "RATING GROUND;"—a piece of unbroken aftergrass, where the sheaflets are untied, and the flax spread thin upon the grass. It is calculated, that a full crop ought to cover as much ground as it grew upon. Here it lies until it be sufficiently "rated;" namely, until the more woodlike substance of the stems will separate, freely, from the filaments or flaxen fibres, while these remain yet untainted; therefore the length of time of rating, like that

that of steeping, depends much on the weather, and can be ascertained, only, by the daily observation of a person, whose judgement has been matured, by long experience.

If, when it reaches this state, the weather be such, that it will not dry, as it lies upon the grass, it is set upon its butts, in parcels resembling sugar loaves, or large untied gaits. When dry, it is laid up, in a barn, or other convenient place, to be “swingled,” when leisure and conveniency will permit.

6. The “SWINGLING”—(and, generally, the “steeping” and the “rating”)—is done by men who make a business of it; travelling from place to place, wherever flax is under cultivation.

The operation of swingling is that of separating the woody substance from the filaments. To effect this, the rough stubborn stems are mangled in a “break;” an instrument which breaks the brittle substance of the stem — provincially, the “bun”—into fragments, without separating them from the filaments. The separation is effected by beating, or rather *beating* the mangled stems against a “swingling stock”—(an upright stout board or slab) with a “swing hand”—or wooden broad-axe; the swingler, from

time to time, drawing out the tow, or short broken filaments, by means of a "foot-heckle"—(resembling the tools of the flax-dressers);—and thus using, alternately, the swingle-hand and the heckle, proceeds, until the line be rendered fit for the flax-dresser; namely, until the principal part of the fragments—provincially, "shivs" or shivers,—and the principal part of the tow or short filaments, be extricated; when the flax is folded up into bundles for sale.

The swingling is done, by the stone, at a price proportioned to the length and stubbornness of the crop. Flax, which is short or tough, requires much more labor, than that which is longer, or from which the shivers part freely. From eighteenpence to two shillings, a stone, with board and lodging, is given for swingling: about twentypence is the common price. The work is very laborious.

VII. MARKETS. A manufactory of coarse linen being carried on in the Vale, a market is always at hand. The price of rough flax varies, with foreign markets, and its intrinsic quality. Seven to eight shillings a stone (of fourteen pounds) may, I believe, be

be considered as a medium price. From thirty to forty stones, an acre, a middling crop.

GENERAL OBSERVATIONS ON FLAX AS A
CROP, IN ENGLAND.

From this sketch of the culture and management of flax, it appears, that the goodness of the crop depends in some measure upon its *length*; and this upon its *evenness* and *closeness upon the ground*. The stems should be *tall, straight, and slender*. Three feet high is a good length of stem; and the thickness of a crow quill a good thickness. A fine stalk affords more line, and fewer shivers, than a thick one does. A *tall, thickset crop* is therefore desirable.

But, unless the LAND BE GOOD, a *thick* crop cannot attain a sufficient *length* of stem. Hence, the folly of sowing flax, on land that is unfit for it.

Nevertheless, with a SUITABLE SOIL, a *sufficiency of seed, evenly distributed*, and a *favorable season*, flax may turn out a very profitable crop.

The flax crop, however, has its DISADVANTAGES: it interferes with harvest, and is generally believed to be a great exhauster
of

of the soil, especially when its seed is suffered to mature *.

Hence, its cultivation, *on a large scale*, ought to be confined to RICH GRASSLAND DISTRICTS, where harvest is a secondary object, and where its exhaustion may be rather favorable, than hurtful, to *succeeding arable crops*; by checking the too great rankness of rich, fresh-broken ground.

It is also evident, from the foregoing outline, that much judgement is requisite to the right-ordering of flax. No man, therefore, ought to attempt its cultivation, on a large scale, until he has himself studied the various processes, maturely, in a District where it is cultivated, or has procured, from such a country, a person who is enured to them, by long practice.

But no prudent man will put himself to either of these inconveniencies, before he has tried, by small EXPERIMENTS, whether his SOIL be sufficiently AFFECTED BY FLAX, to ensure, under proper management, and a good season, a moral certainty of a CROP.

* In this case, the sheaflets are set up in stooks, in the field, and, when dry, are carried to the barn, thrashed, rated, sent to the watering pit, and treated as prime flax.

24.

T O B A C C O.

SOME YEARS ago (mostly in the year 1782) large patches of tobacco, together amounting to many acres, were grown, in this Vale: and, in the Vale of York, a still greater quantity was cultivated.

In this District, it did not excite the notice of legal authority: in the richer parts of the Vale, where the greatest quantity was raised, it was cured, and manufactured, by a man who had formerly been employed, upon the tobacco plantations of America; and who not only cured it properly, but gave it the proper cut, and finally prepared it for the pipe and pouch.

But, in the Vale of York, the cultivators of it met with less favorable circumstances. Their tobacco was publicly burnt, and themselves severely fined, and imprisoned. Penalties, it was said, were laid to the amount of thirty thousand pounds*:

This

* The penalty, I believe, is 10l. a rod, or 1600l. an acre!

This was enough to put a stop to the *illegal* cultivation of tobacco. But, perhaps rather unfortunately, it has likewise put a stop to the cultivation of that *limited quantity*, which the *law allows* to be planted, for the purposes of “physic and chirurgy.”

The quantity of land allowed to be cultivated for these purposes is, I believe, HALF A ROD, which is full FIFTEEN SQUARE YARDS of ground; a patch of ground sufficient, under proper management, to raise tobacco enough, for all the *medical* purposes of a farm house; in which it is, on many occasions, useful. In cutaneous disorders of cattle and sheep, it is universally applied.

I will, therefore, just set down such particulars, respecting its cultivation in this neighbourhood, as I collected in the autumn of 1782. I had not an opportunity of seeing the plants on the ground.

The SPECIES was probably NICOTIANA *rustica*, the ENGLISH TOBACCO; so called from the circumstance of its being the first species cultivated in England.

The *seeds* were procured at the seed shops, and handed about, from one cultivator to another.

The

The *seed-bed*, as rich and fine as possible.

The *time of sowing*, as soon as the weather became warm enough, to make it vegetate : mostly, in April.

When the seedling plants were strong enough to bear removing, they were *transplanted* from the seed-bed, to the patch on which they were intended to stand.

In the practice of one, they were planted out in the *quincunx* manner, a foot asunder : in that of another, in *rows*, two feet apart, and one foot asunder in the rows.

In both cases, they were carefully *hoed*, and kept free from weeds, during the summer.

In autumn, when the flowers began to drop off, they were *cut* and *dried in the shade*.

When dry, the leaves were *picked off*, and *pressed down close*, in casks or other vessels.

The spring of 1782 being late, the plants did not, upon weak soils, reach maturity before the frosts began to set in. Hence, a rich forcing soil seems to be necessary to the culture of tobacco, in this climate.

The vegetation, however, may be greatly forwarded, by forcing the seedling plants, in a stove or hotbed, and transplanting them out, as soon as the frosts of spring are over.

25.

CULTIVATED HERBAGE.

THE SPECIES of HERBAGE, cultivated in this District, for the purposes of hay and pasturage, are,

Clover—*trifolium pratense*—red clover *.

White clover — *trifolium repens* — white clover †.

Trefoil—*medicago lupulina*—yellow clover, or trefoil, or nonsuch.

Ryegrass—*lolium perenne*—raygrass.

Hay-seeds—*holcus lanatus*—softgrass.

Rib-grass—*plantago lanceolata*—plantain.

Cinquefoil—*bedysarum onobrychis*—sainfoin.

These species are cultivated, separately, or mixed, as soils and circumstances point out.

The DURATION of the intended ley is the first

* RED CLOVER; a cultivated variety of the MEADOW TREFOIL. See NAT. HERBAGE.

† WHITE CLOVER; a cultivated variety of the CREEPING TREFOIL.

first thing considered; therefore, the principal division of the subject is into

I. Temporary leys.

II. Perennial leys.

III. Sainfoin ley.

I. TEMPORARY LEYS. The *annual* ley, which is now common in most parts of the kingdom, and the *biennial* ley, which is prevalent in Norfolk, are almost equally strangers in this District.

Fallowing for wheat is still a common practice, here. Clover stubbles are seldom used as matrices for that crop. An ill-grounded notion prevails, that wheat after clover breeds quicks!

If land be stocked with couch, when the clover is sown, the succeeding wheat crop, no doubt, by occupying the soil so long with only a single plowing, increases the quantity. There is no worse management than sowing wheat on a *foul* clover ley; but this is no argument against ANNUAL LEYS. If the land be clean, when the clover seed is sown, it will as soon breed sugar canes as quicks.

In a grass land country, however, clover leys are less wanted than tillage; and, in the cooler better-soiled parts of the Vale, they may, perhaps, without much impropriety, be
dispensed

dispensed with. But, on the drier thin-soiled lands, which lie upon the marginal heights, temporary leys would be found far preferable, to the unproductive "meadows," which now occupy a considerable part of their surface. The Norfolk system of husbandry appears, to me, to be singularly well adapted to the lands of the "high towns;" the more productive parts of which ought not, in my opinion, to be permitted to bear more than two crops of grain, nor two crops of grass, successively.

II. MIXED PERENNIAL LEYS. Formerly, in this as in other Districts, arable land was laid to grass, by the mere cessation of plowing. When land refused to produce corn any longer, it was permitted to lie down to *rest*; or, in other words, to lie waste. For several years, it produced nothing but weeds; and these, of course, of the leanest kind. The wild birds were its only occupiers. At length, however, the grasses, by some mysterious process of nature, would begin to make their appearance. But their progress was slow: it was twenty years, perhaps, before a full crop of them was produced.

Before the cultivation of grasses was known, in this Island, such barbarous management

ment was excusable; but how this and other counties could continue it, more than half a century, after the cultivation of them was fully established, in a county not far distant from them (Norfolk), is a matter of some astonishment. Thirty years ago, the cultivated grasses were strangers in the Vale. The production of perennial leys was left wholly to nature; and, even yet, there are some *few* individuals, who remain bigots to Nature's practice.

It is, no doubt, a fact, as notorious as it is interesting, that all the charming old grass lands, with which *this* neighbourhood at present abounds, are of NATURE'S LEYING. For richness and variety of herbage (as will appear in the next section) it is no where, perhaps, exceeded. It is also notorious, that there has been very little, if any, well herbage meadow produced, in this District, through the means of *artificial grasses*.

Striking, however, as these facts may be, they only afford matter of argument, do not bring proof, against the CULTIVATION of PERENNIAL LEYS.

If a soil already *exhausted by corn crops*, and *foul through a want of tillage*, be rendered still fouler, by having the *seeds of weeds* under

the denomination of "hay-seeds," *sown* over it; and if, added to this, the weedy crop, which such management must necessarily afford, be *mown*, year after year, and the produce *carried off*, it is no wonder that the sward, instead of improving by age, should annually go off, and that the soil, at length, should require to be given up again to the plow.

On the contrary, if a soil, naturally suited to grass, in good heart, and thoroughly cleansed, be sown with the seeds of herbage suitable to its nature, and free from the seeds of weeds; and if, for a few years, the young ley be pastured, during the spring months, and the weeds and broken grass be swept down with the sith, after Midsummer, a well-herbaged durable ley may, on a certainty, be produced, and this without *one* year's crop being lost.

The DURATION of good herbage, however, depends much on the *nature* of the SOIL, and much also on the *state* in which it has been kept. Land which has been kept in TILLAGE, for centuries, is peculiarly affected by the grasses, which, under such circumstances, will flourish for a length of time; even on soils that are not peculiarly adapted

adapted to them. Some of the grass lands of this neighbourhood are now growing toward a century old; yet, notwithstanding they are generally mown, year after year, without intermission, they are still in a flourishing state: not, however, I apprehend, entirely owing to the method in which they were leyed, but to the land having previously been long in a STATE OF ARATION.

Nevertheless, I am of opinion, that the *variety* and *closeness* of the herbage under notice arises, in some measure, from the METHOD OF LEYING. But taking this for granted, and admitting that the produce is somewhat improved, or increased, by an endless variety, and an extreme closeness, of herbage, no man, without the pale of dotage, can consider this advantage, as a full compensation, for the loss of, at least, *ten* years' crops.

Of late years, the art of leying land to grass has, in this District, made rapid strides toward perfection.

In the CHOICE OF HERBAGE, judicious husbandmen are guided by the *nature of the soil* to be swarded. On the southern heights, where the soil and subsoil are calcareous, SAINFOIN is cultivated, as a perennial ley.

In the Vale, where the soils are non-calcareous, a MIXTURE of grasses are cultivated for that purpose.

Formerly, "HAYSEEDS" were in high estimation, and they have still some few advocates left. They consist either of a collection of grasses and weeds, as collected from the hay-loft, or a less foul selection of the MEADOW SOFT GRASS; which is cultivated, separately, and thrashed, as corn, for its seeds.

But this is far from being an eligible grass for cultivation, and is now entirely exploded by judicious husbandmen; among whom RAYGRASS has, at length, grown into due estimation; and has very properly supplanted, in their esteem, the whole tribe of hayseeds*.

RAYGRASS, nevertheless, has still its enemies. But they are either men who are unacquainted with it, or who have been unfortunate in their experience.

If the seeds be foul (as is too generally the case) the herbage will of course be of a bad quality. If it be suffered to run up, in the spring, before stock be turned upon it, much
of

* The growers of the seeds of the soft grass are the only persons who have profited by its cultivation. Eighty bushels an acre have been produced.

of it will, no doubt, be left uneaten. If suffered to stand too long, before it be mown, its hay will, of course, be ordinary. Under bad management, even the wheat crop is unprofitable. But will any man bring this as an argument against the intrinsic quality of wheat, or against its being proper to be cultivated, in soils and situations to which it is adapted?

The seeds of raygrass should be *winnowed*, and freed from the seeds of weeds, with the same scrupulousness, that is bestowed on the seed of wheat, or other grain.

If raygrass be intended for PASTURAGE, it ought to be eaten, as *early in spring*, as the land will bear stock; which ought to be so proportioned, that it never be suffered to rise above a moderate bite.

If it be shut up for HAY, it ought to be mown, as soon as the seed-stems are fully formed; *before the flowers come out*.

If it be intended for SEED, it ought to stand until *the flowers be fully blown*. But it must not be expected, in this case, that the *straw* will prove *hay*. Who ever expected *hay* from oats or barley, *which stood to mature the seed*?

As a *spring* food, RAYGRASS is indisputably preferable to every other grass; and, in *autumn*, it renews its nutritious bite. This property, added to its productiveness, and to the facility with which its seeds may be collected in quantity, give it a decided pre-eminence to every other bladegrass, at present known, in these kingdoms.

But raygrasses, like other early grasses, remains in a great measure unproductive, during the *summer* months. This renders it improper to be sown *alone*, for PASTURAGE.

WHITE CLOVER, or other *summer herbage*, is requisite to be cultivated with it.

All perhaps that is wanted, in addition to these, in order to render the business of cultivating perennial leys as nearly perfect as common practice may require, is one or more SUMMER BLADE GRASSES, of a nutritious quality and productive growth, and whose seeds may be easily collected, separately, from the seeds of weeds.

The MEADOW OR TALL FESCUE (FESTUCA *elatior*) is most likely to answer the purpose.

The MEADOW POE (POA *pratensis*) has some properties which recommend it strongly; but its seeds are not easily separable. Nevertheless,

theless, it might be worth some pains to cultivate this grass. It is strictly a *summer* grass. It blows sufficiently late, and bears drought with uncommon hardiness. I have seen it flourish, on a wall, throughout summer. And during the drought of 1786, Mr. Curtis's botanic garden afforded a striking instance of its nature, in this respect: it remained green, and in growth, while its neighbours were most of them scorched up with drought.

This District has adopted the NARROW-LEAVED PLANTAIN, as summer herbage. As an article of *pasturage*, for cattle and sheep, it is in high esteem: it is not, however, well affected by horses; and, as an article of *hay*, it is detrimental to the crop; retaining its sap an unusual length of time; and, when fully dry, falls into a small compass, or is broken into fragments, and left behind in the field. An advantage of this plant is, that its seeds may be easily procured, in an unadulterated state. A small proportion of it may be eligible: it has now stood the test of twenty years established practice, and seems to be still in good estimation; even among observant husbandmen.

THE MIXTURE OF SEEDS for a perennial ley varies, in this District, with the spirit and

judgement of the occupier. Some make choice of the cheapest, and imagine a small quantity to be sufficient: while others choose those which are most suitable to their respective soils, and think they cannot throw on too many.

The most promising young perennial ley which I have seen, in the Vale, and which is in the occupation of one of the largest and best farmers in it, was seeded with the following feeds, and proportions, an acre: namely, fourteen pounds of WHITE CLOVER; and fourteen pounds of RED CLOVER, TREFOIL, RIBGRASS, and RAYGRASS, mixed in equal proportion of weight.

But the more general mixture is fourteen pounds of RED CLOVER, WHITE CLOVER, TREFOIL and RIBGRASS, mixed in equal quantities; with a bushel or two of RAY GRASS, sown separately.

This, however, is an unnecessary quantity of RAYGRASS; a gallon to a peck, an acre, of clean *winnowed* feed, appears in the above instance, as well as in the Norfolk practice, to be abundantly sufficient.

The AFTER MANAGEMENT of perennial leys is, in the ordinary practice of this District,

strict, as it is in that of most other places, extremely injudicious.

GENERAL REMARKS ON LEYING, AND BREAKING UP OLD LEY GROUNDS.

Letting the land lie, eight or ten years, in worse than a state of waste is very little wider from the line of right management, than mowing a young perennial ley, every year, and carrying off the produce. They are two extremes which ought to be equally avoided. One of them is giving up present profit, entirely, for future advantage: the other, regardless of future advantage, is grasping at present profit.

In tenants at will, without confidence in their landlords, there may be some excuse for such management. But they are not, perhaps, aware that, by such conduct, they are destroying that confidence which landlords ought to have in their tenants: thereby militating against themselves and their profession.

Landed gentlemen, in general, are tenacious of their old grassland; and with good reason, even though it might, for a time, be worth thrice the value in a state of aration.

An

An instance occurs in this neighbourhood, in which a piece of old grassland, broken up to arable, has thrown out its purchase value, as grassland at the time of breaking up, in the first three crops.

All sward, unless the soil be singularly good, the management extraordinary, and the manurings frequent, will in time become unproductive. Even the sward of well soiled commons, off which no produce has been taken, is, when inclosed, found weak and unprofitable.

Nevertheless, it may be more prudent, in men of landed estates, to hand down their old grassland, to their successors, in the state in which it is, than to permit it to be broken up and reduced, by improper treatment, to a state still less valuable. And were there no means of avoiding the evils of improper management, in tenants, landlords would be fully warranted in a rigid refusal of their requests, to break up such grass-lands, though they were unproductive and unprofitable.

But in the management of an estate, GRASS LANDS and HEDGES stand in nearly the same predicament. It is the tenant's interest to *injure* them; and the landlord's business, of course, to look to their *preservation*.

If,

If, on a farm, already *in due proportion*, as to GRASSLAND and ARABLE, the tenant request to break up a piece of unproductive sward, it might be said to be a *duty* which the landlord owes, to the community at large, to grant his request. But it is, at the same time, a *duty* which he owes, to himself, and his successors, to oblige him to lay down to grass an equivalent of arable land. Not, however, a piece which has been exhausted and rendered foul by a succession of corn crops; but one which is in heart, and has been duly cleaned by a *whole year's fallow*. Not, however, by sowing it with foul feeds, or an improper assortment; but (where due confidence cannot be placed in the tenant) with *clean seeds*, furnished by the landlord, at the tenant's expence.

The after management calls equally aloud for the landlord's attention. If he voluntarily suffer it to be eaten with sheep, or to be poached with other stock, the first winter; if he suffer the tender bottom grasses to be smothered, in their infant state, by the taller herbage running up for hay, or the soil to be exhausted, by carrying off a crop during the first three years; or if he permit it, under ordinary circumstances, to be afterwards mown

(except

(except sweeping off the weeds and broken grafs after Midsummer) oftener than every second year;—he is doing injustice, to himself and the community.

It must be understood, however, that the management here recommended is applicable only to *perennial* leys of twenty, fifty, or a greater number of years: not to *temporary* leys of one, two, or even five or six years. In this case, herbage becomes an ARABLE CROP, and calls for no other attention than that which the ordinary management of an estate requires.

III. SAINFOIN LEY. This is a perennial ley; in the making of which both landlord and tenant are generally interested.

The District under survey is singularly favorable to the study of sites fit for the culture of sainfoin. In some parts of it, it is cultivated with great profit. In others, its culture has been repeatedly attempted, without success.

The finest sainfoin, I have seen, grows in the immediate neighbourhood of MALTON. Three tons of hay, an acre, are said to have been cut. I have seen crops, which, to appearance, would not afford less.

The *soil* a dry calcareous loam, from ten to twenty inches deep. The *subsoil* a calcareous rubble,

rubble, from two to three feet deep; lying on an unfathomed rock of soft limestone. (See Art. MANURE.)

One hundred grains of the cultivated *surface soil* of "Peasy Hill" affords twentyfive grains of calcareous matter.

One hundred grains of the earthy part of the *subsoil*, among which the plants of sainfoin, in all probability, principally feed, contain fifty-nine grains of calcareous earth*.

The analysis of the *rock* appears in Vol. I. page 315.

About BROMPTON, in the northeast quarter of the Vale, good sainfoin is grown; but, I believe, in no way comparable with that of Malton.

* It has been conceived that sainfoin feeds on the stones themselves; not on the soil which is mixt among them, or which covers them; and this has served to account for the superiority of the sainfoin of Malton. But it seems much better adapted to the nature of plants to feed among soil, than in stones; especially when the soil is of a nature similar to that of the stones which mix among it. The lower part of the subsoil, which forms the upper part of the rock, is composed of small stones mixed with an efflorescent mold, formed in the interstices of the stones, which mold is *almost wholly calcareous*; so that the plants, in this case, have a sufficiency of calcareous matter to pasture among, without feeding upon the stones; which, though *soft*, cannot, in this case, be said to be *porous*.

The

The *soil* is a lightish loam; good turnep and barley land; varying in depth.

The *subsoil*, a calcareous loam; mixt with limestone, or with redstone, gravel; and lying on a limestone, or on a redstone rock. In either case, the land is productive of sainfoin; in proportion, it is said, to the depth of the soil; that is, the depth between the surface of the soil and the rock; lasting twenty years, more or less, according to the depth of the land.

One hundred grains of the *natural soil* (taken from the side of the lane between Brompton and Sawdon) yields three grains of calcareous matter.

One hundred grains of the *subsoil* of an adjoining inclosure, taken from the top of a loose mixt-stone rock, at about eighteen inches deep, affords fourteen grains of calcareous earth.

The *limestone* is of a nature between that of Malton and that of Pickering (See Art. MANURE), namely a calcareous granite of a middle quality, as to hardness.

The *redstone* is of a singular nature, being intermixed with calcareous globules, or round grains, exactly resembling those of the softest of the Malton limestone. One hundred grains
of

of this *redstone*, collected among the *soil* above analyzed, yields thirteen grains of calcareous matter. The stone in this case porous; sufficiently open for the fibrils of plants to insinuate themselves.

In the neighbourhood of PICKERING, sainfoin has been repeatedly tried; but, I believe, without one instance of tolerable success. The plants, I understand, rose very well from the seed; but never got up to a crop; and in a short time disappeared.

On examining a piece of limestone land, which was sown with sainfoin, by my father, some fifty or sixty years ago, I find, in one particular part of it, a few plants still surviving.

To ascertain the nature of the pasturage, which could give such unusual longevity to these plants (supposing them to be remains of the originally cultivated roots), I dug down by the side of two plants, which grew within a few inches of each other: one of them remarkably healthy, though not luxuriant; the other, a declining plant; half of its top decayed.

The roots struck downward, perpendicularly, and parallel to each other; throwing out a few slender side rootlets.

Near

Near the surface, they were accompanied with the roots of the burnet, and of the burnet rose (see the next section); neither of which reached more than two feet deep.

At the depth of three feet, the root of the decaying plant had rotted off; having nothing but the fibrils, above, left to support it.

At four feet, the vigorous plant reached the top of the rock; or rather, the loose stones which lie upon the rock.

The fields of pasture of this plant were evident. The root was simply a thong, reaching from top to bottom; tapering from the size of a reed to that of a crow-quill. The fibrils on the side were fine as hair; except at about two feet deep, where some thread-like rootlets were thrown out, into a thin layer of somewhat palish-colored clay; and except at about three feet and a half deep, a similar ramification had been made, in a similar but paler-colored earth. At four feet, a general ramification had taken place; the main root there separating into large branches; striking nearly horizontally; not upon the top of a hard impenetrable rock (though upon a stone of about six inches over) but in a stratum of still paler clay; some three or four inches thick: a proof that it had here
met

met with a soil suitable to its nature ; only one of its rootlets (not thicker than a stem of raygrass) having attempted to go lower.

In testing the several strata, I find, that the three seams of clay, alone, discover symptoms of calcareosity. Neither the topsoil, nor any of the intervening strata, appear to contain any thing of a calcareous nature ; excepting some fragments of clean, hard limestone, which mix, more or less, with the whole.

One hundred grains, of the uppermost seam of clay, yield seven grains and a half of calcareous matter : one hundred of the middlemost, twentythree and a half grains : one hundred of the lowest stratum, the main field of pasturage, twentynine grains.

From the sum of this evidence, and from every part of it, it appears, demonstrably, that SAINFOIN delights in CALCAREOUS EARTH. And we may almost infer, with equal certainty, that it will not *flourish* in a situation, where both the soil and the substrata are destitute of calcareosity.

In another part of the field, last under notice, the rock rises to within ten inches of the surface ; terminating in flat *clean* stones, without any admixture of mold or efflorescent matter ; and the soil perfectly uncalca-

reous. Here, not a single plant of sainfoin is to be detected. The plants, probably, did not survive the first year.

Much of the limestone land, above Pickering, is of a similar nature. This accounts for the miscarriages which have taken place.

Nevertheless, the tops of some of the limestone quarries (as the Castle Bank) terminate in loose stones, mixt with grey efflorescent mold, and have fissures containing efflorescent matter, which, I find, is purely calcareous. Among these, sainfoin no doubt would flourish. There may be considerable patches of this land; and they appear to me to be well worth searching for. To throw away seed, and perhaps two or three years crops, merely on supposition, is highly imprudent. But a few hours, or a few days, expended in the search of a proper soil, might be time well employed.

The great ADVANTAGE OF SAINFOIN, and that which distinguishes it, in a striking manner, from *all other crops*, is that of its feeding, principally, *below the field of ordinary vegetation*; bringing up, to the surface, vegetable matter, which, without it, would for ever have lain useless to agriculture; and enriching the cultivator, with treasures, which, with-

without its assistance, might as well have been situated at the earth's center *. While he is annually reaping a crop of the most nutritious herbage, agriculture is at present acquainted with, his soil, so far from being exhausted, is, in all probability, gathering strength, to enable it to throw out, in future, a succession of *arable crops*: besides the additional advantage, arising from the quantity of *manure*, which he has been extracting from the bowels of the earth, by twenty or thirty crops of sainfoin.

26.

NATURAL HERBAGE.

GENERAL VIEW OF THE SUBJECT.

In a District where permanent grass lands prevail, and where arable crops may be considered as secondary or subordinate to this main object of its husbandry, GRASS LANDS

* On the Malton side of the Vale, the roots of sainfoin have been traced to the depth of twelve or fourteen feet. I have seen roots, which, near the surface, have been as thick as an ordinary walking-cane.

AND THEIR MANAGEMENT are entitled to particular attention; and, in a register of the Rural Economy of such a District, they require a minute detail, and a perspicuous arrangement.

This important branch of agriculture, as it is practised in the District under survey, aptly separates into the following subdivisions:

I. The Species of permanent Grass Lands in this District.

II. Their General Management; or the operations common to the several species, and to the several purposes to which they are applied.

III. The particular Management of Hay Grounds.

IV. The Management of Pasture Grounds.

I. The SPECIES or variety of grass lands must be in some measure indefinite, in a District where the soil varies, from the coldest clay to the most fertile loam, and from this to the most barren sand in the bleakest situation; and where natural herbage abounds, indiscriminately, on every soil, and in every situation.

Nevertheless, in *this* quarter of the Vale under survey, they may be reduced to three CLASSES, namely,

1. Low-

1. Lowland Grass.
2. Upper Grass-Grounds.
3. Upland Grass.

I. **LOWLAND GRASS.** The *situation* of the grass lands that fall under this denomination, is in the low flat parts of the area of the Vale. In a state of nature, they were doubtless covered with water, the whole, or a principal part, of the year; and some of them are still (or were until very lately) liable to be overflowed, in times of floods.

The *soil* of these lands varies. Part of them are of a loose loamy texture; but, more generally, they are of a close firm clayey nature; such as we frequently find where large bodies of water have been accustomed to lie. In some places, especially on their upper margins, the clay is covered with a stratum of black vegetable mold; generated, probably, by the overflowings of spring, while the land lay in a neglected state; before shores and ditches were opened.

The *herbage* varies with the state of occupancy, to which they have been subjected, during, perhaps, a millennium of time; namely, ever since the first laying out of the township. It is certain, at least, that, time immemorial, and beyond all tradition or record,

part of them have been kept in a state of COMMON PASTURE,—provincially CAR,—a term analogous with *marsh* or *fen*, or the *meadow* of Norfolk,—namely, *perennial pasture ground*; the other have been as constantly kept in a state of COMMON MOWING GROUND,—provincially ING,—a term synonymous with *meadow*, as used in most Districts,—namely, *perennial mowing ground*.

These ing lands, or ings, as they are usually called, differ from the common meadows of Gloucestershire, and other counties, in the manner of distribution; the shares lying, not in square plots, but in SWATHS, about nine feet wide, and of half a mile, perhaps, in length; and mostly in *pairs*; without any other boundaries, than what have been given by constant mowing; each swath being hollow in the middle, and rising to a ridge, on either side.

Some of this ingland still remains open; parts of it have been, from time to time, inclosed.

The HERBAGE of the LOWLANDS OF PICKERING consists, chiefly, of the following plants; which I have *endeavored* to place, according to their frequency, in the OPEN

INGS of this township. Some of those, in the lower part of the list, may not be prevalent, in these open mowing grounds; but are common on the same soil, and in a similar situation, where the land is inclosed, and may have been pastured, and improved by draining, &c. *but has never been plowed.*

Provincial. *Linnean.* *English.*

Pig-leaves, — *carduus pratensis* (of HUDSON),
— meadow thistle.

Blue-caps, — *scabiosa succisa*, — meadow scabious.

sanguisorba officinalis, — meadow burnet.

juncus articulatus, — jointed rush.

Clock-leaves, — *schœnus nigricans*, — black-headed bogrush.

cardamine pratensis, — common ladies-smock.

betonica officinalis *, — betony.

Henpenny, — *rhinanthus crista-galli*, — yellow rattle.

valeriana dioica, — marsh valerian.

H 4

anemone

* BETONY. This is a common article of herbage, in the grass lands of this District; abounding, in almost every soil, and in every situation, from the marsh to the mountain. The term *Wood Betony* is ill applied to it; at least in this division of the Island.

Provincial. Linnean. English.

anemone nemorosa,—wood anemone.

juncus campestris,—grafs rush.

Crakefeet,—*orchis*,—orchifes.

Segs,—*carices*,—sedges.

Hay-seeds,—*holcus lanatus*,—meadow soft-grafs.

anthoxanthum odoratum,—vernal.

poa trivialis,—common poe.

agrostis canina,—brown bentgrafs.

briza media,—trembling grafs.

festuca duriuscula,—hard fescue.

melica cærulea,—purple melicgrafs.

phleum nodosum,—bulbous catstail.

orchis tuberosus,—bulbous pea.

lotus corniculatus,—birdsfoot trefoil.

hypochaeris radicata, — longrooted hawkweed.

ferratula tinctoria,—dyer's saw-wort.

achillea ptarmica,—goosetongue.

peucedanum silaus,—meadow saffrafs.

vicia cracca,—bluetufted vetch.

polygala vulgaris,—milkwort.

pedicularis palustris,—marsh lousewort.

spirea ulmaria,—meadowsweet.

lythrum salicaria,—spiked willowherb.

arundo phragmites,—common reed.

carduus palustris,—marsh thistle.

lychnis

Provincial. *Linnean.* *English.*

lychnis flos-cuculi,—meadow campion,

Seaves,—*juncus effusus*,—common rush.

Reshes,—*juncus inflexus*,—wire rush.

cineraria palustris,—marsh fleabane.

Horseknots, — *centaurea nigra*, — common
knobweed.

achillea millefolium,—milfoil.

Parnassia palustris,—grass of Parnassus,

cerastium vulgatum,—common mouse-
ear.

potentilla anserina,—silverweed.

avena flavescens,—yellow oatgrass.

lolium perenne,—raygrass.

Windlestraws,—*cynosurus cristatus*,—crested
dogstail.

festuca elatior,—tall fescue.

agrostis alba,—creeping bentgrass.

alopecurus geniculatus,—marsh foxtail.

festuca fluitans,—flote fescue.

Bulls foreheads,—*aira cespitosa*,—turfy air-
grass, or haddock grass.

lathyrus pratensis,—meadow vetchling.

trifolium pratense,—meadow trefoil.

ranunculus acris,—common crowfoot.

ranunculus repens,—creeping crowfoot.

Sourdocken, — *rumex acetosa*, — common sorrel.

angelica sylvestris,—wild angelica.

comarum

Provincial. *Linnean.* *English.*

comarum palustre,—marsh cinquefoil.

chrysanthemum leucanth.—oxeye daisy.

hypericum quadrangulum,—square-
stalked Saintjohnswort.

prunella vulgaris,—selfheal.

Woodwesh,—*genista tinctoria*,—dyer's broom.

salix,—dwarf bitter willow.

epilobium parviflorum,—small-flowered
willowherb.

eriphorum polystachion,—common cot-
tonrush.

spergula nodosa,—marsh spurrey.

Bog violet,—*pinguicula vulgaris*,—common
butterwort.

hydrocotele vulgaris,—pennywort.

lysimachia nummularia,—moneywort.

menthæ,—mints.

polyganum hydropiper,—smartweed.

sum latifolium,—great water parsnep.

caltha palustris,—marsh marigold.

iris pseud-acorus,—yellow flag,

Threefold,—*menyanthes trifoliata*,—bogbean.

equisetum palustre,—marsh horsetail.

galium palustre,—white bedstraw.

veronica beccabunga,—brooklime.

sisymbrium nasturtium,—watercress.

The PRODUCE of this species of old grass land is much below par. The *quality* may be judged of, by the herbage it bears; and the *quantity*, even on the inclosed parts, is not great. The parts, which yet remain as open common meadow, are still less productive. The surface, in many places, is more than half of it occupied, by the spreading leaves of the MEADOW THISTLE; and, in others, entire patches are covered with the BOGRUSH. The medial produce about half a load of hay (if it merits the name) an acre.

The RENT, five to eight shillings.

GENERAL OBSERVATIONS. Nevertheless, it appears, demonstrably, from the patches of corn which are intermixed with this species of grass land, that its present unproductiveness is not so much owing to the nature of the SOIL, or the SITUATIONS, as to the *age* and the present *quality* of the HERBAGE.

A stronger instance need not be produced, of the great impropriety, *in some cases*, of obstinately withholding permission to break up old grass land.

Who, but a mere botanist, can see, without disgust, his estate occupied, by such a
tribe

tribe of *weeds*, as are here enumerated? especially when the means of extirpation are so easy, and so profitable. All that is requisite, to render the land of double its present value, is to annihilate the present sward, and raise up a fresh one in its place: in doing which, if properly done, a course of corn crops may be profitably taken,

But neither the soil, nor the situation, of lands of this nature, fits them for a *continuance of arable crops*. They ought to be used as a *means*, only, of purging the soil from its impurities, and rendering it fit for the reception and nourishment of herbage, *whose every blade and leaf is nutritive*.

In the instance under notice, the renovation of the sward is, now, rendered easily practicable. The Commissioners of Inclosure, for this township, with a degree of judgement and spirit which do them the greatest credit, and for which the township will for ages be indebted to them, have sunk a main drain, or shore, through the center of these lowlands, every acre of which is now plowable; consequently, every owner may now choose, whether he will continue a sward of palustrean weeds, equally unproductive and innutritious to stock; or whether
he

he will convert this sward into nourishment for a course, of corn crops, and then replace it with a turf of grasses and legumes, equally productive and nutritious.

How many thousand acres of land, in these kingdoms, now lie, or might easily be placed, in a similar predicament.

II. UPPER GRASS GROUNDS. These consist of the prime part of the common-field lands, which have been laid down to grass, in the *natural* way that has been mentioned.

The SITUATION is *cool*, but is, in general, *dry* enough to permit the soil to bear stock in winter.

The SOIL is a rich sandy loam: the cooler parts, deep, and mixed with a few pebbles; the higher parts, shallower, with a mixture of redstones: equally productive of grass and corn.

The HERBAGE consists of the following plants. The last twelve species grow, principally, near the hedges, or toward home-stalls; but are sometimes found in the areas of fields.

Windle-

*Provincial.**Linnean.**English.*

Windlestraws,—*cynofurus cristatus*,—crested
dogstail.

dactylis glomerata,—orchardgrafs.

agrostis canina,—brown bentgrafs.

anthoxanthum odoratum,—vernal.

White grafs—*bolcus lanatus*,—meadow soft-
grafs.

briza media,—trembling grafs.

avena flavescens,—yellow oatgrafs.

Rye grafs—*lolium perenne*,—raygrafs.

poa trivialis,—common poe.

poa annua,—dwarf poe.

poa pratensis,—meadow poe.

alopecurus pratensis,—meadow foxtail.

festuca elatior,—tall fescue.

festuca duriuscula,—hard fescue.

bromus mollis,—soft brome-grafs.

avena elatior,—tall oatgrafs.

avena pubescens,—rough oatgrafs.

agrostis capillaris,—fine bentgrafs.

hordeum murinum,—common barley-
grafs.

juncus campestris,—grafs rush.

Ribgrafs,*plantago lanceolata*, narrow plantain.

Red clover,—*trifolium pratense*,—meadow
trefoil.

White clover,—*trifolium repens*,—creeping
trefoil.

Trefoil,

- | <i>Provincial.</i> | <i>Linnean.</i> | <i>English.</i> |
|--------------------|---------------------------------|----------------------|
| Trefoil, | <i>trifolium procumbens,</i> | procumbent trefoil. |
| | <i>lotus corniculatus,</i> | birdsfoot trefoil. |
| | <i>latbyrus pratensis,</i> | meadow vetchling. |
| Fitches, | <i>vicia sativa,</i> | meadow vetch. |
| | <i>ranunculus acris,</i> | common crowfoot. |
| | <i>ranunculus repens,</i> | creeping crowfoot. |
| | <i>ranunculus bulbosus,</i> | bulbous crowfoot. |
| | <i>leontodon taraxacum,</i> | common dandelion. |
| | <i>leontodon hispidum,</i> | rough dandelion. |
| | <i>hypochaeris radicata,</i> | longrooted hawkweed. |
| Henpenny, | <i>rhinanthus crista-galli,</i> | yellow rattle. |
| | <i>betonica officinalis,</i> | betony. |
| | <i>cerastium vulgatum,</i> | common moufear. |
| | <i>valentia cruciata,</i> | crosswort. |
| | <i>prunella vulgaris,</i> | selfheal. |
| Birds-eye, | <i>veronica chamædrys,</i> | germander speedwell. |
| | <i>ranunculus ficaria,</i> | pilewort. |
| Cowstriplings, | <i>primula veris,</i> | cowslip. |
| Bairnworts, | <i>bellis perennis,</i> | daisey. |
| Cuishia, | <i>heracleum sphondylium,</i> | cowparsnep. |

Provincial. *Linnean.* *English.*

Horseknoobs, — *centaurea nigra*, — meadow knobweed.

Seggrums, — *senecio jacobæa*, — common ragwort.

achillea millefolium, — milfoil.

Sourdocken, — *rumex acetosa*, — common sorrel.

Bluebells, — *campanularotundifolia*, — common bellflower.

plantago major, — broad plantain.

vicia cracca, — bluetufted vetch.

vicia sepium, — bush vetch.

eruum hirsutum, — twoseeded tare.

tragopogon pratense, — yellow goatsbeard.

agrimonia eupatoria, — agrimony.

geranium pratense, — crowfoot cranesbill.

Mauls, — *malva sylvestris*, — common mallow.

malva rotundifolia, — roundleaved mallow.

Cicely, — *chærophyllyum sylvestre*, — orchardweed.

Dockens, — *rumex crispus*, — curled dock.

rumex obtusifolius, — broadleaved dock.

urtica dioica, — common nettle.

The

The PRODUCE is such as may be expected, from the *herbage*, the *soil*, and the *situation*. An acre of some of the lands, lying immediately round the town of Pickering, will afford *pasturage* for a cow, from Mayday to Michaelmas; not by being forced with manure, but in its intrinsic nature. In general, three acres are allowed to two cows; but they are of uncommon size; being nearly equal to three middle-sized cows.

The produce of *hay* is from one to two tons, an acre, in a common year. The quality of the hay, if well made, is fine; well affected by every kind of stock; equally fit for cows and horses.

The RENT, thirty shillings to three pounds, an acre. The summer pasturage of a cow, forty to fifty shillings.

III. UPLAND GRASS. In the uninclosed state, this land was partly in arable field, partly in upland pasture, for cattle and sheep.

The SITUATION is hilly, rising somewhat abruptly, above the middle grounds. The substructure, a limestone rock; rising, in some places, up to the soil, in others, a seam of redstone intervenes.

The SOIL is loam, of different depths, mixed with redstone, or with limestone rubble. Some parts of this land, where the soil is deep and the redstone stratum two or three feet thick, may rank with the first *corn land* in these kingdoms.

The HERBAGE, which prevails on the old sward of these uplands, may be seen in the following list :

<i>Provincial.</i>	<i>Linnean.</i>	<i>English</i>
	<i>leontodon hispidum,</i>	—rough dandelion.
	<i>plantago media,</i>	—middle plantain.
	<i>hypochæris radicata,</i>	— longrooted hawkweed.
	<i>leontodon taraxacum,</i>	—common dandelion.
Henpenny,	<i>rhinanthus crista-galli,</i>	—yellow rattle.
	<i>chrysanthemum leucanthemum,</i>	— oxeye daisey.
Mountain flax,	<i>linum catharticum,</i>	—purging flax.
	<i>alchemilla vulgaris,</i>	—ladies mantle.
	<i>polygala vulgaris,</i>	—milkwort.
	<i>festuca duriuscula,</i>	—hard fescue.
	<i>anthoxanthum odoratum,</i>	—vernal.
White grass,	<i>holcus lanatus,</i>	—meadow soft- grass.

- | <i>Provincial.</i> | <i>Linnean.</i> | <i>English.</i> |
|--------------------|-------------------------------|----------------------|
| | <i>avena pubescens</i> , | rough oatgrafs. |
| | <i>avena flavescens</i> , | yellow oatgrafs. |
| | <i>briza media</i> , | trembling grafs. |
| | <i>agrostis canina</i> , | brown bentgrafs. |
| | <i>dactylis glomerata</i> , | orchardgrafs. |
| | <i>poa trivialis</i> , | common poe. |
| Rye-grafs, | <i>lolium perenne</i> , | raygrafs. |
| Windlestraws, | <i>cynosurus cristatus</i> , | crested
dogstail. |
| | <i>poa pratensis</i> , | meadow poe. |
| | <i>phleum nodosum</i> , | bulbous catstail. |
| | <i>avena elatior</i> , | tall oatgrafs. |
| | <i>festuca ovina</i> , | sheep's fescue. |
| | <i>juncus campestris</i> , | grafs rush. |
| | <i>carex</i> —, — — | sedge. |
| | <i>plantago lanceolatus</i> , | narrow plantain. |
| Red clover, | <i>trifolium pratense</i> , | meadow
trefoil. |
| | <i>trifolium alpestre</i> , | alpine trefoil. |
| White clover, | <i>trifolium repens</i> , | creeping
trefoil. |
| Trefoil, | <i>trifolium agrarium</i> , | hop trefoil. |
| | <i>lotus corniculatus</i> , | birdsfoot trefoil. |
| | <i>lathyrus pratensis</i> , | meadow vetchling. |
| | <i>orobus tuberosus</i> , | bulbous pea. |
| | <i>anthyllis vulneraria</i> , | ladiesfinger. |
| | <i>galium verum</i> , | yellow beditraw. |

<i>Provincial.</i>	<i>Linnean.</i>	<i>Engliff.</i>
	<i>campanula rotundifolia,</i>	—common bell-flower.
	<i>veronica chamædrys,</i>	—germander speed-well.
	<i>euphrasia odontites,</i>	—red eyebright.
	<i>euphrasia officinalis,</i>	— common eye-bright.
	<i>valantia cruciata,</i>	—crosswort.
	<i>cerastium vulgatum,</i>	—common moufe-ear.
	<i>betonica officinalis,</i>	—betony.
	<i>prunella vulgaris,</i>	—selfheal.
Cowstriplings,	<i>primula veris,</i>	—cowflip:
	<i>ranunculus ficaria,</i>	—pilewort.
Dog-daisies,	<i>bellis perennis,</i>	—daisy.
	<i>draba verna,</i>	—whitlowwort.
	<i>thymus serpyllum,</i>	—wild thyme.
	<i>potentilla reptans,</i>	—creeping cinquefoil.
Horfe knobs,	<i>centaurea nigra,</i>	— common knobweed.
	<i>ranunculus acris,</i>	—common crowfoot.
	<i>ranunculus repens,</i>	—creeping crowfoot.
	<i>scabiosa arvensis,</i>	—corn scabious.
	<i>scabiosa columbaria,</i>	— mountain sca-bious.
Bluecaps,	<i>scabiosa succisa,</i>	— meadow sca-bious.

Provincial.

Linnean.

English.

- Yernuts,—*bunium bulbocastanum*,—earthenut.
acbillea millefolium,—milfoil.
- Seggrums,—*senecio-jacobæa*,—common ragwort.
- heracleum sphondylium*,—cowparsnep.
orchis mascula,—male orchis.
orchis morio,—fool's orchis.
orchis ustulata,—upland orchis.
poterium sanguisorba,—upland burnet.
origanum vulgare,—wild marjoram.
spiræa filipendula,—dropwort.
agrimonia eupatoria,—agrimony.
valeriana officinalis,—medical valerian.
marrubrium vulgare,—horehound.
sanicula europæa,—fanicle.
gentiana centaurium,—centaury gentian.
reseda luteola,—weld.
crepis tectorum,—smooth crepis.
stellaria graminea,—meadow starflower.
vicia cracca,—bluetufted vetch.
erum hirsutum,—twoseeded tare.
geranium robertianum,—stinking cranesbill.
geranium dissectum,—jagged cranesbill.
geranium cicutarium,—hemlockleaved cranesbill.
sperardia arvensis,—field sherard.

<i>Provincial.</i>	<i>Linnean.</i>	<i>English.</i>
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hieracium pilocella, — mouseear hawk-weed.

aphanes arvensis, — parsley pert.

Breckens, — *pteris aquilina*, — brakes; fern.

Bur thistle, — *carduus lanceolatus*, — spear thistle.

carduus nutans, — nodding thistle.

carduus eriophorus, — woollyheaded thistle.

ferratula arvensis, — common thistle.

Red thistle, — *carduus palustris*, — marsh thistle.

carlina vulgaris, — carline thistle.

Rustburn, — *ononis arvensis*, — restharrow.

Cat-whin, — *rosa spinosissima*, — burnet rose.

The PRODUCE, in a dry year, little or nothing. On a par of years, half a ton of hay an acre. The ordinary allowance for a summer *pasturage* of a cow, two or three acres.

The RENT ten to thirty shillings.

Land bearing this description is entirely unfit for *perennial ley*. Arable crops, intermixed with TEMPORARY LEY, are much more suitable to its nature.

II. The GENERAL MANAGEMENT OF GRASS LAND, in this country, now requires to be registered.

The

The OBJECTS are *hay* and *pasturage*; each of which will require to be separately considered. But there are certain OPERATIONS, which are common to them both, and which demand a previous consideration. These are;

1. Draining,
2. Clearing,
3. Dressing.
4. Weeding,
5. Manuring.

1, 2. DRAINING, CLEARING: These two operations have been already spoken of, sufficiently, under the general management of ARABLE LAND; excepting so far as relates to *clearing away anthills*.

Here, as in most places, this operation is too much neglected. When practised, the hills are either taken off with a paring spade, or perhaps a plow, level with the surrounding sward, and carted into hollows &c. sowing the hillsteads with hayseeds; or, in one instance, I saw the cap of the hill first taken off thin, and, when the body of the hill was removed, the cap was laid upon the hillstead. But this is ineligible. No implement can come upon the surface to dress it; and the caps are liable to be misplaced, by cattle and other stock.

The practice of GELDING * has *lately* been introduced. The greatest nicety of the art, I find, lies in clearing away the *skirts* of the core effectually; so that when the flaps are returned, a rim, rising above the surrounding surface, be not left, for the molding sledge, or other implement, to lay hold of.

If this operation be performed in *autumn*, the frosts and rains of winter will temper the cores, and, in the first dry weather of spring, the molding sledge will readily reduce them, and lodge them at the roots of the grass.

If the operation be imperfectly done, or the lumps of core remain stubborn, a heavy roller should be run over the surface, before the molding sledge be used.

No man, who has attended to the quality of the *herbage of antbills*, needs any argument to convince him of the propriety of bestowing a little attention, on the most eligible means of extirpation.

3. DRESSING MEADOWS. The Vale husbandmen are peculiarly assiduous, in this department of the management of grass lands, which, in the spring of the year, engages much of their attention. The dung and molehills

* See NORFOLK—MIN. 50.

molehills are generally spread, repeatedly, and the stones and wood assiduously gathered off. The ground, intended for hay, is more particularly attended to; but pasture grounds are paid their share of attention.

“Molding,” that is spreading dung and molehills, is either done wholly by hand, with a “molding rake;” namely, a short flat-headed rake, with four flat teeth (a tool not uncommon in other Districts); or by the means of a “molding sledge” (see IMPLEMENTS), an implement introduced into this country, some twenty or thirty years ago.

The first molding is given, the first dry days of spring; generally about Candlemas. Old molehills are found to get heavy, and firm, by lying; and if horse dung be not broken while moist, it is difficult to be reduced*.

The

* I have met with one instance of molding *pasture grounds*, at *Michaelmas*, (when stock is here usually transferred from pasture grounds to aftergrass) a practice which ought to be universally adopted. The surface is, then, generally open enough to admit the dung which is spread upon it; whereas, in spring, being spread over a surface, saturated with water, it is probable that much of it is washed away, with heavy rains, or dissipated by frosts. Molding, in early autumn, is similar, in its effects, to the practice of manuring grass land, at that season.

The soil must become firm, before the sledge can be used with propriety. After the surface has been polished by this, it is finally looked over, with the rake; especially round the borders, where the sledge may have left it unfinished.

Hand molding is done, entirely, by women. Their wages 6d. a day.

This may be a proper place to mention an opinion, which I have met with in this District, respecting MOLES.

A man, whose examinations are seldom superficial, is clearly of opinion, that moles are useful to the farmer. And, under this idea, he has not had a mole killed, upon his farm, during the last twenty years! He believes them to be useful, in draining the soil, in communicating air to the roots of plants, in raising fresh mold upon grass land, and in *killing worms*; which, he conceives, feed upon the roots of grass and corn.

That moles are useful to *cold strong-textured* land, and to *grass land* in general, is probably a fact; and this may account for the opinion under notice; which was formed on soil of that description; or on grass land of a more loamy nature.

But

But admitting that moles are useful upon cold strong grass land, it does not follow that they likewise are useful, on *light, thin-soiled, arable land*. Their mischiefs, here, are too obvious to be overlooked.

With respect to WORMS, too, moles are probably mischievous. No evidence, I apprehend, has ever been produced of their feeding on the roots of vegetables. I speak of the common EARTHWORM; not of the grubs of beetles, &c. They are said to draw leaves and other vegetable substances into the ground; but to what end is only conjectured. It may be in pursuance of the wisest dictates, and for the best of purposes.

I mention this subject, because I believe it is *new* to the public; and I mention it in this cursory way, because I have not yet had opportunity of studying it maturely. It appears to me, however, a subject of the first importance in Rural Economy: for meanly as we are habituated to think of this lowly drudge, the prosperity of the vegetable and animal creation may hinge upon it. Its natural history appears, to me, a subject of sufficient importance, to engage the attention of any man, let his abilities and pretensions be what they may: and it is a subject which
any

any man of leisure may apply himself to, without difficulty.

4. WEEDING GRASS LAND. This department of the grass land management is too little attended to. Beds of the *common thistle* are too frequently suffered to seed in pastures, to the great nuisance of the neighbourhood; while both meadows and pastures are, not unfrequently, disgraced with the *dock*; a weed which requires much less industry to extirpate it.

I met with an instance of a meadow, foul in the extreme with *knobweed*, cured by pasturing it repeatedly with *sheep*, in the spring. *Ragwort* I have known killed in the same manner.

I likewise met with an instance, here, of a bed of *docks* being destroyed by *swine*; or by *mowing*. The fact was, a large patch of docks, as thick as they could grow upon the ground, were liable to the bite of swine (some species of which will feed on them with avidity); and what they left was repeatedly mown off, perhaps twice or thrice in a summer, for a succession of years. At length, they vanished as by a charm; and were succeeded by a thick sward of the finer grasses.

Perhaps,

Perhaps, neither the swine nor the fith could be said, with strictness, to have killed these docks; which, it appears to me evidently, *died of age*. No vegetable is everlasting. Some are annual, some are biennial, others perennial. But the age, or natural life of perennial *herbs*, has not perhaps been attended to. We may, however, take it for granted, without experience, that all plants, which propagate their species by seed alone, may be subdued by persevering to prevent their seeding. All that we want to know, from experience, is their several degrees of *longevity*; in order that we may calculate the difference, between the expence of heading them, from time to time, and that of destroying them, at once, by the more expensive process of eradication.

5. MANURING GRASS LANDS. The dung cart is seldom drawn upon grass land. The quantity of *dung* which is made in the District (see FARMYARD MAN.) is small; and is chiefly applied to arable lands; while the collecting of *mud*, *roadstuff*, and other materials, meliorating to grass land, is shamefully neglected.

Foddering on grass, in winter, is chiefly depended upon, as an equivalent for its exhaustion

haustion by *hay*; and *pastured* ground is considered as standing in no need of extraneous assistance.

If a piece of mown ground were to have the *whole* of the crop returned to it, in fodder, and in a proper manner, it is probable, that such ground might be repeatedly mown, without being materially exhausted. But the foddering should certainly be *general* to the whole piece; beginning on one side, and *teatbing* it regularly, in the Norfolk manner, (see NORFOLK, Article TURNEPS), until the opposite side be reached: not, partially, under the hedge, as is mostly the case, here. The hedges are, no doubt, crept to for shelter: in windy weather, especially, hay will not lie in an exposed place: but, certainly, the hedge ought to be considered, as a resource to fly to, in stormy weather; returning to the area of the field, whenever the storm may abate.

The GOOD EFFECT of foddering, on any grass land *which will bear the treading of stock in winter*, is evident to common observation.

The great danger to land, which is inclined to *tenacity*, is that of its being *caught in the drought of spring*; before the sward be relieved by rains or by frosts; which, by tempering

pering the surface, is observed to release the grasses from their confinement, in the footsteps of stock. On such land, the foddering should not be continued too late in the spring.

On *light-land* grass, many advantages arise from this practice. The fodder is laid up, and the manure carried on, at a small expence. The contexture of the soil is improved, and moss (the greatest enemy of land of this description) checked or destroyed, by the treading of stock. There can be no doubt that, in some cases, and under proper management, stacking hay in the field, and foddering with it on the land it grew on, may be perfectly eligible. Much depends upon the nature of the land, and much upon whether the given piece of grass, or the arable land in the same occupation, is most in want of melioration.

But advantageous as this management may be, in some cases, to *light-land* grass, a striking instance of the inutility of teathing *stiff land*, in winter, with sheep, occurred in this neighbourhood. A piece of low cold retentive (but well sheltered) Inland was foddered upon, during a succession of severe weather, until its surface was black with dung. Great

expectations of improvement were formed; but no sensible benefit whatever followed:

From this and other instances of a similar nature, it is more than probable, that *teatbing* closely textured land, in winter, is equally ineligible as *manuring* it, in winter; an impropriety which I am fully convinced of, from my own practice; and which all countries are *beginning* to be aware of. I am afraid, however, that the principal part of the little manure which is set upon grass lands, in this District, is carried on during the frosts of winter; the worst time invention can devise.

Lime is, in the general idea of the country, rather injurious, than beneficial, to grass land. Evidences are produced against it; but they are not conclusive: the trials, which are said to have been made, were on cold retentive soils; the least likely, perhaps, to be improved by lime. To corn crops, lime is most beneficial, on dry warm soils; and some recent experience here shews, that on such soils lime is beneficial to grass.

A quantity of lime having been scattered accidentally on sward, it was observed to injure the herbage, considerably, for the first three or four years. This of course corroborated

borated the opinion of its being injurious to grafs. But, in a few years more, this incidental patch became much superior to the rest of the piece, it lies in; and has, now, continued to be so, for some years. The soil, a middle loam, on a rocky substratum.

This led to an experiment with a smaller quantity; namely, four chaldron, an acre, on a piece of declining mossy sward, on a burning sand, in an upland situation.

This experiment was made, last autumn. The present state of it is striking (Sept. 1787). The entire countenance of the land is changed: the sward has acquired a dark-green healthy color; and, already, the moss has mostly disappeared: while the remainder of the piece (the whole eaten with sheep) is covered with a fleece of moss, intermixed with parched, straw-colored herbage

Thus far, and as far as one experiment reaches, this under notice is, decisively, in favor of lime being beneficial to a scorching upland soil. For reviving the productiveness of old sheep walks and rabbit warrens, lime may, perhaps, be found a most profitable manure.

A remarkable incident occurs, this year, (1787) near Pickering. Part of the com-

mon has been, I believe, time immemorial, in use as a whitening ground — provincially, “bleaching greens.” — The soil, drift sand left by a brook which frequently overflows those greens; the subsoil gravel; left, in all probability, by the brook, in shifting its channel, from time to time. Nevertheless, such was the *superficial appearance* of this valley, while it was used as a whitening ground, that the Commissioners under the Inclosure valued the land (last summer a dry season) at forty to fifty shillings rent, an acre. But, this year, the bleaching being discontinued, it has turned out not worth fifty pence, an acre; notwithstanding the uncommon power which vegetation has this year, every where else, manifested.

The parts where the webbs have usually lain, are evident to common observation: scarcely a blade of grass has, this year, shewn itself upon them. Even the sedges and other palustrean weeds, which attempt to grow, are not able to hide the dead-looking sand, among which they are rooted. The soil, naturally weak, is at present evidently exhausted. But query, how has this exhaustion been effected? By the *lime*, which has been used in bleaching? Or by the *watering*,

watering, which it has heretofore constantly had, through the summer? Or by the *warmth of the webbs*; which, acting as a gardener's frame, has induced the soil to exert itself beyond its natural strength? The effect is well ascertained; but, evident and interesting as it is, it appears to me difficult to be accounted for, satisfactorily.

III. MANAGEMENT OF MOWING GROUNDS. All old grass land, which is *mown*, is here called "MEADOW;" whether its situation be low or high, dry or moist. It is merely a term in contradistinction to PASTURE, or "summer-eaten" ground; which name it may take the ensuing year; it being a pretty common practice to mow and summer-eat, alternately.

This, however, is far from being a general practice; the same lands will be mown, and others will be used as cow pasture, for several years successively. But on the lands which are described above, as upper grass grounds, an alternacy, though not perhaps annual and regular, generally takes place.

In describing this department of Management, a fourfold division of the subject will be requisite.

1. Spring Management ;
2. Haying ;
3. Aftergrafs ;
4. Winter Management.

i. **SPRING MANAGEMENT OF MEADOWS.** The general practice is to "eat" them, until *Old Mayday* ; when the stock is transferred to the pasture grounds, and the meadows finally shut up, for hay.

In this climature, the practice is injudicious. It throws haytime too backward, in a common year. And, if dry weather set in early, the ground, having no covering, is parched with drought, and the crop of hay, *perhaps*, thereby lessened.

In Surrey, and round the metropolis, grounds intended to be mown are scrupulously freed from stock, early in the spring ; not a spring shoot is cropped. This is the opposite extreme : and, if the land will bear stock, is also improper. Some valuable spring feed is lost ; the frosts destroying that which would be of service to stock.

Land may, in general, be eaten, until **OLD LADYDAY**, or the **MIDDLE OF APRIL**, without injuring the crop of hay. Early weeds, and the ranker grasses, are checked ; by
which

which means the better bottom grasses are suffered to rise and ripen with them.

2. HAY HARVEST. To give a minutial account of this department of the grassland management, it will be requisite to consider, separately, the following subdivisions:

1. Mowing;

2. Making;

3. Preserving.

4. Expenditure.

1. *Mowing.* This is done chiefly by the "day mowing," which is an inaccurate acre; sometimes more, but generally less than a statute acre; old inclosed meadows having been reckoned, from time immemorial, so many "day mowings;" and whether they are, in reality, a greater or less number of acres, they are considered as so many days' works.

The wages for mowing, one shilling to eighteen pence, a day, and board. Little or no mowing is done by the acre. A man seldom mows more than his day's mowing; which, if he be a good hand, he performs in a few hours, in the morning and evening; generally lying by, in the middle of the day.

The Yorkshire mowers labor hard, during the short hours they work: their sithes are of uncommon length, and they take their swath of unusual width; seldom less than three yards; some of them ten or eleven feet wide. They invariably "keep stroke;" that is, all strike together as one man; a practice which is at least pleasing to the looker-on.

2. *Making.* All countries, I find, abound in bad haymakers; and some are destitute of good ones. The country under survey may be said to be above mediocrity; and that is as much as can be said of it. Quantities of hay are annually wasted, and still greater quantities unnecessarily injured, through bad management. It is seldom tedded sufficiently; is frequently exposed, all night, abroad, in catching weather; and, in such weather, is too often carried before it be dry.

A singular expedient is here practised to get it (as it is intended) out of harm's way. This is to put it into "pikes," or stacklets, of about a load each, before it be fit to be put into stack; and, too frequently, before it be fit to be put into large cocks. This is considered as a middle stage; in which it is

to take a partial heat, and become prepared for the stack.

If hay be free from external moisture, yet too full of sap to be trusted in stack, "piking" it may be of great use. But it is more generally made use of, as a slovenly expedient, for getting hay out of hand, in a tedious season. In this case, however, it is mostly mischievous. I have seen these pikes, when opened out to be carried to the stack, white with mould, black with rottenness, and of every intermediate color, excepting that which alone is desirable.

In the best practice of the District, the grass, in fine weather, is tedded after the mowers; or, in showery weather, as soon as a fair opportunity offers. In the evening, unless due confidence can be placed in the weather, it is put into cocklets—provincially, "hipples;" made in different ways; some being set up hollow, with the foot and the head of the rake; others, in the common way, with forks. As the hay has advanced in dryness, the hipples are increased in size.

When a fair opportunity offers, and the grass is perfectly dry, the hipples are "sundered;" that is, broken out into beds, in the usual manner; turned; and again got up into

cocklets, of such size as the state of dryness requires. When sufficiently dry, the hay is made into well sized cocks; namely, about eight or ten to the load; horses being sometimes used in this operation. See the next Article.

When the crop is intended to be stacked on the piece it grew on, the first-made part generally stands in these cocks, until the whole, or the principal part of the remainder, be ready for the stack; which, by this means, is never exposed abroad in its first stages: a circumstance, however, which is too commonly suffered, by less judicious hay-farmers.

3. *Preserving Hay.* The most prevalent practice is to stack it in the field; either for the purpose of foddering with it on the ground, or to be fetched home, in frosty weather, or when wanted. Much, however, is carried to the homestead, at hay time; some to be stacked; others to be housed; the latter a practice which, when room can conveniently be had, seems to be in good estimation. It is at once got out of the way of the weather, and probably into the place, in which it will be wanted: the multiness of housed hay,
which

which is talked of in some places, is not perceived in this.

The practice of STACKING HAY IN THE FIELD adds much to the ease and dispatch of hay time. If the stack be placed in the center of the ground, a considerable part of the hay may be collected, without the trouble of loading it on a carriage.

If it be in large cocks, it is sometimes drawn to the stack, with one horse; by means of a cart rope, put underneath the skirts of the cock on the sides, and above the skirts on the back part; giving the bend of the rope sufficient hold of the hay, to prevent its being drawn from under the cock. The two ends of the rope pass to a pair of hames; to which one end is fixed, the other being kept in its place by a wooden pin. When the cock arrives at the rick, the peg is drawn, and the rope is disengaged,

If the hay be abroad, it is rowed in the usual way, and is sometimes drawn together with a long pole (six or eight feet long), with a rope passing, from each end of it, to the hames; a man standing or pressing upon the pole, to keep it down to its work, and make it clear the ground as it goes. This however, though simple, is a difficult business. More complex

complex implements, of various constructions, have therefore been contrived, for this purpose.

These implements are also used in *cocking*; and, when the quantity of dry hay is great, and hands scarce, it eases and expedites the business very considerably. For, in this case, the main burden of the hay is drawn together by the team, the rakers having only the bared ground to rake over; following the implement, and drawing the rakings to the part to be cleared, by the next sweep of the implement; beginning on one side of the piece, and proceeding, in this regular and expeditious manner, to the other; leaving the hay in large rows, easily to be cocked; or to be dragged to the stack; or loaded; as occasion may require. This expedient, however, is far from being in general practice.

When the ground near the stack is cleared, and the stack has risen too high to be conveniently forked upon, from the ground, the outskirts of the field are drawn together in carriages.

In the best practice of the District, the stack, if not very large (which field stacks seldom are), is never begun upon, until a sufficiency of hay be dry, to get it above the

eaves,

eaves, the first day. If the whole be ready, the middle of the stack is rounded up, and the remainder set in tall "pikes," by the side of it, ready to be laid on, the first fine day after the stem be sufficiently settled. This appears, to me, to be bringing the business of laying up hay, in the field, as near perfection as the nature of it will admit.

Field stacks are, I believe invariably, made round. The favorite *form*, at present, seems to be that of an *egg*; a form, perhaps, of all others the most beautiful, but by no means the most convenient*.

When the hay has done heating, the stack is finally topt up, its roof adjusted and raked, and its top *cap't with thatch*; the principal part of the roof being left naked.

In a country where thatching the entire roof is the established custom, this would appear negligent management. In this country, to bestow thatch and thatching, upon the whole, would be deemed a wasteful extravagant practice. It would be difficult to say, with

* In CLEVELAND the opposite extreme prevails. The *turnep* is there the archetype. If hay stacks be made *round*, a form between the egg and the turnep is preferable to either extreme; but, in my opinion, a *barn* is the best model for a hay stack,

with certainty, which is the better practice; much depends on a plenty or scarcity of straw. Either of them is good, if properly executed.

Field stacks are *fenced* with large hurdles, provincially "stack-bars;" resembling the gate hurdles of some Districts, and the cattle hurdles of others. Being placed in a ring, and united together with pins passing through the heads, they form an arch, and become a simple and sufficient fence against every kind of stock.

4. *Expenditure of Hay.* There is no regular market for hay, in the District. It is seldom *sold*, but in times of scarcity. It is mostly *consumed*, on the premises: chiefly in the house, but partly in the field; a practice which has already been spoken of.

3. AFTERGRASS. The *expenditure* of aftergrass, in this country, is principally on milked cows; some on dry fattening cows, and some on oxen, thrown up from work, in the spring, and finished with aftergrass.

Time of Breaking. In some places, cattle are turned into meadows, as soon as the crop is out of them. This is fouling the ground without any advantage to the cattle, which
will

will not, cannot, eat the *stubble* of mown ground*.

In this country, the opposite extreme of management is too prevalent. AFTERGRASS, provincially, "fog," is scarcely ever broken, till *after Michaelmas*; is sometimes hoarded up, till near *Martinmas*, before it be turned into. In the latter case, half of it, perhaps; is wasted. Whether the weather prove wet or frosty, one of which may reasonably be expected, at that time of the year, cattle destroy as much long overgrown aftergrafs, with their feet, as with their mouths. Wherever they tread, in wet weather, the grafs is fouled; wherever they step, when frost is on the ground, the grafs they tread on is destroyed.

GENERAL REMARKS ON THE MANAGEMENT OF AFTERGRASS:

It is a matter of surprize that no country has yet adopted AN ECONOMICAL EXPENDITURE OF AFTERGRASS. I have met with some faint attempts, in the practice of individuals, in different places; but nothing of a regular confirmed established practice.

There

* But see WEST OF ENGLAND, Art. AFTERGRASS.

There is one leading principle of management, which is easy to be observed, and by which alone, perhaps, half the present waste might be avoided. This is the self-evident and simple one of not suffering cattle to remain *at nights*, on aftergrass, nor of permitting them to return to it, in the morning, *while frost remains on the ground*.

In strictness, they ought never to be suffered *to lie down among it*, but should be removed, as soon as their appetites are palled. Even this, when the expenditure is on cows, is not difficult. But fattening cattle may, perhaps, require more indulgence. These, however, might, without injury, be let out, in the evening, into an adjoining stubble or pasture ground, and be suffered to return in the morning, with very little extraordinary attention or trouble. Cows might be folded in a yard, or kept in the house, or in the field, as circumstances might require.

Grass which has been trampled under foot, in the manner described above, necessarily remains, in winter, an encumbrance to the surface. If the ground be foddered upon, some of it will of course be worked off by cattle; and horses will eat a still greater share of it. Still, however, the sward will be
ragged

ragged in the spring ; a circumstance that ought to be avoided. In the early part of spring, aftergrafs ought to be level ; that is, either *entirely bare*, or covered with a *sufficient even bite* of unsoiled aftergrafs, or winter-freed pasturage.

Two of the most intelligent rural economists of these kingdoms make a point of saving autumnal grafs, for spring feed ; and they are probably right when they assert, that it is the most certain, and, on the whole, the best spring feed, which is, at present, known.

On these principles, the right management of aftergrafs is evident. The forwardest ought to be broken, sufficiently early, to be eaten, without waste, before winter set in ; and the latest, that is to say, the shortest, should be shut up for spring feed. If aftergrafs be too long and grossy, it is apt to lodge, and rot upon the ground in winter. Therefore, on rich land, it ought to be more or less fed, before Michaelmas ; and then, while of a due length, to be shut up during winter.

IV. PASTURE GROUNDS. The management of pasture grounds requires to be subdivided into

1. Spring Management.
2. Stocking.
3. Summer Management.

I. SPRING MANAGEMENT: In the ordinary practice of the District, pastures are shut up, in winter, or early in the spring, and kept free from stock, until *Old Mayday*.

GENERAL REMARKS ON THE SPRING MANAGEMENT OF GRASS LANDS.

This appears to me to be bad management. At *Old Mayday*, in a common year, and on an ordinary soil, there is a sufficient bite, over *every part of the surface*. Cattle of course *choose the better herbage*. They have no inducement to crop the *weeds and coarser grasses*, which they suffer to run up to *seed*, thereby, in the instant, encumbering the surface, and, in the consequence, increasing their quantity; thus tending to lessen, in a twofold way, the proportion of NUTRITIOUS HERBAGE.

Even supposing the sward to be perfectly free from weeds and coarse grasses, it is bad management to suffer stock (STORE STOCK) to be turned upon a full bite. They cannot, if duly stocked, keep the whole of it under. Much of it will inevitably run up to seed, forming tufts and uneaten patches, which (if not removed with the *fithe*) remain, during
the

the summer, as useless to the grazier, as if they were not included within the limits of his pastures. They are so much *waste ground*. The quantity of grazing surface, or, in other words, the *size of the pasture*, is lessened, *in proportion to the quantity of stale herbage*.

On the contrary, if stock be admitted into pastures, while the *early weeds* are yet in a *tender state*, and before the surface be covered with *better herbage*, every weed will be cropped, and every part be *equally eaten*. Even *rushes*, when they first shoot, are eaten freely by cattle and horses; especially the latter. The *cowparsnep*, *ragwort*, *knobweed*, and other gross early plants are; on their first emergence, devoured greedily by cattle and sheep.

But changing *weeds into nutriment*, and increasing the *quantity of pasturing surface*, are not the only advantages arising from breaking pastures, early, with store cattle. The cattle themselves are benefited. by being removed; by degrees, from dry meat to succulent herbage; and thereby, in all human probability, preserved from many disorders; which cattle are liable to, on their being first turned out to grass in the spring.

It will be said, that, under this management, pasture grounds require to be stocked *thinner*, than in the usual practice. For a few days, immediately after Mayday, the pasture will be comparatively *short* (a circumstance, perhaps, favorable to cattle when first turned out wholly to grass), but, afterwards, the advantage will be evidently in favor of early breaking; inasmuch as the quantity of surface is thereby increased. It is therefore demonstrable, that, under this management, pastures may be stocked *thicker*, than in the common practice.

FATTING CATTLE, which are forward in flesh, and are intended to be *finished* with grass, may require a full bite at the first turning out. But for COWS, WORKING OXEN, REARING CATTLE, and lean cattle, intended to be *fatted* on grass, a full bite, at the first turning out, is not requisite.

Another objection, which may be made to early grazing, is that of laying the land open to the drought of spring. This, too, is in great measure, when applied to *pasturage*, an ill grounded apprehension. It is notorious to common observation, that cows milk, and cattle in general thrive, beyond expectation, in *droughty weather*. It is not the *length of*
grass,

grafs, but the *quantity of nourishment* it contains, which makes cattle pay for their pasturage. In dry seasons, medicinal waters are strongly impregnated, and fruit exposed to the sun in such seasons, is sweeter and more highly flavored, than it is in a moist season, or a shady situation; but the distillers of essential oils are the best judges of the effects of seasons on herbage.

The richness of vegetable productions appears to be in proportion to the quantity of heat, in the immediate sphere of their vegetation. Thus the richness of fruit is increased, by the reflection of the wall; and it strikes me that the richness of *grafs* is increased, by the reflection of the soil. Long *grafs* shades the soil and destroys the reflection. The shorter the *grafs* the stronger the reflection, and, consequently, the richer the herbage.

But the longer the *grafs*, the sooner the cattle satisfy their hunger, and lie down to rest. A MEDIUM, therefore, is observable. The due length depends upon the nature of the stock, the nature of the soil, and the nature of the season. Rich *grafs* goes farther than that which is watery and weak. A good grazier looks to the condition of his

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cattle,

cattle, rather than to the length of their pasture.

These observations are drawn from my own experience, as well as from the practice of one man in this District, who, by early stocking, keeps not only his rough pastures, but even his yards, in a great measure level, and free from encumbrance.

OLD LADY DAY to the MIDDLE OF APRIL, according to the progress of spring, appears to me, at present, as the best time for *shutting up mowing grounds and opening pastures*.

2. STOCKING PASTURES. The *species* and the *quantity* require to be separately considered.

No settled rules, with respect to the *mixture of species*, are here observed. It is generally understood, that *horses* and *cattle*, intermixed, will eat grass, cleaner, than either species will, alone; not so much from their separately affecting different grasses, as from the circumstance of both species disliking to feed near their own dung.

Horses, it is true, appear partial to particular patches of sward; but, on close examination, I have never been able to discover any peculiarity, in the *soil*, or the *herbage*, of these barely eaten spots; which are, I apprehend,

prehend, first eaten to the quick, fortuitously, and are afterwards kept down, through their *peculiar sweetness*, owing to the *peculiar shortness of the herbage*. Hares and rabbits, in the neighbourhood of kept covers, keep down patches of barley or other corn, in a similar manner, and through similar motives.

Besides this unfair manner of feeding, the HORSE is disliked in pastures, on account of the worthlessness of the DUNG OF HORSES, at grafs.

This, when the superior value of their dung, in the stable, is considered, appears somewhat paradoxical. The idea, however, is not confined to this District, nor to this Island; it prevails, I am well informed, in America, and more or less, perhaps, in every place, where husbandmen observe, inattentively.

The idea has, no doubt, some foundation. The dung of horses, dropped on grafs in summer, soon undergoes a change. Its substance is presently scooped out by insects; nothing but a porous bundle of undigested vegetable matter being left. If insects not only eat horse dung, but fly away with it out of the field, it is in reality lost, to that particular field; but if, what is most likely, they

drop it again, near the place where it was taken up, and, at length, find a grave, for their own bodies, among the grafs, the occupier of the land fufains no lofs.

SHEEP, I believe, are feldom mixed, here, either with cows or fattening cattle. They eat lefs fairly than horfes, which ftick to particular patches; while fheep run over and nibble out the choicelt morsels of the entire piece. They are generally kept alone, except on commons, and are, on *this* fide of the Vale, properly confined to the uplands, the moft natural pafure of fheep.

With regard to the aggregate QUANTITY OF STOCK, fuitable to a *given piece of ground*, husbandmen, here, as in other places, differ in their opinions. Extremes are moftly injudicious. The impropriety of ftocking too *thin* has already been fhewn; but laying on ftock too *thick* is a ftill greater impropriety. Broken grafs may be mown for hay; but the evils of overftocking are not eafily repaired: ftock once checked do not readily regain a thriving habit. I have known (not in this Diftrict) the entire produce of the land thrown away, by overftocking: it is an error which novitiate farmers too frequently fall into. The middle way ought to be attentively

tively sought after. Nothing but experience, on the given ground, can point it out. In obtaining this experience, it is always prudent to begin on the safe side ; or, in other words, to understock, rather than overstock, the first year.

3. SUMMER MANAGEMENT OF PASTURES. In this department of the grass land management, the District under survey is deficient. No *shifting* of stock ; no head stock and *followers* ; nor *sweeping* of pastures, with the *sithe*. In the ordinary practice of the country, stock are turned into pasture grounds, at Mayday, and there remain impounded, until Michaelmas ; or until harvest be in ; when the head stock are transferred to the mowing grounds, and the ordinary stock to the stubbles, to partake of the "average : " a provincial term for the eatage of arable land, after harvest ; a term probably originating in the ancient commonfield management.

I have already intimated, that it is not my intention to make the present a didactic work. Nevertheless, where I find what appears to me cause of censure, it may be right to mention what I think would be a means of doing it away.

GENERAL REMARKS ON THE MANAGEMENT OF SUMMER PASTURES.

The grassland management is no longer a subject which is new to me. I have now had a considerable share of experience, in my own practice, and have also had opportunities of observing, on a large scale, the practice of others, in different and distant Districts. I will therefore give, here, in as few words as possible, a *sketch* of my present ideas, respecting the proper management of SUMMER PASTURES.

Much depends on SITUATION, and much on WATER. There are cases (many of them in this District) in which the stock are, through necessity, confined during the summer in *one* grass pound. Cases like these can only be lamented, not remedied. There are others which will admit of only *two* divisions; that is, of *one skift*: a predicament infinitely preferable to the first; but not altogether desirable.

In all cases, where fattening cattle or dairy cows make a part of the stock, and where situation, soil, and water will permit, every suite of grazing grounds ought, in my idea,

to consist of THREE COMPARTMENTS. One for head stock (as cows or fatting cattle), one for followers (as rearing or other lean stock), and the third to be shut up to freshen for the leading stock.

If, at the time of shifting the followers, there be *much seedy herbage* left upon the ground, it ought to remain until they be shifted; and to be MOWN AS HAY during the recess.

But if, at that time, a *few weeds*, and a *little seedy herbage* only be left, they ought to be SWEEPED down, with the sithe, a few days before the removal of the lean stock; which will not fail, in this case, to lick up even the sharpest thistles, while they are in the soft flaccid state, to which mowing presently reduces them.

Finally, I am clearly of opinion, that, let the pasture consist of one, two, or more compartments, not a weed ought to *seed*, nor a tuft of *stale grass* be suffered to stand, in a pasture ground; which ought once, at least, during the summer, to be LEVELLED WITH THE SITHE; thus, at a small expence, converting WEEDS INTO NUTRIMENT, and WASTE GROUND INTO AFTERGRASS.

27.

H O R S E S.

INTRODUCTORY REMARKS.

YORKSHIRE has long been celebrated for its horses. Fitzherbert, who wrote two hundred and fifty years ago, mentions his going to Rippon fair, to buy colts.

The influence of *climature*, on the *constitution*, or *changeable* part of the nature of animals, is a matter difficult to be demonstrated. There are men who deny it.— Nevertheless, strong evidences of its existence may be drawn, from the animal under consideration.

No man has yet been able to breed *Arabian* horses, in England; *English* horses, in France or Germany; nor *Yorkshire* horses, in any other District of England. Some good horses, no doubt, are bred every year, in different parts of the kingdom; but they are few, in proportion to the number of bad ones bred, in those parts.

In

In Norfolk, the breeding of saddle horses has been repeatedly attempted, without success. Yorkshire stallions have been, and still are sent, into Norfolk, in the covering season. The *foals* may be handsome, *but they lose their form as they grow up.*

On the contrary, in Yorkshire, let the foal, when dropt, be ever so unpromising, it will, if any true blood circulate in its veins, acquire fashion, strength, and activity, *with its growth.*

These circumstances *seem* to account for the superiority of Yorkshire-bred horses; and furnish an evidence, that *air, water, soil, or herbage*, has an influence on the constitution or changeable properties of animals.

The District more immediately under survey may, perhaps, be considered as the first, in the county, for the breeding of horses. Nevertheless, it cannot, even here, be called a universal practice. Men are led into it by accident or caprice.

It would be difficult to ascertain the exact number annually bred. The Vale, the Wolds, and Holderness, probably employ a hundred stallions. One hundred mares are considered as the full complement for one horse.

horse. Some of them, perhaps, do not get fifty. On this calculation, there are from five to ten thousand horses bred, between the Eastern Morelands and the Humber*.

It will now be necessary to consider separately,

1. The breed.
2. The method of breeding.
3. The method of making-up.
4. The markets.
5. The management of worked horses, in this District.

I. BREED. Thirty years ago, STRONG SADDLE HORSES, fit for the road only, were the principal breed of the Vale.

During the last twenty years, some capital HUNTERS have been bred in it. This change was principally effected by one horse, JALAP; a full-bred horse; whose pedigree and performances are well known upon the turf.

He is still living; and, what is remarkable, last season, at the age of thirty, covered several mares. His leap five guineas each, for

* This calculation, however, is grounded on little more than supposition. It would be difficult to ascertain the exact number of stallions kept in so wide a District.

for blood mares; two guineas for “Chapmen’s” mares*.

But notwithstanding the credit which the Vale has justly acquired, of late, by its hunters, the breed is, at present, changing to fashionable COACH HORSES; namely, tall, strong, oversized hunters. The breed, therefore, may be said to have increased in size, rather than to have undergone a change. In 1783, the stallion shows exhibited beautiful groups of animals, active as the greyhound, and spirited as the lion. This year (1787) the shows were comparatively flat and spiritless: a mere parade of troopers.

There may be several reasons, for the alteration which is taking place, in the breed of horses in the Vale.—The *Jalopian* breed has degenerated; very few of the sons of this celebrated horse have been good stock-getters. Another reason, and perhaps a better, is the unfitness of high-bred hunters, for beasts of burden and draught. Not only brood mares, but growing horses, are used in husbandry. The operation of plowing with two horses requires strength: slender horses are unfit for it; but a three or four-year

* He died in December 1787, since this article was written.

year old coach horse may be occasionally used; and, in cases of deformity or lameness, may be continued as a farm horse. If to this be added, the extravagant prices which this description of coach horses have recently borne, the Vale farmers may be right in propagating the breed*.

Let this be as it may, they are most assuredly wrong, when they give encouragement to the *Fen Breed*, the "Howden mack" of BLACK CART HORSES, which I am sorry to see worming their way, into the Vale. The breed of grey rats, with which this Island has of late years been overrun, are not a greater pest in it, than the breed of black fen horses: at least, while cattle remain scarce, as they are at present; and while the flesh of horses continues to be rejected as an article of human food.

Let the Vale farmers continue to plow with coach horses, and use oxen in carriage: a breed of horses better calculated for eating than working, and whose tendency is to render their drivers as sluggish as themselves, are ill adapted to the present rents of the Vale. Norfolk has already experienced the
evil

* The WOLDS and HOLDERNESS have been longer in the practice of breeding coach horses.

evil consequences of encouraging that breed; and I hope this country will not suffer by the same indiscretion. It is laughable enough to see a slender half-bred mare, who perhaps, a few years ago, received the embraces of *Jalap* or his offspring, bending under the weight of a cumbrous animal, whose very legs, in all their admired roughness, are nearly equal in size to the body of her former gallant. No wonder that monsters, having not their likenesses in nature, should be the produce of such unnatural amours.

II. BREEDING HORSES. From what has been said respecting the superiority of Yorkshire horses, it will, no doubt, be expected that great attention is paid to breeding; and that the mysteries of it will be disclosed; while, perhaps, others have conceived that their superiority is more owing to the art of breeding, than to the geniality of climature. I should be sorry if truth oblige me to discover the misjudgment of my readers; and feel myself awkwardly circumstanced in being under the necessity of disclosing the misconduct of my countrymen.

In different parts of the kingdom, the breeding of *race horses* is reduced almost to science. In the Midland counties, the breeding

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ing of *cart horses* is attended to with the same assiduity, as that which has of late years been bestowed, on cattle and sheep; while the breeding of *saddle horses*, *hunters*, and *coach horses*; is almost entirely neglected; is left almost wholly to chance; even in Yorkshire! I mean as to FEMALES. A breeder, here, would not give five guineas for the best brood mare in the kingdom;—unless she could draw; or carry him occasionally to market; nor a guinea extraordinary for one which would do both. He would sooner breed from a rip, which he happens to have upon his premises; though not worth a month's keep.

But how absurd. The price of the leap, the keep of the mare, and the care and keep of her progeny, from the time they drop to the time of sale, is the same, whether they be sold from ten to fifteen, or from forty to fifty pounds each:

Superior excellency may be said to depend upon the MARE. There is an instance, in this neighbourhood, of the offspring of one mare being sold, *to dealers*, for four or five hundred pounds. What are a few guineas in the first purchase of a good mare? and what are a few days plowing, or a few rides to market,

market, compared with the difference between a race of good and of ordinary horses?

It appears to me evidently, that much remains to be done, in this department of Rural Economy. Good STALLIONS may be had for money; and the different hunts, in the south of England, will, so long as they remain, be a source of MARES, most suitable to the purpose of breeding CAPITAL HUNTERS. Mares lamed, or stiffened by severe exercise and improper treatment, are generally to be bought, in the neighbourhood of these hunts, at moderate prices. And mares, fit for the breeding of COACH HORSES, are to be met with in every county.

The present prices, given for hunters and coach horses, and, more especially, the declension of the breeding of the former, are incitements sufficient, to induce men of spirit to make an attempt. Nothing appears to me to be wanting, but a BAKEWELL, to take the lead.

While the nation remains in its present state of refinement, horses for the *road* and the *field* are in a degree necessary; but *racers* and *cart horses* might, with less inconve- niency, be dispensed with.

The King's Plates have probably had their use, in improving the English horse, in activity and fleetness. But the original intention of them has long ago been answered: RACE-HORSES are now fit for the purpose of *amusement*, only. They are, in general, drawn much too fine for *use*. Therefore, to continue these prizes will be distributing the public money, toward the worst of purposes: the encouragement of gaming; and the injury of the breed of English horses. The broad-loined, deep-chested, old English hunter has given place to the lank feeble racer. If it should be still thought proper to continue the King's Plates, it would certainly be wise to increase the limited weight.

With respect to CART HORSES, if extending the saddle-horse TAX, to farm horses in general, would lessen their number, and increase that of working oxen, it would be political to extend it, without loss of time.

Under the present head, it may be proper to register an idea, which I have met with in this country, and which, evident as it may seem, never occurred to me before, either in theory or practice.

It is a fact, well established in the common practice of this District, that spayed heifers

work

work better, and have in general *more wind*, than oxen; and it is not doubted that SPAYED MARES would have an equal preference to *geldings*.

I do not, however, find that the experiment has ever been tried. The reason held out against it, though formidable at first sight, proves a mere shadow on examination. The spaying of fillies would undoubtedly spoil them for *brood mares*. But does not the gelding of a colt spoil him for a *stallion*? What breeder, when his mares foal, wishes for fillies? and what dealer would not willingly give halfacrown, for each, to have his mares changed into geldings? or perhaps into animals superior to geldings?

In the spring of the year, *open mares* are faint and troublesome. The only requisites appear to be a safe cutter, and a man of spirit to set him to work; to bring the spaying of female foals into common practice.

It does not follow, that because a part of the female foals should be cut, there would not be open mares to breed from, more than it does, that because some heifers are spayed for the yoke, or for fattening, there are not cows sufficient, for the purposes of breeding and the dairy.

I do not mean to *recommend* a practice of which I have had no experience ; but if the experiment has not been tried, it strikes me, forcibly, that it is worth the trial ; and that it is more than time it were set about *.

III. MAKING UP HORSES. The AGE, at which young horses are here made up for a market, is four or five years old.

Some BREEDERS *make-up* their own horses ; others only *back* them, and perhaps use them gently, in *barnefs* ; selling them, at full age, to PROFESSIONAL DEALERS ; who, with arts best known to themselves, make them fat and fine-skinned—set up their tails—abridge occasionally the number of their teeth,—and teach them their stable exercise.

Some are bought up, at two or three years old, by HORSE-DEALING FARMERS ; who *grow* them upon good land ; break them into the saddle, at least ; and finally make them up, *according to art*, for market.

One farmer in the Vale is said to make-up an hundred, annually. And one dealer, at Malton, is said to have sometimes two or three hundred horses in his stables, at once.

Making-

* Since the first publication of this Volume, I met with an instance of practice, in the spaying of mares, which will be mentioned, in the SOUTHERN COUNTIES.

Making-up horses, upon a FARM, by a man who is a judge, is a most profitable branch of husbandry. Oats, hay, and straw, find a market on the spot; and *town* manure is procured, in quantity, without the expence of fetching.

IV. MARKETS FOR HORSES. *Malton* has the only HORSE SHOW in this District. It is held in the spring of the year, and continues for a week; namely, the week before Palm Sunday.

At this fair, great numbers of made-up horses are sold. They begin to go in, on Monday: Tuesday and Wednesday are the principal days, for good horses: Thursday and Friday generally exhibit an inferior sort: and Saturday, which is likewise a great cattle fair, is principally a stallion show, and a fair for refuse horses; which, on this day, are shewn in the open market.

During the week days, the horses are shewn in stables; fitted up, at the inns, and in private yards, for the purpose; being only led out, occasionally, at the desire of the chapman.

The hours of show are the morning before breakfast, the forenoon, and again in the

evening; the stables being constantly shut during meal times.

The show consists of well bred hunters, inferior saddle horses, and light coach horses; most of them being bred in the Vale, on the Wolds, or in Holderness; some few come from Cleveland, and the upper part of the Vale of York.

The purchasers are the *London and West of Yorkshire dealers*, and *foreigners*; especially of FRANCE and PRUSSIA.

In 1783, the French markets being then recently opened by the peace, several French dealers were at this show. The favorite colors were yellow bays, greys, and chesnuts. Brown, the Englishman's favorite color, is disliked by foreigners.

But, of late years, the principal part of the first-rate horses have been bought by the dealers, foreign and domestic, *previously to the show*, at the houses of the country dealers, or the breeders.

The prices are various: from fifteen to fifty pounds includes the majority of the made-up horses, sold at Malton show. They are led, in strings, to London, or shipped off, at Hull, for foreign markets. In 1783, a vessel laden with horses, bought at this show
and

and in the neighbourhood, was lost off the coast of Yorkshire.

V. TREATMENT OF WORKED HORSES. In a District where the working of oxen has been, for many ages, the established practice, it cannot be expected that any very accurate management of DRAUGHT HORSES can have taken place. But, in a country which has always been considered as the source of good HUNTERS, and the school of good horsemanship, it may be reasonably supposed, that a superiority of management prevails.

This, however, is not, from what I have seen, the case. The only striking feature of management, which has caught my notice, is, that of turning hunters, and other hard-ridden horses, out into the field in the day-time, in winter; cold or warm, and sometimes wet or dry: a practice which has been cried up by many great horsemen, and is to be met with in every part of the kingdom; though nowhere so prevalently, perhaps, as in this country.

It has always struck me as a bad practice. Nevertheless, in compliance with the custom of the place I was in, I let a mare, which I rode into the country in 1782, run out to

grafs, on leifure days, and lie in the houfe, at nights. The confequence was unfavorable, and fufficiently ftriking to induce me to minute the circumftances, at the clofe of the occurrence.

As the fubject appears to be of confiderable importance, I will here copy the Minute.

“ 1783, *March* 11. There are, perhaps, few horfes which will bear to be hunted, one day, and turned out to grafs the next. My brother's practice is to let his horfes run at grafs, in the middle of the day, throughout winter. In conformity with this plan, mine was turned out in the daytime, whenever I did not want to ufe her. On my arrival here, in November laft, though I had rode her a journey of two hundred miles, ſhe was as fat as a mole, and her carcafe round as a barrel. In the early part of winter, I rode her a good deal, and ſhewed her the hounds, generally once a week. With this exerciſe, I was not ſurprifed at her ſhrinking. But having more lately given her eaſe,—in order that ſhe might recover her fleſh and ſpirits,—without finding any alteration, I had good reaſon to think that it was not altogether the work, but the treatment, which kept her down; for, with
all

all the indulgence I could give her, her sides, ten days ago, were clapped together, and her hide stuck as close to her ribs, as if it had been glued to them. Her appetite for dry meat at least was gone. She would let her corn lie in the manger untouched; though for the time I have had her—six years—she has ever been a remarkable good feeder. I had some blood taken from her, but she still remained the same. Suspecting that hanging after the grass was the only cause of her ill thriving, she has for the last ten days been kept entirely in the house. Her skin is already loose and filky, and she calls for corn every time the stable door is opened. The other day she wanted spurs. Now she is all spirits again. — — turned out a mare, which he had hunted the day before, to grass, on a cold day. She got a violent cold; was seized of her limbs; and it has been with great difficulty he has saved her. — — began to turn out a valuable mare, which he hunted occasionally; but finding that she refused her dry meat, he discontinued it; and now finds that she has taken to her hay and corn, again. My brother's horse, used to it as he has been from his infancy, and pampered as he constantly

stantly is, looks more like a common hack than a hunter.

“ There are two reasons why a horse, which is subjected to violent exercise, should not be exposed at grass, in severe weather. It takes them off their dry meat ; and horses, which sweat much, are, it is highly probable, more chilly, suffer more from pinching cold, and may be more liable to be seized by acute disorders, than horses which have more moderate exercise, and whose frames are less relaxed. A horse which has been enured to those transitions of heat and cold will, no doubt, bear them better than one which has always been used to a warm stable ; and which, certainly, ought not to be exposed to such dangerous treatment, without the greatest precaution.

“ I am nevertheless of opinion, that letting a horse run out, in winter, keeps his legs cleaner and more supple than standing always in the stable. My mare was not fresher on her legs, at four years old, than she has been this winter. And if hunters could be turned out, on leisure days, when the weather is tolerably fine, into a spacious place to hay and corn, without grass, I am of opinion it
would

would be of great service to them. Horses which are unavoidably exposed to transitions from heat to cold—as hunters frequently are, in sauntering by the side of a cover, after a hard run—ought, indisputably, to stand in a cool stable, and to be exposed to the open air on leisure days, so far as the state of perfect *health* and *vigour* will permit: *but no farther.*”

I make no comment on the foregoing facts and reflections. I insert them as a caution to the inexperienced: and as hints to those who wish to hit the **HAPPY MEDIUM** of treatment.

TURNING OUT HORSES TO GRASS IN THE SPRING. I met with an idea, in this District, respecting the first turning out of a horse entirely to grass, which deserves to be generally known.

When a horse is thrown up, or turned out at nights to grass, in the spring of the year, it is common to choose the *forenoon* of a *fine day* to do it in. The natural consequence is, the horse fills his belly, during the *sunshine*, and lays down to rest, in the *cold of the night*; thereby, probably exposing himself to disorders.

A much

A much better practice prevails, here: The horse, instead of being turned out in the morning, is turned out *at bed-time*. The consequence is, he *eats all night*, and sleeps in the sunshine of the next day*.

28.

C A T T L E.

INTRODUCTORY REMARKS.

IN A SEQUESTERED Vale, abounding with GRASS LAND, cattle may be expected: they are the most natural stock.

In the uninclosed state of this Vale, the Commons and Cars were applied, chiefly, to the rearing of WORKING OXEN, and a few DAIRY COWS. In the West Marshes, and other central parts of the Vale, which have
been

* It is generally understood here, that HORSES AT GRASS do not require WATER. They are frequently kept, for months together, in dry upland pastures, without water, and without any apparent inconveniency.

been inclosed, time immemorial, and which, until of late years, have always lain in a state of rough grass, great numbers of YOUNG CATTLE were reared, for sale.

Converting the lower lands to arable, inclosing the Commons, and laying the arable fields to grass, have wrought a considerable change, in what may be called the ECONOMY OF LIVE STOCK; more especially in the ECONOMY OF CATTLE. DAIRIES have increased; GRAZING has been introduced; and REARING has declined.

Thus far, however, the Vale may be said to have reared its own stock; excepting some few SCOTCH CATTLE, which are annually brought into it, for the purpose of clearing rough pastures in winter; and to be fatted on secondary grazing grounds, the ensuing summer.

To give an adequate idea of the nature and management of cattle, in this District, it will be proper to divide the subject into four principal divisions: namely,

1. The Species, or breed.
2. Breeding Cattle.
3. Rearing cattle.
4. Fattening cattle.

I. BREED.

I. BREED. Within the memory of a person now living; namely, about seventy years ago; the ancient breed of BLACK cattle, which probably once prevailed throughout England*, and whose name is still very improperly used in speaking of cattle in general, were the only breed of cattle, in this District. By description, they appear to have resembled the present breeds of Wales and the West of Scotland: mostly “*all black* ;” but some with “*white faces* :” mostly “*horned* ;” but some of them “*humbled* ;” that is *hornless*.

To these succeeded a BLACK AND WHITE breed; probably a *variety* of the original species. But still the “*red cow’s milk*” was considered as *medicinal*: and many inveterate disorders were doubtless cured with it: that is to say, by a perseverance in milk diet.

The black mottles, probably a transient sort, were succeeded by the LONGHORNED or “*Craven breed* :” the probable origin of the present celebrated breed of the Midland counties.

But, in a country where the business of aration was carried on principally by *oxen*, this breed was found extremely inconvenient. Horns a yard long were not only troublesome,

* But see WEST OF ENGLAND, ART. CATTLE.

some, but dangerous, in yoke ; especially in the narrow roads and hollow ways, with which the District formerly abounded. Accidents were frequently happening to them ; by getting their horns entangled in the hedge or the bank ; sometimes breaking off their horns ; but more frequently breaking their necks.

This was a sufficient inducement for adopting the SHORTHORNED or “Holderness breed :” probably of *Dutch* extraction. This change took place some forty or fifty years ago : and the shorthorned breed still prevails ; though it has undergone several alterations, since its first introduction.

The first variety of this species of cattle, which I can recollect, was a thick, large-boned, coarse, clumsy animal : remarkably large behind, with thick gummy thighs. Always fleshy, but never fat ; the *flesh* being of a bad quality. This, however, was not the worst : the *monstrous* size of the buttocks of the calf was, frequently, fatal to the cow. Numbers of cows were annually lost, in calving. These monsters were stigmatized with the opprobrious epithet “ *Dutch a—d.*” This was probably the worst breed the Vale ever knew.

The unprofitableness of the "Dutch breed" being evident, men of discernment began to set about IMPROVING it. In the course of the last twenty years, the bone has been lowered, the hind quarters reduced, and the flesh and fattening quality very much improved; not by foreign admixtures and unnatural crossings, but by choosing the cleanest and best-fleshed bulls and heifers, from among their own or their neighbours stock.

It is very observable, however, that in effecting this improvement, the *horn* has been considerably *lengthened*; the present prevailing breed appearing as if it were a cross, between the old short horizontal horn—(provincially, "buckle-horns")—and the middle elevated horn of Herefordshire and East Sussex: not, perhaps, from either of these breeds having been employed in the improvement, but merely from the circumstance of a "fine horn"—namely, a clean, small, sharp well turned horn—having been *fashionable*, for the last twenty years.

This shews how much the appearance, as well as the nature or constitution, of a given breed of stock, may be altered and improved, without calling in the assistance of *alien breeds*.

Even

Even the Dutch buttocks were probably *bred* in England.

The Holdernefs breed, on their first introduction into the Vale, were said to be *thin-quartered*, too light behind, and too coarse before; large shoulders, coarse necks, and deep dewlaps. This form being found disadvantageous to the butcher, encreasing the quantity of the coarser parts, and reducing the weight of the prime piéces, the breeder endeavored to enlarge the hind quarters; and had he stopped when he had got to the *happy medium*, he would have wrought a good work. But the fashion was set;—"cloddy" bullocks were in estimation; and their evil qualities were overlooked, until they were rendered too obvious; and the consequences above mentioned had taken place.

The *form* and *size* of the PRESENT BREED OF THE VALE may be seen, in the following dimensions of a working ox, rising five years old; above par as to form, but somewhat beneath it in point of size.

Height, at the withers, four feet eleven inches.

— of the brisket, from the ground, twenty inches.

Smallest girt, seven feet four inches.

Largest girt, eight feet five inches.

Greatest width, at the shoulder, twentytwo and a half inches.

————— at the hips, twentythree and a half inches.

•————— at the round-bone, twentyone inches.

Length from forehead to nache, eight feet five inches.

————— the center of the shoulder-knob to the center of the hip bone, four feet one inch.

————— the center of the hip bone, to the extremity of the nache, twentytwo inches.

Length of the horns, fourteen inches.

Width of the horns at the points, twentytwo inches.

The eye full and quick.

The head and neck clean.

The bone somewhat large.

The chine and buttocks full.

The flesh soft and mellow to the hand.

The color blood-red, marked with white.

But a variety, new to the Vale, is now creeping into it: the TEES-WATER BREED; —a variety of the shorthorned breed. This variety is established on the banks of the

Tees.

Tees, at the head of the Vale of York, and is held out as the "true Yorkshire short-horned breed." Be this as it may, much attention has been bestowed on its establishment; and it appears to be, at present, a most valuable breed of cattle: valuable, I mean, to the *grazier* and the *butcher*: the bone, head, and neck fine; the chine full; the loin broad; the carcase, throughout, large and well fashioned; and the flesh and fatting quality equal, or perhaps superior, to those of the present breed of the Vale; which, however, appear to be more *active*, more *athletic*, and fitter for the *yoke* or *harness*.

In forming that variety, a horn, very different from that which is prevalent in the Vale, has been produced. The "buckle-horn" is, in this case, as in the other, somewhat lengthened; but the *fashionable* horn, on the banks of the Tees, is a clubbed down-hanging horn, as if, in forming it, a dash of Craven blood had been thrown in. And it might be made a moot point; whether the horns of the two breeds, now particularly under notice, have been produced by fashion alone; or whether the Teeswater horn may not have been altered, from the original short horn, by a slight intermixture of the Craven
N 2 breed;

breed; and whether the Holdernefs breed, from which the Vale cattle have indifputably originated, may not have had a fimilar admixture of the middlehorned blood*.

I wifh to trace the origin and progrefs of the different breeds of cattle in the Ifland; but I find it will be a difficult task to do it with ftrict accuracy †.

The HORN is the beft criterion for diftinguifhing the different *species* (if the term be applicable) of cattle. It is a PERMANENT SPECIFIC CHARACTER. The *color*, though not altogether accidental, is changeable; and neither the *form* nor the *flesh* are permanently characteristic

* 1796. The circumftance of "red cow's milk" being drank medicinally, implies the prefence of red cattle. Admitting that thefe red cattle were of either of the breeds abovementioned, (that is to fay, of the native red breed of the fouthern parts of this Ifland, fee WEST OF ENGLAND) and that they were mixed with the imported breed, it readily follows, that the change which has recently taken place, has been effected, merely, by reftoring part of the original blood.

After having examined, with fome attention, the feveral breeds of the Ifland, this appears to me the moft fatisfactory manner of accounting for the ftriking refemblance, between individuals of the breed under notice, and thofe of the breeds of Herefordfhire and Eaft Suffex.

† 1795. See WEST OF ENGLAND, ART. CATTLE, for a more enlarged View of this fubject.

characteristic of any particular species. Good form and good flesh may be found, in every species; though they are by no means equally prevalent, nor equally excellent, in all. But a horn six inches long was never yet produced by the Craven breed; nor one a yard long by the Holdernefs breed. And the middle-horned breed of Herefordshire, Suffex, and other parts of the Island, appears to be as distinct a *species* as either of the former.

These are my only reasons for being so minutely descriptive of the horns of cattle. I am not a BIGOT to horns of any shape or length. I would as soon judge of a man's heart by the length of his fingers, as of the value of a bullock by the length of his horns.

If his *flesh be good and well laid on*, and his *offal be proportionably small*; if he *thrive well, fat kindly at an early age, or work to a late one if required*; I would much rather have him entirely *without horns*, than with *any* which ENTHUSIASM can point out.

The doctrine of horns has long appeared to me as a species of SUPERSTITION, among *Farmers*, and as a CRAFT, convenient to *leading breeders*, in establishing their respective *systems*.

But lest I should have cause to repent of my rashness, in speaking thus irreverently of horns, I will here allow them all the merit which, in my opinion, truth entitles them to.

The horn has been mentioned as a permanent specific character of cattle. Hence, in varieties, it may have its use, as a criterion. Thus, supposing a male and female of superior form and flesh, and with horns resembling each other (as nearly as the horns of males and females of the same variety naturally do), no matter whether short or long, sharp or clubbed, rising or falling; and supposing a variety to be established from this parentage, it is highly probable, that the horns of the parents would continue to be characteristic of the *true breed*, and might, by inferior judges, be depended upon, *in some degree*, as a criterion.

But it is indisputable, that horns remain the same, while the flesh and fatting quality change; and every man of superior judgment will depend more upon the form and *handle* of the carcase, than upon the length and turn of the horn. For it is a notorious fact, that the individuals of a given variety
may

may have exactly the same horns, without having exactly, either the same fashion, or the same flesh.

If there be any criterion or *point* of cattle, which may be *universally* depended upon, as a guide to the grazier, it is the EYE, not the horn. The eye is a mirror, in which the *health* and *habit*, at least, may be seen, with a degree of certainty.

II. BREEDING. From the foregoing view of the breeds of cattle, in the Vale, it appears, that considerable attention has long been paid to the art of breeding; and it has increased much of late years.

I. BULLS. A BULL SHOW has lately been established, in East Yorkshire: a prize medal being awarded to him who produces the best young bull: an admirable institution, which will doubtless be of lasting benefit to the country.

In the Vale, there is an instance of a gentleman (Mr. HILL of Thornton) keeping one of the best of these shown BULLS, for the use of his tenants: a liberal practice which might well be adopted, by other country gentlemen; and, more particularly, by men of large estates.

2. BREEDING COWS. This subject requires to be subdivided into,

1. Rearing.
2. Purchasing.
3. Treatment.
4. Disposal.

1. *Rearing.* It has already been said, that the Vale still continues to rear its own stock. The rearing of *cows* will appear, in the next section, under the general head REARING CATTLE.

2. *Purchasing Cows.* Though a dairyman may in general rear his own cows, he must be fortunate indeed, if he never have occasion to purchase a cow.

The favorite *points* of a milking cow, here, are a thin thigh, a lank thin-skinned bag hanging backward, teats long, and sufficiently free of milk without spilling it, dug veins large, and horns yellow. I will not vouch for the infallibility of *all* these points; but this I can say, that I never noticed a cow, with a thick fleshy thigh, which was a good milker.

The *dimensions* of the handsomest cow, I have seen, of the true Vale breed, rising five years old, and within a few months of calving, are as follow :

Height

Height at the withers, four feet five inches.

———— of the brisket, eighteen and a half inches.

Smallest girt, seven feet one inch.

Largest girt, nine feet two inches.

Width at the shoulder, twentyone and a half inches.

———— hips, twentyfour inches.

———— roundbone, nineteen inches.

Length from forehead to nache, seven feet five inches.

———— the center of the shoulderknob to the center of the huckle, three feet eleven inches.

———— the center of the hip bones to the out of the nache, twentyone inches.

Length of the horns, ten inches.

Width at the points, eighteen and a half inches.

Head, neck, and leg, *fine and clean*.

Chine full, and back level.

Color, a darkish red, mottled with white.

3. *Treatment of Cows.* Here, as in all countries where grazing gives place to the dairy, milked cows are indulged with the best the farm will afford. The best land for pasture, in summer; the head of the fog, in autumn; and, generally, hay most of winter.

This

This practice has already been noticed. If the present breed of cows require hay, when they give no milk, it is a depreciation of their value as milking cows.

Be this as it may, there is certainly one disadvantage of the Vale breed of cows, which, I believe, is common to all the varieties of the shorthorned breed. This is their *difficulty in calving*. For, notwithstanding the *fleshiness* of the hind quarter has been sufficiently done away, the *bones* still remain. The loin is still broad, and the hips still protuberate; perhaps too much, either for seamliness or use.

An improper treatment of the cow may encrease the difficulty. A cow can scarcely be too low in flesh, a month before she calves. Good keep, three weeks or a month before calving, gives due strength and a flush of milk. The cause may be difficult to point out with precision; but the effect is well ascertained.

It is a fact, that shorthorned cows seldom calve without *assistance*. The hour of calving is watched, with obstetric solicitude; the person who has the care of them frequently rising in the night, and sometimes sitting up with them, the night through. From constant

stant observation, however, a skilful dairyman will judge, at bedtime, the hour of calving, sufficiently near, to know whether it will be necessary for him to rise, before his usual hour.

4. *Markets for Cows.* Milking cows are mostly sold, at the neighbouring fairs, *with calves by their sides.* Sometimes, but not frequently, they are sold as *incalvers.* The medial *price* of a cow and calf, on a par of the last ten years, has been seven to nine pounds.

Dry cows—provincially, “drapes”—are either sold, at the fairs, to jobbers, who buy them up for the Midland or South-of-England graziers, or are fatted, on the dairy farm, with aftergrass, turneps, &c.—The medial *price* of a lean “drape,” of the Vale breed, on a par of the last ten years, has been five to six pounds.

III. REARING. This department of the subject is naturally broken into three stages; rearing cattle requiring different kinds of treatment, at different ages.

I. CALVES. 1. *Time of rearing.* Candelmas to Old Ladyday.

2. *Points of a rearing Calf.* The *form* I pass over, in this place, as not having met with

with an accurate definition of it, in this country; where the *blood* and the *color* seem to be more attended to, by breeders in general, than the form.

A “*raw nose* ;” that is, a *white muzzle*, with nostrils red on the inside, is considered as a bad mark ; portending a tender animal : on the contrary, a black or brown muzzle, with dark-colored nostrils, is esteemed a sign of hardiness.

A calf *entirely white* is generally rejected, under a notion that white cattle are of a tender nature ; that they are peculiarly subject to lousiness ; and that they are disliked by their associates ! The finest ox, I ever knew, of the Holderneſs breed, was *white*. The finest ox, I ever ſaw, of the Teeswater breed, was *white*. One of the finest cows, now in the Vale, is *white*. Nevertheless, valuable calves are annually ſent to the butcher, merely becauſe they are *all white*. The ſmalleſt ſpeck of color ; even the tip of an ear, red or black ; ſaves them from proſcription : under a notion, no doubt, that it hardens their nature ; defends them from lice ; and renders them acceptable to their companions : a vulgar error, which is not confined to this
District ;

District; but which ought, in my opinion, to be universally exploded*.

3. *Castrating Calves.* OXEN, in this country at least, are subject to a stoppage in the intestines; owing, it is believed, to the "blood strings" of the testicles being left in the body, at the time of castration. The fact seems to be, that the disorder is generally caused, by a link of the intestines being thrown (in playing, it is supposed) across a cord or membrane, in the hind part of the abdomen; and the cure is radically effected, by breaking it: an operation which is not unfrequently performed †.

If

* 1796. The wild Cattle of Chillingham Park, in Northumberland, are uniformly white; except the insides of their ears, which are of a brown color.

† I remember to have once seen this operation; and have lately heard it minutely described, by a person who has repeatedly performed it. It is simple and safe. An orifice, large enough to admit the hand, being made in the coats of the abdomen—on the near or left side—(between the ribs, the huckle, and the flank) the intestines are drawn forward into their natural situation, and the string broken: otherwise, the animal is liable to a repetition of the same disorder. The symptoms are restlessness, with attempts (but not violent, I believe) to beat the belly with the hind legs; and with a stoppage of the fœces; nothing passing through the body but a white slimy matter. In many places, I apprehend, this disorder is not well understood; being mistaken for some other internal disorder. Death is the certain consequence.

If the suspension be really effected, by a string of the testicle, indexterously left in the calf, at the time of castration, much caution is requisite in this operation.

An experienced cutter performed it thus : Having extricated the testicle, and cut the seminal cord — the “ nature string,” — he forced his finger and thumb upward, as it were into the body of the calf, (which *stood on its legs* during the operation) drawing the “ blood string” twelve or fourteen inches long : the point of it appearing, not abrupt, as if broken off ; but fine as a thread, as if wholly extracted.

4. *Treatment of rearing Calves.* This differs, in the practice of different individuals. In an instance which, perhaps, may be considered as a fair specimen, the treatment is this :—The calf never sucks its dam ; but has her milk, warm from the teat, given to it, twice a day, in a pail,—from the time of calving, until it be a fortnight or three weeks old. At that age, the calves begin to have half new milk and half skim milk, *boiled* (which is thought to be more “ nourishing” than raw milk) for about three weeks longer : they are then put to all skim milk, or to milk and water, with perhaps a little oatmeal or wheat

wheat flour strowed over it * ; and with hay, in the early part of the season ; or grafs, as soon as spring puts in. In the latter end of May, or the beginning of June, according to the time of their being dropped, they are turned away to grafs and water, only, for the summer ; with sometimes rape herbage, in autumn.

2. YEARLINGS. Young cattle are, I believe, invariably housed, the first winter :—generally loose ; and are indulged with the best hay the farm will afford. Their summer pasture is such as conveniency will allow them : mostly of a secondary nature. In the open-field state, the common was their summer pasture.

3. TWOMEAROLD CATTLE. The second winter, oat straw is the common fodder of young cattle. They are generally tied by the neck, in hovels, or under sheds. Their summer pasture, commons, woody wastes, rough grounds, or whatever best suits their owner's conveniency.

At

* Sometimes, a small quantity of LINSEED JELLY is mixt with thin milk and water, and is found of great service ; making their skins remarkably sleek and silky. If too much be used, it is liable to make them scour.

At two years old, the STEERS — provincially, “stots,” — are generally familiarized to the yoke, but are not, by good husbandmen, worked much, at that age.

At two years old, also, the HEIFERS — provincially, “whies,” are generally put to the bull. This, however, is not an invariable practice. In the state of commonage, they were frequently kept from the bull, until they were *three* years old: now, in the state of inclosure and improvement, and at the present high rents, they are frequently suffered to take the bull, when *yearlings*; bringing calves at two years old.

GENERAL REMARKS ON BRINGING HEIFERS INTO MILK.

This is an interesting subject, in the management of cattle. Farmers, in every District, differ in their opinions respecting it.

The arguments, for bringing heifers in, at TWO YEARS OLD, are, that they come sooner to profit; and that farmers cannot afford, at the present rate of rent, to let them run, unprofitably, until they be three years old.

On the other hand, the argument, in favor of bringing them in at THREE YEARS OLD, is

is that, not being stunted in their growth, they make larger finer cows, than those which are suffered to bear calves, at a more early age.

But I have not yet met with any man, who even attempts to prove, which of the two is, upon the whole, the more profitable practice.

The gardener seems to be well aware, that suffering a tree to bear fruit, too early, *checks its growth*; and there may be some analogy, in this respect, between vegetables and animals. But even admitting this, if the cow receive no injury, as to *thriving, calving, milking*, nor any other than that of being checked, in point of *size*; the objection appears to me to fall. If, however, early production check, not only the *cow*, but her *progeny* likewise, an objection no doubt will lie against it.

I have long been of opinion, that it is, *in general*, the farmer's interest to let his heifers take the bull, whenever nature prompts them. There is, undoubtedly, some present profit arising from their coming in, at an early age; and whether a middle-sized cow may not, afterwards, afford as much *neat* profit, as one of larger stature, is certainly a moot point.

Much, however, depends upon KEEP. A starveling heifer will not take the bull, at a year old. Nor ought any yearling heifer, which has taken the bull, ever afterwards; to be stinted in keep. If she be ill kept, while with calf, there will be danger at, or after, the time of her calving. If afterwards pinched, there will be danger of her not taking the bull the next year.

Hence, we may infer, with a degree of safety, that the propriety, or impropriety, of bringing heifers into milk, at two years old, depends, principally, upon SOIL and SITUATION.

On a good soil, and in a genial climature, in which heifers do not experience a check, from the time they are dropt, they ought, I am clearly of *opinion*, to be permitted to take the bull whenever nature prompts them.

But, in less genial situations, where lean ill herbage lands are to be pastured with young cattle, it appears to me equally evident, that heifers ought not, in strictness of management, to be suffered to come into milk, before they be THREE YEARS OLD.

IV. FATTING CATTLE. Although grazing has, of late years, gained some footing in the Vale, it does not yet fall under the
deno-

denomination of a *grazing country*. A detail of management must not, therefore, be expected: and the only *incident* of practice, which has occurred to my notice, and which appears to be entitled to a place in this register; is the following; at once, evidencing the propriety of *finishing* highly; and giving a favorable specimen of the YORKSHIRE BREEDS OF CATTLE.

The subject of this incident is a cow, which was bred and fatted in this neighbourhood. Her dam was of the improved breed of the Vale, with an admixture of the Craven or longhorned breed. Her sire a Teeswater bull of the first blood; being leaped at half-3-guinea a cow; which, twelve years ago, was a very high price.

From the time of her being dropped, she was remarked as a good thriver; she came in, at three years old; had one cow calf, which was reared, and three bulls, all of which died before they were three weeks old! they being seized, about that age, with a numbness in their limbs; soon dying with jellied joints, and symptoms of a general mortification. Like most high bred cows, she milked well for a few weeks after calving;

but, afterwards, fell off her milk, and generally got to be good beef, about Michaelmas.

After her last calf, (in 1782) she was milked until August; when she was tolerable beef; worth, at the then low price of beef, about ten pounds. In autumn, she had aftergrafs; in winter, turneps, hay, and oat-sheaves (in the house), but no ground corn. In March 1783, she was sold for twenty pounds, to return one guinea: consequently, she paid more than six shillings, a week, for fattening.

Her dimensions, a few days before she was slaughtered, were these:

Height about four feet six inches (not accurately taken).

Smallest girt seven feet six inches.

Largest girt nine feet.

Length from shoulder-point to huckle four feet.

Length from huckle to the extremity of the nache, two feet two inches.

Width at the huckles from out to out, two feet two inches.

Her *horns* fine; of a whitish-grey color; sharp; somewhat resembling the Craven horn; but shorter; and turned upward at the points, in the middle-horn manner: her

head

head and *neck* small and clean; her *legs* short, and her *bone* throughout fine.

Her *points* as to fatness were not all of them full. Her *kernel* was small, and her *shoulder* bare; her *fore-dug* and *flank* not extraordinary; her *chine* and *loin* were well laid up; one dimple, but not regularly cloven; she was not what is called fat *upon*: but her *rib*, her *buckle*, and her *nache*, were very good; and her *twist* remarkable; bulging out in an extraordinary manner*.

She *proved* as follows: the quarters equal; exactly eighteen stones each; together seventytwo stones (fourteen pounds each); the tallow eight stones; the hide seven stones.

O 3

The

* Taking the DIMENSIONS OF CATTLE, and describing their POINTS with minuteness, is not merely a matter of curiosity. Nothing matures the judgement, more speedily, nor gives a more adequate idea of the due proportion of the parts of a bullock. I never, however, understood that the admeasurement of cattle was reduced, anywhere, to *common practice*, until lately. In the West of Yorkshire, I am told, the manufacturers, who kill their own beef, carry measuring tapes to market with them. The butcher, by constant practice, may be a match for the grazier, with his eye alone: but it is certainly prudent, in the clothier, to take his *measure* with him also.

A WEIGHING MACHINE would, however, in this case, be a much safer guide. One, fixed in a single stall, opening with folding-doors to the street, would be a good appendage to any market-place.

The weight is not remarkably great ; but, that a *small* cow should lay it on, in *seven months*, is extraordinary.

GENERAL REMARKS ON THE PRESENT SCARCITY OF CATTLE, IN THIS ISLAND.

The present *dearness*, arising beyond dispute from a *real scarcity*, of cattle appears to be a matter of serious import to the community. Had it not been for the immense influx of Irish cattle, which have, during the last three or four years, poured into this Island, the grazing grounds could not have been fully stocked ; nor the markets well supplied. There is not, generally speaking, any *aged* cattle left, in *this* kingdom.

There can be only two reasons of this scarcity : either the CONSUMPTION OF BEEF must have lately *increased*, or the REARING OF CATTLE must have *diminished* ; or the effect must have been produced, by the joint operation of the two causes.

I wish to bring the matter to a rational issue ; and have endeavoured to collect evidences in the Districts I have visited. This District affords two, which appear to be admissible.

Twenty or thirty years ago, there was not, for the smaller markets of *this* District, a single cattle killed (except upon some extraordinary occasion) during the winter, spring, or summer months. In autumn, particularly in the month of November, considerable numbers were butchered, to be salted and hung for winter provision; "hung-beef" being formerly, a standing dish, not only in this, but in other Districts*. But the number which were then killed, in autumn, was small, compared with the much greater numbers that are, at present, butchered in the District; every market of which is, now, plentifully supplied with beef, the year round; and this, notwithstanding considerable quantities are still hung in autumn. The market of Malton might well vie with the London

O 4

markets,

* HANGING BEEF. Formerly, before the cultivation of turneps, &c. as winter food of cattle; and before the use of oil-cake, &c. was known; more especially in *open* countries, at a distance from marshes, fens, and rich *bay-land* Districts; the practice here noticed was a thing of necessity. The only opportunity the husbandman had of raising his cattle above the half-starved common-pasture condition, was in the wane of summer, with the aft rgrass of the common meadows, and the stubbles of the common fields: these done, his sources of *fattening* were exhausted, without a possibility of renewal, until the wane of the ensuing summer.

markets. If only twice the quantity of beef be consumed in the District, now, which was, fifty years ago, the evidence is good.

Twenty or thirty years ago, great quantities of young stock, bred in the common pastures, and in the rough grounds of the marshes, and other central parts of the Vale, were annually sent out of it. The number of lean oxen, too, which were sent out of the country, was very considerable. Now, the Vale, perhaps, barely rears its own stock. A few young cattle may go out of it every year; but a number of Scotch and some Irish heace, and generally more or fewer young cattle from the Teeswater quarter, are annually brought into it. A few lean oxen, (few in comparison with what formerly went out) with some barren cows, and a surplus of fat cattle, driven to the ports of Whitby and Scarborough, may be said to be the only cattle which the Vale, at present, sends to market.

The causes of this decline are the increase of horses, the increase of tillage in the lower parts of the Vale, and the increase of the dairy upon its margins; an increase of grazing grounds in the richer parts, and, throughout, an increase in the consumption of beef.

This,

This, too, may be fairly admitted, as a circumstantial evidence at least, of a growing scarcity of cattle, at present, in these kingdoms. I mean a scarcity comparatively with the present consumption.

29.

THE DAIRY.

BUTTER being a principal object of the Vale husbandry, a separate section may with propriety be assigned, in this case, to the Management of the Dairy; — whose productions, in the Vale under survey, are the following:

- I. Calves, for the butcher, and for rearing.
- II. Butter, for home consumption and the London market.
- III. Skim-cheese, for home consumption.
- IV. Hog liquor.

I. CALVES. The REARING of calves has been spoken of in the last section. The FATTING of calves belongs properly to this.

There

There is a practice, pretty common in this neighbourhood, though not general, which merits notice, from its singularity, rather than from its excellency. In this practice, the calf never sucks its dam! which, from the time of her calving, is milked into a pail, and the warm milk immediately given to the calf; which, never having had the teat, soon learns to drink.

The chief reason given for this practice is, that the cow does not pine after her calf; so much, at least, as when it is permitted to suck her.

For *rearing* calves, I can see no material objection to this method, except that of additional labor, which is still more increased when calves are *fatted* in that way; the time being longer in this case: and it seems to be allowed, that calves do not fat so kindly, with the pail, as when they suck the cow; nor is it, probably, so good for the udder of the cow.

II. BUTTER. Great quantities of butter are annually sent out of the Vale. Many thousand firkins are sent, from Malton; and the produce of the west end of the Vale goes principally, to York.

The fraternity of cheesemongers, in London, have agents, placed in different parts of
the

the country, stiled "searchers," who probe and examine the quality of every firkin; and mark it *first*, *second*, *third*, or "grease," according to its intrinsic quality.

The *firsts* and *seconds* go to the London market; the "grease" to the woollen manufactory in the west of Yorkshire.

There are "weighers" likewise employed, to check the weight of each firkin, each of which has its maker's name branded upon it. These are wise regulations; the searchers' mark is a guide for the London dealer, as the farmer's name is for the country "factor." If it will not bear the search, the factor has a clue to the farmer; if, on its arrival in London, it do not answer the mark, it is returned upon the searcher.

After what has been said, in the RURAL ECONOMY OF NORFOLK, on the subject of BUTTERMAKING, there is nothing, in the practice of this District, entitled to minute description. There are, nevertheless, a few particulars which may merit notice.

CLEANLINESS, the basis of good management, is well attended to in most dairies; perhaps too closely in some. Formerly, the milk was set wholly in deep wooden bowls, almost
semi-

femi-globular: a worse form could not be well devised. Now, it is set, principally, in leads — provincially, “lead-bowls” — made in the usual broad flat shallow form; a form much better calculated for raising the cream*.

These leads are *scalded*, as often as they are used, and, in common practice, are *scoured* about once a month. But this has been found, in the practice of one whose cleanliness cannot be doubted, to be injurious to the butter, churned next after the scouring of the leads. The effect is not immediately apparent; but the butter will not keep; presently turning rancid. She therefore scours her leads, only once a year; about Mayday; and then with fine sea-sand; not with

* In some countries, MILK-LEADS are skimmed with a skimming-dish: here, the milk is let off, through a hole in the center, leaving the cream in the lead. The pipe through which the milk escapes is fitted with a tall wooden stopper. Previous to drawing the stopper, a loose wide leaden pipe, seven or eight inches long, is put over it. The base of this pipe is notched, or otherwise made uneven, so as to admit the milk to steal away beneath it, without endangering the escape of the cream; which (the pipe being removed) is afterwards let down through the same aperture.

with *salt*; the common material used in scouring lead bowls *.

The BARREL CHURN is now chiefly in use. An improvement has lately been made in its form. Formerly, the staves were nearly straight; now they are bent; the churn being made considerably bulging. By this means a churn, large enough to churn a firkin (56 lb.) at once, may be used to churn three or four pounds. The entire quantity of the cream, though small, being collected in the bulge, receives its due agitation. The "standing churn," an awkward utensil, seems to be going out of use. A barrel churn, two feet and a half long, two feet diameter at the mouth, and twentyone inches at the ends, with dathers six inches wide, will churn either a firkin, or a few pounds, of butter. The price of such a churn is about fifty shillings; iron hoops, cranks, frame, &c. inclusive.

The FIRKINS are made in the neighbourhood, at very low prices (price of a "whole
"firkin,"

* I mention this circumstance, as many "grease firkins" may be made through the means here noticed; and, if the evil effect be caused by a solution of the particles of lead, loosened by the scouring, the butter, if eaten in a recent state, may be of still worse consequence.

“firkin,” weighing 12lb. is 10d. to 1s.—of a “half firkin,” weighing 7lb. 8d. to 9d.): The staves and heads of ash; the hoops principally of hazle.

IN PUTTING DOWN BUTTER, the firkin is scalded and salted on the inside, previously to its being used: salt is strewed at the bottom; the butter closely kneaded in; covered at the top with salt; and headed up for market.

The “first gathering” is generally SENT TO MARKET, in the spring, in a recent state; the “summer butter” (namely, that gathered between the latter end of May and the beginning of November) is sent, from time to time, as the factor’s or the farmer’s convenience requires; or is sometimes kept to the close of the season, and carried at once to market.

The PRICE of firkins, for the last ten years, has been 28s. to 32s.

III CHEESE: Skim cheese — provincially, “old-milk cheese”—is the natural accompaniment of a butter dairy. In the lower parts of the Vale; towards the banks of the Rye, some “new-milk cheeses” are made; and of a quality nearly equal to those of Gloucester-

Gloucestershire. But on the marginal parts of it, this species of cheese is seldom attempted.

I have met with nothing striking enough, in the manufacturing of skim cheese; to deserve notice; excepting what relates to the CURD MILL; a utensil of the dairy, which I never met with, elsewhere, and which is new to this District.

IN MAKING SKIM CHEESE, the curd is broken up in the whey; the whey, when the curd has subsided, laded off; the remainder, with the curd, thrown into a coarse strainer; and having lain abroad in this (spread over a large tray, with a hole at the corner to let out the whey which drains through the cloth) until quite cool, the corners and loose part of the strainer are gathered together, in the hand, and the curd squeezed, as hard as the hands can press it. The curd in the strainer is then put into a vat, and set in the press, for a few minutes, to discharge the remaining whey more effectually. The whey having done running, the curd is taken out of the press; and rebroken, as finely as possible; salted; and returned to the press.

It is in the final breaking the CURD MILL is used. The labor of doing it, by hand, when

when a large quantity of curd is to be broken, is almost intolerable. In a large dairy, a curd mill is found very valuable *.

The CONSUMPTION of skim cheese is, principally, in the neighbourhood of its manufacture. It is eaten by almost all ranks of people. If well made, it is not only palatable, but, I apprehend, a very wholesome food. To have it in perfection, it should be "kept one year under another:" that is, should not be eaten under a year old.

The PRICE, on a par of the last ten years, has been 2s. to 2s. 6d. a stone (of 14lb.).

IV. HOG

* CURD MILL. This utensil consists of two rollers, working, in a thin deep chest, one above the other; on the principle of the common cider-mill of the Southern counties. The upper one is stuck with iron spikes, an inch long, and $1\frac{1}{2}$ inch asunder. The lower one is closely set with bevel-headed nails, rising with a sharp angle, or point, about a tenth of an inch out of the surface of the roller. The curd, partially broken, is put into a hopper, the bottom of which is the upper roller: this, working against the side of the box, prepares the curd for the bottom roller; which being finer, and working closer, grinds it down to small granules. The rollers are about six inches diameter, and fifteen inches long. They are both of them turned by one crank; put on one end of the axle of the upper roller. On the opposite ends of the rollers are fixed two even-toothed wooden wheels; working in each other, and giving motion to the lower roller.

IV. HOG LIQUOR. The whey of skim milk is only a lean beverage for swine; but mixt with buttermilk, a tolerable food is formed. Pigs, however, are only *grown*, seldom *fatted*; with the “swillings” of the dairy.

The PRODUCE of a good Cow, in a common year, is thus calculated :

A rearing calf	-	0	15	0
3 firkins of butter *, at 30s.		4	10	0
½ cwt. of skim cheese, at 18s.		0	9	0
Milk and whey for hogs		0	10	0
		<hr/>		
		£.6	4	0
		<hr/>		

30.

S W I N E.

THE HUSBANDRY of swine has undergone a total change, in this part of the District, within the last thirty or forty years.

Formerly, there was scarcely a BREEDING sow in the Vale. The entire supply of store

VOL. II.

P

pigs

* A large dairy of cows, in which heifers are intermixt, seldom turn out three firkins each. Two and a half is, I believe, esteemed a good produce; taking the dairy round.

pigs was from the Wolds, through the medium of Malton market. Now, they are bred wholly in the Vale.

The BREED, too, has been totally changed. The Wold pigs were of the white, gaunt, long-legged sort, which appear to have been, formerly, the prevailing kind throughout the kingdom. Now, the black-fandy Berkshire breed is prevalent; with a mixture, here, as in other places, of the oriental race.

There is a variety of the last, the individuals of which have two very valuable properties. They are remarkably *cadish* and quiet; of a disposition directly opposite to that wildness and ferocity, which I have experienced in other varieties of this race of animals, in different parts of the Island. Their other good quality is that of their *pasturing* freely; not only upon the better grasses, but upon some of the more noxious weeds; particularly the *dock*. This is a property of swine, which is worth attending to, by the breeders of this species of livestock.

The GENERAL MANAGEMENT of swine, in the Vale, has likewise undergone a change. Formerly, the Wold pigs which were not fatted, for home consumption, were returned
to

to Malton, fully grown and fleshy, but not fat; and were there sold; to drovers, who bought them up, probably, for the distillers, starch-makers, &c. of the metropolis. Now, the surplus, which is much greater than formerly, are fatted, butchered, and sold whole, to bacon makers; who salt and dry them, for the London and West Yorkshire markets.

31.

S H E E P.

THEIR GENERAL ECONOMY.

THERE ARE FEW large flocks kept in the VALE. The farms are chiefly small, and the commons are, now, mostly inclosed. Almost every farmer, however, keeps a few; so that, on the whole, the number kept is considerable.

The general economy of sheep is here very simple. Every man, let his number be great or small, rears his own stock: his store

flock (in the inclosed parts of the Vale) consisting of ewes,—hoggards,—and shearling widders; his returns being in fat lambs,—two-shear widders, (lean or fatted on turneps, hay, &c.) and aged ewes. In the richer parts of the Vale, shearling widders are fatted.

But, in the MORELANDS, and upon the heights of the northern margin, where considerable flocks are kept, especially in the more central parts of the Morelands, a different economy prevails. The lambs are all reared, and the widders generally kept, until they be three or four years old; mostly selling them and the aged ewes, lean, in autumn, to the Vale farmers: or, if the walk—provincially, the “heaf”—be good, they will sometimes get fat enough, upon the heaths, for the butcher.

The particulars to be noticed, in this place, are

- I. Breed.
- II. Rearing.
- III. Treatment.
- IV. Markets.

I. BREEDS. The old COMMON stock of the Vale was a thin-carcafed, ill formed, white-faced, hornless breed. This (perhaps a weak dege-

degenerate variety) has of late years been so much improved, as no longer to bear marks of its former degeneracy. I speak of the more highly improved flocks of the Vale. The old base blood may still be detected, in the flocks of less attentive breeders.

The IMPROVEMENT has been effected, by the introduction of rams of the Leicestershire, and the Teeswater breeds; the former purchased, or hired, of Mr. CULLY of Northumberland (a spirited and successful disciple of Mr. BAKEWELL of Leicestershire); and the latter of Mr. COLLINS, and other attentive breeders, in the neighbourhood of Darlington, on the banks of the Tees.

Fortunately, perhaps, for the Vale, two of its most considerable farmers, to whom it is principally indebted, for its present improved breeds of stock, differ in their opinions respecting the superior excellency of these two breeds of sheep; each of them propagating, and encouraging, his own favorite breed.

Both of them are excellent, though perhaps widely different in their origin. Of the Leicestershire breed I say nothing, in this place, as I may, hereafter, have occasion to

speak of it fully *. The Teeswater breed falls within the intention of the present work.

The "MUD" sheep have been inhabitants of the banks of the Tees, time immemorial: I remember them, twenty years ago, of enormous size, resembling, when their wool was in full growth, the smaller breeds of cattle, rather than sheep. Their *flesh*, nevertheless, was of an excellent quality; their *wool* (as long wool) fine, and of an uncommon length, singularly adapted to the worsted manufactory.

The present fashionable breed is considerably smaller, than the original kind; but they are still much larger and fuller of *bone*, than the Leicestershire breed. They bear an analogy to the shorthorned breed of cattle, as those of the Midland counties do to the longhorned. They are not so compact, nor so neat in their form, as the Leicestershire sheep; nevertheless, the excellency of their flesh and fatting quality is not doubted; and their wool still remains of a superior staple. For the banks of the Tees, or any other

* See the RURAL ECONOMY of the MIDLAND COUNTIES, first published in 1790.

other rich-land country, they may be singularly excellent*.

The MORELAND breed of sheep has always been very different from that of the Vale, and has not varied, perhaps, during a succession of centuries. It is peculiarly adapted to the extreme bleakness of the climature, and the extreme coarseness of the herbage. They live upon the open heaths, the year round. Their food heath, rushes, and a few of the coarsest grasses; a pasture on which, perhaps, every other breed of sheep of *this* kingdom would starve.

The Moreland sheep resemble, much, the Scotch sheep, which are sometimes brought into the Vale †: their horns wide; the face

P 4

black

* In this District, the Leicestershire sheep appear to gain a preference. One leading breeder lets out a considerable number of rams every year; and has already got the prices to ten or fifteen guineas, for the season.

† 1796. I had conceived this variety of BLACK FACED SHEEP to be of Scotch extraction, before I had had an opportunity of examining the breeds of Scotland. But there are circumstances which render it more than probable, that they travelled northward, from the mountains of Yorkshire and Westmoreland, to those of the South of Scotland: from whence they are now travelling in the same direction;—and have, within these few years, made their first entry into the Highlands; where they are supplanting the short-

tailed

black or mottled ; in *countenance* and general appearance, very much resembling the Norfolk breed ; except that their wool is somewhat longer, and much coarser, than that of the Norfolk sheep. The covering of their buttocks is mere hair, resembling the shag of the goat, rather than the wool of sheep. But this is considered as a mark of hardiness ; and the Moordale shepherds prefer a coarse-wooled shaggy tup *. The carcases of these sheep are small ; not much larger than the heath sheep of Norfolk : the ewes, moderately fattened, weighing from seven to ten pounds, the widders ten to fourteen pounds, a quarter.

II. BREEDING. The common TIME OF PUTTING EWES TO THE RAM, in the Vale, is from old Michaelmas to the latter end of October ;

tailed or Shetland breed ; which have long been the established inhabitants of the Northern mountains ; as the long-tailed or Cheviot breed have been, in much probability, of the Southern . and still remain in full possession of part of the borders : where, it is possible, the introduction of the "black faced breed" might still be traced. The subject, though no. important, is interesting to what may be styled AGRICULTURAL HISTORY.

* 1796. A circumstance, which alone, perhaps, has debased their wool, and varied them from the Norfolk breed.

October ; bringing them in, the latter end of March, or the beginning of April. In the Morelands, the latter end of November, or beginning of December, is chosen for the time of putting to, in order that the snows may be pretty well over, before the time of lambing.

If TWIN LAMBS be preferred, the ewes are put to superior keep, a few weeks before the ram be admitted. This, likewise, brings them in nearer together, than when they are put to the ram, in low condition.

It is also understood, by attentive shepherds, that ewes ought to have an increase of keep, a few weeks *previous* to their lambing ; but less judicious sheep masters think it sufficient to put them to good keep, *as they drop their lambs.*

This, however, is a faulty practice. If there be any *mystery* in the rearing of sheep, it lies in giving the ewes a FLUSH OF MILK, *at* the time of lambing. This cannot be done without putting them to good keep, a fortnight or three weeks, *before* that time. An additional supply of milk cannot be *commanded* in a few hours. The carcase of the ewe, as well as her udder, may require to be saturated,

saturated, at the time of lambing, left, *in the interim of preparation*, the lamb be stunted or starved.

Another practice, to which attentive breeders pay due regard, is that of TRIMMING—provincially, “docking”—breeding ewes, as early in the spring as the state of the weather will permit. I have seen the bags of ewes (of the modern breed) so heated with the dung and urine, which hung about them, as to become chafed to running sores. The bag ought to be trimmed, a few weeks before lambing (when the ewes are put to fresh keep), and the tail and buttocks, as soon as warm weather set in.

GEN. OBS. ON BREEDING FLOCKS. To render the breeding of sheep profitable, much attendance and attention is requisite. A *few* ewes, therefore, cannot be worth the notice of any man, except a small painstaking farmer, who has little else to attend to. I have seen more labor and attention thrown away, upon a score of ewes, than their whole produce was worth. A ewe flock, large enough to employ a shepherd, is, in many situations, the most profitable stock.

III. MANAGEMENT OF STORE SHEEP. The only particular of management, which is here entitled to notice, is that of dressing them in autumn, with tar and grease — provincially, “SALVING;” — the tar and grease, with which they are anointed, being aptly enough termed *salve*.

How the practice was first introduced, into the District under survey, does not appear to be at present known, though not of more than fifty years standing*.

The intention of this practice is to kill lice, prevent the scab, and make the wool grow; and another idea, I believe, is, that it fortifies the skin against the severity of the winter's cold.

Whether it answer all or any of these intentions I will not assert. Whatever may be its effects, it has now been the invariable practice of the District, for near half a century. I have not at least met with more than one man who has deviated from it, through principle.

This

* 1796. This practice travels with the mountain breed of black faced sheep! But what I have seen done, in Scotland, was executed in a manner much inferior to that of the Eastern Morelands of Yorkshire.

This deviation, however, is made by one who seldom acts from caprice. He does not wholly deny its use, but thinks its effect is very transient. He has found tobacco water more effectual against vermin;—oil of tar, if cautiously used, a safe and certain remedy of the scab;—and is of opinion, that salving is of little if any use to the growth of the wool: he allows that it may encrease the *weight* of the wool, in proportion to the quantity of dirt it contracts, but thinks it does not add to the *quantity*.

Whether it does or does not may, nevertheless, be a moot point:—ointment rubbed, on a recent scar of a horse, is believed to assist the hair in growing. Pomatum is allowed to encourage the growth of the human hair; and it is *probable* that salve may have *some* effect on the growth of wool: the only doubt with me is, whether the advantages, upon the whole, are adequate to the expence.

This is a matter difficult to be ascertained: I can say, that the scab does not appear to be less prevalent, in this, than in other Districts: and it appears probable, to me, that, notwithstanding the present prevalency of the practice, it will in time wear away. I will, nevertheless,

vertheless, here give a detail of the process; not to prolong its continuance, but to memorize a practice, which, at present, gives cold and dirty employment to thousands, some weeks, in every year.

The *mixture* is eight pounds of *butter* (of the second, third, or fourth quality—see article DAIRY) to one gallon of *tar*. The butter being dissolved, the two ingredients are poured into a tub or other vessel, and stirred, for some time, with a long wooden spatula; agitating them violently, and uniting them intimately together. The general guide is to keep stirring, until the butter has regained its stiffness, sufficiently, to hold the stirring stick erect in the ointment; which, when quite cool, is of the consistence of butter in warm weather. Some put the tar previously into the “salve-tub,” and stir that, alone, until it loses its blackness, acquiring a mellow yellowish hue; then add the dissolved butter, and continue stirring until the stick stand on-end. If the butter be heated too much, it is thought to injure the tar: it should be barely *oiled*.

The *time* of salving is from Michaelmas to Martinmas.

The

The *method* is this: the feet of the sheep being bound, it is laid upon a bier—provincially, a “creel”—(about six feet long—two feet wide in the middle—twentyone inches toward the ends—with four legs about two feet long). The “salver” sits astride of one end of the creel, the shoulder of the sheep resting against his thigh; its head under his arm. He begins the operation by parting, provincially, “shedding,” the wool, from the withers to the tail, leaving a straight open “shed” or cleft in the wool, the whole length of the sheep. This cleft ought to be perfectly straight, and clear at the bottom; a form which practice only can give it. It is made by taking the wool in the hands, and pulling it asunder; giving straightness to the cleft, with the thumbs. The fissure made, and the wool pressed down flat on either side with the hands and wrists, the workman takes a piece of ointment, the size of a large hazle-nut (from a kind of dish formed out of a block of wood in the shape of a cheese), upon the *side* of the end of his fore finger, and applies it to the skin of the sheep; driving it along the bottom of the shed, (some six or eight inches, till the whole be expended,) with

with a degree of sleight which experience alone can teach: the perfection of the art lies in distributing the ointment, evenly, and in applying it entirely to the *skin* of the animal, without fouling the *wool*, except immediately at the root. One "finger-full" being expended, another and another is applied, until the whole length of the first shed be finished: when a second cleft is made, about an inch or an inch and a half from the first. In making the second, and every succeeding shed, the fingers of one hand are kept in the last-made cleft, by which means an experienced workman is enabled to make the partings, parallel with each other. Towards the back of the sheep, the sheds are made closer to each other, than they are beneath its barrel; where the wool being thinner, the scab is less liable to make its attack.

Ten or twelve sheep, of the middle size, are esteemed the day's work of one man. His wages, and board, fifteen to eighteen-pence, a day.

The expence is thus calculated: thirty sheep take eight pounds of butter (seconds, thirds,

thirds, or greasé), worth on a par	
fourpence halfpenny a pound	3 0
One gallon of tar	1 0
Labor	3 6
	<hr/>
	7 6

Five shillings, a score, or threepence, a sheep.

IV. MARKETS. West Yorkshire is the principal market for Wool. Formerly, a manufactory of coarse woollen cloth was carried on, in the Eastern Morelands; but, at present, it is almost wholly laid aside.

The following are the weights and values of the fleeces, of different breeds of sheep, in the District:

Moreland store ewes, one and a half pound,
at 4d—6d each!

— — — aged widders, fatted in the Vale,
two and a half pounds, 4d—10d.

Ewes of the old Vale breed, summered on a
common, four pounds, at 6d—2s.

Two sheer widders of the same breed, four
and a half pounds, 2s. 6d.

Ewes of the improved breed, summered in
inclosed grounds, seven pounds, at 5d—3s*.

Wool

* None of the sheep, from which the above fleeces were taken, were saved.

Wool is here sold by the *stone* of *seventeen* pounds.

The markets, for CARCASSES, are the market towns in the neighbourhood, and the ports of Scarborough and Whitby.

The price of mutton, in the markets of the Vale, ten years ago, was twopence halfpenny to threepence a pound. This year (1787), fourpence to fourpence halfpenny a pound.

But the most substantial evidence, I have any where met with, of the recent rise in the price of live stock, may be taken from the Moreland *store* sheep; a species of stock which has undergone no change whatever, either by breeding, or by cultivation.

The price of Moreland *store* ewes, ten or fifteen years ago, was two shillings and sixpence to five shillings, a head. This autumn, they were sold for eight shillings and sixpence. The price of Moreland *store* widders, the same distance of time ago, was six to eight shillings, a head. This autumn, they have been sold for fourteen shillings!

32.

R A B B I T S.

THE VALE affords few rabbit warrens. The northern margin is the only part of it adapted to this species of livestock. At *Dalby*, there are two pretty large warrens. At *Lockton* there is one now "planting." And there are other parts of these heights which might be profitably stocked with rabbits. In general, however, property is too much intermixed to admit of an improvement, which is singularly adapted to the nature of these high grounds.

In situations where the *ground* *, as well as the soil, is suitable to rabbit warren, and where an extent of it, sufficiently large, can be collected together in one property, there is a very strong reason why it may be profitably stocked with rabbits.

The

* See NORFOLK: Art. RABBITS,

The hide of a bullock (of some breeds) is not worth more than one twentieth of his carcase. The skin of a sheep may, in full wool, be worth from a sixth to a tenth of its carcase. But the fur of a rabbit is worth twice the whole value of the carcase. Therefore, supposing the rabbit to consume a quantity of food, in proportion to its carcase, it is, on the principle offered, a species of stock nearly three times as valuable as either cattle or sheep.

This theory is strongly corroborated, by an incident of practice. One of the warrens of this District contains eighteen hundred acres of surface; most of it covered with a black Moreland soil; part of it a barren dead gravel; some little of it a thin limestone loam; not worth perhaps, on a par, *for the common purposes of husbandry*, a shilling an acre; nevertheless, these eighteen hundred acres are let, *as a rabbit warren*, for three hundred pounds, a year!

I will not pretend to say, that the warren, here alluded to, is worth three hundred pounds a year, nor assert that it is not worth a shilling, an acre, to a husbandman. If it be worth two hundred and fifty pounds, as a warren, and supposing it to be worth even

two shillings an acre, as a farm, it still is a sufficient evidence of the profitableness of rabbit warrens, in proper situations.

As I shall, in giving a sketch of the husbandry of the WOLDS, have occasion to speak fully of this species of stock, it is needless to dwell on the subject, here.

33.

P O U L T R Y.

NOTHING sufficiently striking has occurred to me, in this District, respecting the management or the breeds of poultry, to excite particular notice. The different species, and the management of them, are on a par with those of the Island in general.

BEES.

34.

B E E S.

THIS may be called a Bee country;— especially the Morelands, and the northern margin of the Vale; where great numbers of bees have been usually kept; and great quantities of honey collected; chiefly from the flowers of the heath, which afford an abundant supply; but the produce is of an inferior quality; brown and strongly flavored.

In hives, situated between the heaths and the cultivated country; a striking contrast is observable, between the spring and the autumnal combs. The former are gathered wholly from the meadows, pasture lands, trees, and cultivated crops; the latter, entirely from the flowers of the heath; none of the species of which begin to blow, until late in the summer. The combs of the

former will be nearly white as snow: and the honey limpid almost as the purest oil. Those of the latter, brown, and the honey, they yield, of the color and consistency of melted rosin. This difference is most striking, when the hive is carried, in autumn, from the lower parts of the marginal heights, into the Moreland dales, to be filled up with honey; a practice which, singular as it may appear, has been followed with success.

In the winter of 1782-3, a general mortality took place, among the bees of this country. Many bee keepers lost their whole stock. I remember to have seen, in the spring of 1783, twelve or fifteen empty stones, in one garden, without a single surviving hive.

But the universality of the destruction, uncommon as it was, being such as no one can remember, was not so remarkable as the manner in which it was effected. The bees were observed to dwindle away, by degrees; though they had plenty of *honey* in their hives; at length vanishing; while still, perhaps, a considerable quantity of *honey* remained unexhausted!

A man who has paid some attention to bees, and whose ideas are frequently well-grounded,

grounded, was of opinion that the effect was entirely owing to the want of a succession of young bees; under a supposition that the year preceding had not been a *breeding year*; and that the bees which dwindled away, in the spring, were the old bees dying of age.

There may be some truth in this opinion; the unusually backward, and extremely wet, spring and summer of 1782, might check the breeding of young bees; but it is unlikely that it should wholly put a stop to it; and that not one hive in ten should have bred a single bee. For, under this argument, the young ones, though few, would, with an ample store of honey, have survived.

In the course of the spring of 1783, an incident led me to a theory, which seems to explain the phenomenon, more fully.

Being attentive to a *female* fallow which was in blow, I observed that bees were equally busy among its flowers, as they were among the male catkins of a neighbouring tree.

This induced me to consider the nature of the materials they collect, and to reflect on whether the different parts of generation, even in hermaphrodite flowers, may not

afford them distinct materials. HONEY, it is well understood, is collected from the *nectarium*. WAX may well be considered as a collection of the viscid mucus of the *pistillum*; as BEE-BREAD appears to be merely a collection of the farina of the *stamen*.

It is well understood, by bee keepers in general, and is asserted by Wildman himself, that bees cannot live without *bread*. That they cannot be kept alive with *pure honey alone*, is, I believe, well ascertained. But *honey* which has been pressed hard from a comb, containing *bee-bread as well as honey*, is considered as a safe and certain relief to them, when their own stores are exhausted.

Admitting that bees require bread, as well as honey, to support them in winter; and admitting that bee-bread is a collection of the stamineous farina of flowers; the phenomenon under notice is easily explainable.

It is well known, that flowers are tenacious of their parts of generation, in a rainy season; exposing them with caution. Nor is it mere exposure that fits the stamina for the purpose of the bee. The anthers must be burst by the sun, before the bee can load its

its thighs with the contained farina : which being exposed, is liable to be washed away, or shook down, by the first heavy shower. Hence, the collection of BEE-BREAD, in a moist showery season, must be very precarious and inconsiderable.

But the collecting of WAX and HONEY depends less on the weather. For the flower once open, the bee has free access to the nectary and pistil, whose productions are less liable to a shower than is the farina. Besides, it is, I believe, a fact which is not doubted, that bees collect honey from what are, perhaps, improperly called honey *dews*, as well as from flowers.

From these premises, we may fairly, I think, draw the following conclusion.

The spring and summer of 1782 being extremely wet, (see NORFOLK) a dearth of BREAD took place. But, through intervals of dry weather, or through a plentifulness of *leaf* honey, the collection of HONEY was sufficiently ample. While the bread lasted the bees lived. Nor did they, when it was consumed, die at once, as when their entire store is exhausted. The honey prolonged their lives for a time; proportioned,
perhaps,

perhaps, to their respective ages or constitutions; the individuals following each other, as disease and famine overcame them; until the whole perished: not through a want of HONEY; but for the want of a more substantial food; *their* STAFF OF LIFE.

THE

THE
WOLDS OF YORKSHIRE.

GENERAL VIEW
OF
THIS DISTRICT.

THE SITUATION and GENERAL APPEARANCE of the Yorkshire Wolds have been given. Their OUTLINE is nearly a circle, whose diameter is about twentyfive miles. Their EXTENT, including their skirts, 500 square miles, or more than 300,000 acres.

The SUBSTRUCTURE of these hills, is probably a uniform rock of HARD CHALK; rising, in most places, to near the surface.

The immediate SUBSOIL is generally a CHALKY RUBBLE, of varied depth and texture, intervening between the rock and the soil.

The

The prevailing SOIL is a CALCAREOUS LOAM; varying in depth and productiveness.

The Northeast quarter of the Wolds is covered with a thin infertile soil; applied to sheepwalks; much of it being overrun with furze and heath; resembling the inferior downs of Surrey.

On the contrary, a shallow valley, which extends some considerable distance, between Malton and Burlington, including the townships of Duggleby, Kirby, Lutton, Helperthorp, Weaverthorp, Foxholes, Woldnewton, &c. with a small rivulet running through it (delightful summer situation!) enjoys a rich deep loamy soil; strong enough for wheat, and chiefly under the plow.

On the higher Wolds, the soil is a lighter loam, from six or eight inches to a foot deep; most of it well adapted to the crops of turneps, barley, and sainfoin; but has formerly lain, and still lies in great quantity, in sheepwalk and rabbit warren.

The CLIMATE of these hills is cold: owing in some measure to their present nakedness. The north and east winds, pouring in upon them, from the sea, and, across the Vale, from the Moreland Mountains, sweep over their surface without a break.

The

The SEASONS, here, are somewhat earlier; than in the Morelands; but later, than in the Vale, or on the Howardian hills. The perfect dryness of the substratum of the Wolds is the only advantage they have, at present, in respect to climature.

INCLOSURE. Formerly, the Wolds, whether parcelled out in common field, or disposed in more entire properties, lay entirely open; excepting a few small yards, about the villages. The East-Wold Valley still lies in a state of common field. But, on the higher Wolds, some spirited attempts have lately been made at inclosure.

THE
RURAL ECONOMY
OF
THIS DISTRICT.

IN giving A SKETCH OF THE RURAL ECONOMY OF THE WOLDS, the following particulars will be entitled to notice :

- | | |
|--------------------------------|-----------------------------|
| I. Estates. | XI. Team Labor. |
| II. Tenancy. | XII. Implements. |
| III. Rent. | XIII. Manure. |
| IV. Removal. | XIV. Harvesting. |
| V. Building. | XV. Farmyard
Management. |
| VI. Planting. | XVI. Markets. |
| VII. Farms. | XVII. Turneps. |
| VIII. Objects of
Husbandry. | XVIII. Sheep. |
| IX. Succession. | XIX. Rabbits. |
| X. Manual Labor. | |

I. ESTATES.

I. ESTATES. The lands of the Wolds belong chiefly to LARGE OWNERS; being mostly occupied by tenants; few of them, I believe, being in the hands of yeomanry; as they are in the Vale, and a great part of the Morelands,

II. TENANCY. Upon the larger farms LEASES are become common. Some of *seven years*; which is considered as too short a term: some *fourteen*, which good tenants seem to be fully satisfied with.

III. RENT. Upon the larger farms, six to twelve shillings an acre. The rent depends, chiefly, on whether the tenant has, or has not, *liberty to break up old sheep walk*, with which the larger farms mostly abound. These lands, in a state of *sward*, may not be worth more than five shillings an acre. But having lain, a succession of ages, in a state of grass, they are many of them, for a course of years, worth five times that rent as *arable land*.

No wonder landed gentlemen are tenacious of these old grass lands. They are treasuries, whose keys they would be blameable in delivering up, without a suitable consideration.

But

But they are still more blameable in obstinately depriving themselves and the community of the use of them. The finest farm upon the Wolds is intolerably cramped, through an ill judged prohibition from breaking up the sheepwalks, of which it principally consists. The tenant cannot winter his sheep upon the farm. He has not a sufficiency of arable land, to grow turneps in proportion to his summer feed. It is not paying twenty pounds a week for sheep feed, which constitutes the evil in this case; but the circumstance of having his flocks scattered about the country, perhaps ten or fifteen miles from his farm, during the winter months.

A *general* permission for breaking up can only be dictated by folly or necessity. A *due proportion* is all that is *at present* requisite.

IV. REMOVALS. The TIME of changing tenants is Ladyday or Mayday. On large farms, mostly Ladyday; the wheat on the ground being valued by referees. On small farms, Mayday; the spring crops being likewise sown by the outgoing tenant, and valued with the wheat, by referees.

V. BUILDINGS.

V. BUILDINGS. A number of new farmeries have, of late years, been erected upon the Wolds. The plan of *some* of them simple and eligible. The dwelling house, to the west; barns and stable, on the north; stack hovels, for cattle and implements, on the east; forming a square straw yard, open to the south; saving a high brick wall, with tall boarded gates; altogether well adapted to the bleakness of the situation. At the top of Garton hill, the dwelling house is simple and snug; becoming its use and situation; with low leantos; enlarging the roof, for the purpose of collecting rain water: a plan which ought to be universally adopted on these bleak and waterless hills*.

VI. PLANTING. Sir Christopher Sykes may, I believe, claim the honor of being the first successful planter upon the Wold Hills. Attempts had formerly been made; but without success: owing, perhaps, more to the *smallness* and the *thinness* of the plantations, than to any other mismanagement.

Sir Christopher, I am well informed, is now contracting, or has contracted, with a

VOL. II.

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nursery-

* For observations on the Wold Ponds, see the Art. DRINKING POOLS.

nurseryman, for upwards of five hundred acres of planting; to be finished in ten years: an undertaking which must do him infinite credit.

It is, perhaps, to be regretted, that Sir Christopher's plantations consist chiefly of the *pinus tribe*; mostly of Scotch Fir; the most worthless of timber trees. As a skreen to better plants, it may, in bleak situations, have its use.

But the BEECH, to which the soil of the Wolds is peculiarly adapted, would be more acceptable to posterity; and would afford much greater ornament to the Wold Hills. If raised from the mast, with due care, there can be no doubt of its succeeding, on these Heights. The Welch mountains abound with it in their bleakest aspects.

Other gentlemen are raising SKREEN PLANTATIONS, and LIVE HEDGES, in a most spirited manner.

In one instance, I observed three rows of hedgewood, planted about two feet apart, and defended by a row of posts and rails, on either side: the bank, in which the posts stand, appearing to have been formed of the substratum of chalk rubble; a slip of soil on either side being thrown in between the
rails,

rails, to give encouragement to the hedge plants. In other instances, the soil has been cleansed by a turnep fallow *. The plants, when I saw them, were vigorous, and in high keeping.

The inclosures, as yet, are mostly large: forty or fifty acres. But should the spirit of planting continue to diffuse its influence over these hills, the size of inclosures will in time be lessened. Should a time arrive when the higher swells shall be crowned with wood, and the intervening vallies be intersected with living fences; forming inclosures of eight or ten acres; the climature of the Wolds will be rendered some degrees of latitude more genial, than it is at present; and the productiveness of the soil be doubly that which it has hitherto been.

VII. FARMS: Many of them very large. *Mowthorp* and *Coldham* are near two thousand acres each; *Crome* thirteen or fourteen hundred acres; all of them charming arable farms; such as would (*if properly sheltered*) let in Norfolk, for fourteen or fifteen shillings an acre.

R 2

VIII. OB-

* Gathering the cultivated soil into an evenly round, wide ridge, would, I apprehend, be found eligible.

VIII. OBJECTS OF HUSBANDRY.

1. STOCK;—principally, *sheep* and *rabbits*. Few *cattle*, except what are purchased, in autumn, for the purpose of raising manure; being sold off in the spring, chiefly to the graziers of Lincolnshire. Some *horses* are bred; but the more general practice is to buy in colts, at a year old, and to keep them until they be three or four; selling them, at that age, to country dealers: or otherwise to keep them till five years old, and make them up for the horse shows. 2. CROPS. Principally *oats*; but much *barley* and some *peas* are grown; and, in the vallies, *wheat*. But, upon the high wolds, the largest farmers, until of late years, bought their bread corn. The old turf, when newly broken up, throws out immense crops of *oats*; and is, I believe, in general, equally productive of *rape*. Instances are mentioned, in which the first crop of *rape* has been equal to the purchase value of the land. *Turneps*, *clover*, and *sainfoin*, are also Wold crops.

IX. SUCCESSION. No regular system of management, with respect to the succession of crops and fallow, is, in any part of the Wolds, to be found in general practice. Upon the thinner-soiled swells, the prevailing practice

practice is to break up, by sodburning, for turneps; oats two years; barley and grass feeds, letting the land lie down again to grass. In the vallies, where wheat is grown, turneps, barley, clover, wheat, has of late years gained some footing.

X. MANUAL LABOR. The Wolds are thinly inhabited. The resident laborers are few, compared with the work to be done; especially in harvest; when numbers flock to it, from the surrounding country. In less busy seasons, the work is done, mostly, by yearly servants; the few laborers being, in winter at least, chiefly employed in thrashing: for which employment, the cottagers are sometimes hired, by the winter half year. The wages for thrashing, sixpence to eightpence, a day, and board; or fourpence to fivepence, a quarter of oats, and board. The Wold farmers, generally speaking, board all their workpeople.

XI. TEAM LABOR. The beasts of labor are principally HORSES, of the saddle or the coach horse breed. A few OXEN are sometimes used about home.

The method of using draught horses, upon the Wolds, is singular; whether they be applied to the waggon or the plow.

The Wold waggon is furnished with a pole, similar to that of a coach; and the horses are applied in a manner similar to coach horses. Four horses are the usual team; the driver, on ordinary occasions, riding on the near-side wheel-horse; generally trotting with the empty carriage.

At plow, the same four horses, in the same harness, are, in strong work, invariably used without a driver! the plowman guiding the four with reins: a practice which is, perhaps, peculiar to the Yorkshire Wolds. In lighter work, as in stirring a fallow, two horses only are used.

But, in this case, a practice equally singular is prevalent. A third horse, drawing a light harrow, is fastened on the off side of the plow horses; the plowman driving the three.

This, in breaking up turnep grounds, or in other *spring* fallowing, is a good practice on dry land; which, by this means, is got perfectly fine, at a small expence (the harrow in this case being usually drawn by an old worn-out horse, or by a two or three-year-old colt), and immediately as it is plowed, by which means the seed weeds have full time to spend themselves. But, in *winter*,
and

and in *summer*, the practice is pernicious. A fallow cannot lie too rough, in those seasons,

The HOURS OF WORK are long. In spring seed time, the plow teams will sometimes stay out from six to six; the plowmen having their dinners carried to them, in the field; the horses remaining all day without a bait, and with only a small allowance of corn when they reach the stable! nevertheless, in light work, and in a busy season, each horse plows near an acre a day. What breed of *black* horses can stand hardships like these?

XII. IMPLEMENTS. The WAGGONS are high and aukward. The PLOW is of the old straight-moldboard construction. Both of them call loudly for improvement. The TURNWREST PLOW is much wanted upon the Wolds.

XIII. MANURE. YARD DUNG and SHEEP TEATHE are the principal manures. SOOT and some LIME are also in use. RAPE CAKE would, perhaps, be found a valuable manure upon the Wolds.

XIV. HARVESTING. All oats and barley, and much wheat, are mown, against the standing corn; bound in sheaf; and set up in stooks, at the time of mowing. The Wold farmers follow this practice, as being

less tedious than that of gaiting, as in the Vale (see Sect. HARVESTING), and less wasteful than that of harvesting loose, in the South-of-England manner.

XV. FARMYARD MANAGEMENT.

STRAW is all consumed in open yards; chiefly in double racks, supported by four legs. No cattle are fastened by the head; nor any straw (except wheat straw) bound.

The STRAWYARD STOCK are, chiefly, aged oxen, of the shorthorned breed, bought at Glanford-bridge and other fairs, in autumn; and sold, in spring, to jobbers or graziers, who sometimes buy them up in winter, on speculation, to be delivered in spring. They leave about twenty shillings, a head, for wintering. But much depends upon judgement in buying them in.

XVI MARKETS. *Malton and Driffield*, both of them NAVIGATION TOWNS, and *Burlington*, a SEA PORT, are the principal markets for *corn*. The Derwent being made navigable, many years, before the navigation of the Hull was extended to Driffield, Malton was once the principal market. But, at present, Driffield, an improving place, takes the lead. At Malton, the corn trade is in the hands of a few *merchants*, who can generally

generally make their own price. At Driffield, the buyers are numerous, and mostly *factors*, who purchase by commission. By the low commission of sixpence a quarter, some of the factors are said to make three or four hundred pounds a year; a striking evidence this of the great quantity of corn which is grown upon these Wolds.

XVII. TURNEPS. The turnep crop may be said to be still a new thing to the Wolds; not more than of twenty years standing, though singularly adapted to the soil; and notwithstanding it has, in Norfolk, whose coast may almost be seen from these hills, been an established object of culture, more than a century!

At present, this crop is in full estimation, being considered as the most solid basis of the Wold husbandry.

Turneps generally *SUCCEED sward, sod-burnt, and once plowed*, very fleet; or perhaps only rice-balked. No MANURE, and only ONCE HOED.

REMARK. This, at first sight, may appear to be a loose mode of culture; but not so if we duly consider its basis. If the turf be of a good age, and the soil of a tolerable quality, no other manure than its ashes is required; and

and fward which has been sodburnt, and only once plowed, is much less liable to foul the crop with weeds, than land which has been under tillage. Upon the whole, it appears, to me, to be a practice well adapted to the Wolds, where old fward is abundant, and where extraneous manures are difficult to be procured.

The APPLICATION of the turnep crop is almost wholly to sheep, which are folded upon the *standing turneps*; a practice that cannot be defended, and with only *one flock*; a practice which is still more censurable. It is no wonder that the Wold sheep, at turneps, should be subject as they are to *disorders*: today, satiated with the tops and the best of the pulp; tomorrow, pining over the shells, with only half their fill; and part of what they pick up, weeds and dirt. The next day, glutted with a flush of fresh turneps.

If turneps be eaten up *clean*, a *head flock* and *followers* are indispensably necessary, to common good management. If it be requisite to eat off turneps, with *one flock* of *fat* sheep, one third of the crop at least ought, in like management, to be left on the ground as manure*.

The

* See the Practice of NORFOLK, VOL. I. SECT. TURNEPS.

The FENCE of the SHEEP FOLD is generally of NETWORK, made of small cord; the size of the meshes four to six inches; the width or height of the fence about three feet; supported by stakes, eight or ten feet asunder. The cost, fourpence to fourpence halfpenny, a yard. But "net-hurdles" are more commonly *bired* (of rope makers) than purchased. The price is a shilling to eighteenpence, a week, for a hundred yards. About home, "bar-hurdles" are sometimes used; but nets, being lighter carriage, are generally used at a distance. For sheep which are hornless, as the Wold sheep invariably are, netted folds are very eligible.

XVIII. SHEEP. The FLOCKS of the Wolds are some of them very large. One, at least, so high as two thousand; eight or nine hundred of them ewes; the rest wedders and yearlings.

The BREED is a variety of the longwooled kind. Some of them very handsome, resembling the present breed of Leicestershire, but more active. The wedders will fat at two-shear (that is, two to three years old) to thirty pounds, a quarter. Produce about six pounds of wool: the length, ten to thirteen inches.

Some

Some years ago, a *cross* of this breed, with the large breed of Lincolnshire, was introduced upon the Wolds, to the great loss of some of the Wold farmers. One of them calculates to have lost seven hundred pounds, by a disorder in the head, called the “megrims,” which this ill judged cross were subject to. He returned again to the Wold breed, and the disorder left his flock.

REMARK. Every country appears to have a naturalized stock—of sheep at least. By neglect, this stock will degenerate. By care, it may be improved; either by the fairest of its own individuals, or by those of a *kindred variety*; not by *an alien breed*.

XIX. RABBITS. The Wold warrens are numerous, and some of them very extensive. COLDHAM WARREN is at present, I believe, the largest upon these Wolds; and, probably, the most valuable warren, in the Island. The Coldham *farm* contains about nineteen hundred acres; and, speaking generally, it is all *warren*: not, however, wholly appropriated to *rabbits*, a flock of six to eight hundred *sheep* being kept within the warren walls; principally, however, on one side of the warren, away from the burrowing grounds.

This

This appears to be a practice peculiar to the Wolds *, where better soil is appropriated to rabbit warrens, than is perhaps in any other part of the Island. The Coldham warren, in point of *soil*, is most of it worth ten to twelve shillings an acre; some of it fifteen or sixteen shillings †. As these better parts become mossy, they are inclosed by a sod wall, the surface pared and burnt, and the soil broken up for arable crops. Having afforded a succession of crops of corn, turneps, &c. they are sown with grass seeds, and again thrown open to the rabbits and sheep.

In 1783, there were about two hundred acres of this farm under the plow, besides some little sheepwalk, which lay without the warren walls. The *warren* therefore, at that time, contained fifteen to sixteen hundred acres: and, adjoining to Coldham, are two more considerable warrens; so that there are, perhaps, three or four thousand acres of tolerably good land, lying together, and appropriated principally to rabbits.

To

* Of Yorkshire and Lincolnshire, whose hills likewise abound much with rabbit warren.

† But the present bleakness of the *situation* renders it of little more than half the value.

To give a general idea of the **MANAGEMENT** of the **WOLD WARRENS**, the following division of the subject will be requisite :

- | | |
|-------------|-------------|
| 1. Soil. | 4. Species. |
| 2. Burrows. | 5. Taking. |
| 3. Fences. | 6. Markets. |

1. **SOIL.** There is a disadvantage in stocking a *rich* soil with rabbits : a flush of grass, after a dry season, is found to produce a scouring ; which sometimes carries off great numbers :

2. **BURROWING GROUND.** Upon the high Wolds, the burrows are mostly on the *sides of hills* : at **COLDHAM**, principally in one deep valley ; whose sides are steep ; giving the rabbits great freedom in working. The soil, in this case, about eight or ten inches deep ; under this a chalky rubble, of some inches thick, lying on a chalkstone rock. The burrows are in the subsoil ; between the soil and the rock ; and chiefly toward the tops of the hills *.

But at **DRIFFIELDGREETS**, near Driffield, where there are two large warrens, the surface is a *dead flat* ; nevertheless, the warrens are well stocked and productive ; a proof that

* Thousands of daws build their nests in these burrows, to the great annoyance of the rabbits.

that a flat surface may, in some cases, be profitably stocked with rabbits. The soil, in this case, is a light sand or gravelly loam.

In stocking a warren, whether the surface be flat or hilly, ARTIFICIAL BURROWS are made, to reconcile the rabbits to the ground, and to preserve them from vermin, until they have time to make their own burrows. In making these burrows, an improvement has lately, I believe, been hit upon. They are bored with an AUGER of a diameter large enough to make a burrow of a sufficient width. In a level warren, these AUGERS may, from time to time, be found useful.

3. WARREN FENCES. The common fence upon the Wolds is *sod wall*, capped with furze, or of late with stiff straw, forming a kind of thatch*. The warrens near Driffield are fenced with *paling*; an expensive fence in the outset, and always under repairs. A *brook*, though ever so deep, is found to be insufficient as a fence against rabbits: one side of Driffieldgreets warren is bounded by a brook; but it is nevertheless fenced with paling. When the rabbits can evade this, they readily swim the brook.

4. SORT

* Reed would be found admirable in this intention.

4. SORT of RABBITS: Until of late years, the common *grey* rabbit—probably the native wild rabbit of the Island—was the only species. At present, the *silver-haired* rabbit is sought after, and has, within the few last years, been introduced into most warrens *. The skin of the grey rabbit is *cut*; that is, the “wool” is pared off the pelt, as a material of *bats*: whereas that of the silver-haired rabbit is *dressed* as *fur*; which, I understand, goes principally to the East Indies. The color is a black ground, thickly interspersed with single white hairs. The skins of this variety sell for about four shillings, a dozen, more than those of the common sort; a sufficient inducement, this, for propagating it.

5. METHOD OF TAKING RABBITS. The Wold warreners have three ways of catching their rabbits:—with *fold nets*—with *spring nets*—and with “*tipes* ;” a species of *trap*.

The *fold nets* are set about midnight, between the burrows and the feeding grounds; the rabbits being driven in, with dogs, and kept inclosed in the fold, until morning.

The *spring net*, when used, is, I believe, generally laid round a hay stack, or other place, where rabbits collect in numbers.

The

* Some of the Lincolnshire warrens, it is said, are already wholly stocked with this variety.

The *trap* is a more modern invention. It consists of a large pit or cistern, formed within the ground, and covered with a floor; or with one large falling door, having a small trapdoor toward its center, into which the rabbits are led by a narrow muce.

This trap, on its first introduction, was set mostly by a hay stack; hay being, at that time, the chief winter food of rabbits; or on the outside of the warren wall, where rabbits were observed to scratch much, in order to make their escape. Since the cultivation of turneps, as a winter food for this species of stock, has become a practice, the situation of the trap has been changed.

Turneps being cultivated in an inclosure, within the warren, a trap is placed within the wall of this inclosure. For a night or two, the muce is left open, and the trap kept covered (with a board or triangular rail), in order to give the rabbits the requisite haunt of the turneps; which having got, the trap is bared, and the required number taken.

In emptying the cistern, the rabbits are *sorted*: those which are fat, and in season, are slaughtered; those which are lean, or out of condition, are turned upon the turneps to improve.

At the close of the season, the bucks and the does are *sorted*, in a similar way: the bucks are slaughtered; the does turned loose to breed. ONE MALE, I understand, is considered as sufficient for SIX OR SEVEN FEMALES; and the nearer they can be brought to this proportion, the greater stock of young ones may be expected; it being the nature of the males (*unnatural* as it may seem) to destroy their young; more especially, perhaps, when their proportional number is too great.

Great precaution is requisite in the use of these traps. If too many rabbits be admitted, at once, and the cistern be kept close covered, only for a few hours, suffocation and inordinate heat take place, and the carcases, at least, are spoiled. Many thousand carcases have been wasted through this means—The traps are therefore watched; and, when the required number are caught, the muce is stopped, or the trap covered.

Some idea of the produce of the Wold warrens may be gathered, from the great numbers which are frequently slaughtered, at once. Five or six hundred couple have, not unfrequently, been slaughtered in one night: and, it is said, that, when the two

Driffield

Driffield warrens lay together, there was once an instance of fifteen hundred couple being killed at one slaughter.

.6. **MARKETS FOR RABBITS.** York, Hull, and the neighbouring towns, for carcases: Glanford-bridge and Malton, for skins; which are cut by furriers, who reside at those places, and who find a market, for their wool, in the hat manufactories of London and Manchester.

Sometimes, the skins and carcases are sold together, to hucksters, or other wholesale dealers. The average price, for the season, about two shillings a couple. The price of carcases, in the neighbourhood of the warrens, eightpence to tenpence a couple.

H O L D E R N E S S.

THIS is the only District of the county I have not been in. I have repeatedly looked over its surface, and been upon its borders; but never entered its area. I purposed to have gone over it, this year (1787), but the Vale employed my whole attention, during summer; and the extreme wetness of the autumn would have prevented me from visiting a low country, at that season, had leisure permitted it.

The objects of husbandry, and the means of obtaining them, are, I have always understood, similar to those of the Vale of Pickering: nevertheless, Holderness may have its partial excellencies; as almost every District has, in a greater or less degree.

The north-west quarter is appendant to a line of marginal villages; situated most desirably on the skirts of the Wold hills; but no way excellent, I believe, in their plan of manage-

management. Nevertheless, the *coast* of Holderness may merit survey.

1796. In March 1791 (in my way to London), I had the honor of paying a transient visit to the late Mr. CONSTABLE of Burton Constable, an ancient family residence, situated near the center of this District.

The ELEVATION and SURFACE of Holderness are extremely different, from what they appear to be, when seen from the more elevated summits of the Wold hills. Holderness is a true Vale or upper-ground District, similar to the Vales of Gloucester, and to the richer Districts of the Midland Counties. The surface is broken into swells and hollows, but never descends to low land; the area of the District being free from marshes and fens. Towards the mouth of the Humber, some considerable extent of marsh lands occur, and in entering Holderness, from Hull, a flat of rich marshes, some two or three miles wide, are crossed; and between Hull and Beverly, a considerable extent of fen lands lie a disgrace to the county; but not particularly to Holderness; whose lands rise out of the way of waters, and whose CLIMATE is healthy, as that of other Districts of a similar nature.

The SOILS are various and much intermixt, as frequently happens in *Vale* Districts; in general, they are very productive.

And the MANAGEMENT, from what I saw of it, is above mediocrity.

C L E V E L A N D.

CLEVELAND is small, comparatively with the other Districts of East Yorkshire. To the east, it terminates in a broken country; mixing with the northern margin of the Moreland hills.

The OUTLINE, if the broken country about *Gisborough* be cut off, is nearly oval. The EXTENT of the greater diameter being about fourteen, of the shorter about ten miles; containing, within its area, somewhat more than one hundred square miles; or about seventy thousand acres.

The SURFACE is nearly plain, but perfectly free from collected water; a true *Vale* District. Its principal brook is the *Leven*; running

running in a valley, some feet below the general surface.

The SOIL, almost invariably, a tenacious clay. Good wheat and bean land.

The OBJECTS OF HUSBANDRY are CORN, BUTTER, BACON, REARING CATTLE, and HORSES; varying but little, in its objects, from the VALE OF PICKERING; excepting that CLEVELAND partakes more of a CORN COUNTRY.

Some peculiarities of the Cleveland practice have been already mentioned. One which marks it strongly, and which distinguishes it, from every other District I have observed in, remains to be noticed.

The ROAD TEAM of Cleveland is, universally, the *three horse cart*. Notwithstanding the deepness of the roads, in a wet season, there is scarcely a *waggon*, or a *long team*, in the country. The three horses are, invariably, drawn, two-and-one; namely, one horse in the shafts, the other two in a pair before it; the whole being guided by leathern reins, and driven with a long-thonged whip, in the coach manner.

This practice has probably arisen, from the circumstance of coals and lime being fetched,

into Cleveland, from distant parts of the county of Durham. The latter, which has long been the chief dependance of the Cleveland farmer, is drawn, into the interior parts of the District, more than thirty miles; the teams going and returning without a rest, excepting transient baits upon the road.

The rule, when going empty, is to trot two miles and feed one; the driver riding in the carriage the two miles, and walking by the side of his horses the one; baiting them with hay, out of his hand, as they go along the road. When loaded, he keeps feeding, whenever he finds the horses will eat a mouthful of hay. Corn is also carried in these journies; and given in bags, hung upon the horses' heads, in the manner in which hackney coach horses are fed, upon the stands in London. Horses, thus used, will stand travelling, thirty miles every day. The breed is strong, active, colored coach horses.

The Cleveland team treads the road evenly; and is the stiffest; the most handy; and, for a *level country* and *long journies*, perhaps, the most eligible team, that invention is capable of suggesting.

THE

EASTERN MORELANDS

O F

YORKSHIRE.

THE SITUATION of this District was given, in describing the COUNTY at large. And, in giving a more minute description of the Vale of Pickering, the Morelands are mentioned as bleak mountains, covered with heath, and intersected by CULTIVATED DALES. These dales have been already noticed, as appendages of the Vale; so far as they are noticeable. What I propose, under the present head, is, to give some account of the MOUNTAINS, and their UNCULTIVATED VALLIES.

The CLIMATE of the Morelands is extremely bleak; several degrees of latitude colder, than the Vale of Pickering; where rain, or perhaps open weather, will frequently prevail, while the Morelands are covered with snow.

The

The **EXTENT** of the Eastern Morelands, including the hills of **HAMBLEDON**, is thirty to forty miles of length, by ten to fifteen of breadth. Excluding the **CULTIVATED DALES**, &c. they may contain from three to four hundred square miles, or from two to three hundred thousand acres, of **UNCULTIVATED HEATH**.

The **FOSSIL PRODUCTIONS** of these mountains are principally **FREE-STONE**, (of a singularly fine grain) which too frequently rises to the surface; lying, in some places, aboveground, in blocks; some of them of considerable size. A thin seam of **COAL** has been found, and still continues to be sparingly found, in different parts of these hills, at no great depth from the surface. **IRON** is forged near **Ayton**; and **COPPER** has been smelted near **Hackness**. But **ALLUM SHALE** is the most valuable material of the Eastern Morelands; which alone, I believe, furnish the Island, and a great part of Europe, with alium.

The immediate **SUBSOIL** is generally **SAND**; which, *in some places*, is formed into a pan or crust; resembling rusty half-decayed iron, rather than an earthy substance: being almost as impervious, by water, as an iron vessel.

The SOIL is invariably a BLACK MOOR;— apparently, a mixture of vegetable mold and sand; resembling the moory soil of fens.

Linneus, I think, calls this species of soil the *depauperated* soil of heaths; but on what grounds I know not. The moor of fens appears, obviously enough, to be composed of the decayed roots and other parts of vegetables; with a greater or less proportion of sand and mud, washed in among them, while in a state of growth. But how a similar matter could be formed, on the tops of mountains, is less obvious. Nevertheless, MOUNTAIN MOOR has every appearance of a VEGETABLE MOLD.

This mold, which covers a principal part of the mountains of the Island, appears to me a most interesting subject of investigation.

It varies, greatly, in regard to depth. On the “low moors,” where it has probably been repeatedly pared off for fuel, it barely covers the sand or gravel of the subsoil: but, upon the higher more distant swells, the covering of soil is thicker; frequently, from one to two feet deep, of what is called “fat moor.” In the vallies, particularly towards their heads, are peat bogs of several feet deep; buried in which, trees of great size have sometimes been found.

The NATURAL PRODUCE of the more lofty swells of these mountains—termed, provincially, the “high moors”—is principally HEATH, interspersed with patches of “BENT;” together with the common rush and other aquatics, in the vallies, and on the bogs with which even some of the swells abound.

But, at the feet of those swells, and on the faces of the cliffs which terminate them to the south, as well as upon the top of the marginal heights, which, when they shoot far to the northward, as between Newton and Cawthorn, are covered with black soil and heath, —a number of the better grasses, with a variety of other plants, may be found growing among the heath; notwithstanding the situation; which, in point of bleakness, is little inferior to the “Moorheads.”

A list of these hardy plants may have its use.

<i>Provincial.</i>	<i>Linnean.</i>	<i>English.</i>
Common ling,	— <i>erica vulgaris</i> ,	—common heath.
Crow ling,	— <i>erica cinerea</i> ,	—fineleaved heath.
Wire ling,	— <i>erica tetralix</i> ,	—crossleaved heath.
Bent,	— <i>juncus squarrosus</i> ,	—heath rush.
Seaves,	— <i>juncus effusus</i> ,	—soft rush.

<i>Provincial.</i>	<i>Linnean.</i>	<i>English.</i>
Moor palms,	— <i>eriphorum</i> ,	—cotton rush.
Gale,	— <i>myrica gale</i> ,	—sweet gale.
Juniper,	— <i>juniperus communis</i> ,	—common juniper.
Cranberry,	— <i>vaccinium oxycoccos</i> ,	—cranberry.
Bleaberry,	— <i>vaccinium myrtillus</i> ,	—common whortleberry.
White clover,	— <i>trifolium repens</i> ,	—creeping trefoil.
Cheese-cake grass,	— <i>lotus corniculatus</i> ,	—birds-foot trefoil.
Bent grass,	— <i>nardus stricta</i> ,	—mat grass.
	<i>aira flexuosa</i> ,	—heath airgrass.
	<i>melica cærulea</i> ,	—purple melicgrass.
	<i>aira præcox</i> ?	—early airgrass * ?
	<i>anthoxanthum odoratum</i> ,	—vernal.
	<i>briza media</i> ,	—trembling grass.
	<i>cynofurus cristatus</i> ,	—crested dogstail.
	<i>festuca duriuscula</i> ,	—hard fescue.
	<i>festuca bromoides</i> ?	—barren fescue ?
	<i>lolium perenne</i> ,	—raygrass.
	<i>dactylis glomerata</i> ,	—orchardgrass.
	<i>holcus mollis</i> ,	—couchy softgrass.
	<i>euphrasia officinalis</i> ,	—common eye-bright.

orobus

* It was late in summer, before I made this collection. Some of the early plants had seeded, and their specific characters were of course become doubtful.

Linnean.

English.

- orobus tuberosus*,—bulbous pea.
galium verum,—yellow bedstraw.
galium montanum,—mountain bedstraw.
scabiosa succisa,—meadow scabious.
rumex acetosella,—sheep's sorrel.
prunella vulgaris,—self heal.
tormentilla erecta,—common tormentil.
potentilla reptans,—common cinquefoil.
cistus helianthemum,—dwarf cistus.
thymus serpyllum,—wild thyme.
poterium sanguisorba,—upland burnet.
spiræa filipendula,—dropwort.
achillea millefolium,—milfoil.
hypericum perforatum,—common Saint-
 johnswort.
carlina vulgaris,—carline thistle.
carduus palustris *,—marsh thistle.
pteris aquilina,—brakes:

THE

* This thistle has no other specific difference, which I have been able to discover, from *carduus palustris*, than the thickness of its stem; which, upon these dry barren bleak hills, will sometimes be equal in size to the largest walking cane. There is a variety of it with white flowers.

THE
RURAL ECONOMY
OF
THIS DISTRICT.

THE STOCK of the Morelands is principally *sheep*. Upon the "high-moors" they are the only stock. On the lower borders, and on the margins of the cultivated dales, young *cattle* are kept upon them, a considerable part of summer. But, in a general light, SHEEP may be taken as the stock of the Morelands; and though they be thinly stocked, the number on the whole is considerable.

In stocking these mountains with sheep, the general calculation is, I believe, one sheep to ten acres. The number therefore kept, on the foregoing calculation, is twenty to thirty thousand.

These sheep live entirely upon the "moor," from their being a year old, until the time of their being sold off; which, formerly, was not until they were four or five years old

The

The yearly profit of a Moreland sheep (very small, see Art. SHEEP), allowing for attendance, hazard *, salving, and a little hay in winter, when the heath is buried in snow; may be laid at two shillings and sixpence; a head †.

Consequently, the YEARLY PRODUCE OF THE HERBAGE, at present, is THREEPENCE AN ACRE; at which rate much of it was valued, by the Commissioners, under the Pickering Bill of Inclosure ‡.

The

* A Moreland farmer reckons that, if half the number he breeds reach a market, he has tolerable luck.

† This calculation is made on the advanced price which sheep have borne, on a par of the last ten years. There are who assert, that, if attendance were rigidly calculated, no neat profit whatever would arise, from keeping sheep on these heaths. But the number of *little fortunes* which have been made in the Moreland dales, principally, it is believed, by keeping sheep, contradict this assertion.

‡ Besides the *herbage*, the *fuel* which is pared off the surface and cut out of the bogs, may be considered, at present, as a species of PRODUCE.

The Pickering highmoor allotments, containing twenty acres or upward, are now selling, for ten pounds each: The fee simple of three of these allotments, containing near one hundred acres, was purchased, the other day, for thirty pounds.

The IMPROVEMENTS which have been attempted, among these hills, require now to be mentioned.

The late SIR CHARLES TURNER ranks highest as an improver of the Morelands. But Sir Charles's site of improvement is not a fair specimen, of the two hundred thousand acres of uncultivated heath, which are the immediate subject of discussion.

KELDALE *, the principal site, is a valley issuing out of Cleveland. The bottom, which has formerly been inclosed, is a rich loam, of great depth ; but had been rendered unproductive, for want of draining. The sides of the valley are variously soiled ; mostly bog, or a fat moory soil, formed probably by springs, with which the whole valley abounds, and which, having trickled down its sides from age to age, have clad them in vegetable mold. Keldale, at the time Sir Charles undertook its improvement, was a *neglected valley*, whose *soils* were full of *intrinsic riches*, and required nothing, but an improvement of their *subsoil*, to render them highly productive.

Had the improvements of this valley been set about, with deliberation, and carried on

* The Valley of Springs.

with judgement and firmness, the profits arising from it would have been exceedingly great. Even in the irregular way in which they were conducted, the improvement must have greatly exceeded the expence. In the spring of 1783, when I saw them, Sir Charles had let off one farm of one hundred and fifty pounds a year (containing about one hundred and fifty acres!) and had then built, or was building, three or four more substantial farm-houses.

KEMPSWIDDEN, the other site of Sir Charles's improvements, is more nearly allied to our present subject. This is a high ridge of mountain, which forms one side of the valley of Keldale. The soil is partly black moor; in part, of a brown loamy nature; altogether, much superior in natural quality to the "high moors;" and equal, if not superior, to any extensive plot of uncultivated heath, on *this* side of the Morelands.

In 1783, the principal part of this hill had been inclosed with stone walls; and part of it had, in the outset, been unfortunately broken up for *corn*. But the rich loams of Keldale being found to be better adapted to arable crops, this was prudently laid down to *grass*; a species of crop much better suited,

suitèd, than corn; to such a soil, in such a situation.

The inclosing of Kempfswiddèn was evidently premature. Had Sir Charles begun at the bottom of Keldale; climbing by degrees up its sides; reaching, in due process of time, the tops of the hills; what amusement and profit might have been reaped from the undertaking!

The ATTEMPTS which have been made, on this side of these mountains, remain to be noticed.

About twenty years ago, the inclosure of MIDDLETON, whose parish extends into the Morelands, gave freedom to the spirit of improvement.

The *site* which was principally chosen, for the essays that have been made, were the lower skirts of the Moreland hills, under the northern steep of the limestone heights. This situation was in a degree of shelter, was near the cultivated country, and the soil, in that valley, is better than it is higher up the sides of the hills.

The *principle of improvement* was to extend the cultivated country into the Morelands. *Corn* was of course the main object. The *beathy wastes* were considered as *grass commons*;

mons ; which usually are, and generally ought to be, converted into *arable land*, and kept in that state, for a course of years, after their inclosure.

The *method of breaking-up* was either by paring and burning, or by fallowing ; which latter was performed in a singular manner. The heath being previously singed off, the land was plowed, and suffered to lie unfitted in rough furrow, for *two years*, in order to give the roots of the heath time to rot. The *third year*, it was stirred as a *fallow* ; and the *fourth year*, cropped.

The *manure*, used, was invariably lime ; which is burnt, in quantity, near the site of improvement. The quantity set on, three to six or seven chaldrons, an acre.

The *crops* wheat, rye, oats, potatoes, turneps. Red clover does not flourish : it will rise very well from the seed, but generally goes off, the first winter. And raygrass has been cautiously used, lest it should foul or impoverish the land !

The *result* of these experiments, some of them on a pretty large scale, is, some small fortunes have been sunk, and some larger ones have been injured. I have not come at
any

any thing like proof, of even one instance, in which the *improvement* has been adequate to the *expence*.

HINTS FOR THE IMPROVEMENT OF THE EASTERN MORELANDS OF YORKSHIRE.

From these premises, we may safely infer, that the two hundred thousand acres of land, under notice, are unimproveable; or that the attempts at improvement, which have hitherto been made, have been ill conducted; or that the principle of improvement has hitherto been erroneous.

Unprepared as I am with self-practice, in the cultivation of these wastes, it would be rashness in me to dictate a general plan of improvement; but having some general knowledge of improvements of this nature, and having bestowed some considerable share of observation and attention, on the District under consideration, it might be wrong to suppress the reflections which have occurred to me, respecting its improvement. In a kingdom whose limits are not extensive, two hundred thousand acres of surface becomes an object of national importance; and on whether they lie in a state of waste, or in a

state of productiveness, the welfare and happiness of many individuals may depend.

The PRINCIPLE OF IMPROVEMENT is what I shall more particularly speak to; and in doing this, I shall keep the HIGH MOORS—not the heathy upper margin of the limestone heights—principally in view.

It appears, to me, that to attempt, *at present*, to crop these heaths with CORN, is injudicious in the extreme. To begin with *carrying off* the means of productiveness, in the shape of *grain*, (which the cultivation of corn implies) from a soil which, it is to be feared, naturally contains them in very inconsiderable quantity, is irreconcilable with common prudence.

The PRODUCTIONS which strike me, as eligible to be PROPAGATED, at present, on these heaths, are *wood* and *herbage*.

I. PLANTATIONS. There are evidences, but no proof, of these hills having been formerly covered with wood. The trees which are still found in the peat bogs are a pretty strong evidence. And part of these hills being included within the ancient *forest* of Pickering, is a corroborating circumstance.

That

That trees, if properly chosen and properly managed, would grow on these hills, is, I believe, beyond dispute. And I am clearly of opinion that, *if they be improveable*, planting is the first step, which ought to be taken, toward their improvement. Woodlands, if once extended, would not only afford immediate shelter to stock; but would, in all human probability, change the climature of these bleak swells, so far as to give due encouragement to the herbage that might be cultivated upon them.

Where the surface is strowed with large stones, planting seems to be the only probable mean of improvement. Where the surface is free, screens of wood are principally wanted.

The SCOTCH FIR and the BIRCH might be employed to break off the North and the Easterly winds. The NORWAY SPRUCE and the LARCH, and, in all probability, the OAK, might, with due care, be reared in the more genial aspects*.

Much would depend upon MANAGEMENT.
—In Keldale, and on Kempswidden, the pine-

T 4

tribe

* 1796. The LARCH ought to prevail, in the bleaker more exposed situations. The Highlands of Scotland afford ample testimony of its excellency, in such situations.

tribe and oaklings were dibbled in, among the standing heath. No wonder they miscarried. To ensure success, the ground should be trenched with the spade; or be prepared with the plow; and the plants be put in with the nurseryman's best care. Not singly, or widely scattered; but in numbers, and in close order*.

There is a natural warmth in vegetable as in animal life. One tree is raised with difficulty, in any situation which is inclined to bleakness; but plant a number, in close order, and the difficulty is overcome. They not only create among themselves, by their natural warmth and perspiration, a fresh atmosphere; but assist each other, in withstanding the attacks of the winds, and other enemies.

II. CULTIVATED HERBAGE. *If these hills be improveable by husbandry, the principle of improvement appears, to me, to be that of removing the heath (wholly or in great part), and replacing it with herbage, adapted to such stock, as is best suited to the soil and situation.*

Sheep

* For the method of Planting, on the HIGHLANDS OF SCOTLAND, see PLANTING and RURAL ORNAMENT, Section GROVES.

Sheep and *rabbits* are the stock best adapted to these hills; and the shortest and least expensive way of bringing them into a state of SHEEP WALK and RABBIT WARREN is, on this principle of improvement, the *first* thing required.

The Heath, it is more than probable, cannot be overcome without *cultivation*. A similar degree of *tillage* would probably be requisite for herbage as for corn*.

The SPECIES OF HERBAGE would be the *grasses*, the *legumes*, and the *brassica* tribe. The hardiest of the two former may be seen in the foregoing list. The *turnep* and the *rape* might be chosen from the last. The *rye* and the *oat*, if fed off, or mown for hay, while in a state of *herbage*, might be found eligible,

The

* In Derbyshire, it has been found that a thick covering of *lime*, alone, is equal to the destruction of the heath, (*without breaking up the soil*;) and to the production of a turf of rich herbage. But I have heard it doubted, by those who are acquainted with the practice, whether in that case the improvement be adequate to the expence; the quantity of lime requisite to produce the effect being great. However, on the skirts of the hills under notice, to which lime might be carried at a moderate expence, the experiment would certainly be worth making.

1796. Repeatedly burning off the heath, and pasturing hard with sheep, would tend much to its destruction.

The MANURES which present themselves are *lime*, which might be had in any quantity, and within a short distance, compared with that which it is carried, in other Districts. *Ashes* of the peat bogs, and the fat moor, where this is of sufficient depth, might likewise be had at will. Even the "*fat moor*," unburnt, it is more than probable, would afford a salutary manure, if properly applied. I have observed instances, in which having been thrown upon the surface, (as in cutting through it for a road) it has, in a short time, become overgrown with a turf of fine herbage. *Earths*, if properly sought for, might, it is highly probable, be found, with natural qualities adapted to the improvement of the moory soil.

Another species of improvement, which it is probable might be prosecuted with success, is that of cutting off the springs which overflow the sides or the bottom of hills, and UNDERDRAINING, if requisite, the bogs they have formed; by which means many fertile patches might, it is probable, be produced.

Another species of melioration, applicable to the reclaiming of these wastes, is WATERING—flooding. I have observed where the
waters

waters of hollow ways, &c. break out, over the black earth, a covering of grass takes place. Almost all the bottoms of the vallies, and skirts of the hills, might be flooded, with the springs and rivulets, which lie above them.

Those who are unacquainted with the practice of flooding, will doubt the efficacy of the waters of *springs* and *clear* rivulets; while those who are versed in it, would smile at their want of information. I have seen waters perfectly limpid produce the happiest effect. It is not the *color*, but the *intrinsic quality*, of water which fits it for the purpose of melioration. Any water, which is not in its nature poisonous to plants, has, if properly thrown over grass land, a beneficial effect. Whether the springs and rivulets, in question, would, or would not, have a beneficial effect, on the lands which lie below them, might easily be put to the test.

By application and due attention, upon the spot, other probable means of improvement might present themselves.

That the principal part of these hills might be brought into a state of grass, of no mean productiveness, appears to me,
highly

highly probable *. But whether any means of improving can be hit upon, which would render the improvement greater than the expence of obtaining it, experience alone can shew; and *individuals* ought to enter cautiously into the project.

But, viewed in a *national* light, an improvement of this kind, whether individuals gain or lose by the prosecution of it, is desirable. If, through the means of a soil which lies waste, of fossile substances which lie useless, of fire which may be had at will, and of
water

* An instance strongly corroborative of this opinion may be produced. A laborer who lived in "Blakay-House,"—situated near the highest swell of these mountains,—inclosed a patch of moor adjoining to his house: a fair specimen of "turf moor;"—namely, a dry black stoney soil, lying on a sandy subsoil. Nevertheless, in 1783, when this improvement accidentally caught my eye, he had converted the principal part of it, namely about two acres, into a piece of *very productive grass land*. He told me that he had tried *corn* of all sorts upon it without success. It came up very well, but generally died away in weaning from the kernel. Nor did *potatoes* ever do well. He had one year a very fine prospect; but a cold high wind cut them off entirely. He was so fully tired of every thing but *grass*, that upon a stripe he was about to lay down, he only meant to throw a few oats, by way of encreasing the swath of hay, intending to mow them off with the rest of his close. His *manure*—lime, ashes, and cow dung; doing a patch well over every year.

water which nature has provided upon the spot, lands that are infertile can be rendered productive, without robbing those which are already in a state of productiveness,—the reality of the acquisition, *to the public*, cannot be doubted.

In the center of these hills, among their highest eminences, lies a plot of land which belongs, exclusively, to the Duchy of Lancaster. Might it not be laudable, in

G O V E R N M E N T,

to direct some attention toward its improvement? The two hundred thousand acres of waste, which lie immediately round it, would not be the only object in view: Twenty times the quantity of similar surface lies waste within the kingdom.

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CHAPTER

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L I S T

O F

R A T E S, &c.

BUILDING MATERIALS.

OAK TIMBER, for buildings, 14*d.* to 18*d.* a foot.

Ash timber, 1*s.* to 1*s.* 6*d.* a foot.

“ Stock ” bricks, 2 1*s.* a thousand, and

“ Water ” bricks, 1 5*s.*

Pantiles, 4 5*s.*

Ridge-stones, 5*d.* a foot.

Copings of gables, 5*d.*

Gable brackets, 2*s.* 6*d.* each.

Lime, 7*s.* to 9*s.* a chaldron.

Dimensions of bricks, $9\frac{1}{4}$ — $4\frac{1}{4}$ — $2\frac{1}{2}$ inches.

————— pantiles, 14 by 10 inches.

CAR-

CARPENTER'S WORK.

Journeyman's wages, 14*d.* and board, or
2*s.* a day.

MASON'S WORK.

Journeyman's wages, 16*d.* and board, or
2*s.* a day.

Laborers ———— 10*d.* ———— or
1*s.* 6*d.* a day.

BLACKSMITH'S WORK.

Common heavy work, 4*d.* a lb.

Traces, draught-irons, &c. 6*d.* a lb.

Horse-shoes, 4*d.* each—removes, 1*d.* each.

Laying a share or coulter, 8*d.* to 1*s.*

Sharping ———— 1*d.*

WOODLANDS.

Ship-timber, at the ports, 3*l.* to 3 guineas,
a ton.

Carriage of timber, about 9*d.* a ton, a
mile.

“Crambles”

“Crambles” — firewood boughs, 10s. to 12s. a load.

Bark, ready chopt for the tanner, 10s. 6d. a quarter.

Peeling bark, about 20d. a day.

———— and chopping 3s. to 3s. 6d. a quarter.

Spray faggots, 6s. to 8s. a hundred of six scores.

Binding such faggots, 2s.

• Felling and binding furze faggots, 4d. a score.

Grubbing ————— 6d. a score.

Grubbing without binding, 20s. to 30s. an acre,

PLANTATIONS.

Price of oziars, 1s. a bundle of a foot diameter, or $1\frac{1}{4}$ yard in circumference.

FENCE S.

Price of seedling white thorn, 5s. a thousand.

———— transplanted ———— 7s. to 8s. ————

Setting posts and two rails, and winding them with thorns, 4d. to 5d. a rod of 7 yards.

Stake-and-edder hedge, 3*d.* to 4*d.* a rod of 7 yards.

Fence walls; raising stones, carriage, and walling, 1*s.* a rod of 7 yards.

TEAM LABOR.

Hire of four horses and a man, 8*s.* to 10*s.* a day.

Carriage of coals, about 8*d.* a chaldron, a mile.

YEARLY SERVANT'S WAGES.

Head man, 13 to 15*l.*

Second — 8 to 10*l.*

Dairymaid, 5 to 6*l.*

DAY-LABORER'S WAGES.

Man in winter, 8*d.* a day and board.

— in summer, 1*s.* to 18*d.* — — — —

Woman, in autumn and spring, 6*d.* a day, no board.

— in hay-time, 9*d.* — — — —

— in harvest, 10*d.* — — — —

M A N U R E.

Price of lime, 7*s.* to 9*s.* a chaldron.

Burning lime — raising stones, breaking, filling, and helping to draw, 18*d.* to 20*d.* a chaldron.

Draw, on the north-side of the Vale (materials hard), from 2 $\frac{1}{2}$ to 3 chaldrons of lime, from one of coals.

— on the south-side (stone softer), 3 to 3 $\frac{1}{2}$ from one.

Set on 3 to 4 chaldrons, an acre.

S O I L P R O C E S S.

Underdraining with wood, 2 to 4 feet deep, 6*d.* for a rod of 7 yards.

Paring with the breast plow, 10*s.* to 14*s.* an acre.

Drying and burning fods, 5*s.* to 6*s.* an acre.

Spreading ashes, 2*s.* an acre.

Whole expence, 18*s.* to 21*s.* an acre.

H A R V E S T P R O C E S S.

Mowing grafs, 16*d.* a day, and board; or 21*d.* to 2*s.* 3*d.* an acre.

Mowing corn, 1*s.* to 14*d.* a day, and board.

BARN LABOR.

Thrashing wheat, 3*d.* a stook; or 2*s.* 6*d.* to 3*s.* a quarter.

GRASS LAND.

Gait of a cow, from Mayday to Michaelmas, 40*s.* to 45*s.*

PRO-

PROVINCIALISMS.

THE DIALECTS OF YORKSHIRE are strikingly various.

The provincial language of *Cleveland* differs more widely, in some respects, from that of the *Vale of Pickering*, though situated only twelve or fifteen miles from each other, than the Dialect of the Vale does from that of Devonshire, which is situated at an opposite extreme of the kingdom. The Eastern Morelands are a barrier which, formerly, cut off all communication between the two Districts. But this cannot be the only cause of difference: the language and the manners, of their respective inhabitants, appear to have *no natural affinity*: they are, to present appearance, as distinct races of people, as if they were descended from different roots. The pronunciation of the Vale bears a strong analogy to the *Scotch*; while that of Cleve-

U 3

land,

land, which lies immediately between the Vale and Scotland, has little affinity to the Scotch pronunciation.

About *Leeds*, the language still varies: it is there strongly marked by a *twang* in the pronunciation. In the Vale of Pickering the word cow, for instance, takes the *close* sound "coo;" about Leeds it becomes "caw:" the *a* *short*, as in *can*; the *w* being articulated as in the established pronunciation of the word.

In the more extreme parts of *West Yorkshire*, the dialect is characterized, by an *openness* or *broadness* of pronunciation, very different from the rest of the county. The language even of Wakefield and that of Leeds, though these two places are situated within twenty miles of each other, are, in many particulars, less analogous, than those of Scotland and the Vale of Pickering.

The dissimilarities here mentioned, however, relate more to PRONUNCIATION, or what is less properly termed *accent*, than to WORDS. Nevertheless, in words, the different Districts, of this extensive province, vary considerably both in *identity* and *number*.

PROVINCIAL WORDS are either *corruptions* of the established language, or *native words* descended from the ANCIENT LANGUAGE of the province they are spoken in. Hence, in RECLUSE DISTRICTS, we must expect to find the greatest number of *genuine provincialisms*;—of ANCIENT VOCAL SOUNDS.

The VALE OF PICKERING is singularly circumstanced in this respect. The peculiar recluseness of its *situation* has been described; and being in a manner wholly agricultural, its *connexions* are inconsiderable. Had it not been for the influx of words and fashion, which *Scarborough* has annually drawn into it, this secluded Vale must inevitably have been, in language and manners, a century at least behind every other District of *this* kingdom, situated equally near its center.

The MORELAND DALES, which are, in reality, appendages of the Vale, have been still more effectually cut off from all *converse with strangers*. Their situation is so reclusive, their soil in general so infertile, and their aspect so uninviting, that it is probable neither Roman, Dane, nor Saxon ever set foot in them. No wonder, then, the language of these Dales, which differs little from that

of the Vale,—except in its greater *purity*,—should abound in *native words*; or that it should vary so widely, in *pronunciation*, from the established language of this day, as to be in a manner wholly unintelligible to strangers; not, however, so much through *genuine words*, as through a regular SYSTEMATIC DEVIATION, from the established *pronunciation* of the *English language* *.

This difference in PRONUNCIATION generally arises, from a *change of the vowels*; which is, in effect, productive of a *change of words*. Hence, it will be necessary, in giving an adequate idea of the language, to point out the *leading principles of pronunciation*: and, previous to this, it may be proper to mention a deviation in GRAMMAR; which,
I be-

* It might be a difficult task, now, to ascertain with precision, whether these DEVIATIONS are in reality *corruptions* or *purities* of the ENGLISH LANGUAGE. They are probably a mixture of the two; I mean, they may contain some slight admixture of depravity. But it would be equally reasonable to suppose that a disturbed stream should be less adulterate than its fountain, as that the language at present established should be less *corrupt*, or (to change the word without altering the argument) less *refined* than that of a District secluded in a singular manner from all intercourse with other languages.

I believe, is peculiar to the dialect under notice.

The provincial language of East Yorkshire has no *genitive*, except that of its possessive pronouns; and except when the nominative is understood. When this is expressed, the preceding substantive becomes, in effect, an adjective; as, *John Hat*,—*George House*; analogous with *London porter*,—*Yorkshire butter*.

This excision of the genitive termination gives much additional beauty and simplicity to the language, *doing away, almost entirely, the declension of nouns*, and silencing, in some degree, the *hissing*, which is so disagreeable to the ears of foreigners, and which is one of the greatest blemishes of the English language.

A person, unacquainted with this mode of speech, will conceive it to be the cause of much ambiguity. But, among those who use it, no inconveniency whatever arises. When the nominative case is not expressed, then a genitive termination becomes requisite, and is always used; as, *Whose hat is this? It is John's. Whose house is this? It is George's.* The same in the personal pronouns:

pronouns: as, Whose land is this? It is *your's*; it is *mine*; it is *his*. Even when the substantive is joined, the personal pronouns take a genitive form; as, *his* country, *your* country, *my* country.

The PRONUNCIATION now remains to be noticed.

The deviations lie, principally, in the *vowels*; but there is one peculiarity of ARTICULATION which is noticeable; as being a stranger in the established pronunciation; though common, I believe, to the northern counties. This is in the articulation of the letter *t*, in *butter*, *matter*, and all words of a similar termination; also in *tree*, *trace*, *tread*, and all words and syllables beginning with *tr* *.

The articulation, in these cases, is between the established articulation of the *t*, and that of the *tb*; the tongue being pressed hard against the teeth and the gums, jointly; not slightly touching the gums alone, as in the ordinary articulation of the *t*. I notice this as a *provincialism*; and know no better test of a *northern provincialist* than this peculiarity.

In

* The letter *d* takes the same articulation in similar cases; namely, whenever it is subjoined with *r* or *er*.

In the pronunciation of VOWELS, that of *a long*, as in *stone*, *yoke*, *bole*, *more*, is first noticeable. A mere provincialist of East Yorkshire knows no such sound; nor can he, without much practice, pronounce it. In the provincial dialect it takes four distinct vocal sounds; namely, *eea*, *au*, *oaa*, *a*,—according to the consonants it is joined with in composition. Thus *stone* is pronounced *steean*; *yoke*, *yauk*; *bole*, *boosal*; *more*, *mare*.

The diphthong *ea*, which formerly, it is probable, had a distinct vocal sound assigned it, in the English language, but which seems to be, at present, entirely unknown to the English tongue, is still in common use, in the dialect under notice. In the established pronunciation, *break* is become *brake*; *great*, *grate*; *tea*, *tee*; *sea*, *see*; but, here, they are uniformly pronounced by a vocal sound, between the *e* and the *a long*.

The *a long* is generally, but not invariably, changed into *eea*; as, *stake*, *steeac*; *lame*, *leeam*; *late*, *leeat*; or into *a short*, as, *take*, *tack*; *make*, *mack*.

The *e short*, before *l* and *n*, is lengthened by the *y consonant* articulated as in *yet*, *yes*,
you:

you : thus, well (a fountain) becomes *weyl* ; to sell, to *seyl* ; men, *meyn* ; ten, *teyn* : in one case it changes into *e long* ; as, well (the adverb), *weel*.

The *i long* seldom has the established pronunciation. Before *ghf* it generally changes into *e long* ; as, night, *neet* ; bright, *breet* ; right, *reet* : before *l*, into *a broad* (as in father, half, and before the letter *r*) ; as, mile, *maal* ; stile, *staal* ; and does not, in any case, take, in strictness, the modern sound ; which is a diphthong composed of *a broad* and *e* : whereas its provincial sound, here, is the *accepted* sound of *e short* lengthened by the *y consonant* * ; as, white, *wbeyt* ; to write, to *wreyt* : a mode of pronunciation which perhaps formerly was in general use, but which now seems to be confined to provincial dialects, or is not at least heard in *fashionable* language.

The *oo* before *k* changes into *u long* ; as book, *buke* ; to look, to *luke* : before *t, l, m, th*,
generally

* I say, the *accepted* sound of *e short*, though it is by no means the *actual* sound of that vowel. I have nevertheless thought proper to give it the established power in the Glossary. The *i short* I retain, for the same reason, though still more liable to objection.

generally into *ea long*; as boots, *beats*; fool, *feal*; broom, *bream*; tooth, *teath*: before *r*, mostly into *ee*; as floor, *fleer*; door, *deer*.

Ol before *d* generally becomes *au*; as, old, *aud*; cold, *caud*; wolds, *wauds*: in one instance the *l* is mute; as, hold, *bod*.

In words ending in *ault* or *alt*, the *l* is likewise mute, the termination becoming in both cases *aut*; as fault, *faut*; salt, *saut*; malt, *maut* *.

The

* This brings to my mind a circumstance which deserves notice; as it serves to shew the *process of corruption*, or as others perhaps will have it, *refinement*, of languages. There are, in many cases, *two distinct provincial languages* in this District: one of them spoken by the lower class,—more especially of old people,—the other by the superior class of *provincialists*. The first I shall call the *vulgar tongue* (though in all probability the purer language); the other the *middle dialect*. Thus the English word *malt* is, in the vulgar tongue *maut*, in the middle dialect *melt*: *Malton*, in like manner, becomes *Mahton* and *Molton*. All syllables formed with *o long* have three distinct pronunciations: thus *boal* in the vulgar tongue, *ball* in the middle dialect, and *bole* in the English language, convey the same idea. *Creeac*, *crake*, *crow*; *father* (the *a short*), *faither*, *father*, are other instances. In a few generations, it is probable, the present vulgar tongue will be lost, and the present middle dialect will then, of course, become the vulgar tongue.

The *ou* changes, almost invariably, into *oo* ; as, flour, *flour* ; our, *oor* ; house, *hoose* ; mouse, *moose* .¹

The *ow* is subject to a similar deviation ; as, bowls, *bools* ; power, *poor* ; flower, *flour* ; bow, *boo* ; cow, *coo* .

These are the principal part of the more REGULAR DEVIATIONS in the pronunciation of the East-Yorkshire dialect. To go thro' its ANOMALIES would be an endless task : some of them will appear in the following GLOSSARY ; in the forming of which, I have been induced to break through my original plan, with respect to PROVINCIALISMS ; which was, and indeed still is, to confine myself, merely, to such words as relate more especially to RURAL AFFAIRS. But finding, *in this particular instance*, a DECLINING LANGUAGE, which is unknown to the public *,—but which, it is highly probable, contains more ample remains of the ANCIENT LANGUAGE

* Except some fragments of it, which were collected on the banks of the Humber (at the most extreme distance from what may be considered as the source of the dialect) by Mr. Brokesby, and communicated to Mr. RAY ; who has preserved them in his COLLECTION OF LOCAL WORDS.

LANGUAGE of the CENTRAL PARTS OF THIS ISLAND, than any other which is now spoken,—I was willing to do my best endeavour towards arresting it, in its present form; before the general blaze of fashion and refinement, which has already spread its dawn, even over this secluded District, shall have buried it, irretrievably, in obscurity.

PROVINCIALISMS

OF

EAST YORKSHIRE. *

EXPLANATIONS. In this Glossary, *a*, before a consonant, and without the *e final*, has the accepted power of a *short*, as in man. *a*, with the *e final*, or *ai*, denotes the *English a*, or a *slender*, as in fate; *aa*, the *French a*, or the *English a broad*, as in half: *au*, the *Italian a*, or the *English aw*, as in law; *aw* a *syllable* composed of a *short*, as in hat, and *w consonant*, as in word.

e, the accepted power of *e short*. *ea*, a *long vowel*, or *simple vocal sound*, whose power lies between those of a *slender* and *e long*. *ee*, the *e long*, as in feet. *eea*, a *diphthong*, or *compound vocal sound*, composed of *e long* and a *short*. *ey*, a *syllable* formed of *e short*, and *y consonant*.

o is invariably *short*, as in hot. *oo* invariably *long*, as in food. *ooa*, a *compound* of *oo* and a *short*.

The *i* and the *u* have their accepted powers assigned them; excepting the slight deviation in the *i long*, which has been mentioned. Where there is room for ambiguity, the quantity is specified.

ABOON;

* More especially of the Eastern Morelands and the Vale of Pickering: the Wolds, Holderness, and the Howardian hills, use the same dialect, but in a less perfect state.

A.

ABOON; above, in the general sense.

ADDLE; to earn by working: "he cannot addle his bread."

ADDIWISSEN; to be sent about addiwissen, is to be sent on a fool's errand:—an expression which is nearly obsolete.

AIGER; an impetuous tide. See **WEST OF ENGLAND, PROV. BOAR.**

AIRTH; quarter; as, "in what airth is the wind?"

AISK; *lacerta vulgaris*; the evet, or land newt.

AITHER; a plowing; as, the first or second aither; the same as *airtb* of some places, and *earth* of others.

ALLFARE; for good-and-all: "he is gone for all-fare."

AMELL; between; as, "amell six and seven o'clock."

ANANTERS, or ANTERS; left; or for fear; —"ananters it should rain."

ANCHOR; the chape of a buckle.

ANENST, or OVER-ANENST; opposite.

ANGLES; the holes or runs of moles, field mice, &c.

AR; a cicatrice, or scar left by a wound.

ARF, or ARFISH; somewhat afraid.

ARK; a kind of large chest or bin, with divisions within, formerly used for laying up dressed corn: a sort of moveable granary.

ASS; ashes.

ASS CARD; fire-shovel.

ASSLE; query, a corruption of *axis*, or a *native* word? *afsle-tooth*, a grinder; *afsle-tree*, the axis of a carriage-wheel, but of no other wheel; nor is it ever applied without the termination tree.

Perhaps *axle*, as applied to the wheel of a carriage, is a pedantic corruption of this word.

AT; who, whom, or which, in the *relative* sense: it is, perhaps, a contraction of *that*: "the man at we met"—"the man at fat next you"—"the house at we passed." See WHILK.

AVERAGE; the pasturage of common fields, and other stubbles, after harvest.

AUM; elm.

AUMAS; an alms.

B.

BACKBEE-RAWAY; *vespertilio*; the bat.

BACKSTON; (that is, *baking stone*) a slate, hung in an iron frame over the fire, to bake cakes upon.

BADGER; a huckster.

BAIRN; a child.

BAIRNWORDS; *bellis perennis*; daisies.

BALKS (pronounced *bauks*); a rough chamber in an out-building.

BAM; a joke; fun.

To BAM; to play the joke; to cajole.

BAND; a rope: hence BAND-MACKER; rope-maker.

BARFAN; a horse-collar.

BARGUEST; a hobgoblin of the highest order; terrible in aspect, and loaded with chains of tremendous rattle.

BASS; a matt of any kind.

BAT; a blow: hence

BATS; a beating: "aa'll gi' tha' thi' bats:" I'll give thee a beating.

BAUF; well grown, lusty; as a boy or youth.

To BAUTER; to trample, in a clownish manner; or as horses tread down grass, or growing corn.

BEACE; cattle; the plural of beast.

BEACE;

- BEACE; a cattle stall.
 To BEAL; to bellow, as an ox.
 BECK; brook (the common term).
 BEDDING; litter, of horses or cattle.
 BEELD; shelter; also the cause of shelter; a clump or skreen of trees; planted for the protection of stock, is called a beeld.
 BEELDING; building; perhaps the diminutive of BEELD.
 BEE-SUCKEN; applied to the ash, when its bark is cancerous, black, and turgid.
 BELIVE; (the *i long*) in the evening.
 BENT; a species of rush which grows on the Moreland hills: *Juncus squarrosus*.
 BESHARP; make haste.
 BINK; a bench, common at the doors of cottages; generally made of stones; sometimes of of earth; and planted on the top with camomile.
 BIRDSEYE; *veronica chamædrys*; germander speedwell.
 BISSLINGS, or BISSLING-MILK; the first milk of a newly calven cow.
 BITER, or BILLYBITER; *motacilla atricapilla*, the blackcap.
 BLACK-NEBB'D-CROW; *corvus corone*, the carrion crow.
 BLAKE; yellowish: the color of bees-wax.
 To BLASH; to splash.
 BLASHY; wet, dirty, splashy; as, "blashy weather."
 BLEA; dusky blue, or lead color.
 BLEABERRY; *vaccinium myrtillus*, common whortleberry.
 BLEB; a blister; or airbubble.
 BLENDINGS; peas and beans grown together as a crop.
 BLUEMILK; skim-milk.

BLINDERS, or **BLINDING-BRIDLE** (the *short*); blinkers for draught horses.

BLINDMOUSE; *scorax araneus*, the shrew mouse.

BLUE-CAPS; *scabiosa succisa*; meadow scabious; devil's-bit.

BLUFF; chubby; having a red, full, firm face; spoken of a boy or girl.

To BLUNDER; to jumble, or disturb, so as to foul; as the water of a pool, or liquor which has deposited a sediment.

BOGGLE; an inferior hobgoblin, or any thing frightful; hence *to boggle*, as a horse.

BOG VIOLET; *pinguicula vulgaris*; butterwort.

BONNY; pretty, handsome, beautiful.

To BOOAC; to reach, to keck.

BOOK; size or bulk; a word in common use.

BOON; going presently; as, "he is boon to market."

BOORLY; lusty; gross and large made, with some degree of comeliness; as, a boorly man or woman.

BOTCHET; small-beer mead.

BOTTRY; elder: a "bottry tree."

BOWKERS; an interjection, expressive of a low degree of surprize.

BRAKENS; *pteris aquilina*; brakes; fern.

BRANDNEW; or **BRANDSPANDER NEW**; fire-new,—never used.

BRANT; steep; as a hill, or a road (the common epithet).

BRASS; halfpence.

BRASHY; small, rubbishly; as refuse fuel.

To BRAY; to pound, or to break small; as limestones for the kiln, &c.

BRECKENS. See **BRAKENS**.

BREEA; the brink or bank of a brook or river.

BREEKIN; the fork, or division of a tree; and, figuratively, of the thighs.

BREERS; brambles and briars.

BRIDE-DOOR; "to run for the bride-door," is to start for a favor, given by a bride, to be run for,

for, by the youth of the neighbourhood; who wait at the church door until the marriage ceremony be over, and from thence run to the bride's door. The prize a ribbon, which is worn, for the day, in the hat of the winner. If the distance be great, as two or three miles, it is customary to "ride for the bride-door."

BRIDE-WAIN; a carriage loaded with household furniture and utensils, travelling from the bride's father's to the bridegroom's house. Formerly, great parade and ceremony were observed on this occasion. The wains were drawn entirely by oxen, whose horns and heads were ornamented with ribbons. Ten or perhaps twenty pair of oxen have, on great occasions, assisted in drawing a bride-wain. A young woman at her spinning-wheel is seated on the center of the load. In passing through towns and villages, the bride's friends and acquaintance throw up articles of furniture, until the "draught," be it ever so powerful, is at least feigned to be over-loaded; and at length is "set fast;" generally, however, by some artifice, rather than the weight of the loading; which, nevertheless, has on some occasions been so considerable, as to require several wains to carry it.

BRIMMING; a sow, when she will take the boar, is said to be a brimming; and the boar is said to brim her.

BROCK; *cicada spumaria*, the cuckowspit insect. "He sweats like a brock."

To **BROG**; to browze upon;—to crop; as cattle are wont to top underwood.

BROO; the forehead; and hence the upper part of a hill, resembling the forehead.

BROACH; the spire of a church.

BUCK-HEADING; cutting off live hedge-thorns, fence-height.

BUCKLE-HORNS ; short crooked horns, turning horizontally inward.

BUFE ; a bough of a tree.

BUFFETSTOOL ; a low four-legged stool.

BULLHEAD, the fish, *cottus gobio*, the miller's thumb.

BULLS-FOREHEADS ; *aira caspitosa* ; turfey air grass, or haddock grass.

BULLSPINK ; the bird, *fringilla caelebs*, the chaffinch.

To BUM ; to hum ; as a "bumming noise"—the "bumble bee:" that is, the bumming bee.

BUMMLE-BEE ; *apis terrestris*, the humble bee ; properly humming bee.

BUMMLE-KITES ; the fruit of the bramble ; black berries.

BUN ; a keeksy, or hollow stem.

To BUNCH ; to kick, with the toe ; hence

BUNCHCLOT ; a farmer, in derision ; a clod-hopper.

BURDENBAND ; a hempen hay-band.

BURK ; *betula alba* ; the birch.

BUR-THISTLE ; *carduus lanceolatus* ; spear thistle.

BUSH ; the box of the nave of a carriage wheel.

BUSK ; a bush.

BUTTERBUMP ; *ardea fbellaris*, the bittern.

BUVER (the *u long*) ; *culex pipiens*, the common gnat, or mosquito.

C.

To CADGE ; to carry.

To CAKE ; to cackle as geese : geese are said to cake, hens to cackle.

CALL ; occasion or necessity ; as "he had no call to do it."

CAM ; any long mound of made earth.

CAN ; a small milk-pail with a handle on the side.

To CANKER ; to rust.

CANKER ;

CANKER; rust (in common use).

CANKERED; crusty; as a cur, or an ill natured husband.

CANTY; brisk, lively, active; generally spoken of an old person.

CAPES; ears of corn, broken off, wholly or partially, in thrashing; as well as, the grains to which the chaff adheres; (the NORF. COLDER)

CAR; low marshy ground; fen; contradistinct from "Ing," as being *pastured*.

CARBERRIES; gooseberries; *ribes grossularia*; properly *grossberries*.

CARLINGS; fried peas, eaten the Sunday next but one before Easter; which is called "Carl-Sunday."

CATSWERRIL; *sciurus vulgaris*, the squirrel.

CAT-WHIN; *rosa spinosissima*; burnet rose.

To **CAVE** (vulgarly to *keev*); to rake off or out of; as short straws and ears, from the corn-in-chaff, on a barn floor. Hence

CAVING RAKE; a barn-floor rake, with a short head and long teeth.

CAUF; calf.

CAUMERIL; a butcher's gambrel, for sheep and pigs; (that used for cattle is called a "stang"): "as cruked as a caumeril."

CAZZONS; the dung of cattle dried for fuel; a common article of fuel in Holdernefs.

CEILING; the wainscoting of a room is called the "sealin;" the ceiling, the "UNDERDRAWING."

CHAFTS; the jaws.

To **CHAR**; to chide; as a child, or a dog.

CHATS; keys of the ash, and maple; also the catkins of the hazle.

To **CHAVVLE**; to chew, imperfectly. See **CHAFTS**.

CHEESE-CAKE-GRASS; *lotus corniculatus*; birdsfoot trefoil.

CHESLIP-SKIN; the calf's bag, used in making "yearning."

CHEVON; *cyprinus cephalus*; the chub.

CHIMPINGS; grits; rough-ground oatmeal.

To CHIP; to trip; as, "to chip up the heels;" or to "chip a fall;" as in wrestling.

To CHIP; to break the shell, as chickens do previous to their exclusion; also to *chop*, as the lips.

CHIZZIL; bran (the common term).

CHOOPS; heps; the fruit of the rose.

CHUB; a thick, clubbed piece of firewood.

CHUBBY; fat, large-headed, full-faced; as a child or young person.

CHUB-HEADED; large or thick-headed; spoken of cattle or sheep: hence, probably, a name of the "CHEVON."

To CHUNTER; to talk about and repine at small misfortunes; to express discontent about trifles.

CICELY; *chærophyllym sylvestre*; orchard weed; cowparsley.

To CLAG; to cleave or cling.

CLAGGY; sticky; as wet clay.

To CLAME (*v. n.*) to daub, as wet soil with the harrows.

To CLAME; (*v. a.*) to spread unctuous matter; as salve on a plaster, butter on bread.

To CLAPPERCLAW; to beat, or paw, with the open hand.

CLARTY; clammy, as honey, &c. spoken of a clayey soil when wet.

CLAVVER; *trifolium repens*; clover.

To CLAVVER; to clamber, as children.

CLEANING; the secundine of the cow, ewe, &c.

CLEG; *tabanus pluvialis*; the grey horsefly.

To CLICK; to snatch hastily, or rudely.

To CLIP; to shear as sheep.

CLIPPING; a sheep-shearing.

- To CLOAM, or CLAUM; to pull together with the hands and with the fingers spread.
- CLOCKS; *scarabæi*; beetles of all kinds.
- CLOCK-SEAVES; *schænus nigricans*; black-headed bogruff.
- CLODDY; thick, short, and full of flesh; as a bullock of this description.
- CLOG; a log; as "a clog of wood."
- CLOG-SHOES; wooden shoes; or rather shoes with wooden soles.
- GLOSE-TEAP; a male sheep, with both testicles within the barrel. See HUNG TEAP.
- To CLOW; to pull together, roughly with the arms; or to labor in a vulgar, furious manner.
- CLUBSTER; *mustela erminea*; the stoat.
- To CLUNTER; to make a rude noise, with the feet, in walking.
- To COBBLE; to stone; to throw stones, dirt, or snowballs.
- COBBLES; pebbles; round stones found in the soil. Also the small boats of fishermen.
- COBBLETREES; double swingle-trees, whip-pins, or splinter-bars.
- COBBY; merry; cheerful.
- COD; pod; pease or beans which are well hung with pods, are said to be well "codded."
- COLLIER; *hirundo apus*, the black swallow, or swift.
- COMMOTHER (perhaps *co-mother*); a god-mother.
- CONNY; clever; neat; tidy; agreeable.
- COOL, or COWL; a swelling raised on the head, by a blow from a cudgel, or other hard weapon.
- COOP; an ox cart, with a *close* body, and without "shelvings," for carrying manure, &c. still in use.
- To COOR; to crouch or sit upon the haunches.
- COOSCOT; *columba palumbus*; the wood-pigeon.
- COPING (pronounced *keapin*); the covering of a stone quarry.

COPPIN;

- COPPIN; one ridglet of a PURL of yarn.
- CORNBIND; *polygonum convolvulus*; climbing buck weed: also *convolvulus arvensis*; corn convolvulus.
- CLOSE (pronounced *cloace*); an inclosure; in distinction to "field," which implies an open common field.
- To COTTER; to entangle; as thread, or the hair.
- COTTREL; the key of an iron bolt.
- GOUSIN BETTY; a female changeling, real or counterfeit, who goes about the country, to excite charity; as she does in Devonshire, under the same name.
- COWCLAGS; bundles of dirt, hanging to the buttocks of cattle or sheep; or to the coats of flatterns.
- COWDY; pert; frolicsome.
- To COWL; to gather, rake, or scrape together.
- COWLPRESS; a lever.
- COWL-RAKE; a mud scraper.
- COW-MIG; the drainage of a cowhouse, or dunghill.
- To COWP; to change; to swap.
- COWS-AND-CALVES; *arum maculatum*; cuckow pint.
- COWSTRIPLINGS; *primula veris*; cowslips.
- COWTHERED (the TH soft as in *these*); recovered from disease or coldness.
- COW-TIE; a short thick hair rope, with a wooden nut at one end, and an eye formed in the other; for HOPPLING the hind legs of a cow, while milking.
- CRAB-HULLINGS; the residuum in making verjuice.
- To CRACK; to brag; to speak highly of, or recommend strongly: "the crack of the country."
- CRAKE (vulg. *creeak*); a crow or rook.

CRAKE-FEET; *orches*; orchifes.

CRAKE-NEEDLE; *scandex pecten-veneris*; shepherds needle.

CRAMBLES; large boughs of trees, off which the faggot wood has been cut.

CRANKY; checked linen: "cranky apron;" a checked linen apron.

To **CREE**; to seethe; to *pre-boil*, as rice, &c.

CREEL; a kind of bier, used for slaughtering and salving sheep upon.

CROFT; a small inclosure; larger than a yard; but smaller than a "CLOSE."

CROOK (pronounced *cruke*); a hook; as, a "yat-cruke;" a gate-hook.

CROUCE; pleased, satisfied, happy, in good spirits.

To **CROWDLE** (diminutive of *to crowd*); to creep close together, as children round the fire, or chickens under the hen.

To **CRUNKLE**; to tumble or rumple, as linen or other cloaths.

CUFF OF THE NECK; the loose skin, on the neck of a dog, &c. by which he is usually held.

CUP-ROSE; *papaver*; poppy: (an apt name).

CUSHIA (the *u* long); *heracleum sphondylium*; cowparsnep.

D.

To **DAFFLE**; to confuse, or render stupid: it is also used in the neuter sense; "he daffles," he wanders, or falters in his speech or conversation. Hence,

DAFT; stupid, inapt; opposed to quick and sensible.

To **DAG**; to sprinkle with water; as linen, &c.

DAITLE (that is *day-tale*); by the day; as "daitleman," a day labourer; "daitle-work, work done by the day.

To **DANDER**; to caper; perhaps the diminutive of to dance.

DAP;

DAP; fledge, fully feathered; as young birds in the nest.

To DARK; to listen.

DARKENING; dusk; the closing in of the day.

DAU; doughy, underbaked.

To DAUL; to weary.

DAUL'D; tired; worn out with fatigue or repetition.

To DEA; to do: as, "winnot ye dea't?" will you not do it?

DEAF; blasted, or barren; as a deaf ear of corn; or a deaf nut; namely, a nut without a kernel.

DEA-NETTLE; *galeopsis tetrahit*; wild hemp.

DEEAZ'D; killed or much injured, by cold, or a want of due warmth; as vegetables which are frost-nipped; or chickens that die in the shell, through the hen's absence.

DEED; doings: "whent deed;" great to-do.

DEFT; neat; pretty; handsome.

To DELVE; to dirt or bruise; as a pewter or a tin vessel.

DESS (of hay); a cut of hay.

DESSABLY; orderly.

To DESS UP; to pile up neatly.

To DIG; to break up the ground, with a hack, mattock, or other tool, which requires a stroke in using it. See To GRAVE.

DIKE; a ditch; also a puddle, or small pool of water is a dike, or "water-dike."

To DILL; to soothe, blunt, or silence pain or sound.

To DINDLE; to experience a sort of tremulous sensation, after a blow, or after the circulation has been checked, by cold, or by what is termed *sleep*, in the extremities. Perhaps it is diminutive of

To DITHER (the *i short*, as in wither); to tremble, or shiver with cold.

To

- To DOCK; to trim the buttocks, &c. of sheep.
 DOCKEN; *rumex*; the dock.
 DOGFINKIL; *anthemis cotula*; maithe-weed.
 DONNOT (that is, *dows not*); good for nothing;
 bad: an epithet applied to the devil.
 To DOOK; to duck or immerge in water; also
 to bow down the head, abruptly.
 DOORY, or DEERY; very little, diminutive;
 "a laadle doory thing."
 DORDUM; a loud, confused, riotous noise.
 DORMAN; the beam of a *chamber* floor.
 To DOW; to thrive or be useful; as, "he dows
 for nought," he is good for nothing: "he nei-
 ther dees nor dows," he neither dies nor mends:
 DOWLED; dead, flat; spoken of liquor which
 has lost its head.
 DOWLEY; sickly, pale; not brisk, or florid.
 DOWNDINNER; afternoon luncheon.
 DOWP; *corvus corone*; the carrion crow.
 To DOVE; to doze: "a doving draft;" a nar-
 cotic.
 DOZZAND; shrivelled; not plump and fair.
 DRAFF; brewers grains.
 DRAPE (vulgarly *dreeap*); a barren cow.
 DRAUGHT; a team, either of oxen or horses.
 DREE; tedious; unexpectedly long.
 To DRESS (pron. *drifs*); to clean, as the barn-
 floor or the table; also to cleanse from refuse, as
 corn or flour.
 To DRITE; to drawl in speaking.
 DROKE (pronounced *droac*); *lolium temulentum*;
 darnel.
 DRYSHOD; opposed to WETSHOD.
 DUBBLER; a dish or platter for the table.
 DUDS; cloaths; apparel.
 DUMP; a deep hole of water; feigned generally
 to be bottomless.
 DUNDER-KNOLL; a blockhead.

To **DUZ**; to beat out, as over-ripe corn at harvest.

DWINED; shrivelled, as corn.

E.

EASED; dirtied; as by walking in a dirty road.

EASINS; eaves of a house.

EE; the eye.

EEN; eyes.

EEN; eve; (probably a contraction of *even*), as "Kefmas een," "Cannlemas een," "Fastness een," "Easter een," "Whiffen een."

EERAN; errand.

ELLER; *betula alnus*; alder.

ELSIN; an awl.

ENTRY; an entrance, or small hall.

ESH; *fraxinus*; the ash: probably the Saxon pronunciation.

EWER. See **YEWER**.

EY (the *e* short and the *y* articulate); yes, aye: the affirmative answer, to that which is ascertained. See **WYAH** and **WEYEW**.

F.

FAANTICKLES; freckles on the face.

To **FAFF**; to blow in puffs.

To **FAFFLE**; to play as a loose garment in the wind.

FALLOW; ground laid down to rest, without sowing grass seeds (as formerly practised). See **FAUF**.

FALLOW HAY; hay grown upon a fallow, or natural new ley.

To **FALTER**; to thrash barley, in the chaff, in order to break off the awns.

To **FASH**; to tease, and vex by importunity.

FASTNESSEEN (perhaps a corruption of *Fastmas even*); Shrove Tuesday; the eve of Lent.

FAT-HEN; *chenopodium*; goosefoot.

FAUD;

FAUD; a truss of short straw, containing as much as the arms can well "faud;" that is, fold.

FAUF; a fallow, or ground repeatedly tilled, without an intervening crop. See **TO FELLY**.

TO FEAL; to hide, in the general sense.

TO FEED (*v. a.*); to fat cattle or sheep. "I mean to feed her;" I intend to fat her.

TO FELLY, to break up a fallow.

FEND (*vulg. FEYND*); activity, management, assiduity, prowess.

TO FEND; to strive, as for a livelihood.

TO FEY; to winnow with the natural wind.

TO FEZZON ON; to seize fiercely; as the bulldog fastens on the baited bull.

TO FICK; to struggle or fight with the legs; as a cow in the "tie;" or a child in the cradle.

FIRE-EYLDING; fuel.

FITCHES; *vicia*; vetches.

TO FITTLE; to prepare, adjust, or make ready.

FIXFAX; the sinews of the neck of cattle and sheep.

TO FLACK; to flicker as a bird; to throb as a wound.

FLAGS; flakes of snow are called "snaw flags."

TO FLAN; to spread wide; as the sides of a bowl or scuttle; opposite to upright.

TO FLAY; to frighten, in the general sense.

FLAYCRAKE; a scare crow.

FLEAKS; wattles; hurdles woven with twigs.

FLECKED; pied, as cattle.

FLIG; fledge; able to fly.

FLIPE (of a hat); the brim.

TO FLIT; to move, or remove, as tenants at quarter-day.

TO FLOWTER; to flurry; to confuse, with a degree of fear.

FOALFOOT; *tussilago farfara*; coltsfoot.

FOG;

FOG ; aftergrafs (hence perhaps *foggy*, as applied to a horse).

FOIST ; musty.

FOLD GARTH (vulg. *fauldgarth*) ; farm yard.

FOND ; weak, silly ; foolish, idiotic.

FOND-PLUFE : It was formerly a custom, which is not I believe yet laid aside, for the youth of each parish or township to drag a plow from village to village, on Epiphany ; or " Twelfth-day ;" collecting money, to make merry with in the evening. Each party is headed by " Mab and his wife ;" two young men in disguise, with their faces blacked, and a kind of Harlequinean dress. I have met with no satisfactory account of the origin of this custom.

FORE-ELDERS : progenitors.

FOSS ; (perhaps a contraction of FORCE) ; a waterfall.

FOUL-MART (pron. *foemert*) ; *mustela putorius*, the polecat.

FOWT ; a fool.

To FOOAZ ; to level, with a pair of shears, the top of a fleece of wool.

FOX-FINGERS ; *digitalis purpurea*, the fox-glove.

To FRAG ; to cram, to fill inordinately ; as the pockets, or as a cow's udder is sometimes filled.

FREBBY ; in proportion to, or comparison with. " This is good, trebby that."

FREM ; strange, inimical, not intimate or friendly.

To FRIDGE ; to chafe ; to *frict* ; to wear or injure by friction.

FUDGEN : low, squat and inactive ; opposed to RENKY : spoken chiefly of young people.

FRUGGAN ; an oven poker : also a dirty slovenly woman.

G.

GAALFAT, or **GUILEFAT**; the vat in which new ale is set to ferment; also the liquor fermenting.

GAD;—a supple, tapering rod, six or seven feet long, with a leathern thong, about three feet long, fastened to the weaker end,—is called a gad; with which the team of oxen and horses united are, or rather were, universally driven: a fishing rod is, in like manner, called a “fishing gad.”

GAIN; short, near; as, the “gainest way.”

GAINERHAND; nearer, more convenient.

GAINHAND; near.

GAIRN; yarn.

GAIT (vulg. *geeat*); street; as west gait, castle gait*, the town gait, the gait door.

GAIT (vulg. *geeat*); a way; as “skilling gait,” “gossip gait;” the names of by-ways, across common fields; also “git a gait”—go thy way.

GAIT (pron. *geeat*); a going place; as a “cow gait;” the going of a cow in a summer pasture.

GAIT (pronounced *gate*); a single sheaf of corn, bound near the top, and set upon its buts †.

GALLAC-HANDED (Q. gaelic, or gaulic, or gallic handed?) left handed:

GALLOWAY; the common name of a poney, or under-sized saddle-horse.

GAMA'SHERS; short spatterdashes, worn by plowmen.

To **GAMMER**; to idle.

* In towns which never were inclosed by a wall; consequently never had any *gates*. The interior streets of York, and perhaps of all old towns in the county, are called *gait*s; improperly *gates*.

† See Vol. I. page 355. Note.

- GAMMERSTAGS; an idle loose girl. See
STAG.
- To GANG; to go.
- GANG; a fet; as "a gang of calves-feet."
- GANTRY; a beer stand; a frame for placing
liquor casks on.
- To GAR; to make, or oblige by force; as, "I'll
gar you do it."
- GARFITS; garbage.
- GARSIL; hedging thorns, or other brushwood,
used in making dead hedges.
- GARTH; a yard, or small inclosure near a house.
- To GAUV; to stare about, oafishly.
- GAUVISON; an oafish, weak silly fellow.
- GAY; considerable; middling; ordinary: "a gay
book"—a tolerable size or bulk.
- GEEAVLAC (perhaps *gavle-back*); a large iron
crow, for raising stones, &c.
- GEEAVLE (in the middle dialect *gavle*); the
gable, or upright end, of a roof.
- GEERS; harness of draught horses (the common
term).
- To GERN (the *g hard*, as in *get*); to snarl as a
dog, or an ill-natured husband.
- GEWGAW (the *w* articulate); a Jew's harp.
- GIB (the *g hard*, as in *gild*); a hook: a GIBBY
STICK, a hooked stick; a NUT-GIB, a nutting hook.
- GILDERS (the *g hard*); hair nooses for catching
small birds.
- GILL (the *g hard*); a small valley; generally a
branch of a valley in a mountainous country,
furnished with a stream, and containing more or
less woodiness: a dell.
- GILTS (the *g hard*); young female pigs, whether
open or spayed; analogous with *beifers*.
- GIMMER (the *g hard*); a female young sheep;
as, "gimmer lamb"—a ewe lamb—"gimmer
hog"—a female ewe of the first year.

GLEAD;

GLEAD; *falco milvus*, the kite.

A GLIFT; a glimpse.

To GLOOAR; to stare with a fixt countenance, rudely or frightfully.

GLOR-FAT; very fat: Q. from GLOR, loose fat?

GLUT; a large wooden wedge.

GOB; a vulgar name for the mouth: hence GOB-STICK, a wooden spoon.

GODSPENNY; earnest money, given on hiring a servant.

GODSHARLD; God forbid!

GOLDSPINK; *emberiza citrinella*; the bird, yellowhammer.

GOOAC (mid. dial. *gauk*); the core of a haystack, or of an apple.

GOODS; livestock.

GOSSIP; a godfather.

GOTHERLY; affable, sociable, pleased with each other.

GOWLANS; the yellow flowers of the *ranunculus* tribe.

GOWPIN; as much as the two hands can hold.

GRAIN; a branch; as, a bough of a tree, or a branch of a dale; also the tine of a fork.

GRAITH; riches.

To GRAITHE; to make fit; to prepare; to furnish with things suitable.

To GRAVE (vulg. *greeav*); to dig or break up the ground, with a *spade*. See To DIG.

GREASE; rancid butter, of the lowest degree. See Vol. II. p. 203.

GREEN LINNET (in contradistinction to the grey linnet, or linnet); *loxia chloris*; the greenfinch.

To GREET; to weep; to cry as a child, or a person in grief.

GRIFF; a narrow valley, with a rocky fissure-like chasm at the bottom: a dingle.

To GRIME; to fally with soot or coals; in common use.

GRIP; a trench, or small ditch.

GRIPE; a dung-fork.

GRIZELY (vulg. *grazly*); ugly in the extreme.

To GROZE; to save or lay up; hence

GROZER; one who keeps money or other valuables long by him. Opposed to a spendthrift.

H.

HACK; half a mattock; a mattock without the axe end; a tool much in use.

HAG; a coppice; originally, perhaps, the woodland set apart, by the lord of the soil, for fuel for his tenants; many woods yet retain the name of *Hags*, and one wood, in Sinnington, that of "*poor folks bags*." In the highlands of Scotland, the word is still used in a similar sense.

HAGSNA'RE; a stool or stub, off which coppice wood has been cut.

HAGWORM; the only name in use for *coluber berus*, the adder; which delights in a coppicewood, when recently cut: it grows, here, to a large size, and is extremely venomous.

HAIROUGH; *galium aperine*; cleavers.

HANDCLOUT (that is, *hand cloth*); a towel.

HANK; a with, or rope, for fastening a gate; also a skein of yarn.

To HAP; to cover; as the seed with soil, or the body with cloaths.

A HAR; a strong fog, or small drizzling rain.

HARLED; mottled; as cattle.

HASK; deficient in moisture; spoken more particularly of food, as bread.

HAUF; half.

HAVVER; oats.

HAY-SPADE; a sharp, heart-shaped spade, universally used for cutting hay with.

HEAF; the haunt, walk, or habitual pasture of sheep, on a common; or wide heath.

HEAP;

HEAP ; a pottle, a quartern, a quarter of a peck.
To HEAZ ; to cough or hawk ; as cattle when they clear the windpipe, or force up phlegm.

HEBBLE ; the rail of a wooden bridge.

HECK ; a rack ; as a " hay-heck ;" a horse-rack ; also the inner or entry-door of a cottage ; formerly, in all probability, made in the form of a heck.

HECKLE ; the flax-dresser's tool.

HECKLER ; a flax-dresser.

HEDGING MITTENS ; hedging gloves.

HEEAH ; here—take it.

HEEAL ; whole (probably the old British word).

HELM ; a hovel ; or an open shed for cattle ; sometimes covered with faggots, and frequently with a stack of beans, or other corn.

HERRINSEW ; *ardea cinerea*, the heron.

HEV ; have.

HEYGOMAD ; wild riotous tumult ;—" they played heygomad."

HEYNBAUKS ; hen roost.

HEYNCAUL ; a chicken coop.

HEYNPENNY ; *rhinanthus crista-galli* ; yellow rattle.

HEZ ; has.

HINE (pron. *baan*) ; a farm bailiff, or head-man.

To HIPE ; to strike with the horn (Doss—NORF.)

To HIP ; to skip, or miss, in reading.

HIPPLES ; cocklets, or small bundles of hay, set up to dry. Vol. II. p. 135.

To HITCH ; to hop, on one leg.

HOB ; the shoe, or foal, of a sledge.

HOFF ; the hough, hock, gambrel, or hind knee of cattle : hence

To HOFFLE ; to walk badly ; not firmly ; to knock the hoffs together.

HOG ; a sheep of a year old ; a hoggard.

HOG PIGS ; castrates ; barrow pigs.

HOLL (pronounced *bowl*); hollow; as, a "hollow-way," a hollow-way: cattle when empty of meat are said to be "holl."

HOLL; a deep narrow valley is frequently termed a "holl."

HOLLIN; *Ilex*, the holly.

HOLM (pron. *bowm*); a fresh-water island; a piece of land surrounded by a divaricating river or brook: hence the names of places, as *Keld-helm*, *North-helm*.

HONEY; a common word of endearment.

The HOOD; the back of the fire.

To HOPPLE; to fetter, by tying the forelegs loosely together.

HORSAM and HUNGIL-MONEY; a small tax which is still paid (though the intention of it has long since ceased) by the townships on the north side of the Vale, and within the lathe or weapontake of Pickering, for horsemen and hounds, kept for the purpose of driving off the deer of the forest of Pickering, from the corn-fields which bordered upon it. When that field of a given township which lay next the forest was fallow, no tax was due from it, that year; and though this forest has long been thrown open, or disafforested, and the common fields now inclosed, the "fauf-year" (calculating every third year) is still exempt from this *imposition*.

HORSEKNOBS; *centaurea nigra*; knobweed; knapweed.

HOST-HOUSE (pron. *west-house*); a farmer's inn at market.

HOTCH; job, or business: "thou's meead a bafe hotch on't."

To HOTTER; to shake, as a carriage on a rough stoney road.

HOTTERY; rough, as a road.

To

To HOVER ; to stay ; to wait for : " Will you hover till I come ? "

The HOUSE ; the sitting room, or fore kitchen.

HOW ; a round hillock ; perhaps sometimes a natural knoll ; but generally of factitious origin.

The Moreland swells abound with *bows*.

HOWSA'YE ; an interjection, conveying a degree of exultation, after something has been in doubt ; as " I have done it, howsa'ye ! "

To HOWZE ; to lade, as water.

HOYT ; a simpleton ; a mild name for a fool.

HUBBLESHEW ; a hubbub, a tumultuous assembly.

HUFFIL ; a finger-bag.

HUFIL (the *u* long) ; the bird, *picus viridis*, woodpecker.

To HUG ; to carry ; especially a cumbrous load.

The HUKÉ ; the huckle, or hip.

HULET (the *u* long) ; *strix*, the owl.

HUMBLED ; hornless ; spoken of cattle and sheep.

HUNG-TEAP ; a male sheep, or ram. See CLOSE-TEAP.

HURN ; the vacancy between the sides of a wide cottage chimney, and the roof of the house.

To HURPLE ; to stick up the back, as cattle under a hedge, in cold weather.

HYVIN , *bedera belix* ; ivy.

J.

To JAUP (*v. n*) ; to make a noise like liquor agitated in a close vessel.

To JAUP (*v. a.*) ; to jumble ; as the sediment with the clear of bottled liquor.

JE'WDICOW ; *coccinella 7-punctata*, the lady-bird.

JEWEL; the starling or trestle of a wooden bridge.

ILK; each; every; as, "ilk other house."

ILL-TURN; mischief, harm, or misfortune: a word in much use.

IMP; an eke placed under a bee hive.

The IN-EAR, or NEAR; the kidney.

ING; meadow; low mowing ground. See CAR.

INMEATS; the pluck, or edible parts, of the viscera of animals.

INOO; presently (perhaps a contraction of *even now*).

JUST NOO (that is, *just now*); immediately, instantly.

K.

To KEAK; to lift behind, as a vicious horse.

To KEDGE; to gluttonize,

KEEAL, or *kale*; broth; pottage.

KEEAL POT; porridge pot.

KEEANS; scum, or *mother*, of ale, &c.

KELD (vulg. *keyld*); a spring; or perhaps a general name for a river or brook which rises abruptly: hence the names of places; as, *keld-head*, the head of the river Costa; *keldholm*, near the efflux of the Dove; *bell-keld-head*, the head of an emergent brook, near Kirby-moor-side.

KELK; a thump; a home blow; or a dead fall; whether by accident, or by wrestling. See SOSS.

KELTER; state, condition; spoken of cattle, and ludicrously of men.

KELTER; condition. "He is in good kelter," he is in good case.

To KEN (vulg. to *keyn*); to know: a word in common use. "Do you ken him?" Do you know him.

KENSBACK;

KENSBACK; a thing known by some striking mark is said to be a kensback.

To **KEP**; to catch; as a ball, or as rain water from the eaves of a house.

KERN; churn (probably British).

KET; carrion; and hence a word of reproach.

KIDS; faggots.

KIE; cows; the plural of "cow."

KIMLIN; a large dough tub.

KIN; a chop in the hand, &c.

KIND; friendly, intimate. "They are as kaand as brothers.

KINK; a fit, or paroxysm; as, a "kink of laughter," a violent fit of laughter: hence

KINK-COUGH; the whooping cough.

KIPPER; nimble.

KIRK; church; still pretty common in the vulgar dialect.

KIST; chest.

KITE; a vulgar name for the belly.

KITLING; kitten, or young cat; *Catling*.

KITTLE; ticklish; sensible to the slightest touch; actuated by the most frivolous motive; unstable; tottering.

To **KNACK**; to attempt to speak the established language; or to speak it affectedly.

To **KNARL**; to know.

KNOLL; the top, or uppermost swell, of a hill is called the knoll of the hill.

L.

LAATLE; little.

To **LABBER**; to dabble in water.

LAFTER; the whole of the eggs, laid between two separate broodings, of the hen or goose.

To **LAIK**; to play, as children; or at cards, or other game.

LAIROCK;

- LAIROCK; *alauda arvensis*, the sky lark.
 To LAIT; to seek, in the general sense.
- LANGSICKLE; a kind of wooden sofa.
- LASS; the vulgar name of a maid servant.
- LAT; a lath.
- LAUKERINS! an expression of some little surprise, or disgust.
- LAVAROCKS; (OF THREE LEAVED LAVAROCKS)
oxalis acetosella, the wood sorrel.
- LEA; the common term for a sith.
- LEA SAND. See STRICKLE.
- To LEAD (pronounced *lead*); to carry on a wagon, &c. as corn and hay. See WEST OF ENGLAND.
- LEAD BOWLS (the *ea long*); milk leads.
- LEAF; the inside fat of pigs.
- LEAP; a large deep basket; a chaff basket.
- To LEATHE; to relax; as a cow when near calving.
- LEATHWAKE; lithe, weak, flexible, limber, feeble; as a hair, a thread, an ozier twig, or an angling rod.
- LEAVE HOLD; let go.
- To LEAZE; to cull, pick out, or separate, by hand; as "fleen" and "poppie," from among wheat in sheaf, previously to its being thrashed for seed.
- To LECK-ON; to add more water, as in brewing.
- To LEEAV; to walk heavily, or with long strides; as a person walking in water; or a south country plowman on dry land.
- LEEAVLANG; oblong.
- To LEEM; to furnish the rock of the spinning-wheel with line; also to free nuts from their husks.
- LEEVE; willingly; a word of indifference.
 "A'ad

“Aa’d as leeve gang as stay ;” I would as soon go as stay. A word in common use.

LEER ; a barn (growing into difuse).

LEYLANDS ; lands in a common field, laid down to grafs ; opposed to plowlands, or such as are kept under tillage.

To LIB ; to geld male lambs and calves (horses and pigs are “gelded”).

To LIE LEY ; to lie in grafs ; as lands in a common field. See LEYLANDS.

To LIG ; to lie along. “They lig together,” they sleep together.

To LIGHT ; to rest, depend, or rely. “It is not to light on ;” it is not to be depended upon ; it is not safe to settle or rest on.

LIN ; *tilia europæa*, the lime or linden tree.

LING ; *erica* ; the common name for heath.

LINTON ; the main beam of a wide cottage chimney.

LISK ; the flank of a horse.

To LITE ; to wait ; as, “Will you lite o’ ma’ ?” Will you wait for me ?

LOADSADDLE ; a wooden packfaddle.

LOBSTROUS LOUSE ; *oniscus asellus*, the wood louse.

LOGGIN ; a truss of long straw.

LOOAN, or LOOANIN ; a lane.

To LOOK ; to weed ; or rather to disweed ; as corn, or young woods.

LOOP ; the thimble of a gate or door. “Loops and crukes ;” hooks and thimbles : also a stitch in knitting.

LOP ; *pulex irritans*, the flea.

A LOW ; a flame, or blaze ; as the low of a candle.

LOWCE (that is, *loose*) ; freed from servitude.

LOWND ; loo, still, calm, under shelter ; opposed to windy.

To

To **LOWP** ; to leap.

LUG ; a handle or ear of a jug, &c. also, ludicrously, the ear itself.

LUND ; a name of stinted common pastures, in the Vale of York ; and of one or more in the Vale of Pickering. *Q.* Analogous with **HAM** ? See **GLOCESTERSHIRE** ; also, **WEST OF ENGLAND**.

M.

MACK ; fort ; species ; as, what mack of corn, or stock.

To **MAINSWEAR** ; to swear falsely ; to commit perjury.

MAIZ ; a kind of large light hay basket.

MANG ; a mash of bran, malt, &c.

MAR ; a mere, or small lake.

MARK-EEN ; the eve of St. Mark, when the apparitions of those, who shall die in the ensuing year, are seen to walk to the church where they shall be buried : certain persons " watching the kirk " to know the fate of their fellow parishioners. If the watcher go to sleep, at the critical moment (the stroke of twelve), he himself is doomed to die, within the year. These things are, or lately were, stedfastly believed.

MARROWS ; fellows ; spoken of oxen, &c. &c.

MASHELSON ; a mixture of wheat and rye ; messin.

MAUF ; a brother-in-law.

MAUKS ; maggots.

MAUL ; a beetle ; as, a " clodding maul ; " a clotting beetle.

MAULS ; *malva*, mallows.

MAUM ; mellow, attended with a degree of dryness.

MAUND ; a large basket.

- To MAUNDER, to talk, in a grumbling indistinct manner; as a changeling, or as a faucy servant: to mutter.
- MEADOW; any ground shut up to be mown; in contradistinction to pasture.
- MEALS; mold: earth; soil.
- MEANS; property.
- MEEA; the plural of more; analogous with enow; as, "*meea meyn*, and *mare wark*."
- MEEALIN (mid. dial. *mailin*); an oven broom.
- MELL (vulg. *meyl*); a mallet.
- MELL-SUPPER, or MEYL-SUPPER; a supper given to farm work-people, at the close of harvest; a harvest-home.
- MENNOT; *ciprinus phoxinus*, the minnow.
- MENSE; manners; creditableness.
- MENSEFUL; mannerly, decent, neat.
- MERCURY; arsenic.
- MET; two bushels.
- MET POKE; a narrow corn bag, to contain two bushels.
- MEW; a mow of corn or hay.
- MICKLE (vulg. tong.); much: "Is there mickle ti' dea?" Is there much to do?
- MIDDEN; a dunghill.
- MIDGE; *culix pulicaris*, the small gnat.
- MILNER; miller.
- To MINT; to make a feint; to aim without intending to hit; also to hint, distantly, at something desired.
- MISTEACHED (pron. *mistecht*); spoiled by improper treatment; vicious, as a horse.
- MITCH (mid. dial.); much.
- MITTENS; gloves with only one bag for the fingers.
- MOOR-PAWMS; (that is, *Moor-Palms*); the flowers of *eripherum*, the cotton rush; after which the heath-sheep, in the spring, stray away from

from their accustomed "heafs:"—returning to them, when these flowers go off.

MOOTER; toll taken at a mill for grinding corn.

To MOOT-OUT; to break out into holes, as old clothes.

MORTAR; loamy soil, beaten up with water, formerly used in building ordinary walls; in contradistinction to "lime,"—"lime-and-sand," or cement.

To MOLD (pron. *to mowd*); to spread mole-hills, &c.

MOWDHILL; molehill.

MOWDIWARP; *talpa europæa*, the mole.

MOY; muggy; also demure (perhaps close).

MOZE; a moss; a lake overgrown with moss and other aquatics.

MUCK; dung, manure.

To MUCK, or to MUCK-OUT; to clear the stalls of cattle from dung.

MUCKMIDDEN; dunghill.

MUD SHEEP; sheep of the old large Teefwater breed.

MUFFS; mitts.

MUN; must: "Aa mun gang;" I must go.

MUNNOT, or MOANT; must not: "Thou munnot gang;" Thou must not go.

To MURL (*v. a.*); to crumble, as bread.

N.

NAFF; nave of a wheel.

NAFFHEAD; blockhead; thickhead; with a head like a "naff."

To NAFFLE; to trifle; to act in a silly manner.

NANTPIE; *corvus pica*, the magpie.

NAPPERY WARE; crockery ware; as glass, china, &c.

NAT;

NAT; a straw mattrafs.

NATTLES; glands, or kernels, in the fat of beef, or other butchers meat.

NEAF; the fist.

NEAFFUL; handful.

NEB; the beak of a bird.

NEEAH; no, to a negative question asked: "is he not come?" "neeah." Analogous with the affirmation WAAYAH.

NEEST; next: nearest.

To NEEZE; to sneeze (the ancient pronunciation).

To NESSLE, or NESTLE; to fidget; perhaps as unfledged nestlings.

NIFFY NAFFY; trifling. See To NAFFLE.

NITHERED; (the *i sport* as in withered); perishing with cold.

NOWTFOOT OIL; an oil extracted from the feet of cattle.

NOWT-HERD; cattle-herd, or keeper of cattle; neat-herd. Q. A corruption of *Nolt-herd*?

O.

OLD-FARRAND (vulg. *audfarrand*); old-fashioned; spoken of a child, forward in sense, and backward in growth.

OLD MILK; skim milk.

ON; used for *of*; as, "nowther on 'em. ul teyl mah;" neither of them will tell me.

ON-STAND; the rent paid by the outgoing to the incoming tenant, for such land as the former has rightfully cropped, before his leaving the farm.

ORLING; a stunted child; or any ill thriving young stock.

OSKIN; an ox-gang; a quantity, or share of common field land, proportioned, perhaps, to the

- the size of the fields, and the number of messu-
ages in the given township, at the time the fields
were set out, or apportioned among the houses.
To **OVERGET** (pronounced *owergit*); to over-
take upon the road.
O'Wergait; stile place, or imperfect gap, in
a hedge; also a "STEPPING" place, across a
brook.
OWCE; ox.
OWCEN; oxen.
OWER; over.
OWERWELT (a word difficult to define); a
sheep which gets laid upon its back, in a hollow;
is said to be in an *owerwelt*.

P.

- PACKRAG DAY**; the day after Martinmas
Day; the time of changing servants.
PAIT; *ursus meles*, the badger.
PALMS (pronounced *parms*); the male catkins
of *salix caprea*, the fallow, which are worn in
the hat (if the season permit) on Palm Sunday.
Palm-crosses are also made, on that day, of the
twigs of the same tree.
To **PAN**; to frame or proffer, as a learner: "He
pans weel."
PANKIN; any small earthen jar.
PANNEL; a soft, sackweb pack-saddle.
PARING-AND-BURNING; burnbeating; den-
shiring; sod-burning.
PARING SPADE; a breast plow.
PARZLIT O'THA'; a slight execration; curse
on thee. (Q. Parz or Pars light on thee?)
PAUKY; arch; cunning; artful.
To **PEFF**; to cough short and faintly, as sheep.
PESSCOD SCALDING; a kind of merrymak-
ing, in summer evenings: the treat, green field
peas, boiled in the shells.

To PET; to indulge; to spoil by over-indulgence.

PET; a child spoiled by improper indulgence.

PET LAMB; a lamb reared by hand; a caded lamb.

To PICK; to push, or shove, with the arms or body: "He picked me down."

To PICK UP; to vomit.

PICKS; the suit of diamonds, in cards.

PIE; a receptacle for rape seed. See Vol. II. p. 38.

To PIE; to pry; to peep, slyly and watchfully; perhaps as the magpie.

PIGGIN; a small wooden drinking vessel; now disused.

PIGLEAVES; *carduus pratensis*; meadow thistle.

PIKE; a stacklet, or loadcock, of hay. See Vol. II. p. 134.

A PILE of GRASS; a blade of grass.

PISSIBEDS; the only name for *leontodon taraxacum*; dandelion.

PLANE-TREE; *acer pseudo-platanus*; sycamore.

PLOOK; a pimple.

To PLUE; to plow.

PLUFE; a plow.

PODDISH; broth; pottage.

POOAC; a narrow corn bag.

POPPLE; *agrostemma githago*; cockle.

POST-AND-PAN. Old half-timber buildings are said to be post-and-pan.

POT-KELPS; the loose bow or handle of a porridge pot.

PREACE; estimation: such a person or thing is in "great preace," or highly valued.

PRICKER; a brad awl.

PRICKY URCHIN; *erinaceus europæus*; the hedge hog.

PROD; a short spike: hence

PROD; a goad for driving oxen. See GAD.

To PROD; to poke, or prick, with a prod.

To PRODDLE ; to pōke out, or feel for, or fetch out, with a long stick or other instrument.

PROOD TAILIER (provincial of PROUD TAYLOR) ; the ordinary name of *fringilla cardualis* ; the goldfinch.

PUBBLE ; plump, full-bodied, as corn.

PULLS ; the shells or chaff of rape, and other pulse.

PULSEY ; a poultice.

PURE ; comfortable, agreeable ; as “ pure warm,” “ pure well,” &c.

PURELY ; pretty well ; in good health ;—“ How do you do ?”—“ Purely, thank you.”

PURL ; the part of a spinning wheel, on which the yarn is wound.

To PUZZOM ; to poison.

Q.

QUEER ; the choir of a church.

QUICKS ; *triticum repens* ; couch-grass. See WHICKS.

R.

To RAIT ; to dissipate the sap of vegetables, by exposing them abroad to the weather. Hay is said to be *raited*, when it has been much exposed to an alternacy of wet and dry weather. See the Art. FLAX ; Vol. II. p. 70.

RAITCH ; a line or list of white, down a horse's face.

RAM ; smelling or tasting strong ; quere, as the RAM ; *alium ursinum* ; ramson.

RANK ; standing in close order ; thick upon the ground, as corn in the field, or trees in a wood.

RANNLEBAUK ; a wooden bar, or balk, laid across the chimney of a cottage, to hang the pothooks on.

RATTEN ; *mus rattus*, &c. the rat.

REAPS ;

REAPS; parcels of corn laid along upon the stubble, by the *reapers*, to be gathered into sheaves, by the *binder* *.

RECKLING; the last of the farrow; an underling.

RECKON; pot hooks, of a particular make.

REDTAIL; *motacilla phœnicurus*; the redstart.

REEANG'D; discoloured in stripes; listid.

REEK; smoke; a word in common use.

RENKY; tall and athletic; spoken of youth; also of young cattle.

RESHES; *juncus inflexus*; wire rush. See SEAVES.

REZZLE; *mustela vulgaris*; the weezle.

To RIE; to turn corn in a sieve; bringing the "capes" into an eddy.

To RIFT; to eructate.

RIGG; ridge, as of land; also a long narrow hill.

RIGGEN; ridge of a roof.

RIGGEN TREE; a piece of timber laid along the ridge of a roof, to support the heads of the spars: an unnecessary piece of timber with which all old roofs are loaded.

RIGGIL, or RIG; ridgil.

To RIGHT (pron. *reet*); to comb, as the hair of the head is combed; or righted; and a comb, merely for this purpose, is called a "reetin keeam."

RIMS; the steps or staves of a ladder.

To RINGE; to whine, as a dog.

RINGTAIL; *falco pygargus*; the hen-harrier.

To RIPPLE; to scratch, or tear, lightly; as with a pin, or a thorn: or rather, perhaps, to raise up and roughen the surface, by such accident.

To ROIL; to play the male romp; spoken of a rude playful boy.

ROLL; a wreath, placed on the head, under the

* Hence, doubtless, the terms *reaping* and *reapers* of the southern provinces; yet, there, the reaps are now termed *shoves*; while in the northern provinces, the act of reaping is termed *shearing*.

milking pail, &c. to keep it steady, and prevent its bearing partially.

ROOAC, or ROKE; a kind of smoke; a species of mist, fog, or small rain.

ROOP; a hoarseness.

ROOTER; a kind of rushing noise; or a rough attack; as a violent gust of wind; or a person rushing into company, abruptly, or rudely.

To ROW; to rake or stir about, as ashes in an oven.

ROWENTREE; *forbus aucuparia*; mountain forb; improperly mountain ash.

To ROWT; to low as cattle.

ROWTY; rank; overgrown, as beans or other corn.

RUD; red ochre; used in giving a temporary mark to sheep.

RUDSTAKES; stakes to which cattle are fastened in the house.

To RUMMLE (that is, to *rumble*); to make a low rumbling noise, as the bull when he is agitated or displeased.

RUNNEL; a rill.

RUNSH; *sinapis arvensis*; wild mustard; charlock.

RUSH (of grass or corn); a tuft, knot, cluster, or croud of plants: perhaps analagous with

RUSH; a meeting; a merrymaking; a rout.

RUSSELL'D; withered, as an apple.

RUSTBURN; *oronis*; reftarrow.

S.

SAAN; since, when it follows the time; as, "Hoo lang saan?" "A year saan." See SINSAAAN.

SACKLESS; idiotic; spoken of a weak, harmless, inoffensive person.

SAD;

SAD; heavy, applied to bread; deep or dark, applied to color.

SAIM; hog's lard.

SAL; shall.

To SALVE SHEEP; to dress them with tar and grease.

To SAM; to curdle milk for cheese, &c. "When do you sam?" When do you set your milk? or, When do you make cheese?

SARK; shirt.

SAUF; *salix caprea*; fallow.

SAUFY; wet, as land in a rainy season.

SAUL; a kind of moth.

SCALDERED; chafed, blistered, or partially excoriated, whether by friction, heat, or corrosion: perhaps, it is diminutive of *scald* (leperous) as applied to the leprosy of the head, in children.

SCALDERINGS; the under-burnt cores of stone lime: the surfaces of which peeling off, in scales or shells, as those of a leperous sore.

To SCALE; to spread or scatter; as manure, gravel, or other loose materials.

SCOW; the sheath of a horse.

SCAR; a precipice faced with rock.

To SCRAUT; to scratch, with a nail, or other sharp-pointed tool.

SCROGS; stunted shrubs; as the hazle browsed by cattle.

To SCUD; to clean or scrape with a "SPITTLE."

To SCUG; to hide.

In SCUGGERY; in secrecy; hid, as from creditors.

SCUTTLE; a shallow basket or wicker-bowl; much in use, here, in the barn, and in other departments of husbandry: the larger sizes with, the smaller without, handles.

SEASONSIDES; a dry, slow-paced, sly fellow.

SEAVES; *juncus effusus*; the soft rush.

SEEDGRASS; cultivated herbage; grass raised from *seed*, in contradistinction from natural grasses.

SEER; sure, or assure; as, "Aa wean't, aa feer tha'"; "I won't, I assure thee.

SFG, or BULLSEG; a castrate bull.

SEGGRUMS; *senecio jacobæa*; ragwort.

SEGS; *carices*; sedges.

SEN; self: "Aa'll dea't mi' sen;" "I'll do it myself.

To SET; to *see*, or accompany part of the way.

To SET AGAIT; to let loose a horse, &c. unintentionally. See GAIT.

SETTER; a feton, or issue in cattle.

SETTERGASS; *belleborus fetidus*; a species of bear's foot; used in making "setters," or issues in cattle.

SEW; a sow (sowing, in like manner, is pronounced, as it is still written, SEWING).

SEWER; a large ditch, or water fence; an artificial SHORE. See Vol. I. p. 181.

To SHACK (that is, to *shake*); to shed, as corn at harvest.

SHACK-FORK (that is, *shake fork*); a wooden fork, for shaking straw off the barn floor; generally made of a forked ozier; the tines or branches about two feet long, and one foot wide at the points.

SHACKLE OF THE ARM; the wrist: hence, probably *shackles*; that is, irons for the shackles; shackle irons.

SHADE; a shed for fuel, &c.

SHAFT; handle; as "fork-shaft"—"spade-shaft."

SHANDY; a little crack-brained; somewhat crazy.

To SHEAR; to reap, or cut corn, with a sickle, or a reaping hook.

To SHED; to part; as wool, or the hair.

SHEEP-

SHEEPCADE, or CADE (pron. *keead*); *acarus reduvius*; the large sheep louse.

SHEEPSALVE; tar-and-grease, for dressing sheep with. See Vol. II. p. 219.

SHEEPSTAR'NEL; *sturnus vulgaris*; the starling.

SHELVINGS; moveable side-rails of a waggon or cart; put on for a top load, and taken off for a body load.

SHIBBANDS; shoe-strings.

To SHILL; to shell; and more generally to separate: taking off the sloughs or skins of oats, in order to make oatmeal, is called *shilling* them; turning a small quantity of milk into curds and whey is called *shilling* it; to sever sheep is to *shill* them.

SHOT-ON; rid-of: "He can't git shot on't:" he cannot dispose or get rid of it.

To SHURL; to slide, as upon ice. See To SLITHER.

SIDE; long, deep; spoken of a roof, cloaths, &c.

To SIDELONG; to fetter, as a preventive from straying, or breaking pasture; by chaining a fore and a hind foot of the same side together. See

To HOPPLE.

SIDEWAVER; the purlin of a roof.

To SIE; to stretch; as a rope, gloves, &c.

SIKE; such, in its general sense.

SILE (vulg. SAAL); a milk-strainer.

To SILE; to strain, as fresh milk from the cow.

SILE-BRIGS; milk-strainer holder; the cheese ladder of Gloucestershire, &c.

SILLS; the shafts of a waggon or cart.

SIN; since, when it precedes the time expressed; as, "I have not seen him sin Tuesday."

To SIND; to rinse, or wash out; as linen, or a milking pail.

To SIPE; to ooze, or drain out slowly.

SINSAA'N; since, when spoken indefinitely, or when the time is understood; as, "I have not

- seen him sinfaan;" I have not seen him since, or since that time. See SAAN and SIN.
- SITTINGS; statutes for servants.
- To SIZ; to hiss; as the goose, the serpent, &c.
- SKEEL; a large milking pail; with two handles, formed of two opposite staves, rising higher than the rest.
- To SKELLER; to squint.
- To SKELP; to whip the bottom, with the hand.
- SKEP; a deep, round, coarse basket.
- To SKERL; to scream, as a child in crying, or a woman in distress.
- To SKEYL; to lean on one side: to *skeyl-up*; to throw up the fore-part of a cart, in order to shoot the load: to *skeyl-over*; to overturn.
- SKEYLBEAST; the partition of cattle stalls.
- SKEYLD; party-colored, as geese or ducks; shelled.
- To SKIME (vulg. *skaam*); to squint.
- To SKIMMER; to shine, to glitter.
- To SKRAFFLE; to crawl in haste.
- SKREED; a border; or narrow slip of land, or of cloth.
- SKUFE; a precipice.
- SKRUNSHINGS; scraps, broken meat.
- SLACK; a valley, or small shallow dale; a dip; resembling the slack of a rope.
- SLAPE; slippery; as ice, or a dirty path.
- SLEA-WORM; the black snake (*anguis fragilis?*) from its color bearing some resemblance to that of the flea, shoe, or fruit of the black-thorn. It is not considered, here, as being very offensive.
- SLED; a sledge.
- SLEEN (that is, *slain*); the smut of corn. An ear which is smutty is called a "slain ear."
- To SLIPE OFF; to draw off superficially; as skin from the body, bark from a tree, &c.

To

To **SLITHER** (*i short*, as in *hither*); to slide, as down a rope, a ladder, or the side of a hill. See To **SHURL**.

SLOT; any broad, *flat* wooden bar; distinct from a *flower*, which is always *round*.

SLUDDER, or **SLUTHER**; loose, broken, slippery, pappy matter; as curds and whey, loose fat, mud, &c.

SLUSH; mud.

To **SMIT**; to infect (perhaps to *smite*); in common use.

SMITTING; infectious; catching, as a disease.

SMOOT; a hair muce; or any small gap or hole in the bottom of a hedge: hence,

To **SMOOT**; to creep under or through, as a hare or sheep through a hedge.

To **SMOOTH** (vulg. to *smeat*); to iron washed linen.

To **SMURK**; to smile; to look pleasantly.

To **SNAPE**; to silence, check, or at least threaten; as a barking dog, or a mischievous child.

SNECK; the latch of a door, or a gate.

SNEVVER; slender and neat.

To **SNICKLE**, or **SNIGGLE**; to snare, as hares.

SNOCKSNARLS; thread which is overtwisted, and runs into kinks, is said to run up into *snocksnarls*.

SNOD; smooth, even, snug, neat.

To **SNOOAC**; to smell in a snuffing manner, as a hound.

SOCK; the share of a plow (the common term).

SOKE (vulg. *soac*); an exclusive privilege, claimed by a mill, for grinding all the corn which is used within the manor or township it stands in*.

* Some trials at law, relative to this ancient privilege, have lately taken place; but the millers have generally been cast. It seems to be understood, however, that an *alien* miller has no right to ask, publicly, for corn to be ground, in a parish which has a corn mill belonging to it. A horn may nevertheless be founded, or a bell be rung.

To SOO ; to pain the hand, in striking with a hammer or beetle : to *jar*.

SORT ; many ; " a good soort," a great many.

SOSS ; thump, KELK : " to fall with a sofs ;"—to fall plump ; whether the weight be live or dead : KELK is applied more particularly to men and animals.

To SOSS ; to lap, as a dog.

SOURDOCKEN ; *rumex acetosa* ; forrel.

To SOWL ; to pull about in water ; as sheep in the wash-pool, &c.

SPAW ; the slit of a pen.

To SPAWDER ; to injure by forcing the legs too far asunder ; as cattle on a slippery road ; applied equally to men and animals.

SPECK ; the heel-piece of a shoe.

To SPEEAN (mid. dial. to *spane*) ; to wean, as calves or pigs, from the dam.

To SPEEAV (mid. dial. to *spave*) ; to spay ; as a female calf.

SPEL (vulg. SPEYL) ; a bar ; as "yat speyl"—gate bar.

To SPELDER (vulg. to *speylder*) ; to spell, as a word.

SPELK ; a splinter, or thin piece of wood.

SPENG'D ; pied, as cattle.

SPICE ; dried fruit ; as raisins, currants, &c.

SPILE ; the vent peg of a cask.

SPIRES ; timber stands (not common).

SPITTLE ; a spaddle, or little spade.

SPOIL ; the weaver's quill.

To SPREAD ; to break hay out of swath : to *teed*.

To SPRENT ; to splash or smear, with small spots.

SPRIG ; a brad.

SPRING ; a young wood raised from the stools of fallen timber-trees.

SPRUNT ; a steep road.

SQUAB ; a couch, common in most " farm-houses."

STACKBARS ; large hurdles, with which hay stacks in the field are generally fenced.

STAGS ;

STAGS; young horses.

STALL; a doorless pew of a church.

STALLED; satiated with eating.

To STANG; to shoot with pain.

STANG; a long pole*.

STARK; stiff; tight; not lax: as a stark rope; stark with severe exercise.

To STAUP; to lift the feet high, and tread heavily, in walking.

STEATHING; a lath and plaister partition.

To STECK; to shut, as a door or a gate.

STEG; a gander.

STEPPED; somewhat beaten, as a path.

STEPPINGS, or STEPPING STONES; large stones, placed in the shallow of a brook; for foot passengers to step over, "DRYSHOD."

STEVVON; a loud voice.

STIDDY (that is, *steady*); the common name of an anvil.

STIFE; strong tasted; as maiz pudding, or bean cake; the latter a food formerly in use, here.

STOCK; livestock.

STOCK; the *outer* rail of a bedstead; or the front side of a bed, which is placed against a wall.

STOOK; shuck; twelve sheaves of corn, set up together, in the field.

* TO RIDE THE STANG. A custom, which few men, I hope, will censure, has prevailed, in this country, time immemorial, and is still, I find; prevalent. This custom is called "riding the stang;" and is used as a reproof to the man who beats his wife; or (when it happens) to the wife who beats her husband.

The ceremony is that of placing a man, or a boy, upon a long pole, borne on men's shoulders, and parading before the house of the delinquent; the rider repeating some rustic verses, applicable to the occasion. If this be found ineffectual, the ceremony is repeated, with stronger marks of disapprobation. In flagrant and obstinate cases, the door has been assailed, the offender seized, and the punishment of the ducking-stool added to the disgrace of the stang. Some inveterate cases, it seems, have recently yielded to this remedy.

STOOP;

STOOP; a post; as, "a yat stoop," a gate post; "stoops and rails," posts and rails.

STONYHARD; *libospermum arvense*; corn gromwell.

To STOOR; to rise up in clouds, as smoke, dust, fallen lime, &c.

STORM; a fall of snow.

STOT; a steer, or young ox.

STOVEN; a sapling shoot, from the stool of a fallen tree.

STOWER; a staff, or round stick; as, "a heck-stower," a rack staff.

To STRAMASH: to crush, or break irreparably; to destroy.

STRAND; a kennel, or occasional rill, caused by falling rain; which, when heavy, "makes the strands run:" a species of SHORE (see Vol. I, page 131.) with which it is not analogous in this sense, only, but in that of being applied to the parts of the margin of the sea, which are washed by the tide.

STREEA; straw.

STRICKLE; an appendage of the sithe; the tool with which it is whetted; made, here, in a peculiar manner: a square piece of wood, worked off at one end to a point; the other end forms a handle: the surfaces indented with the point of a sickle; greased with hoglard; and powdered with sharp sand, or powder of a grit-stone, found in one particular part of the Eastern Morelands; from whence it is carried, as far as the banks of the Humber, for this use; under the name of "LEA SAND."

To STRIP; to draw the *aftermilkings* of cows.

STRIPPINGS; *aftermilkings*; strokings.

STRUM; the hose used in brewing &c. to keep the tap free.

STRUNT;

STRUNT; the dock of a horse, independent of the hair; also the tail of slaughtered cattle or sheep, when the skin is taken off.

To **STUB**; to grub up stumps of trees and shrubs.

STUNT; stubborn; not easy to be bent; as, a "stunt child," a stubborn child; a "stunt stick," a thick short stick.

STUPID; obstinate (the common epithet).

To **STURKEN**; to stiffen, as melted grease.

STURKS; yearling cattle.

STY; a ladder (the common term) *.

SUD; should.

SUMMER COLT; when the air is seen in a calm hot day to undulate, near the surface of the ground, and appear to rise, as from hot embers, the phenomenon is expressed by saying, "the summer colt rides."

To **SUMMER-EAT**; to use as pasture.

To **SUNDER**; to air; to expose to the sun and wind; as hay which has been cocked, but which, being still under dry, is respread abroad.

SWAD; a pod; especially of peas which have been boiled in the shell.

SWAIMISH; bashful, in the general sense.

SWANG; any low-lying, long, grassy place, covered, or liable to be covered, with water.

SWAPE; a long pole, turning on a fulcrum; used in raising water out of a shallow well.

To **SWARM**; to climb the naked stem of a tree, with the arms and knees only.

SWARTH; sward; whether of grass land, or of *bacon*. Hence, probably, *swarthby*.

To **SWASH**, or **SWASH-OVER**; to spill by waves; as milk or water, agitated in a pail.

* **STILE** is probably the diminutive of this term: the stile of this district is usually formed of two short ladders, meeting at the top of the fence; where they cross each other, in the Saltier manner; the upper ends (without steps) serving as handles.

- SWATCH; a pattern, or small specimen of cloth; cut off the end of the piece; also a dyer's tally.
- To SWATTER; to spill or throw about water, as geese and ducks do, in drinking, and feeding.
- To SWAY (pronounced *sway*); to ride upon a plank or pole, moving on a fulcrum (as children are wont). Perhaps the best exemplification of the established verb.
- SWEAL; to waste away, as a candle blown upon by the wind.
- SWEEATH; a swath of mown grass.
- SWEEATH-BAUK; the ridge of stubble, or short grass, which is left between two swath-widths, in mowing.
- SWEET-MART; *musfela martes*; the marten. See FOUL-MART.
- SWIDDEN; to singe, or burn off, as heath, &c.
- To SWIDGE; to smart violently; as a burn, or recent wound.
- SWILL; a sort of shallow tub.
- SWILLINGS; hogwash.
- SWILL TUB; hog tub.
- SWINE THISTLE; *sonchus oleraceus*; sow thistle.
- To SWINGLE; to rough-dress flax.
- SWINGLETREE; splinterbar; whippin.
- SYKE; a rill or small brook; more particularly, I believe, in a low boggy situation.

T.

- To TAAL; to fettle, or be reconciled to a situation; as a servant to a place; sheep to a "heaf," &c.
- TAISTREL; a rascal.
- TAWS; marbles; the only name.
- TEA; to: as, "pud sum mare tea't;" put some more to it.

TEA;

TEA; too; as, "Aa'll gang, tea;" I'll go, likewise.

TEAM; an ox chain, passing from yoke to yoke.

To TEAM; to pour, as water: also to unload, as hay or corn.

TEAM; empty; as, "a team waggon," an empty waggon.

TEAP; tup; a ram.

TEATHY; peevish; as children when cutting the teeth.

To TED. See **To SPREAD**.

TEEAT; the head in dishabille; the hair in mats, or **COTTERS**.

To TEEAV: to paw, and sprawl, with the arms and legs.

TEMCE; a coarse hair sieve, for separating the inferior flour from the bran.

To TENG; to sting; as the bee, or the adder.

TENG'D; a disease in cattle; conceived to be occasioned by a small red spider stinging the fauces, or root of the tongue. The animal voids saliva, swells, and presently dies. An egg, broken upon the part, is *considered* as a remedy; if applied in time.

To TENT; to tend, as sheep or other stock.

To TENT; to scare or frighten; as, to "tent the birds" from corn.

To TEW; to work as mortar, &c. also to agitate and fatigue, by violent exercise.

TEYLPEYAT, or **TELPIC**; a telltale; (perhaps as the pie, or magpie) one who divulges secrets; spoken chiefly of children.

THAAVLÉ; a pot-stick; a ladle without the bowl.

THACK; thatch.

THARFLY; slowly; deliberately; as, "the rain comes tharfly."

To THEAK; to thatch.

THEAKER;

THEAKER ; thatcher.

THEET ; close ; tight ; opposed to leaky.

THOU ; this pronoun is still much in use. Farmers in general "thou" their servants ; the inferior class (and the lower class of men in general) frequently their wives, and always their children ; and the children as invariably "thou" each other. Superiors in general "thou" their inferiors ; while inferiors "you" their betters. Equals and intimates of the lower class generally "thou" one another. These distinctions are sometimes the cause of awkwardness : to "you" a man may be making too familiar with him ; while to "thou" him might offend him.

To **THREAP** ; to assert, positively ; to force down an argument.

THREAVE ; twelve "loggins" of straw.

THREEFOLD ; *menyanthes trifoliata* ; bogbean.

THRONG (vulg. *thrang*) ; busily employed ; "desperate thrang," very busy.

THROW, or **THRAW** ; a turner's lathe.

To **THRUM** ; to pur, as a cat.

TIFFANY ; a fine gauze sieve, for separating fine flour.

To **TIFT** ; to adjust, or dress up.

TIPE ; a trap or device for catching rabbits. See Vol. II. p. 257. Also for taking mice, rats, or other vermin. The general principle is that of a balance, with one end somewhat heavier than the other. The heavier end rests horizontally on some support : the lighter is furnished with a bait ; which being approached, the weight of the animal overcomes the counter weight of the balance, and drops into a pit, or a vessel of water, placed below to receive it.

TIPPY ; the brim of a cap, or bonnet.

TIT, or **TOMTIT** ; *motacilla tryglodites* ; the wren.

TITTER ;

TITTER ; sooner ; rather : “ I would titter go than stay.”—“ I was there titter than you.”

TIV ; to : “ gang tiv ’em ;” go to them.

TOFFER ; old furnitures, or household goods.

TOIT ; a miss, huff, or slight resentment.

TOITY ; unsteady in temper, flighty. See **HOIT** : hence, perhaps, *boity-toity*.

TONGUE-WHALED ; severely scolded. See **TO WHALE**.

To TOWP ; to heel : to **TOWP-OVER** ; to topple.

TRAMPERS ; strollers ; whether beggars, or pedlers.

TROD ; a track, or foot path ; the preterite of the verb to *tread*, as road (rode) is that of the verb to *ride*.

To TROLL ; to roll ; as a stone, &c. down a slope. Hence,

TROLLOWERANCE ; the teetotum.

TUFIT (the u long) ; *tringa vanellus* ; the peewit, or lapwing.

To TUM ; to card wool, roughly ; to prepare it for the finer cards.

To TWATTLE ; to pat ; to make much of ; as horses, cows, dogs.

TWEEA ; two, in its general sense.

TWILL ; a quill.

TWILT ; a quilt, or bed cover.

TWITCHBELL ; *forficula auricularis* ; the earwig.

TWITTER ; thread which is unevenly spun, is said to be in twitters.

V.

VARRA ; very : “ varra faan ;” very fine.

VOIDER ; a kind of open-work, shallow basket.

U.

To UNBETHINK ; to recollect : I unbethought myself on't," I recollected it.

The UNDERDRAWING ; the ceiling of a room.
See CEILING.

UNKARD ; strange ; as an unkard place. A servant is unkard on his first going to a fresh servitude.

UVVER ; upper ; as the uvver lip.

UZZLE, or BLACK UZZLE ; *turdus merula* ; the blackbird.

W.

WAD ; would.

To WAFF ; to bark as a cur.

WAIN ; a large ox cart, with an *open* body, and furnished with "shelvings ;" formerly used in carrying corn and hay. A hundred years ago, perhaps, there was not a farmer's WAGGON in the country : fifty years ago, WAINS were, I believe, pretty common : now, there is not, perhaps, one left.

WAINHOUSE ; waggon houses still retain the ancient name.

WAKE ; a company of neighbours, sitting up all night, with the dead : a custom which is still prevalent.

WALKER ; a fuller.

WALK MILL ; a fulling mill.

WALLANEERING ; an expression of pity.

WALSH ; insipid ; wanting salt, or some other seasoning : opposed to relishing.

WANKLE ; unstable ; not to be depended upon ; as wankle weather, a wankle seat, &c.

WAR, or WARSE ; worse.

WARBLES ;

WARBLES; maggots in the backs of cattle.

To WARE; to lay out; as money at a market.

To WARK; to ache: hence, "head-wark"—
"teath-wark;" head-ache—tooth-ache.

WARK; work, in its general sense. But what is noticeable, the verb *to work*, and the substantive *worker*, take the established pronunciation.

WARK-DAY (pron. *warday*); week-day, in contradistinction to *Sunday*: "Sunday and warday."

WARRIDGE; the withers of a horse.

WATH; the common name of a ford.

WATTLES; rods laid on a roof to thatch upon.

WAVERS; young timberlings left standing in a fallen wood.

To WAW (the *w* articulate); to mew as a cat.

To WAWL; to cry audibly, but not loudly.

WAZISTHEART; an expression of condolence.

WEAD; very angry; mad, in the figurative sense.

WEAKY; juicy; opposed to "HASK."

WEANT (vulg. dial.); won't, will not.

WEDGED; spoken of a cow's udder;—hard; furcharged to a degree of disease.

WEERING (that is, a *wearing*); a pulmonary consumption.

To be WEEA; to be sorry: "I am weea for him."

WEE-BIT; small piece.

WELL (vulg. *weyl*); surface springs, used as a source of water, for domestic or other special purposes, are generally termed wells.

WETSHOD; with water in the shoes: "are you not wetshod?" have not your shoes taken in water? is a common expression.

WEYCY (the *y* articulate); yes, yes; reiterated assent. Perhaps a contraction of WYAH and Ey.

To WHALE; to beat severely, with a whip or pliant stick.

WHEAN ; a strumpet.

WHEEANG ; a thong of leather.

WHEEANGS, or a pair of PEPPER WHEEANGS ; an old-fashioned pepper-mill, of a most simple construction.

WHENT ; great ; extraordinary : “ whent deed,” great doings.

WHERRY ; a liquor made from the pulp of crabs, after the verjuice is expressed ; generally called CRAB-WHERRY.

To WHEWT ; to whistle faintly, or unskilfully.

WHICK ; alive ; quick.

WHICKS ; quicks ; *triticum repens* ; couchgrass.

WHIE ; a heifer, or young cow.

WHIG ; acidulated whey ; sometimes mixed with butter milk ; and with sweet herbs, to give it flavor : formerly, perhaps, the ordinary summer beverage.

WHILK ; which ; as, “ whilk will you have ?” — not used in the *relative* sense. See AT.

WHIMLY ; softly ; silently, or with little noise.

WHINS ; *ulex europæus* ; furz.

WHISHT ! hush ! silence !

WHISHT : silent ; applied either to a company or to a machine, &c.

WHITE-NEBB'D CROW ; *corvus frugilegus* ; the rook.

To WHITE ; to cut or shape wood, with a knife.

WHITE WITCHES ; superior beings in human shape, who formerly inhabited this quarter of the island ; with power (and will, when properly applied to) of counteracting the wicked intentions of the magic art. They are still said to inhabit the more extreme parts of the WEST OF ENGLAND ; which see.

WHITTLE ; a pocket knife.

WHOOR (mid. dial. WHEER) ; where : the latter is probably the *Saxon* pronunciation ; the former, perhaps, is of *British* origin.

WIDDY ;

- WIDDY ; a with, or withy.
 WIKE ; the corner of the mouth or eye.
 WIKES ; temporary marks ; as boughs set up, to divide swaths to be mown, in the common ings ; also boughs, set on haycocks, for tithes, &c. &c.
 WILF ; *salix alba* ; the willow.
 WINDER ; window.
 To WINDER ; to clean corn with a fan.
 WINDLESTRAWS ; *cynosurus cristatus* ; crested dogftail.
 WINDYBAGS ; a talking, rattling, noisy fellow.
 WINNOT (mid. dial.) ; will not.
 WIZZENED ; withered ; shrivelled.
 WOODWESH ; *genista tinctoria* ; dyer's broom.
 WOONKERS ; an interjection of surprize.
 WOTCHAT ; orchard.
 WOTS ; oats.
 To WRAX ; to stretch the body in yawning ; or as cattle do when they rise.
 WUMMLE ; an auger.
 To WUN ; to live, or abide ; as, " he wuns at such a place " (nearly obsolete).
 WYAH ; a word of willing assent, to something required to be done : " Go and tell John I want him." " Wyah ; " equivalent to *very well* ; or to *yes I will* ; or *yes*, simply, spoken with a degree of indifference. See WEYBY.

Y.

- YAA ; one, with the substantive expressed ; as, " yaa man ; " " yaa horse."
 YACK ; oak : *yackrans*, acorns.
 YAN ; one, with the substantive understood ; as, " gi' me yan : " give me one.
 YANCE ; once.
 YAT ; a gate.

YATHOUSE ; a high carriage-gateway, through a building.

YAWD ; a riding horse.

YERNIN ; cheese rennet.

YERNUTS ; *bunium bulbocastanum* ; earthnuts.

YETHERS ; edders.

YETLING ; an iron pan.

YEWER ; the udder of a cow, &c.

YESTERNIGHT (pronounced *yifternect*) ; last night ; analogous with yesterday.

YOON ; oven.

To YOWL, or Yool ; to howl as a dog.

YUL-CLOG ; a large log, laid behind the fire, on Christmas-eve ; about which, formerly, much ceremony was observed.

I N D E X

TO THE T W O V O L U M E S.

A.

- AFTER GRASS**, General Remarks on its Management, ii. 141.
——— Management of Hedges, i. 207.
Age of Felling Timber, i. 225.
Agriculture, Division of, i. 239.
———, its History in the Vale, i. 272.
Alien Claim of Common Land, an instance of, i. 88.
Allum, a Production of the Morelands, ii. 266.
Analysis of Cements, i. 107.
——— of Lime Stones of the Vale, i. 313.
——— of Sanfoin Soils and Subsoils, ii. 93.
Anthills, Method of Destroying, ii. 119.
Appeal from Commissioners of Inclosure, i. 89.
Approbation, Quantity of, requisite for an Inclosure, i. 96.

- Arsenic used as a Preventive of Smut, ii. 10.
Ashes of Turf, as a Manure, i. 307.
Auctions of Timber, Remarks on, i. 226.

B.

- BARK**, Method of Peeling and Drying, i. 227.
———, Remarks on, i. 229.
Barley and Oats, Remarks on Harvesting, i. 357.
———, Section of, ii. 15.
———, formerly Malted, by Farmers, ii. 16.
Barn Doors, Remarks on, i. 124.
——— Floor Granary, Remarks on, i. 124.
——— of Yorkshire, compared with that of Norfolk, i. 125.
——— Management, i. 361.
Barometer, its real Pretensions, i. 267.
A a 4 Barrel

- Barrel Churn described,
ii. 205.
- Beasts of Labor, Section of,
i. 245.
- on the Wolds,
ii. 245.
- Beech recommended to the
Wold Planters, ii. 242.
- Beef, its past and present
Consumption, in the Vale,
ii. 198.
- Bees, Section of, ii. 229.
- , their Mortality in
1782, ii. 230.
- Bishop's Lease, i. 21.
- Bleaching Greens of Picker-
ing, an Incident respect-
ing, ii. 129.
- Bottoming Dung Yards,
i. 368.
- Brackets of Gables, i. 129.
- Bricks, as a Material of Build-
ing, i. 101.
- Brotherton Lime Kilns, N.
i. 324.
- Building Materials, i. 98.
- of the Vale, i. 98.
- on the Wolds, ii. 241.
- Bull Show of East Yorkihire,
ii. 183.
- Burning Lime, i. 317.
- Burying Hedge Plants, In-
stances of, i. 202.
- Butter and its Management,
ii. 202.
- CABBAGES compared with
Potatoes and Turneps,
ii. 62.
- Calves, Rearing, ii. 187.
- , on Castrating, ii. 189.
- , Fattening, ii. 201.
- Canine Madness, Instances
of, i. 344.
- Carriage of Timber, i. 230.
- Castrating Calves, Method
of, ii. 189.
- Catalogue of Corn Weeds,
i. 333.
- of Lowland Plants,
ii. 103.
- of Upper Grass-
land Plants, ii. 110.
- of Upland Plants,
ii. 114.
- of Moreland
Plants, ii. 268.
- Cattle, Section of, ii. 172.
- of the Vale, their
History, ii. 174.
- , Wild, N. ii. 189.
- , Remarks on their
Scarcity, ii. 198.
- Cements in Use, in the Vale,
i. 101.
- of Pickering Castle
analysed, i. 103.
- , General Remarks
on, i. 109.
- Mill suggested, i. 115.
- Chamber Barn, an Instance
of, i. 119.

C.

Chamber

I N D E X.

- Chamber Barn Floors, Remarks on, i. 119.
- Characteristics of Farms, i. 241.
- Cheese and its Management, ii. 206.
- Churn of the Vale, ii. 205.
- Cisterns for Rain Water described, i. 132.
- Cleveland, its Situation, i. 4.
 ———, District of, ii. 262.
- Climature of the Vale, i. 12.
 ——— of the Wolds, ii. 236.
 ——— of the Wolds improvable, ii. 243.
 ——— of the Eastern Morelands, ii. 265.
- Clover, Remarks on, as a Matrice of Wheat, ii. 79.
- Commissioners of Inclosure, Remarks on, i. 77.
- Common Fields, the Arrangement of, in the Vale, i. 48.
- Common Right, its Limits, i. 63.
 ——— Lands, their Interest in Commons, i. 72.
 ——— Houses, their Interest in Commons, i. 74.
 ——— Sites, their Interest in Commons, i. 75.
- Commons, Origin of, i. 54.
- Confidence or Leases necessary, i. 24.
- Copings of Ridges, i. 128.
 ——— of Gables, i. 129.
 ———, Method of Laying, i. 130.
- Copyhold Tenure, i. 20.
- Corn Weeds, Catalogue of, i. 333.
- Country Banks, Remarks on, i. 370.
- County divided into Districts, i. 1.
 ——— considered as a Subject of Survey, i. 7.
- Course of Practice, in the Vale, i. 277.
 ———, Remarks on, i. 278.
 ———, on the Wolds, ii. 244.
- Covenants in the Vale, i. 34.
- Cows, Article of, ii. 184.
 ———, Dimensions of, ii. 196.
- Crabtree, as a Hedgewood, i. 198.
- Cultivated Herbage, Section of, ii. 78.
 ——— proposed for the Morelands, ii. 280.
- Curd Mill described, N. ii. 208.
- Curltops, Disease of, noticed, ii. 49.
- Cutting Potatoe Setts, ii. 55.

D.

- DAIRY, Section of, ii. 201.
- Deal, as a Material of Building, i. 101.
- Defending young Hedges, i. 204.
- Denizen Rights of Common, an Instance of, i. 86.
 Dimensions

Dimensions of a Vale Ox,
 ii. 177.
 ----- of a Vale Cow,
 ii. 184.
 ----- of a Fat Cow,
 ii. 196.
 ----- of Cattle, Re-
 marks on, N. ii. 197.
 Disposal of Timber, i. 224.
 Districts of the County, i. 1.
 Docks destroyed by Swine,
 or by Mowing, ii. 124.
 Dogs, as a Species of Ver-
 min, i. 344.
 ----- destructive to Sheep,
 i. 345.
 -----, a Tax on, proposed,
 i. 346.
 Dormant Lands, their Right
 of Commonage, i. 61.
 Draining Marshes, Remarks
 on, i. 182.
 Drinking Places, Section of,
 i. 136.
 ----- Pools, Method of
 Making, i. 137.
 -----, General Re-
 marks on, i. 157.
 Drying Bark, i. 228.
 Dung, Article of, i. 350.
 -----, Remarks on Raising,
 i. 366.
 ----- of Horses, Remarks
 on, ii. 149.
 ----- Yards, Remarks on,
 i. 367.

E.

EARTH WORMS, Re-
 marks on, ii. 123.
 East Yorkshire and its Di-
 visions, i. 2.
 -----, its Advan-
 tages as a Subject of Study,
 i. 9.
 Eastern Morelands described,
 i. 4.
 -----, District
 of, ii. 265.
 Eaves Gutters, Method of
 Making, i. 131.
 Economy of Bees, Remarks
 on, ii. 131.
 Elder, as a Hedgewood,
 i. 199.
 Embankments, Remarks on,
 i. 183.
 Estates and Tenures, Section
 of, i. 18.
 ----- on the Wolds, ii. 239.
 Extent of the Vale, i. 10.
 ----- of the Eastern More-
 lands, ii. 266.
 Extirpation of Weeds, i. 338.

F.

FALLEN TIMBER, Ar-
 ticle of, i. 228.
 Fallowing, Remarks on,
 i. 338.
 Fancy Farm Houses, Re-
 marks on, i. 116.

FAN

I N D E X.

Fan Machine, i. 264.
 Farm Building, i. 98.
 ——— Lands, their History in
 the Vale, i. 272.
 ——— Yard Management in
 the Vale, i. 361.
 ————— on
 the Wolds, ii. 248.
 Farms, Section of, i. 239.
 ———, Sizes of, i. 239.
 ——— of the Wolds, ii. 243.
 Farmeries of the Vale, i. 116.
 Farmers, Section of, i. 242.
 ———, General Remarks
 on, i. 242.
 Farmery, a Plan of, suggest-
 ed, i. 121.
 Fattening Cattle, ii. 194.
 Felling Timber, Method of,
 i. 227.
 Fences of New Inclosures, a
 Remark on, i. 79.
 ———, Section of, i. 190.
 Fence Walls, and the Me-
 thod of Construction, i. 194.
 Fencing, a Regulation re-
 specting, in an Inclosure
 Bill, i. 89.
 Fescue, Meadow, as a Ley
 Herbage, ii. 86.
 Field Wells, i. 168.
 Fitzherbert, Judge, Note on,
 i. 45.
 Flax, Section of, ii. 64.
 ———, General Remarks on,
 as a Crop in England,
 ii. 73.
 Floors of Cement, Method
 of Making, i. 135.

Foddering on Grass, Re-
 marks on, ii. 125.
 Forest Lands, on Reclaim-
 ing, i. 296.
 ——— Trees proper for a
 Drained Moor, i. 236.
 Forms of Leases, i. 39.
 Fossil Productions of the
 Eastern Morelands, ii. 266.
 Frosts, Effects of, in low Si-
 tuations, N. i. 237.
 Fuel of ancient Townships,
 i. 70.
 Fur of Rabbits, Remarks on,
 ii. 256.
 Furze Grounds, on Clearing,
 i. 294.

G.

GABLES, Copings of, i. 129.
 Gaits, Method of Setting up,
 i. 353.
 Gaiting, Remarks on its
 Origin, N. i. 355.
 Gates, on Hanging, with
 Pivots, i. 191.
 ———, on the Height of,
 i. 191.
 General Law of Inclosure
 recommended, i. 94.
 General Management of Es-
 tates, i. 22.
 ————— of
 Grass Lands, ii. 118.
 General Principle of Inclo-
 sure examined, i. 54.
 General

I N D E X.

- General Principle of Inclosure inferred, i. 90.
- General Remarks on Laying out Townships, i. 56.
- on Trials at Law, i. 80.
- on Cements, i. 109.
- on Farmeries, i. 117.
- on Drinking Pools, i. 157.
- on Forming and Repairing of Roads, i. 170.
- on the Treatment of Hedges, i. 210.
- on Hedge-row Timber, i. 217.
- on Farmers, i. 242.
- on the Width of Wheel Carriages, i. 253.
- on the Constructions of Plows, i. 257.
- on Sod-burning, i. 291.
- on Reclaiming Forest Lands, i. 296.
- on Harvesting Barley and Oats, i. 357.
- on Raising and Improving Varieties of Grain, ii. 8.
- General Remarks on Transplanting Rape, ii. 31.
- on the Culture of Rape Seed, ii. 45.
- on Potatoes as a Fallow Crop, &c. ii. 62.
- on Flax, as a Crop in England, ii. 75.
- on Laying and Breaking up old Ley Grounds, ii. 89.
- on Breaking up old Grassland, ii. 107.
- on Stacking Hay in the Field, ii. 137.
- on the Management of After Grass, ii. 141.
- on the Spring Management of Grassland, ii. 144.
- on the Management of Summer Pastures, ii. 152.
- on the Breeding of Horses, ii. 159.
- on the Treatment of Hunters, ii. 167.
- on the Cattle of the Vale, ii. 174.
- on bringing Heifers into Milk, ii. 192.

General

- General Remarks on the present Scarcity of Cattle, ii. 192.
- Geological Remark on the Vale of Pickering, i. 5.
- on the Rivers of the Vale, i. 13.
- on the Northern Margin, i. 281.
- Granary over a Barn Floor, an Instance of, i. 123.
- Graffes, Cultivated, ii. 78.
- Grass lands, Remarks on breaking up, i. 298.
- , General Remarks, on Laying and Breaking up, ii. 89.
- , Section of, ii. 99.
- , Observations on Breaking up, ii. 107.
- , General Management of, ii. 118.
- improved by Lime, ii. 129.
- , their Spring Management remarked on, ii. 144.
- , Remarks on Breaking up, ii. 239.
- H.**
- HANGING BEEF, the ancient Practice of, N. ii. 199.
- Gates, on Pivots, i. 191.
- Harvesting, Section of, i. 348.
- with the Sickle, i. 349.
- Harvesting with the Sithe, i. 351.
- - Barley and Oats, General Remarks on, i. 357.
- on the Wolds, ii. 247.
- Hay, on Stacking in the Field, ii. 137.
- , Expenditure of, ii. 140.
- Harvest of the Vale, ii. 133.
- Seeds much cultivated, ii. 84.
- Stacks, Remarks on their Form, ii. 139.
- Haywards recommended, i. 214.
- Hazard of Farming, Instance of, ii. 45.
- Hedgekeepers recommended, i. 214.
- Hedgerow Timber, Section of, i. 215.
- , General Remarks on, i. 217.
- Hedgewoods, i. 198.
- Hedges of Lanes, Remarks on their proper Height, i. 179.
- , Stake and Edder, i. 196.
- , Living, i. 197.
- , Planting, i. 200.
- , old, various Treatments of, i. 208.
- , General Observations on their Treatment, i. 210.
- , Method of Planting, on the Wolds, ii. 242.
- Heifers,

- Heifers, General Remarks on bringing them into Milk, ii. 192.
- Herbage, Cultivated, ii. 78.
- of Low Lands, ii. 102.
- of Upper Grass Grounds, ii. 109.
- of Upland Grass, ii. 114.
- Hog Liquor, ii. 209.
- Holderness noticed, i. 6.
- , District of, ii. 260.
- Holly, on the Time of Transplanting, i. 199.
- Horns of Cattle, Remarks on, ii. 180.
- Horse Dung, Remarks on, ii. 149.
- Horses, as Beasts of Draught, compared with Oxen, i. 249.
- , Section of, ii. 154.
- Hunters, General Remarks on their Treatment, ii. 167.
- Hurdles of the Wolds, ii. 251.
- Husbandry, its History in the Vale, i. 272.
- I.
- JALAP, his Services to the Vale, ii. 156.
- Implements, Section of, i. 252.
- of the Wolds, ii. 247.
- Improved Method of Harvesting Rape, ii. 39.
- Improvement, in the Mode of Slaking Lime, proposed, i. 335.
- of the Royal Wastes, Practical Remarks on, i. 297.
- of the Culture of Rape, ii. 30.
- of the Morelands attempted, ii. 273.
- of the Eastern Morelands proposed, ii. 277.
- Improving Varieties of Potatoes, ii. 53.
- Inclosures, Section of, i. 45.
- in the Vale, History of, i. 46.
- , State of, in the Vale, i. 16.
- , General Principle of, i. 54.
- , by Exchanges, i. 91.
- , by private Commission, i. 92.
- , by Act of Parliament, Remarks on, i. 92.
- , a General Law of, recommended, i. 94.
- , State of, on the Wolds, ii. 237.
- Incrustation, an Instance of, i. 310.
- Indulgences to Tenants, their Effect, i. 23.
- England, its Nature, ii. 102.
- Inland

I N D E X.

- Inland Navigation of the Vale, i. 14.
 _____, a remarkable Site for, i. 15.
 _____ Ports, i. 7.
 Interests in Commonable Lands enumerated, i. 95.
- K.**
- KELDALE, Description of, ii. 273.
 Kempswiddon, Description of, ii. 273.
 King's Plates Remark'd on, ii. 162.
 Kirbymoorside, Rill of, i. 166.
 Knareborough Inclosure Bill, i. 82.
- L.**
- LABORERS of the Wolds, ii. 245.
 Lambs, on procuring Twins, ii. 217.
 Landed Estates and their Management, i. 18.
 Lands, Purchasing, i. 29.
 Laying Land to Grass, Ancient Method of, ii. 80.
 _____ Lands across Slopes, i. 304.
 Leases or Confidence necessary, i. 24.
 _____, their Length in the Vale, i. 31.
 _____, Forms of, i. 39.
 _____ of the Vale digested, i. 40.
- Length of Leases, i. 31.
 Lentils formerly cultivated, ii. 24.
 Leys, Temporary, ii. 79.
 _____, Perennial, ii. 80.
 _____, Sanfoin, ii. 92.
 Lime, as a Manure, i. 312.
 _____, Method of Burning, i. 317.
 _____, Cost and Price of, i. 324.
 _____, Application of, i. 326.
 _____, its Effect on different Soils, i. 326.
 _____, as a Manure of Grass Land, ii. 128.
 _____, its Effect on Whitening Grounds, ii. 129.
 Lime Husbandry of the Vale, i. 313.
 Lime Kiln of the Vale, i. 317.
 _____, Further Remarks, i. 321.
 _____ of Brotherton, N. i. 324.
 Limestones of the Vale, i. 313.
 Liming, Method of, i. 328.
 Limits of Common Rights, i. 63.
 Linseed, as a Food of Calves, ii. 191.
 List of Rates, ii. 287.
 Lord of the Soil, his Right of Commonage, i. 65.
 _____, his Interest in Commons, i. 76.
 _____, his assigned Share in the Sinnington Inclosure Bill, i. 86.
 Lowland Grass, ii. 101.
- MAKING

M.

- MAKING** Hay, ii. 154.
 — up Horses, ii. 164.
 Making formerly done by Farmers, ii. 16.
 Management of Estates, i. 22.
 —, a General Principle of, i. 190.
 — of Farms, i. 272.
 — of Mowing Grounds, ii. 131.
 Manor Courts, i. 27.
 —, their Revival suggested, i. 23.
 Manufactures, i. 8.
 Manufacturing District, i. 3.
 Manures and their Management, i. 307.
 — of the Wolds, ii. 247.
 Markets for Fallen Timber, i. 228.
 — of the Vale, i. 369.
 — of the Wolds, ii. 248.
 Marl of Newton Dale Well, i. 307.
 — of Limestone Quarries, N. i. 315.
 Materials of Building, i. 98.
 Method of Making Water Cisterns, i. 132.
 — Making Mortar Floors, i. 135.
 — Laying Pantiles, i. 136.
 — Making Drinking Pools, i. 137.
 — Conducting Rills, i. 162.
 Method of Forming and Repairing Roads, i. 170.
 — Draining Marsh Lands, i. 183.
 — Building Fence Walls, i. 195.
 — Sodburning, i. 284.
 — Reclaiming Rough Grounds, i. 295.
 — Burning Lime, i. 317.
 — Destroying Mice, i. 340.
 — Mowing Corn for Sheafing, i. 352.
 — Setting up Single Sheaves, i. 353.
 — Winnowing with the Machine Fan, i. 362.
 — Raising and Improving Varieties of Grain, ii. 6.
 — Preparing Seed Wheat, with Arsenic, ii. 11.
 — Thrashing Oats, in the open Air, ii. 21.
 — Transplanting Rape, ii. 29.
 — Thrashing Rape, ii. 33.
 — Raising Potatoes from Seed, ii. 51.
 — Improving Varieties of Potatoes, ii. 53.
 — Making Hay, ii. 135.
 — Stacking Hay in the Field, ii. 137.
 — Castrating Calves, ii. 189.
 Method

Method of Making Skim
Cheese, ii. 207.

————— Salving Sheep,
ii. 221.

————— Taking and Sort-
ing Rabbits, ii. 257.

Mice, on the Method of De-
stroying, i. 340.

Middleton Inclosure Bill,
i. 90.

Mildew of Wheat, Remarks
on, ii. 13.

Milk Leads, Description of,
N. ii. 204.

—————, on Scouring,
ii. 204.

Minerals of the County, i. 8.

Molding Grassland, ii. 121.

————— Sledge and its Con-
struction, i. 262.

Moles, Remarks on, ii. 122.

Moory Soil, as a Site of
Planting, i. 234.

————— of Heaths, ii. 267.

Morelands, Improvements of,
attempted, ii. 273.

—————, proposed, ii. 277.

Moreland Sheep described,
ii. 215.

Mortar Floors, Method of
Making, i. 135.

Mossy Land improved by
Lime, ii. 129.

Mowing Corn, for Sheafing,
i. 352.

————— Grass, ii. 133.

————— Grounds, Method
of Dressing, ii. 120.

—————, Manage-
ment of, ii. 131.

Mudd Sheep, ii. 214.

VOL. II.

N.

NATURAL Advantages of
East Yorkshire, i. 9.

————— Districts of the
County, i. 1.

————— Herbage, Sec-
tion of, ii. 99.

————— Woods, Section
of, i. 219.

Nett Hurdles described,
ii. 251.

Newtondale Well, Waters
of, i. 308.

O.

OAK, as a Material of Build-
ing, i. 115.

Oats and Barley, Remarks
on Harvesting, i. 357.

————, Section of, ii. 17.

————, a New Method of
Thrashing, ii. 20.

Objects of the Vale Hus-
bandry, i. 275.

———— of the Wold Hus-
bandry, ii. 244.

Operations in Rural Archi-
tecture, i. 123.

Origin of Commons, i. 54.

Ornamental Appearance of
the Vale, i. 17.

Ox of the Vale, Dimensions
of, ii. 177.

Oxen,

B b

I N D E X.

- Oxen**, as Beasts of Draught, their History in the Vale, i. 245.
- compared with Horses, as Beasts of Draught, i. 249.
- , their Treatment in the Vale, i. 250.
- P.**
- PANNAGE** of ancient Township, i. 70.
- Pantiles** and their Manufacture, i. 99.
- , Method of Laying, i. 126.
- Paper Money**, Remarks on, i. 370.
- Paring and Burning**, i. 284.
- Pasture Grounds**, General Management of, ii. 143.
- , General Remarks on their Summer Management, ii. 152.
- Peeling Bark**, i. 227.
- Perennial Leys**, ii. 80.
- Petrefactive Waters**, Remarks on, i. 308.
- Plan of Management of Farms**, i. 272.
- Plantain**, as a Ley Herbage, ii. 87.
- Plantations**, Section of, i. 237.
- of East Yorkshire, i. 232.
- proposed, on the Morelands, ii. 278.
- Planting Hedges in the Vale**, i. 200.
- on the Wolds, ii. 242.
- a Moory Soil, an Instance of, i. 233.
- Trees on the Wolds, ii. 241.
- Plow of the Vale**, i. 257.
- Plows**, Remarks on their Construction, i. 257.
- Plowing with Reins**, i. 302.
- Plow Team of the Vale**, its History, i. 32.
- Pickering Castle** noticed, i. 102.
- Pickering, Township of**, described, i. 48.
- Inclosure Bill, History of, i. 49.
- Farther Remarks on, i. 77.
- Piking Hay**, ii. 134.
- Poe, Meadow**, as a Ley Herbage, ii. 86.
- Pools, Artificial**, Method of Making, i. 137.
- Post and Rails**, as a Temporary Fence, i. 195.
- Potatoes**, Section of, ii. 48.
- , Varieties of, Temporary, ii. 49.
- , Method of Raising from Seed, ii. 51.
- Plants, Remarks on Cutting, ii. 55.
- , their Effects on Land, ii. 60.
- compared with Turneps and Cabbages, ii. 62.
- Poultry,

I N D E X.

Poultry, ii. 228.
 Preparing Seed Wheat with Arsenic, ii. 10.
 Private Bills of Inclosure, their attendant Evils, i. 51.
 Productions of the Vale, i. 17.
 ----- of the Morelands, ii. 268.
 Prognostication, a Part of a Farmer's Business, i. 269.
 Progress of Spring in 1787, i. 270.
 Propagation of Timber, a Remark on, i. 231.
 Proprietors, in the Vale, i. 19.
 Provincial Surveys, their Utility, ii. 44.
 Pulse, Section of, ii. 24.
 Purchase of Lands, i. 29.

Q.

QUANTITY of Approbation requisite for an Inclosure, i. 96.

R.

RABBITS, Section of, ii. 226.
 ----- of the Wolds, ii. 252.
 ----- Trap described, ii. 257.
 ----- Warrens, their Profitableness, ii. 227.
 ----- Management of, ii. 254.

Rabbit Warren proposed, an Improvement of the Morelands, ii. 281.
 Raising Woods from Acorns, i. 220.
 ----- Yard Manure, i. 366.
 Rape, Section of, ii. 27.
 -----, Method of Transplanting, ii. 29.
 ----- Culture, Improvement of, suggested, ii. 30.
 -----, General Remarks on, ii. 45.
 ----- Thrashing described, ii. 33.
 Rates, List of, ii. 287.
 Rats, Remarks on their Destructiveness, i. 343.
 Ray Grass, Remarks on, ii. 84.
 Rearing Cattle, ii. 187.
 Receiving Rents, i. 38.
 Reclaiming Forest Lands, Remarks on, i. 296.
 ----- Rough Grounds, i. 284.
 Red Cow's Milk, its Efficacy, ii. 174.
 Reed Oat, Remarks on, ii. 18.
 Registers of Rural Practices, their Utility, ii. 44.
 Remarks on Estimating the Rental Value of Farms, i. 25.
 ----- on Manor Courts, i. 27.
 ----- on Purchasing Land, i. 29.
 ----- on the Rental Value of Lands, i. 32.
 B b 2 Remarks

- | | |
|---|--|
| <p>Remarks on the Time of Re-
movals, i. 36.</p> <p>----- on Denizen Rights
of Commonage, i. 86.</p> <p>----- on Chamber Barns,
i. 119.</p> <p>----- on Barn Doors,
i. 124.</p> <p>----- on Barn Floor Gra-
naries, i. 124.</p> <p>----- on the proper
Width of Lanes, i. 178.</p> <p>----- on River Embank-
ment, i. 183.</p> <p>----- on Raifing Woods
from Acorns, i. 210.</p> <p>----- on the Carriage of
'Timber, i. 230.</p> <p>----- on the Effects of
Frost, N. i. 237.</p> <p>----- on the Sizes of
Farms, i. 239.</p> <p>----- on Raifing Yard
Dung, i. 366.</p> <p>----- on a Wet Summer,
i. 270.</p> <p>----- on Country Banks,
i. 370.</p> <p>----- on an extraordi-
nary Exertion of Vege-
tation, i. 271.</p> <p>----- on the Course of
Practice, i. 277.</p> <p>----- on Breaking up
Tough Sward, i. 299.</p> <p>----- on Plowing with
Reins, i. 303.</p> <p>----- on Plowing across
Slopes, i. 304.</p> <p>----- on Petrefactive
Waters, i. 308.</p> | <p>Remarks on Liming Land,
i. 328.</p> <p>----- on Fallowing,
i. 338.</p> <p>----- on Weeding, i. 339.</p> <p>----- on the Destructive-
ness of Rats, i. 343.</p> <p>----- on Reaping, by
Women, i. 350.</p> <p>----- on Shucking, i. 350.</p> <p>----- on the Consump-
tion of Straw, i. 365.</p> <p>----- on Raifing Vari-
eties of Grain, ii. 4.</p> <p>----- on Arfenic, as a
Preventive of Smut, ii. 11.</p> <p>----- on Rye, as a Pre-
ventive of Mildew, ii. 13.</p> <p>----- on Thrashing Oats
in the Field, ii. 20.</p> <p>----- on Public Rape
Thrashing, ii. 36.</p> <p>----- on Declining Va-
rieties of Potatoes, ii. 49.</p> <p>----- on Potatoe Sets,
ii. 55.</p> <p>----- on the Effects of
Potatoes on Land, ii. 60.</p> <p>----- on the Growth of
Flax, ii. 67.</p> <p>----- on Clover as a
Matrice of Wheat, ii. 79.</p> <p>----- on Laying Grass-
Lands, ii. 80.</p> <p>----- on Raygrafs as a
Ley Herbage, ii. 84.</p> <p>----- on the Food of
Sanfoin, ii. 95.</p> <p>----- on the Mole, ii. 122.</p> <p>----- on Earthworms,
ii. 123.</p> |
|---|--|

Remarks

I N D E X.

- Remarks on Foddering on
 Grass, ii. 125.
- on the Longevity
 of Plants, ii. 125.
- on Whitening
 Grounds, as destructive to
 Grass, ii. 129.
- on the Time of
 shutting up Grassland for
 Hay, ii. 132.
- on the Spaying of
 Mares, ii. 162.
- on the Dutch Breed
 of Cattle, ii. 175.
- on the Natural
 Dispositions of Swine,
 ii. 210.
- on Blackfaced
 Sheep, ii. 215.
- on Breeding
 Flocks, ii. 218.
- on Salving Sheep,
 ii. 219.
- on Rabbits, as an
 Article of Farm Stock,
 ii. 227.
- on the Food of
 Bees, ii. 231.
- on Breaking old
 Sheep Walks, ii. 239.
- on the Climature
 of the Wolds, ii. 243.
- on the Turnep
 Culture of the Wolds,
 ii. 249.
- on Eating off Tur-
 neps, ii. 250.
- on Changing the
 Breed of Sheep, ii. 252.
- on the Dang of
 Horses, ii. 149.
- Remarks on the Fur of Rab-
 bits, ii. 256.
- on the unnatural
 Disposition of Rabbits,
 ii. 258.
- on improving
 Heaths, ii. 275.
- Removals in the Vale, i. 35.
- on the Wolds,
 ii. 240.
- Rent, a Medium of, the most
 eligible, i. 25.
- , in the Vale, i. 32.
- , on Receiving, i. 38.
- , on the Wolds, ii. 239.
- Rental Value of the More-
 lands, ii. 272.
- Repairs, Covenants respect-
 ing, i. 34.
- Respruing Timber Trees,
 Method of, i. 222.
- Ribgrass, as a Ley Herbage,
 ii. 87.
- Ridge Stones, i. 129.
- Right of Soil considered,
 i. 72.
- Rill, Artificial, Method of
 Making, i. 162.
- Rill of Kirbymoorside, i. 166.
- River Embankments, Re-
 marks on, i. 183.
- , In-
 stances of, i. 187.
- Rivers of the County, i. 7.
- of the Vale, i. 13.
- Roads, Section of, i. 168.
- of the Vale, their His-
 tory, i. 168.
- , General Remarks on
 Forming and Repairing,
 i. 170.

I N D E X.

- Roads, the proper Width of, i. 178.
- Road Hedges, Remarks on, i. 179.
- Men recommended to Parishes, i. 177.
- Team of Cleveland, ii. 263.
- Rough Grounds, on Reclaiming, i. 284.
- Royal Wastes, Practical Remarks on Improving, i. 297.
- Rural Architecture, a General Principle in, i. 116.
- , Operations in, i. 125.
- Surveys, their Utility, ii. 44.
- Rye, Section of, ii. 14.
- S.
- SALE by Auction, Remarks on, i. 226.
- Salving Sheep described, ii. 219.
- Sanfoin, Article of, ii. 92.
- , its Advantages as a Crop, ii. 95.
- , its favorite Field of Pasturage ascertained, ii. 95.
- Scarcity of Cattle, Remarks on, ii. 198.
- Seaports, i. 8.
- Seed Procefs, Section of, i. 331.
- Semination, Section of, i. 331.
- Servants, their Wages and Treatment, i. 244.
- , the Time of Changing, i. 245.
- Setting Sun, its Use in Prognostics, i. 268.
- up Single Sheaves, i. 353.
- Sheep worried by Dogs, i. 345.
- destructive to certain Weeds, ii. 124.
- , Section of, ii. 211.
- , their History in the Vale, ii. 212.
- of the Morelands, ii. 215.
- of Scotland, N. ii. 215.
- of the Wolds, ii. 251.
- , Remark on the Danger of changing the Breed, ii. 252.
- , as the Stock of the Morelands, ii. 271.
- Walk proposed, as an Improvement of the Morelands, ii. 281.
- Shores and Embankments, Section of, i. 181.
- , Definition of, N. i. 181.
- Shucks, Remarks on, i. 350.
- Sinnington Inclosure Bill, i. 84.
- Skim Cheese, Method of Making, ii. 207.
- Skreen Plantations recommended for the Wolds, ii. 242.
- Slaking Lime, an Improvement proposed, i. 330.
- Sledges of the Vale, i. 261.
- Slopes,

I N D E X.

- Slopes, on the Method of Plowing, i. 304.
- Slugs Enemies to Flax, ii. 68.
- Smut prevented by Arsenic, ii. 10.
- Single Sheaves, Method of Setting up, i. 353.
- Sites of Houses, their Rights of Commonage, i. 61.
- Situation of the Vale, i. 10.
- of the Wolds, ii. 235.
- of the Eastern Morelands, ii. 265.
- Sizes of Farms, Remarks on, i. 239.
- Sodburning and the Method of Practice, i. 284.
- , an Innovation in, i. 288.
- , General Observations on, i. 291.
- Tough Sward, its Utility, i. 298.
- Soils of the Vale, i. 10.
- , and their Management, i. 279.
- , Variety of, a Stimulus to Ingenuity, i. 281.
- of the Wolds, ii. 236.
- of the Eastern Morelands, ii. 267.
- Sorting Hedge Plants, i. 202.
- Rabbits, ii. 257.
- Spaying Fillies intimated, ii. 163.
- Spirit of Improvement, a Stimulus of, i. 281.
- Spring, 1787, Progress of, i. 270.
- Stacking Hay in the Field, Remarks on, ii. 137.
- State of Inclosure, in the Vale, i. 16.
- Straw, Method of Binding, i. 361.
- , Expenditure of, i. 364.
- , Remarks on its Consumption, i. 365.
- Steers, Age of Breaking in, ii. 192.
- Stocking Pasture Grounds, ii. 148.
- Stones, as a Material of Building, i. 98.
- Subsoils of the Vale, i. 281.
- of the Wolds, ii. 235.
- of the Eastern Morelands, ii. 266.
- Substructure of the Wolds, ii. 235.
- Sub-Varieties of Potatoes, on selecting, ii. 53.
- Succession, in the Vale, i. 277.
- , Remarks on, i. 278.
- , on the Wolds, ii. 244.
- Summer, a remarkably wet one, i. 270.
- Surface of the Vale, i. 10.
- singularly Flat, i. 13.
- Sward, on Breaking up, i. 299.
- Swine destructive to the Dock, ii. 124.
- , Section of, ii. 209.

I N D E X.

T.

- TAX on Dogs proposed, i. 346.
- Team of the Wolds, singular Method of. Harnessing, ii. 246.
- Teathing Grassland, in Winter, Remarks on, ii. 128.
- Teeswater freed of Cattle, ii. 178.
- Sheep, ii. 214.
- Temporary Leys, ii. 79.
- Tenures, in the Vale, i. 20.
- Tenancy, in the Vale, i. 31.
- , of the Wolds, ii. 239.
- Tenants, Instance of their indulgent Treatment, i. 22.
- Term of Leases, i. 31.
- Thrashing Oats, a new Method of, ii. 20.
- Rape, Method of, ii. 33.
- Tillage of the Vale, i. 302.
- Timber, Disposal of, i. 224.
- , Markets for, i. 228.
- , Carriage of, i. 230.
- Trees of the Vale, i. 220.
- , Method of Respringing, i. 222.
- Tip of the Wolds described, ii. 257.
- Tithes, on setting out Land in Lieu of, i. 84.
- Tobacco, Section of, ii. 75.
- Townships of the Vale, i. 16.
- , the ancient Method of Laying out, i. 48.

- Townships, farther on Laying out, i. 56.
- , Open, one common Farm, i. 56.
- Training young Hedges, i. 205.
- Transplanting Rape, ii. 29.
- Trap for taking Rabbits, ii. 257.
- Trial at Law, Remarks on, i. 80.
- Turneps, Section of, ii. 25.
- , an improved Mode of Expenditure, ii. 25.
- compared with Potatoes and Cabbages, ii. 62.
- Turnep Culture of the Wolds, ii. 249.
- Twin Lambs, on procuring, ii. 217.
- Two Year Old Cattle, ii. 191.

U.

- UNDERDRAINING, Instances of, i. 283.
- Upland Grass, ii. 113.
- Upper Grass Grounds, ii. 109.

V.

- VALE of York described, i. 3.
- Vale of Pickering, a singular Passage of Country, i. 5.
- , General View of, i. 10.
- Valuing

- Valuing Timber, Method of, i. 226.
 Varieties of Wheat, on Raising, ii. 4.
 -----, an Instance of Raising, ii. 5.
 ----- of Grain, Improving of, ii. 9.
 ----- of Potatoes are Temporary, ii. 49.
 -----, Selecting, ii. 52.
 Vegetable Economy, Conjectures respecting, ii. 46.
 ----- Mold of Heaths, ii. 267.
 Vegetation, Extraordinary Strength of, i. 271.
 Vermin of the Vale, i. 340.

W.

- WAGGONS of the Vale, i. 252.
 -----, Remarks on their Width of Running, i. 253.
 ----- of the Wolds, Method of Drawing, ii. 246.
 Walls of Fields, on the Method of Construction, i. 194.
 Water Cisterns, i. 132.
 Waters of Newtondale Well, i. 308.
 Way Reaves recommended, i. 177.
 Weather, Section of, i. 267.
 Weeds and Vermin, i. 332.
 -----, Catalogue of, i. 333.
 Weeding Grasslands, ii. 124.
 -----, Remarks on, i. 339.
 Weighing Machine, for Cattle Markets, proposed, N. ii. 197.
 Wells in Fields, i. 168.
 Western Morelands, Situation of, i. 2.
 West Yorkshire and its Divisions, i. 2.
 Wheat and Rye, Method of Harvesting, i. 349.
 Wheat, Section of, ii. 1.
 -----, on Raising Varieties of, ii. 4.
 -----, Preparing the Seed with Arsenic, ii. 10.
 -----, Remarks on the Mildew of, ii. 13.
 Wheelwasher, an Improvement of, N. i. 252.
 Window Leads, Painting, i. 135.
 Windrake, an ancient Privilege, i. 21.
 Winnowing Machine, and its History in the Vale, i. 264.
 ----- with the Machine Fan, i. 362.
 Wolds, a Sketch of, i. 6.
 -----, District of, ii. 235.
 Women employed in Reaping, i. 349.
 Woodlands and Plantations, i. 219.
 -----, on Reclaiming, i. 295.

Woods,

I N D E X.

Woods, Natural, i. 219.
 ———, Remarks on Raising, i. 220.
 ———, Method of Resprouting, i. 222.
 Wool, Weights of Fleeces, ii. 224.
 Worms, Remarks on, ii. 123.
 Workpeople, Section of, i. 244.
 ——— of the Woods, ii. 245.

Y.

YARD Management, i. 364.
 Yearling Cattle, ii. 191.
 Yeomanry numerous in the Vale, i. 19.
 ———, their Characteristics in the Vale, i. 245.

TABLE

TABLE OF REFERENCE

FROM THE
FIRST TO THE SECOND EDITION.

The References, between the several Provincial Registers, being, in the first Editions, to their respective Pages; and the Pages of these Volumes being now considerably altered, I have thought it right to form the following TABLE, to assist the Reader who may have the first Edition of any of the other Registers; to refer to the Pages of this Edition.

V O L. I.

1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.
1	1	61	57	135	125	208	204	263	248	334	314
2	2	62	58	138	128	209	205	264	248	335	315
3	3	64	60	141	131	210	205	265	250	337	316
4	4	65	61	146	135	212	207	266	250	337	317
5	5	67	63	146	136	213	208	268	250	339	318
6	6	68	64	149	139	215	210	269	253	341	320
7	8	69	65	151	141	216	211	272	256	342	321
8	9	72	68	154	144	219	213	274	257	346	324
9	10	75	70	156	146	219	214	278	261	347	326
10	10	75	71	160	149	220	215	279	262	348	327
11	12	76	71	163	152	222	217	281	264	349	328
12	13	77	72	164	153	224	181	284	267	352	330
13	14	78	73	167	156	225	182	286	268	353	331
14	17	79	74	168	157	225	183	287	270	354	332
15	18	80	75	170	159	226	183	288	271	355	333
16	22	81	76	174	162	230	187	290	272	361	338
17	23	82	77	175	164	232	189	292	274	362	339
18	24	85	80	176	165	233	190	294	275	377	340
19	25	89	83	178	167	234	219	296	277	381	343
20	26	90	84	179	168	235	220	297	278	382	344
21	27	96	90	180	168	236	221	298	278	383	345
22	28	97	90	181	169	238	223	298	279	384	347
23	29	98	91	181	170	239	224	300	281	387	348
24	29	99	92	182	171	240	225	301	283	390	351
25	31	101	94	183	171	241	226	303	284	391	352
26	31	102	95	185	176	242	227	304	284	392	353
27	32	103	96	189	177	243	227	305	285	393	354
28	33	105	98	190	178	243	228	307	288	394	355
29	35	107	99	191	179	244	229	308	288	396	357
30	36	108	101	192	181	245	230	310	290	399	359
31	38	111	103	194	190	246	231	314	294	400	361
32	39	117	109	195	191	247	232	316	296	401	362
33	39	123	115	198	194	248	233	318	298	403	364
34	40	124	116	199	195	250	235	323	302	405	366
35	45	125	116	200	196	253	236	324	304	407	367
36	47	126	118	201	197	254	239	325	305	409	369
37	48	127	119	202	198	256	241	327	307	410	370
38	53	130	122	204	200	257	242	328	307	411	371
39	54	132	123	205	201	259	244	330	309		
40	56	133	124	206	202	260	245	331	311		
41	56	134	125	207	202	262	247	333	312		

TABLE OF REFERENCE

FROM THE
FIRST TO THE SECOND EDITION.

V O L. II.

1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.	1st Edit.	2d Edit.
1	1	54	52	107	103	163	157	202	209	248	238
2	2	55	53	111	107	165	155	203	187	249	239
4	4	57	54	113	108	167	16	204	188	249	243
6	6	58	55	113	109	168	162	205	189	251	240
8	8	59	56	117	113	169	162	206	190	252	244
10	10	61	57	118	113	171	164	207	191	253	245
11	11	62	59	122	118	172	165	208	192	255	247
13	13	64	60	123	118	173	166	214	194	257	249
14	14	65	62	125	120	174	167	215	196	259	251
16	15	68	64	126	122	175	168	216	197	260	251
17	16	69	65	127	123	178	17	219	212	261	252
18	17	70	67	128	124	180	172	220	214	264	255
20	19	72	69	130	125	181	174	221	215	265	256
22	21	75	71	132	127	183	175	222	216	269	260
24	23	76	72	133	128	184	176	223	217	271	262
26	24	79	75	136	131	185	177	224	218	272	263
27	25	82	78	137	132	186	178	225	219	275	264
29	27	83	79	138	133	187	176	227	220	277	267
31	28	84	80	140	135	188	180	229	223	278	268
33	30	85	81	141	136	189	182	230	224	282	272
35	32	86	82	145	140	190	183	231	225	285	275
36	35	88	83	148	140	191	183	232	226	287	277
41	38	91	86	147	141	191	184	233	227	288	278
42	39	92	87	148	143	194	186	235	209	289	279
46	45	93	88	149	143	195	201	237	228	291	281
47	44	95	90	154	148	196	202	238	229	292	282
47	45	97	92	156	150	197	204	239	230	295	285
50	47	99	94	157	151	198	205	240	231	297	287
51	48	100	95	160	154	200	206	244	235	303	293
52	50	103	98	161	155	201	208	246	237		
53	51	105	99	162	156	202	208	247	242		







