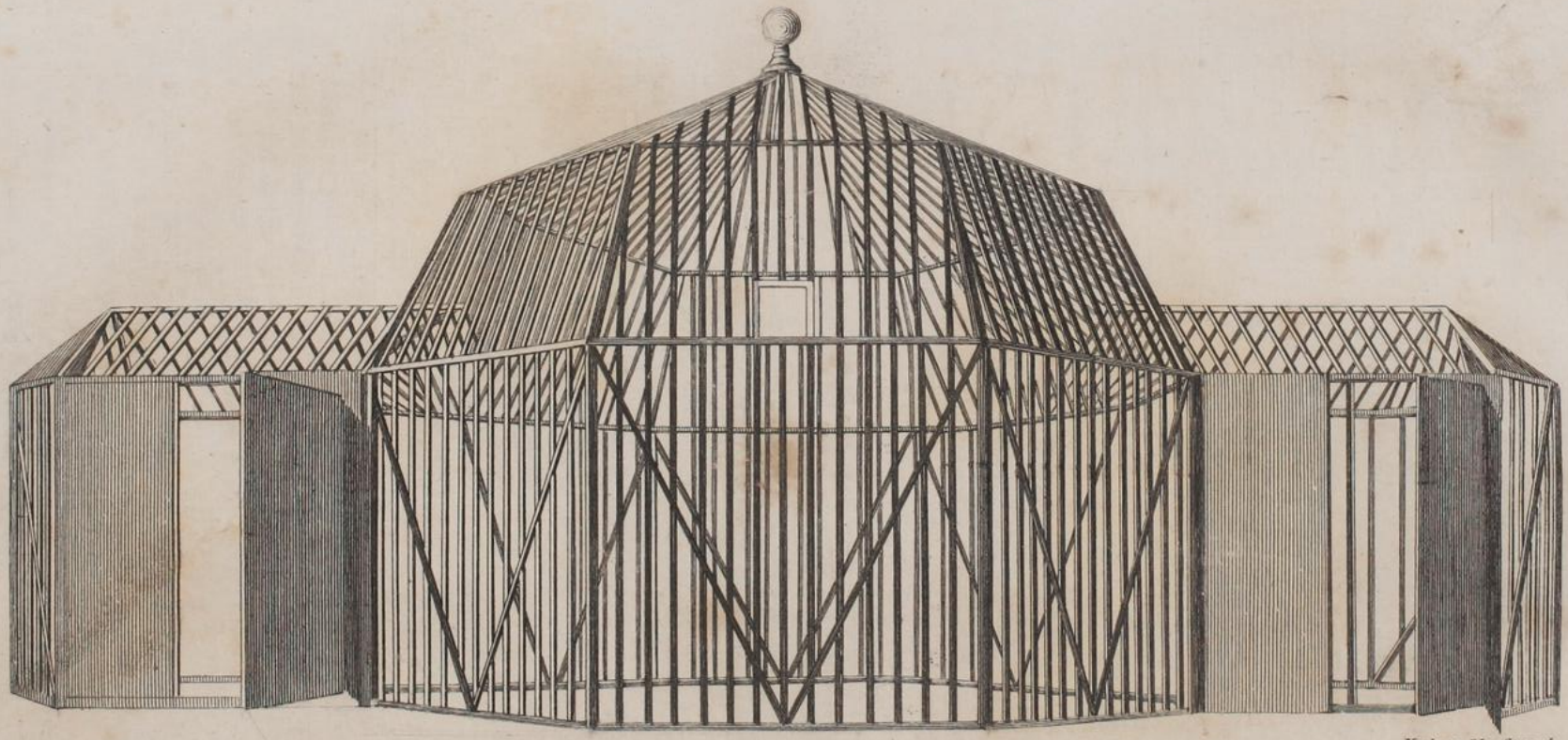

Neele sc. 352 Strand.

MODEL of a BARN.

by Mr. Henry Dobson, of the City of Norwich.

Published by V. Griffiths, Paternoster Row, Mar 31st 1804.

THE

AGRICULTURAL MAGAZINE.

No. LVI.] MARCH, 1804. Vol. X.]

MODEL OF A BARN,

WITH A PLATE ANNEXED.

To the Editor of the Agricultural Magazine.

Sir,

We live at a time when persons affect to consider that the principles of philosophy in general, and of mathematics in particular, are successfully applied to the ordinary concerns of life. Notwithstanding this position is so fondly assumed by many of your intelligent correspondents, a little attention will discover that these principles are, in many cases, generally misunderstood, and in others wholly abandoned.

Your last number contains some account of the agriculture of Norfolk, which I have read both with pleasure, and instruction. I have therefore been disposed to express my gratitude by inclosing the annexed drawing of a barn, constructed by Mr. Henry Dobson, of Norwich, the description of which was by him communicated to one of the best public institutions in this country.

The following are the dimensions of a barn fifty feet long, by twenty and a half wide.

Dimensions of the Model.	*Dimensions of the Common Barn.*
1,475 Square feet the area.	1,475 Square feet the area.
30,900 Cubic feet for corn only.	24,428 Cubic feet for corn only.
445 Cubic feet of timber.	702 Cubic feet of timber.

By which calculation it appears that a barn, built on the present model, gains on one in common use of the same area 6,472 cubic feet of space, and is built with 257 cubic feet of timber less: as there is nothing in its construction which would increase the expence of workmanship, the difference between the expence of building a barn on this plan and that of one in common use, of the same area, would be as 445 is to 702. It is needless to say any thing of its mathematical strength, and it must be obvious to any one who is at all acquainted with mechanics, that the present figure is of all others the best calculated to answer that purpose.

I very much doubt if the preference assigned to Staddles, (No 55, p. 98,) be well founded. In this uncertain climate a barn is, perhaps, the only effectual security for wheat, the most valuable production of the field; and I flatter myself the attention of your readers will not be uselessly applied by adverting to the ingenious plan which is the subject of the present communication.

Lynn, I am, Sir, yours, &c.
March, 8, 1804. F. C.

ON COMMONS IN NORFOLK, ROTATION OF CROPS, NEW HUSBANDRY, &c.

To the Editor of the Agricultural Magazine.

SIR,

THOUGH Chorographus has given your very intelligent correspondent, Agricola Norfolciensis, and me, a sort of challenge, I do not know that I should have made any remarks on his communication in your last Number, 55, had he not professed himself ashamed to speak of our Norfolk commons. I assure you Mr. Editor, we take no shame to ourselves on that score, but great merit, if merit be due to those who have made corn, &c. to grow where they never grew before. He says, this county contains 80,000 acres of waste; so says Mr. Kent in his Report to the Board of Agriculture, (a work which Chorographus seems to have read with attention) but it ought to be recollected, that Mr. Kent's report was made nearly, if not quite, ten years ago, since which time, I do not believe that the inclosing of commons has gone on any where with so much spirit as in this county. I presume your correspondent does not often see a certain weekly publication, called the Norfolk Chronicle, almost every number of which, for the last ten years, has contained advertisements relative to inclosures. A large portion of one of the commons he particularly notes, which came under the general denomination of Wyndham common, though not all within the bounds of that parish, was inclosed about four years ago, and the very extensive common belonging to that parish would have been inclosed also, but for a difficulty which arose in settling the extent of claims of certain individuals. Kent, in his report, mentions the parishes of Horsford, Hevingham and Marsham (contiguous to each other,) as containing 3000 acres of waste land: these are all since inclosed. Poringland Heath, which forms part of six or seven parishes, is inclosed, and the great heath called Muswold, adjoining Norwich, and extending from thence seven or eight miles in length, and from one and a half to two miles in width, consequently containing many

thousands of acres, and forming part of fifteen parishes, is all inclosed, except about 200 acres, belonging to one of the Norwich hamlets. In short, Mr. Editor, if your correspondent will give himself the trouble to ride about this county, he will not see a single common which would answer tillage uninclosed, or uninclosing, with the exception of our *greens*, (small neat commons, generally with cottages scattered around them,) which I am always vexed to see divided by new hedge rows, as in their present state, they afford great comfort and convenience to the inhabitants on their borders, and must delight the eye of every one who can relish rural scenery, especially on a fine Sunday evening, when the lads and lasses turn out, the former to enjoy the athletic sport of camping, (foot-ball,) &c. the latter to exhibit their neat Sunday gowns, and blooming rural beauties, and to admire the manly exertion and dexterity of their sweethearts.

So far, Mr. Editor, from our commons being permitted to lay waste, I think we are a pattern to all other parts of the kingdom, for our spirit of inclosing; and many of them cannot do better than send for some of our active commissioners, (who have almost worked themselves out at home) our Burtons, Dugmores, &c. as they have really had great experience, and are very dexterous in *carving* a common, and helping each claimant to such a slice as generally satisfies his appetite. With respect to ploughing, where the soil is naturally deep and rich, perhaps you cannot well stir it to too great a depth; but this is not the case with Norfolk, the soil of which has (if I may use the expression,) been created by the industry and ingenuity of the farmer, and whenever we go beyond the usual pitch, we are sure to turn up a barren unproductive sub-soil. It has been my lot to take land into my occupation pretty well stocked with twitch, (triticum repens) and this has perhaps made me the more partial to shallow ploughing, as the only means by which it is possible to eradicate it. Land so stocked, becomes by deep ploughing, apparently clear for a time; but the twitch remains beyond the reach of the scuffler and harrows, and with the succeeding crop increases ten fold. Where the land is clean, I would take up to the *full pitch* with the *first earth*, for the turnip crop, but in this case I do not think I should go beyond the usual depth of ploughing in this county, and we can scarcely quarrel with our mode of tillage, when it allows us, both by the accounts of Kent and Chorographus, to export corn to the amount of 900,000l. per annum.

In this place it may be fair to observe, that Kent estimates the amount of our exports, including corn, cattle, sheep, poultry, &c. at upwards of 1,274,521l. per annum.

I shall now take leave to make a few remarks on the course of cropping. To the south of Norwich, containing the hundreds of Humbleyard, Henstead, Loddon, &c. the land is strong, and the course generally wheat, turnips, barley, and clover. To the east, containing the hundreds of Blofield, Walsham, and Flegg, the course is almost invariably turnips, barley with seeds, clover, &c. wheat, barley, or oats without seeds. This is a course which every theoretical, and also every practical farmer, will condemn (except those who reside in the district); and though the soil is not naturally such as would be considered unusually rich, being a shallow loam on gravel, which in some places approaches very near the surface; yet the farms are in a high state, rich and clean, bearing abundant crops, both of wheat, barley, clover, and turnips; and the farmers wealthy. They apply small quantities of marle here, but very frequently, which, perhaps, may in a great measure, do away the ill effects of such *close* cropping. To give an idea of the excellence of a farm, it is sufficient with us to mention the word, Blofield: and a certain nobleman, who has considerable property in this district, and who is now, (according to his usual custom) advertising some of his farms to be let, endeavours to attract attention, by placing conspicuously, at the head of his advertisements, "Blofield Hundred." In the district to the North of Norwich, containing the Hundreds of Erpingham, Tunstead, &c. the almost invariable course is turnips, barley with seeds, layer, layer-wheat, barley or oats without seeds. They here let their land lie the second year, though perhaps there may be but a very scanty herbage indeed, and their invariable adherence to this system, arises, I conceive, from the district containing but very few meadows, and no old upland pasture, consequently they want their second year's layer for the use of their horses, cows, &c. in the summer. The above course is somewhat deviated from, by some excellent farmers, who suffer the land to lie the full two years, but instead of breaking it up for wheat, it remains till the following spring, when it is taken up for peas; then wheat, which is succeeded by turnips, so that the course is kept; and this is better than the other, as two white corn crops do not come in succession. The peas, especially if a stout crop, doing service rather than injury to the land; and the pea-stubble is considered as a better preparation for the wheat, than the tough knotty rye-grass layer. As to the western, south-western, and north-western part of the county, the land greatly varies, and the course of cropping and management vary accordingly.

Dibbling, for which this county used to be so famous, is going out very fast, it is generally done shamefully, much seed scattered on the surface, some holes filled, and others left

empty. Drilling gains ground, and is now practised by many of those men who, six years ago, would have been more alarmed by seeing a Drill at work on their lands, than they would be at this time, were they to meet the foraging party of a French army. Men, who, some years ago, would tell you, "Aye, they are mighty pretty playthings for gentlemen to waste their time and money upon, but fit only for a farmer to *hull into the deek hole.*"

I cannot conclude, without thanking your valuable correspondent, Agricola Northumbriensis, for his observations in your last Number; his hints will not be unattended to by me, and I shall always read with satisfaction, the communications of so intelligent a practioner. I will not, however, yet, give up the claim of us, Norfolk farmers, to superior management of the turnip-crop, and have a communication to make of a method which is beginning to be practised, to preserve our turnips from the frost, but this I must defer to some future opportunity.

Norfolk, I am, Sir, your constant reader,
March 8, 1804. P. J.

ON SHEPHERDS' DOGS.

To the Editor of the Agricultural Magazine.

Sir,

I THINK the following hints on Shepherds' Dogs will be acceptable to many of your readers. I have been a very close observer of sheep for more than ten years, and for some time have thought there wanted a reform among the shepherds' dogs. It seems to me ridiculous that sheep (the most timid of all domestic animals) should have to encounter with dogs little inferior to wolves in ferocity, and nearly as mischievous, particularly in a ewe flock. Perhaps, in the course of a day several ewes, heavy with lamb, will have to encounter with one of these dogs, and be nearly torn to pieces. After a farmer has seen this, it seems strange that he should ask his shepherd "What is the reason we have so many lambs come dead, and before their time?"

I know several farmers that look on the shepherds' dogs with a jealous eye, and still let them go on in the accustomed way. I believe it will be a little difficult to bring the shepherds to my way of thinking, as they are so much attached to their dogs, that their master must not tell them of their faults, much more that they shall have no dog at all, which I think they never ought to have among the ewes, for at least two months before they commence lambing, nor for a great while afterwards. If the shepherds would exert themselves a little more, and, at some particular time, might have the help

of a very small boy, (which in most places are to be had, and would be better for them than being idle, and better for their friends if their pay was ever so small;) by so doing, if I mistake not, all the dogs might be dispensed with, and the sheep live a quiet life, and would enjoy their food much better than they do at present. If after all, the shepherds must have dogs, I am fully persuaded one dog on each farm is quite sufficient; and that should always be the master's property, and as much care taken in breeding them as is used in breeding any other kind of dogs, and by choosing the most docile species that can be found, they will have dogs far superior from this present bloodthirsty race. I hope many of your correspondents will acquiesce with me, and I think sometime I shall see an end to this cruel usage among sheep. If this is thought worthy of a place in your Magazine, by inserting it you will much oblige Your humble servant,

E. DOWLEN.

Falmer, near Lewes,
March 13, 1804.

P. S. I believe my neighbour R. S. has been wrongly informed respecting Paterish sheep. In your last number, page 103, he says, "This disorder is occasioned by a bladder of water that surrounds the brain," which in the many cases I have seen, the brain has always surrounded the bladder.

FURTHER ACCOUNT OF MR. WHITTLE'S PRIZE HOG.

For the Agricultural Magazine.

ACCOUNT of food consumed, and weight gained, by Mr. Whittle's Prize Hog, exhibited at Smithfield in December last, (The weights here stated being taken when the animal was alive, are, in course, not Bacon Fashion, as given in No. 54. p. 5, of this Magazine.)

Date.	Age.	Weight.	Weight gained.	Food eaten.		Food which give 100lbs. live flesh in 3 months.
						lbs.
1803, Feb. 28,	6 Months,	161 lbs.	lbs.	lbs.	Bushels of Peas and Barley.	
May 28,	9	348	187	15¾		8½
Aug. 28,	12	496	148	14		9½
Nov. 28,	15	591	95	13		13¾
Dec. 13,		595	4	1½		37½

The result of feeding this hog is remarkable, and proves the great importance of ascertaining the progression of weight gained from food given: the longer the hog is feeding the less he pays; but the loss of keeping too long does not fully appear in the last article, as it is supposed he would have proceeded for ninety days as he did for fifteen; but he would, from the decline, in these fifteen days, probably have gained less and less.

WASTE LANDS IN YORKSHIRE.

To the Editor of the Agricultural Magazine.

SIR,

IT is at last discovered, that of all the interesting subjects with which Agriculture is connected, there is none which, in a national point of view, deserve so much attention as the improvement of the waste lands of the kingdom. The annexed account will shew, that land of this description in Yorkshire almost equals the extent of the entire county of Norfolk; and it will likewise shew, that of this quantity, by far the greater portion is capable, either of being converted into valuable pasture or arable land; and that the whole, by planting, may be devoted to purposes of great public utility. You have, in various parts of your work, supplied to your readers a consistent history of the method of improvement best suited to the different species of soil discoverable on these wastes. You will not, I am sure, think it an unimportant matter, occasionally, to expose to the men of property in the several counties, the scene of wildness, desolation, and misery adjacent to their own domains; that motives of humanity and patriotism may induce them to avail themselves of the advantages of their wealth and influence to diffuse around the patrimonial mansion industry, fertility, and happiness.

York, I am, Sir, yours, &c.
March 13, 1804. EBORACENSIS.

STATE OF WASTE LAND IN YORKSHIRE, *calculated by* Mr. TUKE, *junior.*

	Capable of cultivation, or of being converted into pasture.	Incapable of being improved, except by planting.	Total.
Waste lands in the North Riding.	Acres.	Acres.	Acres.
The Western moor lands.	150,000	76,940	226,940
Eastern ditto.	60,000	136,625	196,625
Detached moors or waste in the country	18,435		18,435
Total —	228,435	213,435	442,000
Waste lands in the West Riding.			
The high moors.	200,000	140,272	340,372
Detached moors, or waste in the country	65,000		65,000
Total —	265,000	140,272	405,272
Waste lands in the East Riding.			
Detached moors or waste in the country	2,000		2,000

In the North Riding	442,000
—— West Riding	405,272
—— East Riding	2,000
Total waste lands in Yorkshire -	849,272

OFFICIAL ACCOUNT FROM THE RECORD IN CHANCERY OF A PATENT PASSED FOR ERADICATING SMUT FROM WHEAT, AND FOR CLEANSING IT WHEN INFECTED WITH THAT DISEASE.

To the Editor of the Agricultural Magazine.

SIR,

SEVERAL of your papers have adverted to different modes of cure for the Smut in Wheat. On that account, I have concluded that the following information from the records in chancery, on a patent passed for the immediate purpose of preventing this noxious disease, would be acceptable to you. I have copied it, verbatim, from the particulars given by the inventor himself to the office of that court.

Specification of the patent granted to James Roberts, of Abbotson Farm, in the county of Southampton, yeoman, and George Cathery of New Alresford, in the same county, gentleman; for completely and effectually eradicating smut from wheat; and that wheat, when cleansed by this invention, will produce flour of as good quality and value as flour made from wheat of the best growth. Dated July 6, 1803.

To all to whom these presents shall come, &c. Now know ye that, in compliance with the said proviso, we the said James Roberts and George Cathery, do hereby describe and ascertain the nature of our said invention, and in what manner the same is to be performed, as follows, that is to say: The said invention for eradicating smut from wheat, consists of mixing the same with lime made from stone, or white or grey chalk, and is used in the following manner, namely, the lime, when slack, to be sifted through a fine sieve, and then mixed well with the wheat, in proportion to the degree of smut, from one to two bushels to a load of five quarters; it then must be passed through a machine, in general once will be sufficient to make the wheat fit for the miller, but, if intended for sale, it will frequently be necessary to pass the wheat through the machine twice, and in some cases three times. The machine is made of wire with brushes within, upon the same principle as the machine in common use for dressing flour, except that the wire is stronger and coarser.

Perhaps, Mr. Editor, it would be no unentertaining, and uninstructive, part of your Miscellany, if you would not only occasionally, but constantly consult the records of chancery, that no patent to facilitate the purposes of agriculture may pass unexplained in the work. I know that into your periodical catalogue you introduce the titles, but I wish you to add, regularly, a correct and minute explanation of the discovery.

Chancery Lane, I am, Sir, yours, &c.
Feb. 12, 1804. LL. D.

VETETINARY ART. LETTER V.

ON MUSCULAR WOUNDS AND ULCERS.

To the Editor of the Agricultural Magazine.

SIR,

IN the conclusion of my last letter, I confined myself to the subject of muscular wounds, and I introduced three prescriptions; one restringent, another relaxing, and a third destructive of a luxuriancy, vulgarly called proud flesh. With the following observations I shall dismiss this division of my subject.

In common wounds, where the separation of the muscle is occasioned, nothing more is necessary in general than uniting the lips of the wound, in a horse of a healthy and sound constitution; which, in many situations, is easily effected either by bandages, or by the needle, as under such circumstances nature's balsam is preferable to Friar's balsam and the long catalogue of unguents to which the cure is commonly attributed; when in fact nature is employing her utmost means to reject them, that she may be left to her own operations. If, indeed, the blood be deprived of its balsamic qualities, internal medicines must be employed before external applications can be reasonably expected to be effectual; and it is from the total ignorance of farriers on the convalescent or infirm state of the animal in this respect, that both the owner and the operator are so often disappointed. When the wound is brought together in the manner I have described, if any ointment be necessary, I recommend that with which I closed my last communication, or the following:

R.—Venice turpentine and bees-wax of each a pound, oil of olives one pound and a half, yellow rosin 12 ounces; when melted together, two or three ounces of verdigrease, finely powdered, may be stirred in and kept so till cold to prevent its subsiding.

But there is a much more serious evil than any that usually arises from ignorance in the misuse of ointments. Sometimes not only the muscle, but an artery is divided, and the bleeding may be attended with the most fatal consequences. In such cases, the person employed should be accurately acquainted with the animal œconomy: he should know the precise situation of the injured artery, and then he would frequently be able to pass a crooked needle underneath it, and by tying it with a thread, waxed, he will stop the hæmorrhage. But it is very rarely the case that the common practitioner can either denudate the vessel, or secure it in the less scientific way to which we have now referred; it is, therefore, often safer to apply lint or tow dipped in oil of vitriol, or hot oil of turpentine, to

the mouth of the bleeding vessels, and care must be taken, that it be kept there by proper bandages till a crust or scab, technically called an eschar, be formed.

In my last paper, and in the few remarks I have now made, I have spoken of wounds of the more dangerous kind; yet there are some which, although less serious, are so frequent from a variety of causes, that I should not think myself justified if they were to escape my particular notice. Broken knees, over reaches, and lacerations between hair and hoof, are of this kind. In such cases, to apply the means of cure with any prospect of success, the wound must be first thoroughly cleansed from all particles of gravel or sand, and from filth of every kind, which has been introduced into it. If this be not carefully done, a violent inflammation is often the consequence of the neglect; the tender parts are torn, and a considerable discharge takes place. After the sponge has been employed in cleansing the wound, equal quantities of camphorated spirits and vinegar should be used to embrocate the parts, and a pledget of tow dipped in the same should be bound on two or three times, which will commonly be a successful remedy by the formation of an eschar, cicatrix, or a little seam, or elevation of the calous flesh. If, indeed, the wound be so considerable as to induce a violent inflammation, recourse must be unavoidably had to unctuous applications; a suppuration must ensue, and the more tedious means of cure must be resorted to, which I have before described.

Unhappily, a great many disorders are the consequence of improper treatment. Often have I seen a poor animal consigned over to misery, when the proprietor has considered he had done his best for his favourite by dismissing him to the hospital of the loquacious farrier—who, applying his fingers to the morbid part, detains his impatient auditor with a laboured harangue, and the distinction of pus and mucus ulcers are frequently produced by such ignorance in the management of wounds. When a wound terminates in the ulcerous state, it discharges a thin watery humour which is often so acrid as to inflame and corode the skin. The ulcerated process is that action of the absorbent vessels, whereby, in consequence of an unnatural stimulus, they imbibe the soft parts and distribute them into the general circulation of the fluids.

Ulcers arise from two causes: from an ill state of the humours, or what is called a bad habit of body, and from mismanaged wounds. With the former I have nothing to do in this place, but it will properly come under my review when I consider the disordered state of the fluids. The latter is immediately connected with my present subject.

The first step is to bring the ulcer to discharge a thick matter instead of that gleety, thin, pale fluid it commonly emits. If the green ointment be ineffectual for this purpose, the prudent practitioner will have recourse to warmer dressings, such as balsam, or oil of turpentine, melted down with the digestive unguents, and over it a strong-beer poultice should be applied. Where the circulation is slow, and the part becomes frigid, to give activity to the blood, the wound should be fomented at the time of dressing, which will thicken the matter and attract to the part the native heat. It is not unusual for the lips of the ulcer to grow hard: this callosity must be completely sloughed off; and the method to produce this effect is by fomenting with a decoction of camomile flowers and mallows in as hot a state as it can be borne without much pain: afterwards the lancet must be used to scarify the surface, both longitudinally and transversely, so as entirely to penetrate the indurated portion. This being affected, the digestive ointment should be used twice every day; and the following has been approved of for this purpose.

R.—Yellow basilicon two ounces, and black basilicon one ounce; melt them together over the fire: when taken off, stir in one ounce of turpentine, and when cool add half an ounce of red precipitate, finely powdered; the whole to be minutely incorporated upon a slab.

It is expected this will remove the exterior induration, and that the discharge will come to its proper consistence. In such cases, a small portion of lint may be thinly covered with basilicon, and be placed under a piece of tow spread with the following digestive:

R.—Yellow wax and rosin, each four ounces, burgundy pitch two ounces; melt these in a pint of olive oil over a slow fire, and when taken off, stir in two ounces of turpentine. For large wounds, where a plentiful discharge is required, stir into this quantity three ounces of the spirit of turpentine, that it may incorporate in getting cool.

The danger that is now to be apprehended is what I noticed at the end of my last communication, to be a pernicious consequence common to all digestives, viz. that the wound should incarnate too fast, and become filled with fungous flesh. I then mentioned a prescription to counteract this effect; perhaps, under the circumstances here supposed, it will be sufficient slightly to touch these protuberances with quick lime, repeating it as often as shall appear necessary. When the scab is formed, the cure may be completed by indurating the surface with tincture of myrrh.

I must now advert to some injuries which are so extremely common, that it would be inexcusable not to give them a dis-

tinct consideration. What I have already said will be preparatory to the suggestions I have now to submit to your readers.

POLL EVIL.

The name of this disease shews its situation. It is the misfortune of this art to have all its names assigned, not from the general nature, or from the correct classification of the disorder, but from the seat of it in the animal form; and hence no system has been adopted for the uniform treatment of the same complaint, and a cloud of mystery has overcast the most simple diseases which require only to be known to be instantly relieved. The poll evil is an abscess, and, like all other disorders of this class, is attended with swelling and inflammation: it contains purulent matter pent up, which corrupts and consumes the fibres and every thing else with which it is in contact. The first question, then, with an intelligent farrier, is not how he shall treat the poll evil, but what is the general remedy for the cure of the abscess? On the first appearance, he knows it may be sometimes removed by bleeding and purges; and if the irritation in the part increase, he will apply the common poultices with bread, milk, and elder flowers. The humours will often by these means lose their acridity, the tumour will gradually disappear, and convalescence will return.

But the principal skill consists in ascertaining the precise time when these remedies will be effectual; for from that moment the contrary means must be employed. While the farrier is wasting his time in uncertainty, the disorder is active; it is glutting its appetite near the seat and principle of life, and will soon sacrafice the victim to its voracity. Under these circumstances I will point out a method which had been successfully employed in the cure of the poll evil, premising, that the exact situation of this disease is in the sinews or cavities between the pole-bone and the uppermost vertebræ of the neck.

What is called rowelling in farriery, is the application of the seton (setaceum) in surgery. It will not be expected that I should here give an account of the ordinary practice of farriers in this painful and dangerous operation, but I will point out the method of an ingenious Scottish practitioner on this subject, which may be advantageously employed in abscesses whether they affect the poll, the withers, or whatever be their situation.

In the first place a leaden probe should be used to trace the cavities of the abscess. It should be of this material, because the lead yields easily without forcing its way through the cellular membrane, or between the interstices of the muscles. Having so done, the needle, provided with a cord, should follow the direction of the sinews, and form an orifice

so much below the seat of the disease as to admit the free discharge of the purulent matter. The wound will be kept open, with the assistance of the cord, until these humours are exhausted; the health of the animal will then be restored, and the wound may be treated in the way I have before recommended for common wounds, but aperient medicines must not be discontinued for some time.

Westminster,
March 8, 1804.

I am yours, &c.
VETERINARIUS.

ON VETERINARY AND AGRICULTURAL SUBJECTS, IN ANSWER TO LUCAS MEDICUS.

To the Editor of the Agricultural Magazine.

SIR,

I BEG to have a few words with L. M. in reply to his two letters of Nos. LIII. and LIV. the last of which, particularly, seems too much filled with mere useless *carte et tierce.*

First, on the chemical analysis of soils, is not L. M. aware, that the analytical results of the old and new chemical schools are so nearly similar, in *substance,* at least, if not in name, that it would be pure burlesque to note the difference? Farther, is he not apprized, that a celebrated French chemist, (*Annales de Chemie*) has, after much laborious investigation, declared, and assigned a very satisfactory reason for his opinion, that it is out of the power of chemestry, in its present state, to confer any new or practical benefits on agriculture? As to pretensions, we can quote them wholesale, folio and quarto; it would be, however, infinitely more satisfactory to the lovers of truth and utility, to be told the facts, the dates, the persons benefitted, the who, and where are to be found, those immense benefits conferred by modern chemistry, on the science and practice of agriculture. The best part of a life spent in agricultural research hath not discovered those benefits to me.

I can easily allow the fact, for it is notorious, that the French, Germans, and Italians, are the best chemists and mineralogists; and the English, the best practical farmers in the world. I wish he or they, among the latter, who have regulated and improved their farming practice by their chemical knowledge, would come forward in the Agricultural Magazine, not with cabalistic phrases and hard words, moon-shine speculations solely, but with actual and useful facts, satisfactorily authenticated.

L. M. says, the use of gravel is to keep the soil open and loose; an observation worth all the calculations, and the whole collection of hard names in his letter: but for this truth we do not thank either the old or the new chemistry, L. M.'s grandmother, had she been a farmer, might have told it him with her other useful lessons. The carbonic matter, it seems, was

unknown to Bergmann; but there was nothing on earth to prevent his grandfather from knowing it, excepting its new name. But what if otherwise? Has Hassenfratz *proved* it the food of plants? Not to me.—The world never has, probably never will, profit by experience. Who, in the name of common sense, would think of premature exultation, after the fate of the pneumatic medicine? To adduce only one out of one thousand examples.

Letter the second. L. M. was misled in a trifling point, by my letter being written at Doncaster; the situation alluded to, is nearly ninety miles distant from that town. A few words will prove which of us has fallen into an *ordinary mistake*. To talk in the sense in which L. M. does, of our *respectable yeomanry*, is upon a level with a poet's writing on modern pastoral subjects, and using the common place terms of shepherds and shepherdesses. The improvements in British agriculture, within the last fifty years, have been immense; indeed, but for them, a vast emigration must have taken place. These are not ideal, mere empty, paper pretensions, which expire and vanish with their paper parents, but facts, capable of numerical proof, and really proven to all the world. To what class of men do we owe these? To our yeomanry? *Gardez vous, Monsieur* L. M. in writing on any subject there is a certain thing of prime, or rather *premiere* consequence.

That 'the art of farriery and of surgery are almost wholly derived from the principles and practice established in France,—I am compelled, by my own knowledge, to aver, is a groundless assertion. As surgeons, whether in theory or practice, the French, I believe, by universal consent, stand on superior ground; but in physic, a similar eminence is perhaps possessed by the writers and practitioners of this country. As to farriery, the Italian is the elder, perhaps the original school, however considerably it might have borrowed from the Arabian. But, until of late, our best English veterinary school, established on the principles of Gibson, the anatomical part derived from Snape, had scarcely any thing in common with that of France, and in rational and efficacious medical practice, was probably far before it. With respect to the *minutiæ* of veterinary operative surgery, the superiority of France must be again allowed, and yet our best English practice in that branch has never been found deficient in essentials. When I speak of our best practice, I freely allow it has ever been extremely confined, and so has even that of France, however long there has existed a regular veterinary college. Let no one suppose that I speak of the practice of our *farriers* of any possible class, nor ought L. M. to speak without due caution, when he speaks of the address of that class, even in France, where I have found the common farriers as great

bunglers, particularly in clumsy shoeing, and as pure ideots as the most exalted of their peers in this country.

L. M. demands, 'if farriery were not to be improved from the lectures, opinions and practice of the French college, from whence should we derive information: no lectures are given here, no opinions are here formed, &c.' I answer, from the principles and practice of two or three of our best writers, the disciples of Boerhaave, whom they did not disgrace, and whose merits, the lectures of modern professors have not been able to obscure. Any veterinary professor or lecturer, possessing a moderate previous share of knowledge, would easily, and without any great exertions of genius, have been able, on such base, to have founded an original English veterinary course; why this was not done, is too plain to need exposition: a gentleman by dint of friends, attains the professional chair, men are naturally fond of original pretensions, and the adoption of the French plan, beside its lying at hand, was obviously most conducive to the promotion of such view.

No—I am not ambitious of the title of a learned professor, any more than I am assailable by the shafts of ridicule; but I am a frequent student in old books, which sometimes occasion me to be, even without such particular aim, the detector of new plagiarisms and forgeries. Apropos, lately turning over Bauderon, Lemery, Fuller, and old Shebeare, for that which I could not find, I unexpectedly chopped upon a nostrum, which, a certain northern Doctor has of late claimed as his own, and *as usual*, plumed himself, no little, upon his important *new discovery!* Scarcely did a certain Professor exult more, on the recommendation of that wonderfully efficacious and rational *new* prescription of a dose of small shot for a broken-winded horse; or not more than the old woman, who thirty years ago, recommended the same identical remedy to me, for a pig which had the heavings.

As to the new nomenclature, without having any particular antipathy, or violent objection to it, I must own its real use has ever appeared to me extremely problematical; whilst the suspicions it has occasioned are by no means groundless. Besides, it is far from improbable, that e'er the general adoption of the present system, another, still more new, and more original, may supervene. I must own, I see no great use in an analytical nomenclature, granting it could be made universal. Some of the names in the New Edinburgh Pharmacopœa are absolutely ludicrous from their verbosity, e. g. those substituted for the simple term, *tutty*; in the name of utility and dispatch, who but the rankest pedant, unless a sharer in the joint stock company of new discoveries, would take the pains of pronouncing or transcribing so many long words, instead of two short and eque-utile syllables?

It is probable, that I have the honor to agree farther with L. M. on the subject of veterinary writers, than he may suppose. I am perfectly without prejudice against the work of Delabere Blaine. With an *if*, Mr. Blaine might have written a good and original work; and even with all its sins and imperfections on its head, Blaine's outlines, six times bigger, surely possesses much more than six times the utility and merit of the same number of veterinary treatises which have of late years issued from our fountain of all knowledge at St. Pancras. The last *New System*, for which, I think, I paid one guinea, is a most impudent attempt to impose on the patience and credulity of the public.

Feb. 18. VETERINARIUS ALTER.

DESCRIPTIONS OF DIFFERENT KINDS OF SOILS CAPABLE OF SUSTAINING VEGETABLE PRODUCE.

To the Editor of the Agricultural Magazine.

SIR,

I HAVE noticed in a great number of your papers, observations on the different kinds of manure, and on the various species of plants. I confess I do not think it less material to determine, in the way of definition or description, what are the contents or ingredients of the several sorts of soils. Mr. Young, somewhere in his Annals, complains of the impossibility of understanding the terms used by farmers in the several counties when they speak of the qualities of the earths, for as all our ideas are comparative, what is called clay in one district, is sand in another; and what is called heavy in one situation, is light in another. It, perhaps, may therefore be useful to give a concise account of the true distinctions of soils, by which some data may be afforded for the observations in your work, which, without this assistance, would be so differently construed by your Readers in various parts of the kingdom.

They have been distinguished in the following manner, into clay, chalk, sand and gravel, clayey loam, chalky loam, and sandy loam, gravelly loam, ferruginous loam, boggy soil, and healthy soil or mountain, as it is often called.

Clay is of various colours, for we meet with white, grey, brownish red, brownish black, yellow, or bluish clays; it feels smooth, and somewhat unctuous; if moist, it sticks to the fingers, and if sufficiently so, it becomes tough and ductile. If dry, it adheres more or less to the tongue; if thrown into water, it gradually diffuses itself through it, and slowly separates from it. It does not effervesce with acids, unless a strong heat be applied, or that it contains a few cal-

careous particles or magnesia. If heated it hardens and burns to a brick.

It consists of argil and fine sand, usually of the silicious kind, in various proportions, and more or less ferruginous. The argil forms generally from 20 to 75 per cwt. of the whole mass; the sand and calx of iron the remainder. These are separable by boiling in vitriolic acid.

Chalk, if not very impure, is of a white colour, moderate consistence, and dusty surface, stains the fingers, adheres slightly to the tongue, does not harden when heated; but, on the contrary, in a strong heat, burns to lime, and loses about four-tenths of its weight. It effervesces with acids, and dissolves almost entirely in them. I shall also add, that this solution is not disturbed by caustic volatile alkali, as this circumstance distinguishes it from magnesia; it promotes putrefaction.

Sand. By this is meant small loose grains of great hardness, not cohering with water, nor softened by it. It is generally of the silicious kind, and therefore insoluble in acids.

Gravel, differs from sand chiefly in size; however, stones of a calcareous nature, when small and rounded, are often comprehended under that denomination.

Loam, denotes any soil moderately cohesive; that is, less so than clay, and more so than loose chalk. By the author of the "Body of Agriculture," it is said to be a clay mixed with sand. Doctor Hill defines it, an earth composed of similar particles, hard, stiff, dense, harsh, and rough to the touch, not easily ductile while moist, readily diffusible in water, and composed of sand and a tough viscid clay. The definition I have given, seems most suited to the different species I shall now enumerate.

Clayey Loam, denotes a compound soil, moderately cohesive, in which the argilaceous ingredient predominates. Its cohesion is greater than that of any other loam, but less than that of pure clay. The other ingredient is a coarse sand, with or without a small mixture of calcareous matter. It is this which farmers generally call *strong, stiff, cold,* and *heavy* loam, in proportion as the clay abounds in it.

Chalkey Loam. This term indicates a loam formed of clay, coarse sand, and chalk; in which, however, the calcareous ingredient or chalk much predominates. It is less cohesive than clayey loams.

Sandy Loam, denotes a loam in which sand predominates; it is less cohesive than either of the above mentioned. Sand, partly coarse and partly fine, forms from eighty to ninety per cwt. of this compound.

Gravelly Loam, differs from the sandy only in containing a larger mixture of coarse sand or pebbles. This and the two

last are generally called by farmers, *light* or *hungry* soils; particularly when they have but little depth.

Ferruginous Loam, or *Till*. This is generally of a dark brown, or reddish colour, and much harder than any of the preceding; it consists of clay and calces of iron, more or less, intimately mixed. It may be distinguished, not only by its colour, but also by its superior weight; it sometimes effervesces with acids, and sometimes not; when it does, much of the irony part may be separated by pouring it, when well dried, into spirit of salt; from which the iron may afterwards be separated by alkalis or chalk.

Similar to this, are certain *vitriolic soils*, which, when steeped in water, impart to it the power of reddening syrrup of violets. These are generally of a blue colour, but redden when heated.

Boggy Soil, or *Bogs*, consist chiefly of ligneous roots of decayed vegetables, mixed with earth mostly argillaceous, and sand, and a coaly substance derived from decayed vegetables. Of bogs there are two sorts: the black contains a larger proportion of clay, and of roots more perfectly decayed with mineral oil. In the red the roots seem less perfectly decayed and to form the principal part.

Heathy Soil, is that which is naturally productive of heath.

Warwick Lane,
March 1st, 1804.

I am, Sir, yours, &c.
LUCAS MEDICUS.

SPRING WHEAT, SHEEP ON TURNIP LAND, CLOVER SPOILT BY FROST, &c.

To the Editor of the Agricultural Magazine.

SIR,

ON looking into your 47th number to-day, I was exceedingly surprised, to find that "a Buckinghamshire Farmer", in his observations on Mr. Middleton's rotation of crops, condemns the practice of cultivating spring wheat, as "a species of crop very ill suited to most parts of this island, and particularly unfit for the adoption of farmers in the northern counties." How far northward this gentleman extended his remarks, I know not. I am satisfied, however, that they cannot be applied to this county, to the adjoining counties of Scotland, nor to any part of that country which is situated between Northumberland and the Frith of Forth. But when I say this, I have in view those soils *only* which are of a proper quality, and in suitable condition.

If spring wheat be cultivated in *any part of the kingdom* on cold, infertile, or strong clay, incumbent on a wet substratum, I should suppose that it would, almost always, prove

a very unprofitable crop, more especially in seasons when the seed cannot be sown pretty early in February; and I am of opinion that it should not, on any description of land, be sown later than the middle of March, *at least in the northern parts of the country.* In this district, spring wheat is reckoned so superior in value to a crop of barley or oats, that almost every farmer endeavours to clear his best land of turnips early in the winter, and to sow as much of it with wheat in January, February, and March as he can find in a proper state; and in most seasons I am convinced, from my own practice, that the crops of that grain exceed those of barley or oats, *on similar soils,* by thirty to fifty shillings; and, in some seasons, by three to four pounds, an acre.—On a deep loam or a clay bottom, I, last harvest, reaped a crop of wheat, sown after turnips in February, which produced forty bushels of good grain per acre. I also reaped a very productive one which was sown on the 19th of March, after turnips, on a sandy loam incumbent on gravel.

Grass seeds thrive well among such crops, either in the drill or broadcast husbandry, and in the more warm and favourable climate of the southern counties, I should suppose that the cultivation of spring wheat would be attended with still greater advantages: It ripens in almost every season in proper time for ploughing the stubble and sowing winter tares; but whether the latter crop "on medium and strong loams" (see Mr. Middleton's course of crops in your 46th number) could be advantageously consumed or removed so early in the season as to enable the farmer *thoroughly* to pulverize, clean, and manure the land, and obtain a productive crop of turnips *in the northern parts of the kingdom,* I cannot yet determine. On lightish early soils, however, I have made the experiment, and have not the smallest doubt but *on a moderate quantity of land* all these operations may be effectually performed, and a good crop of turnips obtained within the same year. These turnips were sown in the first week of July, and this year I have a considerable number of acres under tares, which I intend to prepare for turnips next season. A small quantity of rye among the tares is useful in preventing their being laid too close to the ground, and the practice is favorable to an increase of that valuable article *manure,* either by folding in the field or carrying the tares (which are excellent food for any species of live stock) to the fold yards at home. I must, however, remark, that in general, it is necessary to give the land two or three ploughings *within a short space of time,* between the tares and the sowing of the turnips, during which, (from evaporation, &c.) it is often so exceedingly dry, that if a moist season does not succeed, the turnips will prove but a scanty crop.

Mr. Middleton's course of crops gives ample opportunities of sowing clover and ray grass seeds to advantage, after which the land may be continued one, two, or more years in grass ere it be again converted into tillage; and I highly approve of his recommending only *one crop* between the breaking up and sowing with turnips, being satisfied *from experience,* that that useful root is always raised to the greatest advantage on *fresh* soils, impregnated with vegetable matter, and that a great crop of turnips lays a solid foundation for future fertility by increasing the quantity of manure.

In this part of Northumberland there are large tracts of light sandy loams mixed with small hard stones, and incumbent on a bed of gravel. On these soils the almost universal course is,

1 Oats after grass,
2 Turnips,
3 Barley, spring wheat, and sometimes a small quantity of rye,
4 Clovers and rye grass,
5 Ditto ditto
6 Ditto ditto

For turnips we apply lime at the rate of three to six loads an acre, where the soil is not already sufficiently mixed with calcareous matter. This species of manure (which we generally apply in autumn) has been highly useful in these soils *. the turnips are generally sown within the month of June *immediately* after the dung is laid on and ploughed in, *while the moisture is fresh.* Under this management great crops of turnips, corn, and grass, are obtained on these *naturally* poor lands. The turnips are mostly consumed by sheep folded upon them, and we are so well satisfied of the importance of this mode, that scarcely any are carried off except from *the best of the land,* and even on these parts we generally draw eight (and leave eight) drills alternately, and then fold the sheep on the *whole* of the ground, by which practice the bare intervals of eight drills are, as well as the other, enriched by their dung, urine, and treading.

In most of the improved parts of this county large flocks of sheep, of the new Leicester kind, are bred and fattened, and in some situations *very light dry lands* are continued *four* †, and in a few cases only *one or two,* years in grass. These afford the advantages of *comparison* by which we are convinced that the valuable crops we obtain, are, in a great mea-

* It has been ascertained, by leaving a large stripe across the ridges, *without lime* on some very light soils in this quarter, in the preparation for a fallow crop after the *first breaking up,* that an application of that species of manure was absolutely necessary to render them fit for the growth of turnips.

† One year for cutting.

sure, owing to our lands being continued three years or upwards in grass.

After being in sheep pasture two or three years, they are fresh, rich, and in a fit state for the growth of *great crops* of turnips, which we consider as the source of *endless fertility*. We hear of no lamentations for our soils thus managed, "tiring of turnips or clover," though I am persuaded that the physical difficulties we have to contend with are greater than those in Norfolk; and though we do not resort to that "beneficial and enlighted practice, *sheep folding*." No, Sir, the source of our manure is to be found in the *greatness of our crops* in consequence of the excellence of a system that does not reduce us to the necessity of *torturing and starving* our sheep, which are bred from rams hired at vast prices, and which we spare no pains to prepare *as quickly as possible* for "feeding and clothing the hungry and naked," and replenishing our *purses, to which important purpose we find them much more conducive, on an average of years, than very extensive aration.*

"A Norfolk Farmer," (in your Magazine for May last) enquires the reason, "why clover so often fails and dies away in the winter and spring seasons, after showing so full a plant the preceding harvest." Permit me, therefore, to make a few remarks upon that subject. Broad clover has been extensively cultivated in a great part of this county for many years, and I have no reason to believe, that our lands do not produce as much of it now as they did formerly. On deep loams and strong soils, however, some farmers have *lately* shortened the interval in grass to *one year*, which I am apprehensive will not be favourable to the growth of that valuable plant. Most of our *very light soils* do not produce it *in great abundance* *, though at harvest they generally exhibit a full cover of plants of a vigorous appearance: these soils, however, so far from producing *less*, now produce *more*, than they did a considerable number of years ago, which we impute, in some degree, to lime having rendered them more cohesive. That dry medium loams and strong lands are more favourable to the preservation of clover than very light soils, is evinced by this circumstance, that a greater *proportion* of plants attain maturity on the former than the latter; and it is pretty obvious, that *in every description of land*, most plants are destroyed in severe and frosty winters, it seems reasonable to conclude that inclement weather is the chief cause of our losing so many clover, as well as wheat, and other plants. Those who wish to see a particular description of the manner in which severe frosts operate in exposing the roots of clover plants to destruc-

* Rye-grass, and some small clovers, thrive well on them.

tion, by raising many of them almost out of the ground, &c. will find it in Dr. Anderson's ingenious Essay in the Bath Society's papers. Another of your Norfolk correspondents, (Agricola Norfolciensis) says, "if any of your correspondents can give us a preventative for this defect (the failure of clover by the loss of plants in winter) he will do us a much more essential service than," &c. I agree with him, and am sorry that I cannot point out an effectual and advantageous remedy. In the new Farmer's Calendar, Mr. Lawrence says, "On the approach of winter, it is highly advantageous to cover the young crop (of grass) with a slight coat of manure, long yard dung, old thatch, or even sand or earth." I am satisfied, from my own experience in the field, that a covering of dung is highly advantageous in preventing carrots and parsnips from being injured by intense frosts; but how far it would be beneficial on young clover, I do not *experimentally* know. I am, however, inclined to believe, that farmers in general, and more especially the cultivators of turnips, would not consider it as the most advantageous way of using their manure.

I will not assert, that the diminution of the turnip and clover crops of Norfolk is attributable (solely) to the taking of two crops of corn between grass and turnips, or to the practice of continuing the land only one or two, instead of three or four years in grass; but this I will declare, that were I concerned in the management of a farm, or an estate, of light land in that county, I would pursue the system which has been practised with so much success on the light lands of Northumberland. I beg to be understood, however, as alluding *principally* to the interval during which the land remains in grass. There may be local circumstances with which I am unacquainted, that would, perhaps, give me a more favourable opinion of other parts of the rural economy of Norfolk, than I at present entertain. But of this I am *certain, that on all light dry turnip soils, sheep may be kept with safety, that on such lands they are the most profitable species of live stock, and that ground of this description in particular, will produce much greater crops of turnips, after being three or four, than after being only one or two years in grass.*

It would be rather difficult, Mr. Editor, to convince me that "sheep-folding" as practised in several parts of the southern counties, is judicious management. If, however, its superiority to the mode of treating that valuable animal in this district, *were demonstrated,* I would not hesitate a moment (judging from the specimen I have seen in Smithfield market) in preferring the Norfolk to the Northumberland sheep, for the former seem as well calculated for *travelling and fold-*

ing as the latter are *for attaining early maturity, and leaving a great profit for human food*

March 7, 1804. I am Sir, yours, &c.
AGRICOLA NORTHUMBRIENSIS.

ON THE AGRICULTURE OF THE COUNTY OF WESTMORELAND.

To the Editor of the Agricultural Magazine.

SIR,

IN a preceding letter I have remarked, that my detention at the delightful lakes of Westmoreland had given me a favourable opportunity of examining the agriculture of that county; how far I am correct in my observations upon it, I shall now have an opportunity of learning from some of your correspondents in that neighbourhood. In the last communicatin, my subject was the county of Norfolk *, and I stated, that neglected commons comprized eighty thousand acres, which is something less than one-thirteenth part of that province. I then said, in a county like that, so celebrated for its cultivation, I was ashamed to speak of the commons. How shall I express my feelings on the state of Westmoreland, when I am obliged to declare, that three-fourths of the county is uncultivated? In this great, opulent, commercial country, where we are erecting pagodas, Egyptian pyramids, the golden palaces of the Arabian fable, and indulging our corrupt taste with all the glittering toys of Eastern pageantry, is this neglect of the proferred bounty of nature to be patiently endured? But, Mr. Editor, I beg your pardon for the momentary gratification of idle sensibility.

The extent of this county from North to South, is about 32 miles; from East to West, perhaps 40 miles; but from the

* In my cursory view of Norfolk, I availed myself of the assistance of a communication of Mr. Kent to the Board of Agriculture, which was, by the order of that Board, printed but not sold or published. The copy to which I had access, is in the collection of the British Museum. I mention this, that it may be clearly understood I avail myself wi great freedom of all manuscript or unpublished materials, to correct nd enlarge the notes of my own tour through various parts of the king om. But no man should presume to resort to published sources of information, without making the just acknowledgment to those to whose labours he is indebted, or at least confessing that the observations do not rest on his own authority. Editors of periodical publications should recollect the remonstrance of our friend Peter.

"I do not blame their borrowing a hint,
For to be plain, there's nothing in't.
The man who scorns to do it, is a log;
An eye, an ear, a tail, a nose,
Were modesty, one might suppose;
But, zounds! thou must not smuggle the whole dog."

irregularity of the outline, it contains only 800 square miles, or 512,000 acres, which is equal to about one seventy-third part of the whole Island. The population has been estimated at 8,089 individuals, and the rental at the low produce of 92,640l.

The soil is in general dry, which is fortunate, because from exterior causes it is among the wettest districts of England; the fall of rain, on an average, being from 45 to 50 inches, which is nearly double what your correspondent, B. A. has stated to be the fall of rain in the adjacent county of Lancaster, in your last number. Notwithstanding this abundance of atmospheric humidity, the superficial dryness may be accounted for by the substrata of the soil, which are of sand, gravel, or limestone rock.

The account of Norfolk shews a system of aquatic connection which resembles modern Batavia. This is not among the advantages of Westmoreland. Besides the Lakes, only three rivers (scarcely any where navigable) deserves attention. The Eden which rises in Mallerstang, enters Cumberland, and intersecting that county, discharges its waters into Solway Firth. The Ken commences in Kenmere, pursues its course through the valley of Kendal, and empties itself near Melthorp. The river Lon has its source in Ravenstonedale; proceeds through the low grounds, to which its own name is given; and enters Lancashire below Kirby Lonsdale.

It will surprise some of your readers, that on an average, not more than 20,000 acres in the whole county are annually under tillage; and I apprehend, with this neglect of the plough, they will not expect much information from the course of crops adopted in the county. The general rule is, when a field of grass is over-grown with moss (which may be in eight or nine years) to break it up with the plough: the fact, however is, that the use of composts, of which lime is a principal ingredient, has been found so powerfully to counteract the growth of moss, that the tillage is likely to be yet further diminished. The course, however, is, when they are overpowered by this noxious intruder, to have a fallow, succeeded by oats, barley, and oats. The land is then left to itself (instead of sowing with the oats the artificial grasses) and a crop of hay, deficient both in quantity and quality, is the miserable return of the first year. In the third year, they consider it in the highest perfection; and, as I have before intimated, in the eighth or ninth, unproductive.

We may reckon about 115,000 acres, either cut for hay or devoted to pastures for; fattening and for the dairy. Hay is a material article of produce in the vicinity of London, and is also of great consequence in this county, but for a very different reason. In summer, the farmers of Westmoreland derive their greatest profit from their cattle. During the whole

summer, they can maintain them at a very cheap rate, on what are called the joisted fields, and at no expence at all upon the commons; but their principal difficulty is in the Winter and Spring. In order to provide against these seasons, they cut for hay all the fields that are worth the labour, and having unfortunately a prejudice against the artificial grasses, this is all the means they have for the support of their stock. Very little hay is sold in the county, but the price may be stated in winter and spring at 4d. to 6d. a stone, or from 4s. to 6s. a cubic yard. A cubic yard in the lower part of a well-pressed mow is found to contain about 12 stone of hay.

As the cattle is a principal source of emolument, the general economy respecting it must not be omitted; and yet if there be any thing peculiar in the conduct of this department, it arises from the singular circumstances of the land, and not from any superiority of skill in the farmer. The young cattle are kept on the less valuable tracts in the summer, and have straw and a little hay allowed them in winter. At three years old, they are indulged with better pasturage, to prepare them for the Yorkshire and Lancashire graziers, to whom the barren ones are sold, at from 6l. to 9l. and those in calf from 8l. to 12l. It is supposed, that 10,000 head of Scotch cattle are annually disposed of at Brough-Hill Fair. Many of these are purchased by the farmers of the county where they are wintered. the young ones, in May, are sent to the commons; those of a proper age are fed upon the richest ground, to be fitted for the shambles in the succeeding October. Notwithstanding more milch cows are kept in these districts in proportion to their extent, than almost in any other where manufactories are not established, yet the farmers are not curious in the selection of their cows. The expence of a cow they estimate at about 6l. and the produce at about 9l. or 10l. annually. They make their butter up into firkins of 56lb. each, for the London market, the price of which is from 35s. to 45s. The London cow-keepers have three halfpence for every quart of new milk: those who follow this employment adjacent to Kendal obtain the same price, and there, in consequence, the dairy is most advantageous. In sheep, no portion of that spirit of improvement appears in this county, for which many other parts of the kingdom have been conspicuous. The breed is either the native, or a cross with the Scotch. Those who have not sufficient pasture on their own farms for wintering their young sheep, drive them to the valleys, where they continue from the beginning of November to the commencement of April, for which they pay about 2s. a head for such as return. Wethers are sold in October, at four years and an half old, from 10s. to 15s. Barren ewes, at Lammas, from 9s. to 11s. and old ewes, at about 7s. to be pastured in the in-

closed grounds, and fattened with their lambs the ensuing summer.

The salving in this county is performed in October. The commixture is a gallon of tar, and 16 lb. of butter, which is sufficient for 35 sheep. The expence is about 6d. each, and if oil and tallow be substituted for the former, it is reduced to 4d. each. Tobacco liquor is not used, because the unctuous preparation is supposed to improve the wool. The manufacturers of Kendal and Yorkshire, buy the wool in time of peace, at from 5d. to 7d. per lb.; but in a tract of land called Silverdale, near Milthorp, the wool is of superior quality, and obtains from 8d. to 10d. per lb.

I have seen, Sir, with much pleasure, the attention your correspondents pay to the amelioration of this essential article, and I wish it may infuse into some of your Northern readers the same spirit. There is an unaccountable partiality in favour of the coarse wooll'd species, although it is now very generally known, that the Cheviot breed (the fleece of which is so valuable) is equally hardy. The price of pasture will surprise your friends in some of the counties near the capital. A summer's grass for ten sheep or one ox, on Forest Hall and Moseley Common, is 4s.; and on a portion of Troutbeck Common is only 6d.

It is, perhaps, more difficult to give an account of the rents under the vast variety of soil and condition, than of any other matter. At Shap, Ambleside, and Troutbeck, the best hay meadows let for 50s. per acre. At Kendal, Burton and Milthorp there are some at 80s. and at Kirby-Lousdales as high as 100s. Yet in Ravenstonedale, where no tithes are paid, about 2,000 acres let from 4 to 11s.; and 500 acres, perhaps from 20 to 40s.

On the subject of the manures employed in these parts, little need be observed. Near Appleby, where turnips and fallow may be considered as a part of their course, a large quantity of lime is employed. The country abounds with limestone, but coals cannot be procured; and therefore this mineral has been hitherto almost useless. The reader may collect the difficulty of establishing a communication by canals from the mountainous character, and from the impervious nature of the soil of the county. The works of this kind projected at Kendal, I hope will not be impeded, which will facilitate the conveyance of coals to an extensive district, and by that means assist the application of the species of manure alluded to which is alone capable of converting the country into an exuberant garden.

As the matter now stands, the lime used must either be brought by land from Kendal, or conducted up Windermere, at a great expence. I should think in many parts of the county

they might avail themselves of the expedient resorted to in Sussex, where 600 faggots cut in winter, and weighing when dry 36 cwt. are found to be sufficient to burn 480 Winchester bushels of lime.

Labour in Westmoreland is at the following prices; which are higher than in some of the adjacent counties. A man by the year, 10 to 12 guineas; besides which, he is to have his board and washing. A labourer 1s 4d to 1s and 8d per day. Corn cutting, 7s to 10s the acre; (the sithe is not used with any kind of grain). Mowing hay 2s to 3s 6d per acre. Threshing is usually performed by the permanent servants of the farm, but if it be done by the piece, 7 bushels and a half of oats are threshed for 1s; the same quantity of barley for 1s 3d, and two bushels of rye for 6d or 8d. The dearness of labour in this county has occasioned a complaint by certain gentlemen of very nice feelings, because women are occasionally employed all round the year in the labours of the field. These knights errant have forgotten the landholders called statesmen in this county, who employ their wives, daughters, and servants in the culture of their little estates, and who are among the most independant yeomanry of the kingdom. The practice of employing women in that way arises from this peculiar distinction of persons, and at the same time that the sex is permitted to conduce to the support of the farm, they are not excluded from the bounties of the table, or from the rational pleasures of society around the family hearth.

It will appear singular, that there is but one windmill in the whole county, and that is not employed in grain, but is devoted to grinding bark for the tanners at Kendal. The numerous streams and cataracts, with a little assistance from the hydraulic art, supply abundance of mills at which wheat is reduced into flour for 4d a bushel.

The swine are neither large or good. Hams are sold at about six-pence halfpenny per lb. green, and eight-pence halfpenny when cured; after which operation they are found to have lost one-fifth of their weight. The horses are neither numerous or handsome, 20l. is considered a good price for a compact well formed animal at five years old.

The implements of husbandry are defective; the plough, however, is light, two or three horses are attached to it, and it performs the work tolerably well. An extraordinary prejudice prevails in favour of one-horse carts; they suppose that four carts of this description are capable of carrying a greater weight than a four-horse waggon. The Drill husbandry being almost wholly unknown, there is no room for observation on any of the best utensils known in agriculture. Some confusion arises from the different proportions of the

acre. The statute acre, which is only 4,840 square yards, is sometimes mistaken for the customary acre, which is 6,760 square yards, and for that of the Lancashire border, which is 7,840 square yards.

The barns are frequently twenty yards long, five wide, and five feet high on the side walls. This edifice usually includes the cow-house and stable, and costs about 70 or 80 guineas. The common fence is a stone wall which costs from 1s. to 1s. 6d. building to the length of seven yards.

The view here given of the agriculture of the county shews the vast room there is for improvement, and especially on the arable lands. The introduction of the drill system, with the artificial grasses and turnips, I most anxiously recommend.

On a great proportion of the land the following rotation of crops might be successfully substituted for the pernicious course which now prevails.

1 Oats manured and drilled.
2 Turnips drilled at the distance at which the horse-hoe may be employed between them.
3 Barley and grass seeds. Clover and ray grass may be sown together, sixteen lb. of the former, and one bushel of the latter to the acre.
4 The land may now continue in grass for two or three years, at the discretion of the farmer, and the course may be lengthened on suitable soils by drilled peas, beans, &c.

These observations are, necessarily, only partially applicable, because the variation in the soils must require a difference in the culture.

The number of sheep annually lost in this county is a sort of *primâ facie* evidence that neglect exists somewhere. It has been said, that in 1792 not less than one-third of the flocks perished. It is known that in some parts of the county ten sheep may be kept for six-pence a year. Supposing then six acres be sufficient for these ten sheep, the rent is one penny a-year per acre; and the fee simple. at twenty-four years purchase, is only two shillings. Such a view of the estimation of their property, I believe, will be a more powerful stimulus to improvement with the gentlemen of the county, than any other to which I could resort. It is as unproductive to the owners as the wilds beneath the Blue Mountains of North America.

I might add much more on this subject, but I am sensible, Mr. Editor, I have extended the article beyond the limits you are disposed to prescribe to me, yet I must take the liberty of devoting a sentence to your facetious correspondent. Topographus quotes, (No. 55, p. 106) some lines from the tasteful

bagatelle of Mrs. Barbauld, of the Swallow and the Tortoise, and he avails himself of it in justification of his own sedentary habits, and in ridicule of my ceaseless activity. I may be permitted to address him in the language of the Little Wanderer; acknowledging, however, the total inapplicability of the concluding words.

" A pleasant nap indeed! (replies the Swallow)
When I can neither see nor fly
The bright example I may follow:
Till then, in truth, not I!
I measure time by its employment,
And only value life for life's enjoyment.
As good be buried all at once,
As doze out half one's days like you,
you stupid dunce."

I am, Sir, your's &c.

March 4, 1804. CHOROGRAPHUS.

ON AGRICULTURAL PHILOSOPHERS. ON THE PREPARATION AND UTILITY OF LIME AS A MANURE; IN ANSWER TO THE INQUIRIES OF " A NOVICE."

To the Editor of the Agricultural Magazine.

SIR,

IN No. 52, p. 325, you have a letter from " A Novice," in which there is the following passage. " I frankly confess, that I have occasionally joined with many farmers, who, like myself, are not learned men, in ridiculing the conversation of several husbandmen whom we distinguished by the name of *philosophers*, without, however, believing that they in reality deserved that distinction. We understood that their *high sounding words* did not correspond with their practice; and that this, in fact, was not more advantageous than that of their unlettered brethren."

By this paragraph I understand, that " A Novice" considers that the high sounding words of philosophy, and the hard working deeds of agriculture are to be expected in the same individual. There is a proverb in an old writer *, by which " A Novice" may be fitly instructed: " The more brilliant the imagination, (he says) the less correct will be the judgment." " A Novice" must not undervalue the philosopher, because he devotes his hours to inventive speculation in his closet, instead of boldly defying the inclemencies of the season, and assisting his dependents in the rough occupations

* The passage referred to is in the works of the platonist Maximus Tyrius, Τι τελος φιλοσοφιας. Where he says, " Quo fecundiore sit ingenio, eo minus valeat judicio."

of the field. Human nature is contracted in its powers, and yet more contracted in their application. Let "A Novice" be satisfied if he himself attain the extensive advantages from honest industry, and if he be assisted in the direction it receives by the recluse philosopher, who derives more satisfaction from the discovery of one useful truth, than from all the luxuries and enjoyments which a life of patient and useful application could obtain. By the wise appointment of Providence, the man who engages in active duty, and he who devotes himself to passive contemplation have their reward, and in the way that is most acceptable to each of them.

One question of "A Novice" in respect to Carbon, has been very correctly and ably answered by Hibernicus. I therefore shall not make a single observation on that subject; but I think your correspondent has given no reply to the inquiries on the nature, qualities, and fructifying principles of lime; and I look in vain for an illustration of this singular manure to the remarks of your Arundel correspondent, whose situation and studies have given him so favourable an opportunity of doing justice to the discussion.

Every one knows that lime is made by exposing chalk, or other native combinations of calcareous earth, and fixed air, to ignition in a furnace, properly adapted for that purpose, called a lime-kiln. The heat must be of considerable intensity, and is usually continued 12 or 15 hours. A less time will be sufficient if the heat be greater, and a longer is necessary if it be moderate. The effect of this process is to drive off the ffxed air and water, which compose about half the weight of such stones. Calcareous earth thus treated, is said to be in a caustic state from its disposition to combine with and destroy the organization of substances, by forming a sope with their fat parts. As calcareous earth is infusible by the heat of a furnace, there would be no danger from too violent a heat, if the specimens of chalk or limestone were pure; but as this is seldom the case, an extreme degree of heat produces a commencement of vitrification in the compound stone, and enables it to preserve its solidity when attempted to be made into mortar. This is called over-burned lime.

Having explained the process, and the evil to be avoided in the preparation of lime, I shall next attend to its fertilizing principle.

When deposited in the earth it is rarely dissolved, because it is not soluble without the addition of 700 times its own weight of water, It, however, undergoes a change by the absorption of this fluid, for 100 parts of quick lime will imbibe about 28 of water. To regain its full portion of air from the atmosphere, or in other words, to restore it to its stony

state, it will require more than a year, unless it be purposely spread out and turned to receive the air into its pores. It has been a subject of controversy whether lime, in its most caustic state, should be employed in agriculture; and it has been supposed that its destructive principle was so strong, as not only to convert into a coaly substance all the organic matter it meets with, but the seed itself which is deposited for future growth. Practical experience has, however, discovered, that no such destructive consequence is to be apprehended, even in its most caustic state, unless the seed and the lime should be deposited on the same day. The facility with which the lime imbibes water, soon deprives it of this extreme causticity; it becomes slacked, it crumbles, and magnifies its surface by these means to the utmost possible extent, in order to impart to the womb of nature all its fructifying principles.

I have said that the effect of lime is to combine with, and destroy the organization of substances by forming a sope with their fat parts. This shews the utility of a mixture of dung with lime; for, by the assitance of this caustic principle, the dung is reduced into a coal, and the carbonaceous ingredient which we are now to understand to be the substantial food of vegetable life, is thus abundantly supplied.

Considering the many papers that have appeared in your useful Miscellany on matters eimediately, or immediately connected with the present inquiry, I do not deem it necessary to enter into any farther explanation. If "A Novice" will think his time not misapplied by connecting the present communication with those to which I allude, he will find the elucidation sufficient, I conceive, to satisfy all his reasonable doubts; but if any uncertainty should remain on his mind with respect to this subject, I will do my best endeavour to comply with any wish he shall express.

I am, Sir, your's, &c.

March 16, 1804. D. C.

ON COMMERCIAL PROPERTY AS SUBJECT TO PERSONAL TITHES, IN ANSWER TO AGRICOLA MERIDIONALIS.

To the Editor of the Agricultural Magazine.

SIR,

SOME papers in your Magazine have treated on the subject of tithes, but your correspondents do not seem to attend to all the difficulties in which this question is involved. I, Sir, am an advocate for tithes under the present system; but I do not found my arguments on their antiquity, or on any peculiar privileges whereto the sacred order to which I belong is entitled. It might be easy for me to avail myself of

the prejudices of the more serious part of your Readers, but I wish to consider the subject merely as a civil right where with I and my brethren are invested by the laws of our country, and of which, therefore, we are not to be deprived without our own consent.

Many who presume to treat on this subject, and who are most forward to plunder the property of the Church, are wholly ignorant of the nature of that species of incorporeal hereditaments, denominated tithes. This, however, is not the fault or the misfortune of your intelligent correspondent Agricola Meridionalis. Page 329 and 330 of your last volume, he very accurately distinguishes what are called predial and mixed tithes, but he says, "with a third kind, distinguished as personal tithes, which includes occupations and trades, I have no present concern."

What! "no present concern," when he is discussing the propriety of their abolition? Does he mean, that he would cancel the two former, *and leave the clergy in the full right to enjoy the latter?* The whole tenor of his letter explains, that his intention is to take the sponge and wipe away the entire claim; and I shall shew, that the only reason he neglected to insist on the last, was because he was incompetent to assign for this part of the surrender any adequate remuneration. Tithes are defined by Sir William Blackstone, "to be the tenth part of the increase yearly arising and accruing from the profits of lands, the stock upon lands, and the personal industry of the inhabitants;" and the latter part of this definition refers to the personal tithes, being the tenth part of the clear gains and profits arising on *all manual occupations, trades, fisheries, and every other employment to which the labour and ingenuity of man is directed**.

Let us now, Mr. Editor, pause, to consider the motive of your correspondent for omitting this material part of the subject under discussion. A moment's attention will explain it. Personal tithes are claimed by the statute of 2 and 3 Edw. VI. c. 13. At that time the trade and commerce of this country was in a very low condition; the policy of Elizabeth had not invited the manufacturers of the Netherlands, and had not established that immense trading institution which commands the Eastern world. But now, on the solid foundation laid by that illustrious Princess, the trade of the nation has risen to a height with which the inhabitants of Tyre, of Carthage, and of Alexandria were unacquainted. The exports of this country amount to fifty millions sterling, and the internal commerce, from its extent and magnitude, seems to defy the calculations of the political arithmetician.

* 1 Roll. Abr. 656.

The profits resulting from this prodigious trading intercourse are subject to personal tithes; or more correctly, a dormant right exists with the clergy to assess tithes on this great commercial income. The principal statutes by which these rights are supported, your legal readers will find to have been passed under the reigns of the three first Edwards, under Richard II. Henry VIII. under his immediate successor, and under William III. and the first and second George. The great object, then, with Agricola Meridionalis, and a vast herd of commutators, is, to get rid of these dormant rights, which the humanity of the church has not thought fit to exercise.

Sir, these are days when the mania of revolution is invading all the ancient establishments, and when its fury and rapacity is peculiarly directed to the subversion of the rights of the sacred order. It is not, then, a time, when the maxims of sound wisdom should incline us to barter away those privileges which we have obtained from the piety of mankind. Let the laity be satisfied with the forbearance of the clergy, in not asserting their rights, lest, if the seculars should press us indiscreetly on this subject, we should think it prudent to resist their hostility, by availing ourselves of the weapon which the laws of our country has, on the most obvious principles of state policy, confided to our hands.

Rudland, Flintshire,
March 4, 1804.

Yours, &c.
CLERICUS.

TITHES, FALLOW, DRILLING, &c.

To the Editor of the Agricultural Magazine.

Sir, *March* 6, 1804.

In Number XLIX. of your Magazine, "An Hertfordshire Farmer," says, "being at the late sheep shearing at Woburn, I had much conversation with some Scotch cultivators on the subject of fallows, and these gentlemen threw much blame on Young, Middleton, and Lawrence, as grosly misleading the public by the sound assertion *that fallowing land was totally unnecessary after it shall have been once thoroughly cleaned from root weeds, and that clay lands are equally adapted to their peculiar fallow crops, as the lighter species of soils.* You must understand, sir, that there exists almost as strong prejudice in favour of the summer fallowing system in Scotland, as in favour of their Bible, &c."

In a former letter to you, I adverted to this subject, and would ere now have offered some further observations upon it, had I not entertained hopes that your able correspondent Mr. Middleton, would have complied with the request of an "Hertfordshire Farmer," and stated the "examples within his

knowledge, &c." and if I had not expected that some of my Scottish brethren would have communicated their sentiments on the occasion. I have no right to inquire why Mr. Middleton did not do so, nor why he did not answer Agricola Norfolciensis's observations on his letter on Tithes; I must, however, beg to express my sorrow and disappointment, that your late numbers have not contained letters from this distinguished advocate in the important cause of agriculture. I hope it is an unusual press of business alone which has prevented your readers from receiving the benefit of his pen, and that as soon as his avocations will permit, they will again have the advantage of his instructions.

I live near the borders of Scotland, and am pretty well acquainted with the agriculture, and many of the inhabitants, of that country; and if your Hertfordshire correspondent is as well acquainted with them, and has discovered that their attachment to the Bible *realy* arises from *prejudice*, I must lament my want of discernment, for it always struck me *forcibly* that their laudable attachment to that book, and the important truths it contains, arose from thorpugh and minute examination and comparison, and not from *prejudice*. Equally satisfied am I, that the sentiments of the cultivators of Scotland on the subject of summer fallowing, rest on the same solid foundation. The practice of occasionally giving their lands a bare fallowing, was, I think, introduced into Scotland (from England) about the commencement of the last century, and has been justly considered by the ablest husbandmen of the North, as a very valuable improvement. Since that period, great improvements have taken place in England in raising wheat after beans and peas, *drilled and well horse hoed:* these, however, cannot, I apprehend, be introduced *with similar advantages*, either into Scotland or the contaminous counties of Northumberland*, &c. for the powers and efforts of man must be unavailing in attempting to render the soil and climate of these parts of the kingdom as propitious to the system of *constant cropping*, and raising an abundant produce of wheat after the fallow crops, as those of the southern counties, which are situated in about two to five degrees of latitude nearer the sun, and in which the husbandman enjoys the advantages of a more regular change of the return of the same kind of weather in the same succession. Some have attributed these advantages to the greater breadth of the island in the southern parts of it, but, whatever the cause is, it is undeniable that in the northern parts of the country the seasons are not only more irregular and unsteady, but much later than in the southern counties; and that in general, when

* I mean that they cannot be so extensively practised.

the farmers in the latter are enjoying the sunshine of an early and propitious season, those in the former are treading the frozen or miry soil; disadvantages under which they frequently labour till the middle or latter end of March; the crops, therefore, are generally brairding in the south e're the seed be committed to the ground in the north, which, with the great additional heat, brings to the southern agriculturists an early and productive harvest, when their brethren of the north are obliged to let their beans remain uncut till Martinmass, and in some seasons evidently later. Now, Sir, I presume that no experienced husbandman will contend that this late period of the season is, *in such a climate*, favorable for sowing wheat and skuffling, and otherwise cleaning land, which has been injured by wet and adverse weather in the preceding spring; and it should be recollected, that, *in most seasons*, such weather baffles all the attempts of the northern cultivator properly to prepare and sow *strong and wet* lands, so as to have a fair prospect of reaping a tolerably productive crop of beans, and of sowing them with wheat in the succeeding autumn. Upon such lands, however, some northern farmers have occasionally bid defiance to weather and climate; but what was the consequence? the account of the beans and the succeeding crop of wheat was not only *less* than that of the wheat obtained on similar soils, *after a bare fallowing*, but the land was in such a state (with root-weeds, &c.) as to be unfit for the growth of clover or any other crop. Now if a more valuable produce, and greater profit, within a given number of years, are the criteria of superiority in the cultivation of the soil, which of these systems would a judicious husbandman pursue? *It has always appeared to me, that the question for the consideration of the prudent farmer is not whether he should have a crop upon his strong wet grounds every year, but whether, by pursuing constant cropping he can raise a more valuable produce and greater profit than by taking four crops in five, or five crops in six years.* I will venture to maintain against any authority whatever, that no system can be good which does not enable the agriculturist compleatly to pulverise his soil, and effectually destroy the root and other weeds, and it is well known in the northern parts of the kingdom, that *in most seasons*, all the efforts of the ablest farmers are required to produce these effects *on strong wet lands* even in the course of a summer, or bare fallowing.

At page 274 of the New Farmer's Calendar, (a work *upon the whole* of great merit,) Mr. Lawrence says, "It has been taken for granted, with a confidence such a notion never merited, that the earth, like a system of animal organization, stands in need of rest, and that it may be totally exhausted by the exertion of perpetual vegetation; a notion which the earth herself, by

her constant and invariable habits has saved the trouble to refute" On this subject, *if proper manuring be practised,* my sentiments are in unison with his; and, therefore, it is not because I conceive that the earth requires *a rest* that I would, *on some kinds of land, and in most seasons* recommend summer fallowing, but because such lands require *a thorough cleaning from root-weeds,* which I am satisfied cannot be effected *in this northern climate* without a bare fallowing, and, perhaps, I entertain as favorable an opinion of horse-hoeing as most of the advocates of that system. I have said *in this northern climate,* but I must confess, sir, that I cannot but entertain doubts as to horse hoeing of drilled fallow crops being adequate to effect such *thorough cleaning* even in the more favorable climate of the southern counties, *I mean when pursued every year on very strong wet lands*; and in all situations, and on soils best adapted to *constant cropping,* I must contend that a copious application of manures is necessary to permanent fertility, and that the means of renovating the land by such applications should have great weight with the farmer in determining between constant cropping and fallowing, for I am at variance with all those who maintain that the latter does not enrich as well as clean the soil.

Mr. Lawrence, at page 277, Farmer's Calendar, says, "Regular periodical fallows, may, in truth, be stiled the nurseries and hot beds of couch, since on lands subject to the practice we even see the greatest quantity of it." In reading this, every practical farmer will, *on the first glance,* conceive that it was the *slovenly fallowist,* and not the *system* he was contemplating when he used these words. I perfectly agree with him, that if fallowing is conducted in a slovenly manner, *in the manner too generally pursued in some of the southern districts,* it will be more favourable to the growth of couch than horse-hoeing, *under the management of a skilful and able agriculturist.*—But surely this is no argument against a *proper management of fallows,* such as we are under the *necessity* of practising in the northern parts of the kingdom, where the three quarters two bushels of wheat, per acre, mentioned by your Hertfordshire friend, as the produce of clay loam, which he had under *constant* crops for twelve years, would not have been reckoned much, if any thing, more than a *middling crop,* and considering that we pay higher rents than are paid for similar lands in the south, we cannot raise the heavy sums demanded of us, from *middling crops,* nor from cultivating our grounds with oxen, or four or five lubberly horses, (with a driver,) to a plough. The latter spectacle I have beheld in Hertfordshire, where a north country farmer would not entertain the smallest doubt of raising a more abundant produce, with only two horses, driven

by the ploughman with cords. In another part of the same work, Mr. Lawrence says, "As to grasses and root-weeds, it is a very common deception to expect that exposure will destroy them, which is to be done effectually by no other means than collecting them by the hand and burning them on the spot." Here again, if he had added the words, *or carrying them away and mixing them with lime, &c. for the compost dung-hill**, I would, in a great measure, have agreed with him. But how can the knot-grass and other root-weeds be collected and burnt, or carried away when the ground is under a fallow crop? It is certain, that in several seasons, *notwithstanding that the soil may have been completely cleaned a few years before, and well horse-hoed afterwards*, these weeds will greatly increase, and that they cannot be *all* collected and destroyed previous to the sowing or planting of such crops; and if the weather succeeding these operations were even favourable for collecting them in the intervals, after the pulverization effected by the best implements, and supposing that they could be burned or removed without damaging the crops, still all that part of the land under and near the rows would remain in a foul state. But in seasons unfavourable for pulverizing such lands by horse-hoeing, the root-weeds could not be destroyed even in the intervals, and I am satisfied, that under such circumstances, a perfect bare fallowing will be found the most judicious management. In treating of fallowing, Mr. Lawrence says, "In these parts where judicious cropping has been substituted to fallows, every species of product, including the rental, has experienced a wonderful increase to the certain emolument of all parties concerned, the landlord, the tenant, and the public." Rents, however, I must contend, have advanced in a greater ratio in the northern counties of England and in Scotland, than in the southern districts; yet in the former, *constant cropping* has not been, and I believe never will be adopted, in the management of much the greatest part of our *very strong and wet soils! This coroborates what I have stated as to the value of the bean and succeeding wheat crops, being overbalanced by that of wheat after a bare fallowing, &c.*

Many of the cultivators of the soil in the southern parts of this kingdom are as enlightened and able as any cultivators in the world, but that, *as a body*, the farmers of the south are as able and enlightened as those in Scotland and the north of England, *where the farms are generally large*,

* He states, that long after being mixed for compost manure, they will again vegetate. If mixed with lime, however, and properly turned over for a length of time, they will putrify, and may be applied to advantage as manure.

and held under the security of long leases, I beg leave to deny. In the latter parts, agricultural books and agricultural knowledge are more diffused, and as necessity is the mother of invention, you may rest assured that the high rents paid by the northern cultivators would *alone* oblige them to adopt and eagerly pursue every improvement in husbandry. That of *constant cropping* has not escaped their most serious attention; and if your Hertfordshire correspondent has been informed that they are *prejudiced* against it, his information has been incorrect, for no agriculturists in the world pursue the cultivation of turnips with greater avidity and success, and *on dry loams, which are too strong for the culture of that valuable root*, other kinds of fallow crops, *well horse-hoed*, and wheat after them, are raised upon an extensive scale. Thus far we can cordially go with the advocates of that (in many situations) admirable system, but being satisfied that, *in our climate, in most seasons, very strong wet lands* are unfit for that mode of cultivation; we not only refuse to go farther, but entertain an opinion that some authors who are very warm advocates for drilling and horse-hoeing, have, by asserting too much, injured the cause they intended to promote.

Mr. Lawrence's observations on restrictive covenants, in favour of fallowing, and the mischievous consequences which result to the country from employing men ignorant of rural affairs, in the management of landed estates, are highly judicious, and deserve the particular attention of every landholder who wishes to promote his own, and his country's interest.

In order to satisfy your Hertfordshire friend that the raising of wheat, after drilled beans, is extensively practised in favourable situations, in the north, I beg leave to refer him to the speech of Charles Taylor, Esq. Secretary to the Society for the Encouragement of Arts, Manufactures and Commerce, delivered in May, 1802, who states, that, "Robert Brown, Esq; Markle, near Haddington, Scotland, by producing a crop of beans, on ninety-five acres, and sowing the land with wheat in the same year, has proved, that by observing a judicious rotation of crops, the common plan of fallowing land may be rendered in a great measure, unnecessary. The silver medal has been adjudged to him for his communications on this subject." By these communications it appears that the beans were drilled with intervals of about twenty-six inches, and well horse-hoed, and that the succeeding crop of wheat was a very productive one, if I mistake not, from thirty-six to forty Winchester bushels per acre.

Mr. Brown is not only distinguished for great knowledge in the cultivation of the soil, but for the zeal and ability with which he has diffused it for the benefit of mankind in gene-

ral, and the inhabitants of this kingdom in particular; but though he raises, almost every year, great quantities of wheat after drilled legiminous crops, *he is an advocate for summer fallowing very strong and wet soils.*

If I am rightly informed, great quantities of wheat and bean-seed were committed to the ground in some of the southern districts, within the last month; scarcely any spring wheat known, and not a single quarter of beans (I believe) has yet been sown in this county. Intense frosts have prevailed for two or three weeks past, and now the ground is covered with snow to a considerable depth. In such late seasons, when there is no probability either of preparing the land properly, or of getting the beans removed in autumn for sowing wheat, e're the season be too far advanced, perhaps *early* gray pease, might on some strong, but dry soils, be cultivated with advantage. Last year I sowed ten acres with such peas, in rows, about the middle of April, the intervals, which were nearly thirty inches, were well horse-hoed; and though the land was but of inferior quality, the pease were a pretty good crop, and removed so as to get it limed and sown with wheat on October. The soil was clean and fresh, and no fallow wheat, on such land has a better appearance.—*Last year, however, was uncommonly favourable for such management.*

In this county, and several parts of Scotland, drilling wheat and barley is practised on an extensive scale, and seems on the increase. The general mode is to sow with intervals of about ten inches; and in autumn, the quantity of wheat sown, is from one and a half to two bushels *; and in spring, from two to two bushels and a half; and of barley, about the same per acre. I think this is considerably more than the quantity of seed generally sown by Messrs. Close and Amos, and other great advocates for the superiority of the drill husbandry. I agree, however, with your very intelligent correspondent, Agricola Norfolciensis, in thinking that these gentlemen have been too sparing in the quantity of seed proposed for land in general. The drill machine, in general use in the north, is somewhat different from Mr. Cook's, and is, in some respects, supposed to be better constructed. Perhaps at some future period I may send you a paper containing the improvement.

I am, Sir, yours, &c.

AGRICOLA NORTHUMBRIENSIS.

* Few farmers sow less than about two Winchester bushels per acre in October.

FENCES CAPABLE OF SECURING BLEACHING-FIELDS, ORCHARDS, &c.

To the Editor of the Agricultural Magazine.

SIR,

THE fences usually commented upon, are only intended to preserve fields from the intrusion of cattle; but, on some occasions it is necessary to have a fence that would even resist the efforts of men to break through it; as round bleaching-fields, orchards, &c. the want of which often subjects the proprietor of such fields to very disagreeable accidents. And, as such a fence might, on some occasions, be procured at no great expence or trouble, it were to be wished that the method of doing this were more generally known than it is at present.

To effect this, it is necessary to begin by trenching up, or ploughing, a large belt all round the field you mean to inclose, of forty or fifty feet, or more, in breadth, if you find it convenient; the outer edge of which should be inclosed by a good dike, or a ditch and hedge. This belt should be kept in culture one year, and well manured if your situation will admit of it, and laid up before winter in such a manner as that no water may be allowed to lodge upon it; and planted in the winter time all over with plants of eglantine, so thick as not to be above two feet from one another; and between these put a number of young birch plants, not above two years old, interspersed with hazels, oak, ash, rawn, (wild service,) and other trees that you think will thrive on your soil; together with thorns, hollies, brambles, and woodbines, (honey-suckle): and having then fenced it from cattle, and kept down the weeds that may rise upon its surface with a hoe, as long as you can conveniently get access into it, leave it afterwards to nature. If this be done, and your soil be not extremely bad, the belt in a few years will be entirely filled with a close bush of trees, so intermixed with the bending brambles of the eglantine, and bound together by the trailing shoots of the bramble and woodbine, as that no animal above the size of a cat could penetrate; especially when it is of such a depth as I have recommended.

The first hint that I got for a fence of this kind, was from a small thicket of brush-wood that I had planted for ornament, pretty much in the manner above described, which in a short time became so interwoven with the sweet briar, that it was impossible to find any access into it. But as all kinds of trees and shrubs, if planted very close to one another, become naked at the root, when they arrive at any considerable size, care should be taken to prevent it from ever coming to

that state, by cutting it down whenever it becomes in danger of being open at the root. And as it would be improper ever to leave the field entirely defenceless, it is a great advantage to have the belt as broad as it conveniently may be, so as that the one-half of it may be a sufficient fence, and the brush-wood that this afforded at each cutting would, in almost every situation, yield such a revenue as would do much more than indemnify the proprietor for the rent of the ground that was thus occupied. And if the field was in such a situation as required shelter, some trees might be allowed to grow to their full size about the middle, without any inconvenience, if the belt were of a sufficient breadth.

The above account is taken from a work in the British Museum, to which I think few of your readers will be likely to have access: I have, therefore, thought it would be acceptable to you, and I have no doubt the expedient would be very beneficial in many situations.

Wood-Street,
March 14, 1804.

I am, Sir, your's, &c.
ARBUSTIVUS.

ON WOOD-LANDS, IN THE DISTRICT EXTENDING FROM CHATHAM-HILL TO CHARING.

To the Editor of the Agricultural Magazine.

SIR,

IN a former letter I signified my intention of giving you an account of wood-lands in Kent. It is supplied from some strictures I have by me, furnished from an authority which I think deserves particular respect and attention. On the importance of the subject, I am sure it is unnecessary I should make a single observation.

The soil on which these woods grow is for the most part flint and clay, with chalk at no great distance from the surface. Where chalk is the chief component part of the upper surface, the wood is of slow growth and little value. They are generally cut down from ten to fourteen years growth, and the price varies from 5l. to 15l. per acre, depending in a great measure on the goodness of the wood, the demand and the price of poles. Hop-poles are the chief article which makes wood valuable in this part of the country, where there is not only a constant demand for them at home, but they are carried as far as Maidstone, and to a considerable distance beyond; the planters preferring the poles which grow upon the hills to those of quicker growth, and nearer home.

Part of the wood-land in this district is in the hands of the proprietors, and part is let to the tenants occupying the adjoining farms. When fit to fell, it is generally sold by valua-

tion. After the purchase is made, and the leaf is off, the wood is parcelled out among the different workmen employed by the purchaser. The first step is to clear the stocks of the small spray, bushes, &c. These are made up into bavins, bound with two wifts*, and are called winter kiln bavins; they should be six feet long, and two in circumference over the bands: the price of making them is three shillings per hundred. If bushes are wanted, the best are bound up in bundles, with one wift, at 1s. 6d. per load, consisting of fifty bundles; and they sell in the woods from 7s. to 10s. per load.

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

The first best poles are chesnut, ash, willow, and maple; their length should be eighteen feet; their prices vary from 30s. to 35s. per hundred. The chesnut poles are dearest, varying from 15l. to 20l. per hundred in the wood.

The second best poles consist of the same wood as the first, and are only a smaller pole, varying in length, from fifteen to sixteen feet. They sell in the wood from 20s. to 21s. per hundred.

The first ordinary poles consist of oak, gascoin, red birch, beech, and hornbeam; the two last very inferior; their length should be from seventeen to eighteen feet; they sell in the wood from 12s. to 20s. per hundred.

The second ordinary poles, varying in length, from fifteen to sixteen feet; sell in the wood from 10s. to 12s. per hundred.

Use poles consist of ash, chesnut, willow, oak, and gascoin, which are too large for hop-poles. They are cut at a halfpenny each, and sell in the wood from 4½d. to 6d. according to the size, length and goodness of the wood. The largest sort are sold by admeasurement, from 8d. to 9d. and 10d. per foot.

Stakes and benders are cut out of hazel, ash, oak, willow, and maple; they are bound up in bundles, twenty-five in each; the price of cutting is 1½d. each, and they sell in the wood from 4½d. to 6d. per bundle; the length of a stake should be five feet, of a binder, from fifteen to eighteen feet.

* Local term for bands.

Thatching rods are cut out of the same kind of wood as the stakes and binders, which are not of a proper length for binders, or large enough for stakes. They are bound up in bundles fifty inches each; the price of cutting is 2d. per bundle, and they sell in the wood for 6d. The length of a bundle should be six feet.

Austry rods are smaller than thatching rods cut out of hazel, they are used to bind billet wood, for the London markets. They are bound up in bundles, one hundred rods in each; the price of cutting is 2d. and they sell at 6d. per bundle in the wood; their length is five feet.

Hurdle rods are cut out to make hurdle gates for folding sheep; they are cut out of the same kind of wood as binders, indeed they are only a small binder, from ten to fourteen feet long. They are bound up in bundles fifty in each; the price of cutting is 2d. and they sell in the wood at 6d. per bundle.

Wheel timber is cut out of large beech of two or three falls growth; it is used for fellies of wheels; it should not be less than seven inches diameter at the small end. It is cut down for 1d. for every length of three feet, and sold in the wood from 7d. to 8d. per length, if sold by admeasurement, at the same price per foot. If smaller, it is cut out for axle-trees, plough cheps and wrests. Axle-trees should be seven feet long, and six inches and a half in diameter at the smaller end: they are cut for 1d. each, and sell in the wood for 10d.; plough cheps should be five feet long, and five inches in diameter at the small end: they are cut for ½d. each, and sell in the wood for 6d.

Plough wrests should be four feet long, and five inches diameter at the small end; they are cut for ½d. each, and sell in the wood for 2d.

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

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

N. B. The above is the price of the poles delivered at the place where they are to be used. Land carriage is 5s. per hundred for six feet piles, 4s. for five feet, 3s. for four feet, and 2s. for three feet piles. If they go by water carriage the price is the same.

Props which are used in the coal mines at Newcastle, are cut out of oak and birch; they should be six feet four or five

inches long, and be two inches and a half diameter at the small end: the price of cutting is one ½d. and sell in the wood at 2d. each.

These are the chief, if not all the articles, cut during the winter. In the spring, what remains in the ranges is made up, part into summer kiln; bavins which are made of the smallest wood, and bound with two wifts, and should be six feet long. The price of making is 3s. per hundred, and they sell in the wood from eight to nine shillings per hundred; part is made into household bavins, being the best faggots which are made; they should be six feet long, and two feet over the band; the price is also 3s. per hundred. The remainder is cut out into cord wood, each stick should be three feet and a half long; the length of the cord fourteen feet, and it should be stacked three feet high. The price of cutting and stacking is 2s. per cord, and the cord sells in the wood from 12s. to 16s.

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

The tithe of woodlands was a few years ago at 2s. in the pound; but now varies from 2s. 3d. to 2s. 6d. and 3s. Many clergymen are of opinion, that the wood ought not only to be cut down, but to be made up in the different articles for sale; but this is not true: if a clergyman and purchaser should disagree, all that the latter has to do, is to sever every tenth perch and leave it: the expence of doing this is found to be about 3d. in the pound.

If wood therefore is sold at a fair valuation, it appears unreasonable for any clergyman to demand more than 2s. 3d. in the pound.

I am, Sir, your's, &c.

April 4, 1804. TOPOGRAPHUS.

HOUNSLOW HEATH, FINCHLEY COMMON, AND ENFIELD CHACE.

To the Editor of the Agricultural Magazine.

Sir,

THE following observations on a considerable tract of land in the immediate vicinity of the capital, was communicated a few years ago to a respectable Agricultural Soci-

ety. Among other improvements in these districts, those of one of your correspondents are introduced, and I shall be happy to see some remarks from his intelligent mind on the more recent ones in which he has been instrumental, or with which he has become acquainted. With respect to Great Britain, London is the common centre of all the useful arts; from this centre the luminous rays of genius diverge in every direction; but I am inclined to think some of our remote cultivators are disposed to smile at our expence when they compare the instructive lessons they receive from the capital, to the dark, unproductive territory with which it is encompassed.

Hounslow Heath, one of the most extensive commons in this part of England, presents itself to the eye of a stranger as a very noble field of improvement. Within ten miles of the capital, and in the midst of a country which, in point of cultivation, is almost wholly a garden, it is wonderful that means have not been fallen upon to convert this extensive waste into arable land; and it is the more to be regretted, as it could be done at no great expence, the soil in general being of an excellent quality, and capable of producing crops equal to any in its neighbourhood. It is said that twelve contiguous parishes have an interest in this extensive common. To the poorer class there the right of pasturage may be a matter of some little conveniency, as well as emolument, but the advantages that would redound to the community at large, from its improvement, would, it is obvious, greatly overbalance any trifling private convenience of that kind. In regard to the cutting fuel and turf, which the poor in the neighhood of those commons also enjoy, it has been proved in a variety of instances, beyond a possibility of doubt, that the exercise of such a right is not half so beneficial to them as their constant labour being required in the cultivation and improvement of the same soil. A portion of their wages will purchase fuel of another description, such as coals or wood, at a much cheaper rate.

To enter into any minute detail of the means of improving this common, may not at present be necessary. But in the mean-time it may be proper to suggest, whether in the event of a division of this extensive waste, this purpose would not be as well and more quickly promoted under leases of a reasonable endurance, subject to a progressive increase of rent, than on any other plan. Such a mode of payment of rent is not only natural on new land, but is the best and most effectual stimulus to industry. The exertions of a number of men setting out on a business of this kind, and improving upon the knowledge and experience of one another, would not only be an excellent school for the observation of others, but would

prove the surest and most rapid means or bringing the ground to the highest pitch of cultivation.

But whatever method may be adopted, it is certain the inclosing and improving this extensive waste is an object of great national concern, and should be paid immediate attention to. The parish of Stanwell has begun, and why should not the other parishes follow so good an example?

Finchly Common is another extensive waste, in which there are large quantities of excellent gravel for roads, but the greater part is a clay soil, and capable of high cultivation; the means of improving a soil of this quality, by the common methods of summer fallow and liming, or paring and burning where the surface is covered with strong heath or ling, with the command of manure which will at all times be obtained, and a proper rotation of crops at the commencement would quickly and effectually convert this sterile waste into a tract of corn and grass ground of fertility, equal to the most sanguine expectations of the improver*.

The remains of Enfield Chace, which still contains from 2 to 3000 acres unimproved, is also another of those tracts which demands the attention of the public, and calls loudly for the operation of the industrious farmer. The soil is naturally good and very improveable, consequently the same observations are applicable to it which have already been made in regard to Hounslow Heath and Finchly Common; and the time, it is hoped, is not far distant when such wastes shall no longer remain a disgrace to the country. In regard to Enfield Chace, in consequence of an act passed fifteen years ago, a considerable part of it has been inclosed and brought into cultivation. The improvements there have been considerable, particularly those of Francis Russel, Esq. and of Dr. Wilkinson; but, in some instances, the expences, it is said, exceeded the profit, and that good land might have been bought at a cheaper rate. It is doubted whether the best mode of improving waste lands was then known, or, at least universally practiced. It is certain that unless a judicious system is pursued, the profit cannot be great. But now so much additional light has been thrown upon the subject, that any person de-

* Aocording to Rocquee's Map of Middlesex, Hounslow Heath contained, in 1754, about 6658, and Finchly Common 1243 acres. Some parts of Hounslow was inclosed about 50 years ago; the particulars respecting which may be worth inquiry. In 1789, such part of this heath as belonged to the parish of Stanwell was inclosed by act of parliament. By a clause in the act power was given to the commissioners named in it, to sell by auction such part of the heath as was necessary to defray the expences of the inclosure. The waste thus sold, produced 21. per acre. The greater part was purchased by Edmund Hill, Esq., and was soon brought into a very good state of cultivation. The open fields of Stanwell were at that time inclosed, by which the proprietors greatly improved the value of their estates.

sirous of improving a waste, cannot find any difficulty in procuring information respecting the best method of doing it, according to the nature and quality of the soil, and the circumstances to be taken into consideration. Where the soil of a newly improved common is inclined to be a stiff cold clay, the application and operation of lime, as a manure, is attended with the most beneficial and happy effects, and if the ground is thoroughly drained, can be safely recommended from experience. Afterwards every thing depends on a proper rotation of crops, and laying down the ground to grass in the highest heart and order, without exhausting it on the first outset by a repetition of impoverishing crops of corn, which, with a view to a too early reimbursement, is often unhappily the case.

Southgate,
March 30, 1804.

I am, Sir, yours, &c.
T. Y.

METHOD OF QUICKLY PRODUCING FRUIT FROM TREES DISPOSED TO RUN TO WOOD. OF OBTANING GOOD SHOOTS, AND OF IMPROVING THE TIMBER TREES.

To the Editor of the Agricultural Magazine.

SIR,

I AM very happy to see that whatever others are inclined to neglect, from local prejudices and temporary passions, you consider that the discoveries even of the French nation are to be respected, and that while we indulge in all the violence of political animosity, we are to consider science as the region of peace, and that the intercourse of philosophy should never be interrupted by the accidental ebullition of national resentment.

It is on this account, Sir, that I have extracted for the observation of your readers the following remarks of Monsieur A. G. M. Suriray Delarue, which he has introduced into the Journal Physico-Economique, and I am confident it will afford entertainment to your friend Arbustivus, and to the many intelligent correspondents of your useful Miscellany.

There are few horticulturists who have not the mortification to see in their orchards a number of fruit trees, of the apple kind, that push out abundance of vigorous branches, but yet constantly remain barren notwithstanding the luxuriance of their growth. To remedy this defect, it has been proposed to bore a hole in the trunk of the tree, and to put into it a wooden peg, or to dig at the foot of the tree and cut off one or more of the large roots. This troublesome process, however, has been attended with very uncertain success, and has, therefore been but little practised.

These methods, in fact, are incapable of curing the evil, because it is not the superabundance of ascending sap, that disposes trees to run to wood, and causes the blossoms to fall off; but too great elasticity of the bark of the tree while yet young that suffers the whole of the descending sap to proceed to the roots, to augment their growth and to form new teguments between the wood and the bark. When these vigorous trees have attained such an age that their bark has acquired strength and solidity, then the sap, interrupted in its circulation, while descending, remains partly among the branches, strengthens the blossoms, nourishes the fruit, increases the size, and advances its maturity. It is evident that if the sap be retained by artificial means we shall obtain the same end, which is effected by nature only, after a considerable number of years, the tree will be rendered fruitful. The most certain way of producing this effect is the annular excoriation.

Buffon was lead to the discovery of this process so important to agriculturists by the following circumstance. Having read in Vitruvius, that "before trees are felled, a hole ought to be bored at the bottom of the trunk to the middle, and that they should be suffered to dry standing, after which they are much better for immediate use;" and finding in Plott's Natural History, that "in the neighbourhood of Stafford it is usual to strip off the bark of the trees, near the root, at the time when they are full of sap; that they are then left standing till the following winter, by which means the outer part of the wood becomes harder, and may be used for the same purposes as the heart."

The Pliny of France resolved to make some new experiments on this subject. He, therefore, in May 1733, directed the trunks of a number of oaks of different ages and sizes to be stripped of the bark; and at the same time, from a like number of trees, of a similar description, he cut away the bark round the whole circumference of each for the space of three inches, at the distance of a yard from the ground. The results of this experiment were as follow: From the upper edge of the wounds, both of the trees that had been stripped, and those with the annular excoriation, proceeded a thick cushion-like substance, or skin, which extended about an inch towards the bottom, for the first summer. In the young trees this substance was of greater extent than the old ones.

Those trees whose trunks had been entirely stripped, lived a longer or shorter time in proportion to their strength; the youngest perished the first year, and the next, vigorous, lived to the end of the ourth. The above-mentioned substance did not extend any farther after the first year, but only swelled a

litttle. I shall now proceed to the effects of this operation.

The solidity and strength, weight, and hardness, both of the inner and outer wood of the trees that had been stripped were considerably increased. The tegument between the wood and the bark, and which, in the ordinary course of nature is not converted into perfect wood till the end of fifteen years, had grown harder than the heart of the best common timber. The outside of this tegument was stronger than the inside, while it is generally the contrary, as its density diminishes the nearer it approaches the bark.

I must refer to Buffon's Memoir* for a more detailed account of these experiments, from which result this important fact: that by thus stripping off the bark, double the quantity of wood may be obtained from a tree to what it furnishes by the usual practice; and that by this method, a tree forty years old may be used for purposes of which otherwise we are obliged to employ one of sixty years. The wood of those trees of which only three inches of the bark had been cut away, was harder than common wood, but was inferior in strength one fourth to those which had been entirely stripped.

I think I recollect having read in some work, that this method of peeling standing timber trees prevents the wood from being liable to be worm-eaten.

Buffon made the same experiment on fruit-trees. Besides the appearances described above, he observed, that those trees were covered the second and succeeding years, with a greater number of flowers, and at an earlier period, than they would have produced without this annular excoriation. That great naturalist judging that the interruption of the course of the descending sap, occasioned by his operations, could alone be the cause of the extraordinary increase in the number of blossoms upon these trees, thence drew this conclusion: that all the operations capable of producing this interruption would be the best means of hastening the time of fecundity of fruit-bearing plants, and of producing fruit from sterile trees which shoot out an exuberance of wood, and nothing else.

It is unnecessary to state, that the following observations relate neither to the stone fruit trees, or those which like them, produce the more fruit the more they run to wood; they apply only to apple trees, and those which like them do not become fruitful, till age has to a certain degree checked the luxuriance of their vegetation.

Manner of making the Annular Excoriation to render fruitful such trees as are apt to run to wood.

1. To make this annular excoriation, with a view to render

* Memoirs of the Academy of Sciences, for the year 1738.

fruitful a tree of this description, the beginning of spring should be chosen: the sap having then begun to rise, the bark no longer adheres to the wood.

2. Cut away a slip of the bark of the trunk just below the branches, if you wish the whole tree to bear, or at the bottom of any particular branch that you may choose to render productive. Attention should be paid not to leave upon the wood thus stripped of the bark any portion of the interior teguments of the bark called *liber*. I have found by experience, that on trees one decimetre in diameter, the annular excoriation should not be made above seven or eight millemetres in breadth, that it may heal before autumn. On branches four or five centimetres in diametre, take away no more than three or four millemetres, and so in proportion, either for apples or stone fruits, when you want to hasten the time of their ripening.

An apple-tree requires a narrower excoriation than a pear-tree, and the quince is still narrower than the former.

3. Branches less than two decimetres in diameter, on which an excoriation in this way has been made, are very liable to be broken in that part by the least bending or agitation. It is, therefore, necessary to strengthen them by means of a strong stick, tied at a little distance above and below the wound.

4. If the wound be made on the trunk of a tree, care must be taken to break off all the shoots that appear below it, otherwise, the ascending sap, taking its course into them, the head of the tree will languish for want of nourishment.

5. A few days after the removal of the bark from the upper extremity of the annular wound, between the wood and the bark issues a production, at first succulent, glutinous, soft, and herbaceous, which hardens by degrees, assumes the colour of the bark, and forms all round the tree a ring of a semicylindrical figure, that is closely attached to the wood.

This ring, or skin, extends itself over the surface of the denuded wood, without however adhering to it. When the wound is not too wide, it reaches the lower edge, and the wound is cicatrized the first year, the tree is then safe: the increase of this ring, after the first two or three months is almost imperceptible. If the wound have been made too wide, the skin is not joined to the lower bark, the circulation of the descending sap is prevented, and before the fourth year the wound will kill all the wood that is above it. No apprehension of this kind needs to be entertained, if in cutting away the bark the proportions I have already mentioned be preserved.

(To be continued.)

CRITICAL CATALOGUE.

The Farmer's Calendar: containing the Buſineſs neceſſary to be performed on various Kinds of Farms during every Month of the Year. By Arthur Young, Eſq. F.R.S. *Secretary to the Board of Agriculture; Honorary Member of the Societies of Dublin, Bath, York, Salford, Odiham, South Hants, Kent, Eſſex, and Norfolk; the Philoſophical and Literary Society of Mancheſter; the Veterinary College of London; the Economical Society of Berne; the Phyſical Society of Zurich; the American Society of Maſſachuſetts; the Palatine Academy of Agriculture at Manheim; the Imperial Economical Society, eſtabliſhed at Peterſburgh; the Royal and Electoral Economical Society of Celle; Member of the Society of Agriculture for the Department of the Seine, France; and Correſponding Member of the Royal Academy of Agriculture at Florence; of the Patriotic Society at Milan; and of the Economical Society at Copenhagen.* A new Edition, greatly enlarged and improved. 8vo. pp. 575. Phillips. 1804.

THE volume before us, as will be ſeen by the title-page, is a new and much-improved edition of a very valuable work. Mr. Young's name, indeed, ſtamps *eclat* wherever it appears, and is too well known in our agricultural annals to demand, or to be benefited by, any eulogium from our pen. It would ill ſpeak our gratitude, however, to the man whoſe exertions have accompliſhed ſo much for the improvement of his country's ſoil, were we to paſs unnoticed, any performance which he might think worthy of preſenting to the public.

"At the beginning of every month," obſerves our author, "a good farmer, whether he has or has not a book of this ſort, is obliged to reflect on the work he has to perform in that month; he ought to foreſee the whole at once, or it is impoſſible he ſhould make a proper proviſion for its due performance. I leave it to any one to judge, if ſuch an eſtimate of monthly buſineſs can be gained ſo eaſily, completely, or ſyſtematically, without ſuch an aſſiſtance to the memory as is afforded by this work; and even if a book of this ſort, but once in a year, gives intimation of ſome important work, which might otherwiſe have been forgotten, its worth muſt be acknowledged."

The juſtice of the above obſervations will ſurely not be queſtioned by any one.

In the "*Adverti ſement*" to this new edition of the "*Farmer's Calendar*," Mr. Young ſays:

"In various parts of the Correſpondence publiſhed during the laſt fifteen years in the *Annals of Agriculture*, I have been called upon for a new edition of this Calendar, and have as often reſolved to give it; but the new improvements which have taken place, made ſo many and ſuch great alterations neceſſary, that other and more preſſing employments have prevented the undertaking. It is at laſt completed; and I hope the Reader will find it, in the preſent form, worthy of his attention."

By many of our Readers it will be recollected, that ſome time ago, we reviewed a work ſimilar to the one now before us, written, we be-

lieve, by Mr. Lawrence*. As a ſtrong proof of the high eſtimation in which Mr. Young's performance was held, even in its *unimproved* ſtate, we can adduce nothing more favourable than the opinion expreſſed by the author of the work above alluded to, who ſays: "To the practice exhibited in the Calendar of Mr. Young, I have generally adhered in mine, as far as my plan would admit, *ſince ſuch is ſtill the beſt prevailing ſyſtem of the country.*"

It is here requiſite to ſtate, that that part of Mr. Lawrence's work, properly to be denominated the *Monthly Remembrancer*, conſiſts of but little more than a hundred pages, while the entire book of Mr. Young is arranged in twelve diviſions, correſponding with the twelve months of the year: the bulk of the reſpective volumes is nearly equal; but Mr. Lawrence ſubjoins to his *Monthly Remembrancer* a number of diſtinct Agricultural Eſſays, while Mr. Young incorporates the ſubjects of ſuch eſſays with his monthly directions, as they occur. The Reader will, according to his own fancy, decide on the ſuppoſed ſuperiority of plan.

Mr. Young, in the earlier, and preſent editions of his Calendar, recommends the circular form for a farmer's ſtock-yard and cattle-ſheds. Speaking of the threſhing-mill, he ſays:

"The moſt important object, perhaps, which is anſwered by this machine, is that of ſaving barns, which are ſo very expenſive in forming a new farm. I begin with it, as its poſition determines that of almoſt every other building in the farmery. There is not the ſmalleſt doubt of the propriety or profit of having one of theſe machines fixed in the principal farm-yard. If the farm be large, and ſtacks conſequently ſcattered over various fields of it, then it may be right to have a moveable one alſo; but ſo many operations are wanting at home, that one ſhould certainly be fixed. I have, in four plates, in the Annals of Agriculture, vol. xxxiii. p. 488, explained the relative poſition of the ſtacks to be built, on ſtandings on wheels moving in a circular iron rail-way, ſo contrived that a very few horſes (four ſufficient for any common ſtack) will draw each ſtack to the mill. This contrivance is eſſential, as it ſaves the whole expence of carting the corn, as well as the neceſſity of waiting for fine days to do it in; and as the expence is moderate, I cannot ſuppoſe that any perſon will now go to the heavy charge of barns and capt-ſtone ſtandings, when leſs money will give him much greater conveniences. The circular form of the rail-way, on which the ſtacks are brought to the mill, is neceſſary, as being the only one which permits a choice of any particular ſtack to threſh, without waiting for all or many others being done, before it can be got at; but a ſtraight line, leading to and paſt the mill is admiſſible, except for this circumſtance, though inferior in ſome otherpoints to the circular form. But whatever plan may be choſen, the mill ſhould have the granary above it, to hoiſt up the corn as threſhed. It muſt alſo have the chaff-houſe annexed, as the power of the mill muſt cut into chaff all ſtrawwhich is uſed in feeding cattle; and as hay is uſed in this operation, mixed with the ſtraw, this decides the poſition of at leaſt ſome hay-ſtacks. Cloſe to and connected to the mill, muſt be a ſhed on poſts, roofed to draw one ſtack under, before the thatch is ſtripped, and from which the corn is delivered at once to the mill. It is turned (ſo much as is wanted for chaff) into a ſtraw-room, and the reſt replaced on the ſtanding of the ſtack that was laſt cleared, and being ſtacked on it with ſome care, is ready to be drawn away in the circle for litter. This circumſtance decides the poſition of the ſheds for cattle and horſes, as they ſhould be ſo placed as to be very near this litter.

* "The New Farmer's Calendar; or Monthly Remembrancer." Publiſhed by Symonds.

Thus ſituated, they demand hay alſo in their immediate vicinity, and as hay was alſo wanted for chaff, all the ſtacks ſhould be within the circle. Thus far every thing is connected, and each building ſo placed, that it cannot be ſuppoſed in any other place, without a manifeſt inconvenience following. If milch cows be in the circle, which they ought to be, this article demands another combination of the dairy and the piggery, which muſt alſo be connected, but at a due diſtance from each other. I have, in the plans above alluded to, ſuppoſed the circle of cattle and team ſheds to open on the outer ſide, to bring in the cattle, and to void the dung into a circular repoſitory that ſurrounds all the ſheds."

Mr. Lawrence, controverting the propriety of part of this plan, ſays:—

"But with all due reſpect and deference to the opinion, and unequalled experience of Mr. Young, I conceive that certain important advantages would be loſt, by placing the ſtacks within, and the cattle without ſide the circle. The buildings would be placed out of the way of doing their beſt ſecondary office, that of affording ſhelter; and the benefit of a fold-yard, an important one indeed, to growing and lean cattle, ſeems entirely excluded. I ſhould greatly prefer placing the ſtacks without the pale, in an appendant circle, granting that figure to be neceſſary, for the valuable purpoſe of their ſliding along an iron groove, or road, to the threſhing mill."

Mr. Young, however, maintains his opinion; with what reaſon our readers ſhall judge. He conceives that to have the ſheds to open within the circle is very erroneous.

"The beaſts," he ſays, "muſt for this purpoſe be reverſed; their heads to the outſide, and the dung voided within the circle. This completely deranges the whole deſign, and converts much convenience into a moſt inconvenient arrangement. The chaff, hay, &c. muſt be conveyed *without* the circle to the heads of the beaſts, by a long walk, inſtead of the neareſt line; the dung muſt be within the area, cutting off all connexion with it; dirt and litter will be found where cleanlineſs ſhould prevail; and nothing gained in return but a little better ſhelter, ſuppoſing the ſheds to be open; but as the contrary is ſuppoſed, this object would not be varied; ſo that I muſt adhere to the original propoſal, as very much ſuperior in convenience to the alteration thus indicated."

Our reſpective authors differ not leſs materially, as to the utility and value of the grain called Buck-Wheat. Under this head, in his directions for April,

"The lands deſigned for Buck-wheat," ſays Mr. Young, "in May or in June, ſhould be well tilled this month, ploughed and harrowed well at leaſt once. It is not neceſſary for that grain, but for the graſſes which ſhould be ſown with it, and for the important object of making all the ſeed-weeds grow, in order to kill them by the following tillage. This April preparation marks the land for Buck-wheat. I ſhall therefore take this opportunity to adviſe the farmers in general to try this crop. Nineteen pariſhes out of twenty, through the kingdom, know it only by name. It has numerous excellencies, perhaps as many to good farmers, as any other grain or pulſe in uſe. It is of an enriching nature, having the quality of preparing for wheat, or any other crop. One buſhel ſows an acre of land well, which is but a fourth of the expence of ſeed-barley. It ſhould not be ſown till the

end of May. This is important, for it gives time in the ſpring to kill all the ſeed-weeds in the ground, and brings no diſagreeable neceſſity from bad weather in March or April, to ſow barley, &c. ſo late as to hazard the crop. It is as valuable as barley. Where it is known, it ſells for the ſame price, and, for fatting hogs and poultry, it equals it. It is, further, the beſt of all crops for ſowing graſs-ſeeds with, giving them the ſame ſhelter as barley or oats, without robbing."

On the ſame ſubject, Mr. Lawrence obſerves: "This grain, on its firſt introduction into England, was lifted up by report far beyond its real value. I can ſpeak of it from actual experience throughout a number of years, during which I uſed it in large quantities, with cattle of every deſcription, (ſheep excepted) rabbits and poultry. The invariable reſult, its inferiority to every other grain, but ſuperiority over other vegetable food, namely, carrots, potatoes, and the like. In the ſtate of herbage, cattle, I know, will eat it, but it is from Hopſon's [Hobſon's] choice, as a hundred trials have convinced me. Its fitneſs for ploughing into the land is undoubted, on account both of its bulk and ſucculence. The juice of it, however, is watery, and far enough from nutricious. Hogs fatten neither ſo faſt with it, (and I have tried many hundred quarters for that purpoſe) nor is the fleſh ſo firm as that fatted upon corn; I have expended it in large quantities, ground, with hard-working horſes, both draught and ſaddle, but the difference of price by no means compenſated for its inferiority to oats and beans; and beſides, it did not always agree; we ſometimes fancied it had a kind of ſtupifying effect. I tried it with a ſtock of ſeveral hundred head of poultry, and it was in the ſame degree inferior, both with the fatting and laying ſtock. I do not hear that it is very highly prized in the diſtillery. In fine, Brank is ſurely valuable upon land that will grow nothing elſe, and is produced with ſmall expence; but when ready, its beſt application is to the market.

"My last crop of Brank was in 1791, upon four acres of clayey loam, of moderate fertility, but lately old meadow. A buſhel per acre was ſown the firſt week in June; the green crop was moſt luxuriant, but being late, it was got up wet, and the ſtack at the ſame time left without thatch; of courſe the ſample was ſpoiled; and what was worſe, the product did not amount to two quarters per acre, not worth, as feed, fourteen ſhillings per quarter. It has been ſaid, that this grain being black, cannot be diſcoloured by wet, which is by no means a practical remark, ſince its diſcolour conſiſts in the loſs of its fine black; beſide which, the grain feels cold and damp, to the great injury of the ſample; wet, or dry, the only uſe of its haulm is under foot. To thoſe who expect to get money by Buck Wheat, I recommend early ſowing, and even to allow it the manure neceſſary for a fallowing wheat-crop. I ſhould think, by ſuch management, five, perhaps ten quarters, might be obtained from an acre of good land, which would remain in excellent order for wheat. This neceſſarily ſuppoſes land in no want of late ſpring tillage. In this caſe, ſhould a ſuſpicion be entertained of the crop running too much to haulm, it might advantageouſly be rowed and hoed. I have rather

enlarged upon the article, having read ſo much in its recommendation."

Some very uſeful tables are appended to Mr. Young's volume, which we now diſmiſs with recommending it to the ſerious attention of our readers.

HISTORY.

National Transactions.

IN INDIA,

THE war with the Mahrattas continues to withdraw the care of the Government from the commercial interests of the Company. Nothing has yet occurred to alarm us for the ſucceſs of our arms on that Continent. But every thing concurs to ſuggeſt, that the extenſion of our conqueſts in India, would be, in fact, a misfortune to us.

The late events in the Iſland of CEYLON, appear ſtill more and more alarming, by every new piece of advice which is received from that iſland. Major Davie, and one or two other officers who were made priſoners with him, are ſaid, in ſome accounts, to have been put to death, in others, ſtill to ſurvive But the forces of the King of Candy, have driven the Britiſh from all the poſts by which they had held communication with the interior country; and now, even beſiege them in their intrenchments on the coaſt. It is, however, believed, that large reinforcements from Madras, may, e're this time, have gone to the aſſiſtance of the Britiſh in Ceylon.

IN EGYPT, the Beys are again masters; the Pacha, repreſenting the Turkiſh Sovereign, ſtill remains, as it ſhould ſeem, by their ſufferance; and nearly the ſame ſort of government as before the French invaſion, appears to be about to be re-eſtabliſhed. Several of the Conſuls reſiding in that country, on account of the commercial affairs of different nations in Europe, complain of injury, and a violent infraction of their rights, in a late inſtance, by the Pacha; but the violence has ceaſed, and they are again in free and security.

Diſorder and inſubordination prevail, to a conſiderable degree, in the European parts of the TURKISH Empire. The Turks dread an attempt of the French upon the Morea, and have made ſome preparations for reſiſtance.

The Republic of the SEVEN ISLES, ſtill ſubſiſts under the protection of the Turks and the Ruſſians. Some diſturbance has been lately excited in it, on account of certain exiles who had taken refuge in the Iſles. A payment of the ſtipulated tribute from this Republic to the Turkiſh government, has juſt become due, for the firſt time; but we do not know whether it have been yet made good.

ITALY is, in its interior parts, almoſt every where ſubject to the immediate authority or the influence of the French. But, from the port of Toulon to the Iſland of Malta, the Engliſh are almoſt every where maſters of the entrances into its harbours, and of its whole ſea-coaſt.

The SPANIARDS ſtill enjoy their neutrality. Though made, perforce, ſubſervient in it to a very great degree, to the intereſts of France, they ſhew, in general, the moſt friendly private diſpoſitions toward the Britiſh.

The PORTUGUESE maintaining, alſo, a neutrality for which they have paid dear to France, are, in conſequence of their greater diſtance from French invaſion over land, and their more entire dependence on Britiſh commerce, ſtill more friendly than the Spaniards to the people of this country.

In FRANCE, a conſpiracy to dethrone the Firſt Conſul, has been lately detected. Georges, a Chief of the Royaliſts of La Vendee; Pichegru, the conqueror of Holland; and Moreau ſo illuſtrious for his victories in Germany; are ſaid to have been its chiefs. The ultimate object is ſaid to have been, to put an end to the revolutionary troubles of France by the reſtoration of royalty. The leaders, with a number of thoſe who are ſaid to have been inferior accomplices in the plot, have been arreſted, are now under ſtrict confinement, and are to be brought to a trial, at which they will not have the benefit of the ſentence of a Jury. In the mean time, public opinion appears to be divided in France, in regard to the reality of the alledged plot, or its fiction by Bonaparte, as a pretence on which he may rid himſelf of thoſe men by whoſe exiſtence his perſonal fears and jealouſies are the moſt alarming. The army of France is in the greateſt force; and is, as much as poſſible, in the hands of none but officers in whom the Firſt Conſul can put confidence. On the ſea-coaſt, in both France and the Dutch Provinces, the preparations for an expedition againſt this country, are continually increaſed. Full twelve hundred gun-boats are now in readineſs at the Port of Boulogne; according, at leaſt, to the moſt credible accounts which have been received thence. The menace of invaſion is raiſed continually louder, and in a tone of more earneſt deciſion againſt Great Britain. A ſmall ſquadron of Dutch gun-brigs has eſcaped to cruize in the North Seas. An embargo on the ſhips in the ports of Great-Britain, prevented any of our merchant-veſſels in the Northern trade from falling into their power when they firſt ſailed. They now await at Bergen in Norway, the chances of lending aſſiſtance to an invaſion of the North of Scotland, or of making prizes of ſome ſtragglers of the Britiſh merchantmen that may ſail, as the ſpring advances, to the Baltic, for Archangel, and the ports of Norway or Gothenburg, or to the whale fiſhery.

In GREAT-BRITAIN, the nation regards itſelf as having gained a tower of additional ſtrength by the recovery of our moſt gracious and beloved Sovereign, from an indiſpoſition which alarmed and afflicted us more than if an invaſion had actually landed on our ſhores. The daily reports of the ſtate of the King's health, have been diſcontinued, on account of his entire convaleſcence. His Majeſty now pays his wonted attention to the diſpatch of public buſineſs. The party conteſts which had begun to ariſe in Parliament during his illneſs, have ceaſed; and thoſe hopes which our enemies had begun to build on the probability of ſome confuſion and uncertainty in our counſels amid the public affliction, will, we doubt not, be utterly diſappointed.

The whole number of ſhips of war in the Britiſh navy, in commiſſion and in effective ſervice, exceeds 1,500. On the ſtocks, or in a progreſs of equipment, are 373. Some of the ableſt Admirals in the ſervice have declared, that the ſquadrons on the different ſtations were never in a better ſtate than at preſent to accompliſh the purpoſes for which they are ſent out. Gun-brigs, ſloops, and ſmall frigates, the ſhips which we employ to blockade thoſe ports in which the French preparations are in the greateſt forwardneſs, have been declared by the beſt judges to be the fitteſt with which to atchieve the deſtruction of their gun-goats. Sir Sidney Smith blocks up Fluſhing, ſo that it is expected that he may be able entirely to annihilate the force which has been there ſo long in preparation. The Jerſey and Guernſey privateers make frequent captures of veſſels on the adjacent French coaſt. Late diſpatches from Lord Nelſon intimate, that he ſtill commands the acceſs to the port of Toulon, and that the French fleet which was in that port, has not, as was once feared, been able to eſcape out to ſea. It is ſaid that our Government has taken meaſures to ruin ſome of the enemy's ports entirely, by ſinking, at the entrance, hulks of veſſels laden with ſtone, in the narroweſt parts of the paſſages, by which alone theſe ports are acceſſible to ſhipping.

In Parliament, the accuſtomed financial buſineſs has been advanced, as far as was uſual at this time, in former ſeſſions. Motions for enquiry relative to the navy, to the ſtate of affairs in Ceylon, to the war with the Mahrattas, and to the ſtate of his Majeſty's health, were made, in the courſe of March, diſcuſſed, and rejected. The motion for enquiry relative to the ſtate of the navy, had Mr. Pitt for its author. Mr. Fox and his friends joined Mr. Pitt in voting for it, when the Houſe divided on the queſtion. The motion was rejected by a majority of only 201 to 130. Mr. Sheridan, and his friends voted with the Miniſter on that occaſion.

Agriculture.

LORD SOMERVILLE'S ANNUAL SHOW OF CATTLE,

AT LANGHORNE'S REPOSITORY.

Monday, February 27, 1804.

THIS day, at eleven o'clock, the ſpacious and convenient yards and ſheds of Mr. Langhorne, Stable-keeper, in Barbican, were opened for the exhibition of the Cattle, Sheep, and Pigs, ſent in from almoſt every part of England, as candidates for the annual prizes ſo liberally given by Lord Somerville.

I. For pairs of Oxen, that have worked together for the ſpace of three years, previous to their being turned up to graſs, aged between 5 and 8 years, weighing between 100 and 180 ſtone (of 8*lb.*) which have worked till ſome period between the 20th of April and the 1ſt of May laſt; the ſtate of the oxen as to fleſh, on the 1ſt of January, 1803, and of the number of days' work done by each, between that time and the 25th of April laſt, to be certified by proper witneſſes, of the facts; alſo that the oxen have eaten no corn of any ſort, or potatoes, and that the ſtraw they uſed was firſt clean threſhed: the exact weight of oil cake, if any was eaten, is to be ſtated.

The prizes are, for the beſt pair 30*l.* and, for the next beſt pair, 20*l.* to be equally divided between the grazier and the farmer who worked them, in caſe there were different perſons.

Among the numerous candidates for theſe prizes, were two Devon oxen, worked by Mr. Lowman, and fed by Mr. Webber; two Hereford oxen, worked by Mr. Knight and Mr. Skyrme (owing to one of the original pair having died) and fed by Mr. Weſtcar; two Herefordſhire oxen, and two Glamorganſhire oxen, all worked and fed upon his Majeſty's Flemiſh, or Cranbourn, Farm, in Windſor Great Park; two Glamorgan oxen, worked and fed by Mr. Waters; two Suſſex oxen, worked and fed by Sir Thomas Carr; two Hereford oxen, worked and fed by Mr. Hudſon; two Devons, worked by Lord Somerville, and fed by Mr. King; two ſhort-horned oxen, worked by Mr. Harper, and fed by Mr. Higgins; two Herefords, worked by Mr. Smith, and fed by Mr. Drake; a Suſſex ox, and a freemartin, or barren cow (twins) worked and fed by the Earl of Egremont; two ſplayed Suſſex heifers, worked and fed by the Earl of Egremont, &c.

The ſucceſsful pairs of oxen are to be ſlaughtered on the following Friday not knocked down by the often repeated ſtrokes of the pole-axe, but by the more humane mode of pricking them in the ſpinal marrow behind the head.

II. For ſheep, in pens, of five ewes each, not in lamb, in a fine ſtore ſtate, that have not been taken from the flock more than ten days from the commencement of their journey to Town, or forced beyond the average keep of the flock; the ages of the ewes to be not leſs than 10, or more than 13,

months; and keep and ages to be particularly certified; a prize of 30*l.* to the breeder of the beſt pen; alſo for pens of five fat wether ſheep of any ſhort-wooled breed, with or without horns, four or ſix toothed; the exact age, duration of work in the fold, period of fatting, and quality of food to be certified; a prize of 20*l.* to the breeder of the beſt pen.

Among the candidates for theſe prizes were five ewe hogs, of the Merino and Ryland breed, 12 months old, bred and belonging to Lord Somerville; five South Down ewes, 11 months old, bred by Sir Thomas Carr; five South Down ewes, 12 months old, bred by Mr. Coke; five South Down ewes, 12 months old, bred by Mr. Hill; five South Down ewes, 10 months old, bred by Mr. Weſterne; five South Down ewes, 11 months old bred on his Grace of Bedford's Maulden Farm; five South Down ewes, 11 months old, bred on his Grace of Bedford's Woburn Farm; five Dorſet ewes, 13 months old, bred by Mr. Bridge, &c. Alſo, five South Down wethers, 4 toothed, 24 months old, bred by Mr. Ellman, and fed by Mr. H. King, jun.; five South Down wethers, four toothed, 35 months old, bred by Sir Thomas Carr, &c. Two of each pen to be killed, and their carcaſes exhibited for the inſpection of the judges who are to decide the prizes, and of the company in general.

III. For the beſt fat pig of any age or breed, a premium, and a piece of plate. The candidates here were Mr. M. Duckitt's white ſow, two years and a quarter old; Mr. Whittle's large pig; Mr. Weſtern's three ſmall pigs; Mr. Wakefield's two ſmall pigs; Mr. Pickford's two large fat pigs; Mr. Smith's pigs, five months old; Mr. Hudſon's two ſmall pigs; Sir Thomas Carr's black pig; Mr. Clayton's fat pig, &c.

Beſides the candidates for prizes, Mr. Ellman ſhewed a very fine Suſſex cow; Mr. Coke, two South Down ſheep, three ſhears, and a new Leiceſter three-ſhear ſheep; the Duke of Bedford alſo ſhewed a South Down ſheep; Lord Somerville, a fine ewe, of the Merino and South Down breed; and Mr. Wakefield, a ſtallion and mare of the Suffolk breed, very fine made, handſome animals.

The carcaſes of two ſheep, of a croſs between the Spaniſh or Merino, and Ryland breeds, and two others of a croſs between the Spaniſh and South Down breeds, were exhibited, which were bred by Lord Somerville, and fed on graſs only, and were killed in preparation for the Dinner on the occaſion. Fatter or finer mutton need not be ſeen, although ſo much has been ſaid againſt the Spaniſh breed, on account of its not being diſpoſed to fatten.

In the centre of the yard ſeveral uſeful implements were exhibited, among them a Somerſetſhire waggon, with fifteen drags to leſſen the velocity of the carriage down a hill; Lord Somerville's patent ſhort beamed plough; Mr. Leſter's chaff cutter, rubbing, or threſhing machine; harrows, horſe-hoe, and a double ſhared plough, with a turnip drill attached.—Mr. Dugdale's horſe-hoe, turnip-drill, and a turnip-ſlicer; the latter is a very ſimple and uſeful implement.—Mr. Gibbs exhibited bags of the ſeeds of the following natural Graſſes: Anthoxantum Odoratum, Cynoſurus Criſſatus, Alepocurus Pratenſis, Aira Cœſpitoſa, Feſtuca Pratenſis, Aveoa Elatoir, Lolium Perenne, of an early or improved variety, and Dactylis Glomerata; alſo of Achilea Milifolia, or Yarrow; and Reſela Leuteola, or Weld, uſed in dying yellow colour.

Among the numerous and very genteel company aſſembled, we noticed his Grace the Duke of Bedford, Lord Somerville, Lord Wm. Ruſſel, Sir Thos. Carr, Sir Watkin Williams Wynne, Sir John Honeywood, Mr. Northey, Mr. R. Byng, Godfrey Thornton, Eſq. Mr. Higgins, Mr. A. Young, Dr. Cline, J. Perry, Weſtcar, Ellman, Buckley, Kirwan, Pickford, Honeybourn, Webber, Aſhley, Wheeler, Garton, Garment, Giblet, Wright, Foreſt, Hill, King, &c.

Mr. Garrard, the cattle modeller, was there, taking portraits of Mr. Webber's fine Devon ox, and of Mr. Coke's South Down ſheep.

It was an inſtruction to the Judges (Sir John Honeywood, Mr. Garſton,

Mr Wheeler, and Mr. Garment) that they are to conſider the diſtance travelled by the fat oxen to the place of ſhew, and the oil-cake eaten; and to have particular regard in the ſheep, to the quality of the carcaſes, aptitude to fatten, meat per acre of land, and quantity and quality of wool, for which purpoſe an experienced wool-ſtapler was to attend them when examining the ſheep.

On Tueſday, in addition to the articles ſhewn on Monday, Mr. Bridge ſhewed ſamples of Mr. Patterſon's improved Poland oat, of his remarkably fine oat, called the potatoe oat; alſo of a white tare, that is coming into uſe.—Mr. Plowman exhibited the model of a portable fold for ſheep, in which, by means of ſmall wheels, a whole ſide can be moved, or even the whole fold ſhoved upon freſh ground, daily, without taking it to pieces; it was ſtated, that Mr. Plowman, of Broom, in Suffolk, has had the fold, from which the model was taken, for more than two years in uſe; it appears alſo, that a ſlight alteration in the conſtruction of this uſeful fold, and making it ſtronger and heavier, would enable the farmer to pen hogs upon his clover, tares, or other green crops, which is a great *deſideratum* in agriculture. The carcaſes of eight very fine ſheep were exhibited, viz. the Duke of Bedford's South Down wethers, weighing 94lb. beſides 16½lb. of looſe fat; Mr. Coke's Leiceſter ewe 142lb. fat 11½lb.; Mr. Coke's South Down 162lb. fat 19½lb.; its fellow out of the ſame pen 132lb. fat 22lb.; Sir Thomas Carr's South Down 76lb. fat 12½lb.; its fellow 94lb. fat 11¼lb.; Mr. H. King, jun.'s SouthDown 74lb. fat 7½lb.; its fellow 74lb. fat 10½lb.—Mr. Garrard, the modeller, took a portrait of Mr. Wakefield's fine Suffolk ſtallion; and Mr. Mayburg, a painter, of two of Lord Somerville's oxen.

Soon after four o'clock, the Duke of Bedford, Lord Somerville, Lord William Ruſſell, and a number of other diſtinguiſhed perſons, left the yard, and ſoon after five o'clock the exhibition cloſed, and moſt of the cattle, &c. were removed in the evening; and none remained longer than the following evening, as was erroneouſly expected.

About ſix o'clock, near 250 perſons ſat down to a moſt elegant dinner, provided by the liberality of Lord Somerville, at Freemaſons' Tavern, which, with the wines, did great credit to the hoſt. Lord Somerville was in the Chair, ſupported by the Duke of Bedford, Earl Darnley, Earl of Macclesfield, Lord Sackville, and a moſt numerous circle of the nobility and gentry, who patroniſe and practiſe Agriculture. As ſoon as the cloth was withdrawn, his Lordſhip gave,

"The King, long life to him, and thanks for the honour he has always done us, in ſending cattle to our ſhow."

Which was drank with the moſt enthuſiaſtic applauſe.

The nine elegant ſilver cups intended to be preſented, were then placed upon the table before his Lordſhip; who gave,

"The Queen and Royal Family."

"The Judges of the Show: and thanks to them for their great attention."

His Lordſhip next gave,

"The memory of thoſe who have been diſtinguiſhed for their improved huſbandry—Mr. Bakewell, Mr. Duckett, and the late Duke of Bedford."

Next followed, "The farming Societies of Scotland and Ireland."

"The Earl of Egremont."———"The Plough."

His Lordſhip then gave the health of "Mr. Coke;" and pathetically lamented the abſence of that diſtinguiſhed agriculturiſt, on account of the death of a near relative. His Lordſhip then entered on the more immediate buſineſs of the evening, by ſtating, that it was his intention to continue the ſhow and premiums as heretofore, with ſome few alterations, expreſſed in the bills then circulating by his ſervant in the room, which, as they conſiſt only in the mention of two Pieces of Plate, value thirty and twenty pounds, inſtead of thoſe ſums, for the firſt and ſecond beſt pen of oxen; and of two Pieces of Plate, value thirty and twenty pounds, for the firſt and ſecond

beſt pair of five ſheep, inſtead of money; and in allowing, at the next ſhow, the admiſſion of oxen which have had corn, "on account of the exceeding drought of the year 1803, as occaſional exceptions to any rule, on juſt grounds, muſt be deemed equally ſalutary with the rule itſelf." We need not, therefore, repeat the conditions of the next ſhow, which is to take place at Langhorn's on Monday and Tueſday, the 5th and 6th of March, 1805.

His Lordſhip then proceeded to read the award of the Judges, and calling up Mr. H. King, jun. ſtated to him that the firſt prize was adjudged to his South Down oxen, which had been worked by himſelf (Lord Somerville) and deſiring him to make his election, either of 15l. in money as feeder, or of the third or fourth cup, ſtanding before him. he preferred a cup, and bore it off to his ſeat amidſt the plaudits of the company.

Mr. Webber was next called up, and informed that the ſecond prize was adjudged to his two Devon oxen, and he immediately choſe a cup inſtead of its value in money.

Mr. Hudſon was alſo preſented with a cup (not aſſigned him by the Judges) for having ſhewn a very ſuperior ox. The partner having fallen ill, he was deprived of the prize for the pair.

Mr. Lawman was aſſigned the next prize cup, for the third beſt ſhew of oxen.

Mr. Coke was adjudged a ſilver cup, for five ſtag ewes.

Sir Thomas Carr received alſo a large cup, for the ſecond prize of five wethers.

Mr. Ducket received a ſmall ſilver cup, for the beſt ſow pig.

Mr. Froſt received a ſmall cup, on the part of his Majeſty (not aſſigned by the Judges) for having exhibited a pair of excellent oxen.

Mr. Bridge obtained a cup, for his Dorſet ewe hogs.

Lord Somerville here took occaſion to propoſe a prize of three guineas to be given to the ſhepherd who ſhould rear, within a given period, the greateſt number of lambs in proportion to the ewes, as it would operate as a reward for the fidelity and attention of the ſhepherd.

A prize of two guineas was alſo propoſed to the ſhepherd who reared the next greateſt number. The Duke of Bedford's ſhepherd was deſired to make this communication known to the reſt of the ſhepherds

The healths of the Chairman, the Duke of Bedford, Mr. A. Young, and ſeveral Gentlemen, eminent for their agricultural purſuits, were then drank.

Among the company preſent were, the Duke of Bedford, Earl of Macclesfield, Lords Wm. Ruſſel, Romney, Darnley, Sondes, Newark, and Sackville; Sir W. Geary, Mr. Foſter, Hon. G. Villiers, Gen. Harcourt, Mr. Byng, and Mr. A. Young.

The truly munificent conduct of Lord Somerville cannot but demand the warmeſt praiſe. His Lordſhip diſburſes from his private purſe thoſe *premiums*, which operate as an incitement to the breeding and feeding of cattle, on a ſyſtem which has not vain oſtentation, but public utility, for its object. Such efforts, ſo laudably exerted, will, we truſt, not prove in vain.

The following inſtance of extraordinary increaſe from a Cow, the property of Mr. Geo. Young, on a Farm of Miſs Sloper's, near Weſt Auckland, in the county of Durham, may be depended on as perfectly correct.—At eight births ſhe has produced fourteen calves, viz. four ſingle ones, twice twins, and twice three: the whole number were fine healthy calves; eleven of them have been reared, the mother is doing well,—and one, at leaſt, of her daughters promiſes to follow her prolific example. On the 13th of March, 1804, the Cow was only ten years old.

PARTICULARS.

At 3	years old, ſhe had	1 Calf
— 4	———————	1
— 5	———————	2
— 6	———————	2
— 7	———————	1
— 8	———————	3
— 9	———————	1
—10	———————	3 February 1804.
		14

Eſſex Agricultural Society.

At a ſpecial Meeting of this Society, convened by the authority of the Preſident, the Right Hon. Lord Braybrooke, and held at the Shire Hall, at Chelmsford, on Saturday the 25th February, 1804, for the purpoſe of taking into conſideration the effect of the high Duties on Barley, the preſent operation of the Corn Act of the 31ſt of his Majeſty, and other matters relative thereto;

CHARLES C. WESTERN, Eſq. in the Chair,

It was reſolved,

That the late returns of Mark-lane and other Markets, exhibit an average price of the ſeveral ſorts of grain, which, conſidering the *increaſed wages of labour, tradeſmen's bills, public and parochial taxes, rents, and tythes*, will not afford to the grower the expence of cultivation, and intereſt for his capital employed.

Reſolved, That although the abundant harveſts of the two laſt years obviouſly preſent ſufficient reaſon for the reduction of the price of all grain to a moderate and deſirable rate, yet the exceſſive depreſſion of the markets has ariſen from other cauſes, which it is hoped the legiſlature will, upon proper application, in its wiſdom, remove, as well from regard to the intereſts of the community at large, as to thoſe of the land proprietor and occupier.

Reſolved, That the heavy duties upon Malt and Beer, which have been recently impoſed, have materially contributed to the exceſſive reduction of the price of Barley.

Reſolved, That the advantage which the Iriſh diſtillers enjoy, from diminiſhed duties allowed in certain caſes, (now become almoſt general) and the conſequent importation of raw-ſpirits from Ireland, for the uſe of the Engliſh rectifying diſtiller, has to an infinite degree reduced the demand of the Engliſh Malt Diſtiller, for malt; the growth of this country, and proportionably diminiſhed the price of barley.

Reſolved, That the export and import prices of the Corn Act of the 31ſt of his Majeſty, compared with the increaſed expences of cultivation ſince that period, are evidently unſuited to the preſent times, and require to be reviſed and altered. The Society does not venture to offer its opinion upon the great queſtion of *free* export and import, but preſuming the ſame ſyſtem of *regulated* export and import to be continued, it is decidedly of opinion the ſame rates cannot now apply.

Reſolved, That it appears upon authentic documents, that, antecedent to the year 1765, the balance of Exports and Imports was conſiderably in favour of this country, and afford a very profitable trade. That ſoon after that time, and particularly ſince the period of the Act of the 13th of His Majeſty, up to the preſent moment, the exportation trade was loſt, and the balance on the average has been very materially againſt this kingdom.

Reſolved, That in order to prevent the return of ſcarcity in future years, and to promote effectually the permanet intereſts of the community, it is neceſſary to direct the national efforts to the acquiſition again of a ſurplus produce and an export trade; and that this can alone be done by ſecuring to

the grower, in *all* caſes, an *adequate* price for *ſuch ſurplus* produce, calculating the expences of cultivation and fair intereſt of capital.

Reſolved, That all bounties upon *importation* are highly prejudicial, as tending only to encourage the growth of corn in other countries, at the charge of the revenue, and diſcouragement of the Agriculture of this kingdom.

Reſolved, That this Society do recommend, and will promote to the utmoſt of its power, an immediate application to the legiſlature, of the land-owners and occupiers of this county, founded upon the principles, and directed to the objects of the foregoing reſolutions.

Reſolved, That copies of theſe Reſolutions be tranſmitted to the Board of Agriculture, and the different Agricultural Societies throughout England.

(Signed) CHARLES C. WESTERN, Chairman.

Reſolved, that the thanks of the meeting be given to Charles C. Weſtern, Eſq. for his attention and able conduct in the chair.

Shire-Hall, Chelmsford, Feb. 1804.

It was further reſolved, That Twenty guineas, preſented to the Society by Charles Callis Weſtern, Eſq. to be applied to the encouragement of induſtrious labourers, be given to ploughmen and boys, upon matches or trials of ſkill in ploughing, in four diviſions of the county, as under, and according to the direction of the gentlemen here mentioned:

Diviſion of Coggeſhall and neighbourhood—Filman Honeywood, Eſq.

Diviſion of Malden and neighbourhood—Thomas Lee, Eſq.

Diviſion of Harlow and neighbourhood, Montague Burgoyne, Eſq.

Diviſion of Chelmsford and neighbourhood, Mr. Maſon, of Crondon-Park.

That an auctioneer be engaged to attend at the annual ſhow of ſtock, at Chelmsford, on Friday the 25th of May next, for the purpoſe of ſelling ſuch ſtock as gentlemen may think proper to ſend, whether for prize exhibition or for ſale only; alſo for the letting of tups, or other ſtock that may be brought there for that purpoſe.

(Signed) CHARLES CALLIS WESTERN, Chairman.

Shire-Hall, Chelmsford, Feb. 25, 1804.

N. B. Notice of Stock intended to be ſold at the ſhow, muſt be ſent in due time to Mr. Goulding, at Chelmsford, that the revenue officer may be appriſed thereof.

Norfolk Agricultural Society.

A General Meeting of this Society was held at Lynn, on Wedneſday, the 22nd of February, 1804, at which were preſent—

Thos. Wm. Coke, Eſq. Preſident	Mr. Godfrey
Sir Richard Budingford, Bart.	Mr. Buhor
H. Styleman, Eſq.	Mr. Purdy
A. Hammond, Eſq.	Mr. Purdy, jun.
Governor Bentinck	Mr. Horſeley
M. F. Riſhton, Eſq.	Mr. A. Beck
W. Hoſte, Eſq.	Mr. Carr
E. Rolfe, Eſq.	Rev. T. Weathearhead
Rev. A. Wodehouſe	Mr. Bolwell
Dr. Marſhall	Mr. W. M. Hill
Mr. Duſgate	Mr. Money
Mr. T. Holland	Mr. Seppings
Mr. E Holland	T. Bagge, Eſq. Treaſurer
Mr. H. Blyth	Rev. St. J. Prieſt, Secretary

Twenty guineas were ordered to be paid by the Treaſurer, towards carrying on the Petition to Parliament, from the land-owners, barley-growers, and maltſters of this county.

New premiums were offered for ſheep, to be ſhewn at Swaffham, on the anniverſary, viz. for ſingle ſhearling rams, and pens of ſhearling ewes,

consisting of three each of the three breeds. Premiums were offered also for the best fleeces of wool, of the two breeds: for the best boar and sow, not more than three years old: for the best bull, three years old: for the best cow, not more than four years old: and for the best heifer, two years old.

The premiums for shepherds are the same as last year, with the following regulations:—That the number of ewes put to tup must be certified, as well as the number of ewes and lambs which a claimant has, any day within a fortnight, before the meeting of the Committee, previous to the anniversary; and every claimant must apply to the Secretary for the form of a certificate.

All these premiums were ordered to be advertised in the four county papers, to appear in the month of March, or April.

The following premiums were adjudged:—

A piece of plate, of ten guineas value, to S. Bevan, Esq. of Riddlesworth, for converting unimproved meadows into water-meadows, in the year 1803.

Four pens of South Down shearling wethers, consisting of ten each, one pen of Leicester shearlings, and one of Norfolk shearlings, were shewn for the prizes.

The first prize, a piece of plate, of seven guineas value, and one guinea to his shepherd, was adjudged to Mr. Purdy of Egmore.

The second prize, a piece of plate of five guineas value, and one guinea to his shepherd, to T. W. Coke, Esq.

The pen of Leicesters belonging to Mr. Purdy, of Egmore, and being without competition, gained the prize of a piece of plate of five guineas value, and one guinea for his shepherd.

The pen of Norfolks belonged to Mr. Harpley, of Norton, and gained the prize of a piece of plate of five guineas, and one guinea for his shepherd.

The best of the South Downs and Leicesters were slaughtered immediately after the shew, and the best of the Norfolks at their own home.—Their weight was as follows:—

Mr. Purdy's South Down	st.	lb.	*Mr. Purdy's Leicester.*	st.	lb.	*Mr. Harpley's Norfolk*	st.	lb.
Blood		6	Blood		5½	Blood		9
Skin		15½	Skin		17½	Skin		14½
Entrials		7	Entrials		8	Entrials		18
Head and Pluck		8¾	Head and Pluck		8½	Head and Pluck		11½
Fat		18	Fat		15	Fat		16
Mutton	8	2	Mutton	7	7½	Mutton	7	9

The South Down and Leicester were then sold to Mr Smith, a butcher at Lynn, estimating the former at 8lb. per quarter, and the latter at 26lb. per quarter, for 7d. per lb. for the mutton, and an halfpenny per lb. for the offal. —Hence the

	£.	s.	d.
Price of the shearling South Down was	3	10	0
Ditto Leicester – – – –	3	5	0
Ditto Norfolk – – – –	3	6	0

The general opinion was, that of the Leicesters and South Downs, before they were slaughtered, the Leicesters weighed the most.

Mr. Beecher, of Docking, exhibited a shearling wether, from a Wiltshire ewe, by a Leicester tup, which was deemed a very useful marsh-sheep; he is to be shewn again this time twelvemonth, when it is supposed he will weigh 36lb. per quarter.

Mr Beecher also produced a white home-bred ox, four years old, which was thought worthy of notice.

Mr. Skippon exhibited a red home-bred bullock, which was esteemed an excellent and useful beast.

The thanks of the Society were given to Mr. Beecher and Mr. Skippon, for shewing the above.

The following gentlemen were elected members of this Society:—

Richard Johnson, Esq. of Swaffham.

Mr. William Lubbock, of Lammas
Mr. Thomas Rackham, of Ripon-Hall
Mr. Samuel Bircham, Reepham
Mr. Baker Rackham, of Brandiſton
Mr. Bucke, of Worlington
Mr. Bolwell, Veterinary Surgeon, of Swaffham.

ORDERED,

That the next meeting of the Committee ſhall be held at Eaſt Dereham, for the purpoſe of paying the premiums adjudged, and of auditing the accompts; that the meeting of the Committee, previous to the anniverſary, ſhall be held at Fakenham, on Wedneſday the 6th of June; that both of theſe meetings ſhall be advertiſed, and the names of the members who compoſe the Committee, be inſerted.

ST. JOHN PRIEST, Secretary.

Hereford Agricultural Society.

The exhibition of bulls, on Monday March 19, far exceeded in quality and number thoſe ſhewn on any ſimilar occaſion, The ſucceſsful candidates for the premiums were Mr. Barnett, of Ledbury, T. A. Knight, Eſq. Mr. Samuel Tully, Mr. Joſeph Tully, and Mr. Weaver, of Bunſhill. A fat pig, the property of Mr. Hewer, of Abergavenny, was much and deſervedly admired.—A ſilver cup, of the value of twenty-five guineas, was voted to Mr. Berrington, of Buttas-Green, near Leominſter, in approbation of his profeſſional ſkill and ſervices, as a Veterinary ſurgeon.

Lincolnshire Division of Lindsey.—Agricultural Society.

The Right Hon. Lord YARBOROUGH, Preſident.

GEORGE THOMAS HENEAGE, Eſq. and JOSEPH LIVESEY, Eſq. } Vice-Preſidents.

At a meeting of the Committee appointed by this Society, the following premiums were ordered to be offered for Stock bred within the ſaid diviſion, and to be ſhewn at the Talbot Inn, in Caiſtor, in the County of Lincoln, on Friday the 15th day of June, 1804, at 11 o'clock in the forenoon.

	£.	s.	d.
For the beſt ram-hog	5	0	0
Second beſt ditto	2	2	0
For the beſt ſhearling-ram	5	5	0
Second beſt ditto	2	2	0
For the beſt aged ram	5	5	0
For the beſt ſix ewe-hogs	5	5	0
For the beſt bull, not exceeding two years old when ſhewn	5	5	0
Second beſt ditto	2	2	0
For the beſt aged bull	5	5	0
Second beſt ditto	2	2	0
For the beſt heifer, not exceeding two years and a quarter old when ſhewn	5	5	0
Second beſt ditto	2	2	0
For the beſt boar	1	1	0
For the beſt gilt, not exceeding nine months old when ſhewn	1	1	0

Note.—The ſheep are to be ſhewn in their wool, and immediately afterwards ſhorn and ſhewn. And the owner of the aged bull not to receive the premium two years together for the ſame beaſt, unleſs the judges ſhall determine the contrary.

Alſo ordered by the Committee, That a premium of Ten Guineas be given for the beſt bull (not bred within the ſaid Diviſion, but to be the property of a ſubſcriber) from any part of England, to be allowed by the judges to be ſuperior to any bull ſhewn for the premiums, and with a reſtriction that he ſhall remain, and be uſed twelve months in the ſaid diviſion; but if ſhewn two years together, it ſhall be left to the judges to allow the premium or not, as ſettled reſpecting the aged bull.

And that a premium of Ten Guineas be given for the beſt black ſtallion, from any part of England, but to be the property of a ſubſcriber, and with a reſtriction that he ſhall remain and be uſed in the ſaid Diviſion, the preſent ſeaſon: and if only one ſhewn, the judges are to determine whether the owner of ſuch horſe ſhall be entitled to the premium or not.

Theſe premiums will be decided at the meeting, and certificates of the age required.

No ſtock to be entitled to the premiums, without full proof of its being bred in the ſaid diviſion, except as to the premiums of ten guineas for the horſe and bull. No perſon to be entitled to a premium without firſt becoming a ſubſcriber. If only one of a ſort of ſtock be ſhewn (where more is required) the judges ſhall give ſuch premium as they think proper, not exceeding thoſe allowed by the Committee.

The ſtock not confined, to be kept on vegetable food only, a declaration will be required at the time of ſhewing, in what manner the ſame have been kept: and perſons intending to become candidates, are deſired to give 14 day's notice to the Secretary.

The male ſtock to be ſhewn, are intended to be let or ſold for the uſe of the county, at ſuch prices only as may be agreed upon between the owners and perſons wiſhing to become purchaſers.

COMMITTEE.

Philip Shipworth
William Thorpe
Woodthorpe Johnſon
John Dudding Panton
John Waleſby.

The following premiums, offered at the meeting of the 24th of Auguſt, 1803, have been adjudged by the Committee:

To William Sleight, of Tealby, for bringing up the moſt numerous family without parochial aſſiſtance.

To John Clarke, of Market Raiſin, labourer in huſbandry, the longeſt time on one farm.

To John Turford, of Barkwitt, ſervant in huſbandry, the longeſt time with one maſter.

N. B. The perſons entitled to the laſt mentioned premiums, may receive the ſame on application to,

Barton upon Humber, Feb. 28, 1804. THOS. MORRIS, Secretary.

York Agricultural Society.

At an half-yearly meeting of this Society, held at the York-Tavern, the 22nd of March 1804,—Hall Plumer, Eſq. Vice Preſident, in the chair; H. J. Baines, Eſq. Vice Preſident, Deputy Chairman, the following gentlemen were appointed judges, viz. Thomas Kendal, Eſq. of Neſs; Mr. Thomas Kendal of Fulford; and Mr Richard Scott, of Coxwold, who adjudged the premium for ſtock as under:—

	£.	s.	d.
Mr. Wilkinſon, of Owſton, for the beſt three years old, or aged bull	5	5	0
Mr. Rob. Wood, of Martin Lordſhip, for the ſecond beſt ditto	3	3	0
Mr. Nicholſon, of Gibton, for the beſt two years old bull –	5	5	0
Mr. William Wharram, for the ſecond beſt ditto – –	3	3	0
Mr. John Bulmer, of Hutton Ambo, for the beſt year old bull	5	5	0
Mr. John Dunnington, of Thorganby, for the ſecond beſt ditto	3	3	0
Mr. Rob. Wood, of Marton Lordſhip, for the beſt ſtallion for getting hunters — — — —	5	5	0
Mr. Rob. Wood, for the beſt ſtallion for getting coach-horſes	5	5	0
Mr. Thomas Weſt, of Eddlethorpe, near Malton, for the beſt ſtallion for getting road-horſes — —	5	5	0
Mr. William Thompſon, of Riccall, for the beſt ſtallion for getting cart-horſes — — — —	5	5	0

There was no competition for the hunter and cart-horſe premiums, but the Judges thought Mr. R. Wood, and Mr. W. Thompſon entitled to the premiums.

The premium of £2. 2s. for the beſt crop of ſpring tares, was adjudged to Mr. John Hartley, of Tadcaſter; and the thanks of the Society were voted to him for his obliging communication on the culture thereof

The following gentlemen were appointed officers, and a Committee for the

year enſuing :—Sir W. M. Milner, Bart. M. P. Preſident; H. M. M. Vavaſour, and B. Agar Eſq.s, Vice-Preſidents; Thomas Hartley, Eſq. Treaſurer; Mr. D. Tuke, Secretary.—

COMMITTEE.—Mr. G. Addirrell, Tadcaſter; H. J. Baines, Eſq Mr. T. Armſtrong, Spring-Houſe; C. Crompton, Eſq. Nun-Monkton; Mr. M. Croſs, Langton; Mr. G. Hardwicke, Burton-Houſe; T. Hartley Eſq. York; Mr. J. Hartley, Tadcaſter; Mr. Haſſel; H. Plumer, Eſq. Bilton; Mr. T. Kendal, Fulford; Mr. W. Laycock, Appleton; Mr. T Laycock, ditto; Mr. J. Milner, Biſhopthorpe; Rev. Mr. Read, Sand-Hutton; Mr. Rocliffe, Eaſingwold; J. Tweedy, Eſq. York; Mr. J Tuke, York; T. Kendal, Eſq. Neſs; S. Croft, Eſq. Stillington; Mr. Dowket, Salton

The ſilver medal of this Society was voted to Mr. J. Tuke, for his ſervices as Secretary.

The Committee are deſired to meet at the York-Tavern, on Thurſday, 5th day of April next.

Additional Subſcriptions received.

	£.	s.	d.		£.	s.	d.
H. M. M. Vivaſour, Eſq.	1	1	0	Mr. T. Hodgſon, Harley *(addition)*	0	10	6
Mr. Nicholſon, Gibton	1	1	0				
Mr. M. Wilkinſon, Owſton	0	10	6	Mr. J. Cartwright, York	0	10	6
Mr. Wharram, Overton	0	10	6				

Low Price of Corn.

At a meeting convened for the purpoſe of taking into conſideration the low price of corn, and held, purſuant to advertiſement, at the Rein Deer inn, in the city of Lincoln, on Friday, the 24th day of February laſt, John Harriſon, Eſq. M P. in the chair; it was, amongſt other things,

Reſolved, That a Petition (a copy whereof is here-under written) ſhould be preſented to the Honourable the Houſe of Commons.

" To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament aſſembled.

" The humble Petition of the Land-Owners, Barley-Growers, and others intereſted in the growth of corn, of the county of Lincoln, whoſe names are hereunto ſubſcribed—

Sheweth, That your Petitioners have ſeen, with a conſiderable degree of alarm, the Price of Barley for ſome time paſt greatly decreaſing, with an increaſing difficulty in the ſale of it, even at a price below what will repay them the expences they are at in the growth of it, and at the very increaſed price of labour and the heavy charges of taxes and parochial rates, and apprehend, that unleſs ſome means are adopted by the Legiſlature to render the ſale more eaſy, with ſome advance in the price, that they will be obliged to change the ſyſtem of cropping their land, which they have purſued with much advantage to themſelves and the public for many years paſt.

Your Petitioners humbly repreſent to this Honourable Houſe, that they apprehend the great and rapid decreaſe in the price, and dullneſs in the ſale of barley is in ſome meaſure owing to the late new and heavy duty on malt, which has reduced the conſumption amongſt the farmers and middling claſs of houſekeepers, and has alſo made a conſiderable number of perſons with ſmall capitals, who uſed to follow the buſineſs of maltſters, entirely relinquiſh the trade, from their capital not being ſufficient to enable them to advance the preſent high duty on the quantity of malt ſufficient to ſupply their cuſtomers till the time of malting after the next harveſt, which has taken an great number of buyers out of the market, yet has deſtroyed that competition which uſed greatly to facilitate the ſale, and contribute to keep the price at a fair ſtandard betwixt the grower and the conſumer; which circumſtances, together with the decreaſe in the demand for the conſumption of the malt-diſtillers, occaſioned, as your Petitioners conceive, by the importation of raw-ſpirits at a price below what the Engliſh malt-diſtillers can, under the high exiſting duties, afford to ſell them to the refiners; and their being ſhut

out from any foreign market, by the high duty upon Britiſh ſpirits, has together ſo much reduced the conſumption of barley and malt, that unleſs meaſures are adopted by the Legiſlature to quicken the ſale and increaſe the demand, by allowing a drawback on the exportation of Britiſh Spirits, to induce the Engliſh malt-diſtillers to conſume a greater quantity of barley, your petitioners apprehend that there will be a conſiderable quantity of the laſt year's crop left unſaleable upon the hands of the grower; a circumſtance which muſt operate very ſtrongly in reducing the quantity of corn grown in future years.

Your Petitioners beg leave further to obſerve, that from the great change the corn-trade has undergone within theſe laſt ten years, the act paſſed in the 31ſt of his preſent Majeſty, for the regulation of the export and import of corn, is wholly inadequate to the purpoſe intended by the Legiſlature, and in many inſtances operates very ſtrongly to reduce the price of all ſorts of corn, much below what they can be afforded at under the exiſting circumſtances, and conſequently to diſcourage the growth of corn in this country.

"Your Petitioners, therefore, humbly pray, that this Honourable Houſe will take the above matters into their early and moſt ſerious conſideration, and by a reviſion of the corn laws, and by regulations in the revenue laws, reſpecting the malt and malt-diſtillers, adopt ſuch meaſures as may appear to the wiſdom of the Houſe, the beſt calculated to encourage the growth of corn in this kingdom, as the beſt means of preventing the return of thoſe heavy loſſes by bounties, and the purchaſe of foreign corn, which the naton ſuſtained in the laſt deficiency in the growth of corn, for the ſupply of the home conſumption of the county. And your Petitioners will for ever pray, &c. &c."

Which petition now lies for ſignature, at the Rein Deer inn, aforeſaid.—Copies are alſo forwarded to Gainſborough, Brigg, Grimſley, Barton, Caiſtor, Raiſin, Louth, Horncaſtle, Alford, Sleaford, Grantham, Stamford, and Boſton.

Lincoln, and March, 1804.

Malt Duties.

At a meeting of the land-owners, land-occupiers, and maltſters, of the county of Eſſex, convened for the purpoſe of taking into conſideration a petition to Parliament, on the ſubject of the high duties on malt, the inequality of duties on the Engliſh and Iriſh diſtiller, the preſent operation of the corn-act of the 31ſt of his preſent Majeſty, and other matters relative thereto, held at the Black-boy inn, at Chelmsford, on Friday, the 9th of March, the Right Hon Lord Braybrook, the lord lieutenant of the county, in the chair; the following petition was moved by Charles C. Weſtern, Eſq.

"To the honourable the Houſe of Commons, of the united kingdoms of Great Britain and Ireland, in Parliament aſſembled.

"The humble PETITIONS of the land owners, land-occupiers, and maltſters, of the county of Eſſex.

"SHEWETH,

"That your Petitioners, the land-owners, land-occupiers, aed maltſters, of the county of Eſſex, have ſeen with great anxiety and concern, that the preſent operation of the corn-laws, combined with certain other cauſes, to which they humbly entreat the attention of this honourable Houſe, is likely to affect materially the agriculture of this kingdom, and has already occaſioned to your Petitioners very conſiderble injury.

"Your Petitioners venture to declare their opinion, that the provſions of the laſt corn-act, of the 31ſt of his Majeſty's reign, are wholly unſuited to the preſent times; that referring to the export and import prices of that act, and calculating the expence of cultivation at *that* period, compared with the preſent, it will evidently appear that the *rates thus* eſtabliſhed cannot now by any means apply; they therefore moſt humbly hope that the ſame may be reviſed and altered.

"Your Petitioners alſo apprehend, that the late very heavy additional duties on malt and beer, have in a great meaſure decreaſed the conſumption

of barley, and thereby materially contributed to the extreme reduction of the price thereof.

"Your Petitioners alſo find that the advantage which the Iriſh diſtillers enjoy, from continued bounties allowed in certain caſes, and the conſequent importation of raw ſpirits from Ireland, has greatly reduced the demand of the Engliſh diſtiller for malt, and proportionably diminiſhed the price of barley.

"Your Petitioners alſo underſtand that a reduction of the duties impoſed during the laſt ſeſſions, upon malt and beer, has been allowed on malt made from barley grown in Scotland, to the diſadvantage and injury of the barley-growers, maltſters and diſtiller sof this part of the kingdom.

"Your Petitioners, therefore, moſt humbly pray, that this honourable Houſe will take the above matters into its early conſideration, and particularly that the corn-act, of the 31ſt of his preſent Majeſty, may be reviſed and altered and ſuch a ſyſtem of permanent laws eſtabliſhed, as ſhall afford protection and encouragement to the agriculture and cultivation of this kingdom, and otherwiſe to grant ſuch relief as this honourable Houſe ſhall in its wiſdom judge fit and expedient.

"And your Petitioners, as in duty bound, will ever pray, &c. &c."

Upon the queſtion being put by the chair, that the meeting do approve the ſaid petition, it was carried unanimouſly.

It was further reſolved that the county members be requeſted to preſent it as ſoon as ſigned.—The thanks of the meeting were voted to Lord Braybrooke upon his leaving the chair, which was then taken by John Strutt, Eſq. and ſeveral other reſolutions were agreed to.—A Committee was appointed to co-operate with gentlemen that may be deputed from other counties, and a ſubſcription was entered into, for the purpoſe of defraying any expence that may be incurred.—The Petition was ſigned by a number of noblemen and gentlemen, and it is expected the number of ſignatures will be beyond example:

A Suſſex ox, bred by Mr. Vaux, of Shipley, and fatted by Mr. W. Carter, of Beeding, was on Monday, March 12, ſlaughtered by Mr. Myrtle, butcher, West-ſtreet, Brighton, the carcaſe of which weighed 16a ſtone, and out of which, no leſs than 33 ſtone 2 pounds of looſe fat was taken by the butcher. The above animal was eſteemed by jndges who ſaw him, one of the completeſt in point of cutting and proof, ever exhibited in any market.

Tueſday, March the 27th, a full Board of Agriculture, was held in Sackville-ſtreet, when Lord Sheffield was re-elected Preſident, and Arthur Young, Eſq. Secretary.—George Smith, Eſq. was at the ſame time elected Treaſurer to the Board. Afterwards the following noblemen and gentlemen were elected ordinary members, in the room of the five members who go out by annual rotation: viz. the Earl of Suffolk, the Biſhop of Llandaff, Edward Loveden, Eſq. M. P. Thomas William Coke, Eſq. M. P. and Thomas Tyrwhitt, Eſq. M. P. and Richard Brinſley Sheridan, Eſq. has been unanimouſly elected an honorary member.

The Petition of the land owners, and occupiers, &c. of the County of Eſſex, praying for a reviſion of the Corn Laws which paſſed in the 31ſt of the King, as inapplicable to the preſent intereſts of the grower or conſumer of corn, will be preſented to parliament immediately after the receſs.—Several of the neighbouring counties have convened meetings to adopt this neceſſary meaſure

Shrewſbury Fair. On Saturday, March 24, the ſale of cattle, ſheep, and pigs was heavy, and prices low. Good horſes ſold well. Cheeſe from 58s to 68s per cwt.

Roſs Fair. On Thurſday, March 15, there was a very fine ſhew of cattle; and many reputable graziers being preſent, the ſale was briſk, and good prices were given. The ſhew of horſes and ſheep was ſmall, and the ſale dull. Beſt cheeſe ſold from 70s to 78s per cwt.

LONDON PRICES OF GRAIN for *March*, 1804.

MARK-LANE, *Monday, March* 5.

OUR arrivals of Wheat have not been great for this day's Market, and the fine, of which we have but few ſamples, are dearer, ſay 1s. per quarter; the bulk of the inferior ſorts remain heavy, and at laſt week's quotation. Barley is 1s. per quarter higher, and Malt continues steady, but at no advance. Tick Beans (having a plenty) are ſomething cheaper; but in the other ſorts, and Peaſe, we have no alteration to note. The ſupply of Oats not being large, and the demand conſiderable, they are 1s. per quarter dearer.

Price of Grain, on board Ship, as under.

Wheat	28s to 53s	Malt	48s to 55s od	Grey Peas	27s to 30s od
Fine	54s to 56s od	Oats	18s to 22s	Small Beans	25s to 31s
Rye	28s to 32s	Polands ditto	23s to 24s 6d	Old ditto	27s 31s
Barley	18s to 23s 6d	White Peas	27s to 34s od	Ticks	21s to 25

Monday, March 12.

Fine Wheats were in conſiderable requeſt this morning, and the ſupply being ſmall, they were 1s. per quarter dearer than laſt Monday. The general bulk, likewiſe obtained rather better prices, but there was not an equal degree of briſkneſs in the ſales. Barley and Malt were both a ſhort ſupply, but not dearer. Beans and Peaſe of the different kinds are ſomething higher, as are Oats; the latter, from an inconſiderable ſupply and large demand, have advanced 1s. per quartet ſince laſt week.

Wheat	30s to 45s	Malt	48s to 55s od	Pearls	0s od
Fine	55s to 56s od	Oats	19s to 24s	Grey Peas	28s to 31s od
Rye	29s to 32s od	Polands ditto	25s to 26s od	Sm. Beans,	27s to 32s od
Barley	18s to 23s od	White Peas	27s to 35s od	Ticks,	32s to 35s od

Monday, March 19.

We had plentiful ſupplies of Wheat, from Kent, Eſſex, and Suffolk, for this day's Market. Fine Samples (as of late) ſold freely at laſt Monday's prices; but not ſo the ordinary ſorts, which went off heavily, and were ſomething cheaper. We had likewiſe many arrivals of Barley, which alſo felt a ſmall depreſſion in price. Horſe and Tick Beans are cheaper, particularly the latter, of which we have a great ſupply. Peaſe remain without much variation; but Oats, of which we have large arrivals, both coaſtways and foreign, are 1s. per quarter cheaper.

Wheat	28s to 54s	Malt	49s to 55s od	Grey Peas	29s to 32s 6d
Fine	55s to 57s od	Oats	18s to 22s	Beans, new	27s to 32s od
Rye	28s to 31s od	Polands ditto	23s to 24s 6d	Ticks	23s to 28s od
Barley	18s to 23s od	White Peas	30s to 35s od		

Monday, March 26.

The ſupply of Wheat for this day's market is but ſmall, and the ſales of prime ſamples very briſk; the other ſorts ſtill, however, want buyers and better prices. Good Malting Barleys and fine Malt obtain ſomething more than laſt week. White Peaſe are cheaper: but Grey Peaſe, with Horſe and Tick Beans, remain nearly at par with laſt quotation. Oats are 1s. per quarter dearer, owing to a ſhort ſupply.

Wheat	27s to 55s	Malt	50s to 56s od	White Peas	30s to 35s od
Fine	55s to 57s od	Oats	18s to 23s	Grey Peas	27s to 31s od
Rye	28s to 31s	Polands	24s to 25s 6d	Beans, new	27s to 33s od
Barley	19s to 24s 6d			Ticks, new	24s to 30s od

BANKRUPTCIES AND DIVIDENDS,

Announced between the 20th of February, and the 20th of March, 1804.

BANKRUPTCIES.

The Solicitors' Names are between Parentheſes.

ALDERSON, Chriſtopher, Beccles, grocer. (E. and T. Dawes, Angel court, Throgmorton ſtreet
Allan, John, ſen. Jewry ſtreet, victualler. (Lewis, New ſquare, Minories
Beetham, W. S. Furnival's inn court, printer. (Beetham, 6, Bouverie ſtreet
Bull. Thomas, Broad ſtreet, Briſtol, brandy merchant. (Blandford and Sweet, Inner Temple
Bedd, Amplias, Aldermanbury, warehouſeman. (Hurd, King's bench walk, Temple
Beck, John, Workington, wine merchant. (Bacon, Southampton ſtreet, Covent Garden
Bulgin, William, Briſtol, printer and bookſeller. (Shawe, New Bridge ſtreet, Blackfriars
Black, George, and Alexander Stephen, Buſh lane, dealers in coals.) Harman, Wine-office court, Fleet ſtreet
Berry, William, Oakham, apothecary. (Rigge and Merrifield, Carey ſtreet
Blowers, John, Haleſworth, ſhopkeeper. (Tarrant and Moule, Chancery lane
Battinſon, Richard, and Samuel Wade, Manchester, merchants. (J and R. Willis, Warnford court
Bury, William, jun. Pilton, clothier. (Luxmoore, Red Lion ſquare
Crooke, James, Colne, cotton manufacturer. (Ellis, Curſitor ſtreet
Collins, Thomas. Crediton, ſerge maker. (Darke, Princes ſtreet, Bedford row
Davis, Benjamin, Chatham, money ſcrivener. (Fowell, Eſſex ſtreet, Strand
Dunkin, John, Redcroſs ſtreet, rectifier. (Martin, Vintner's hall
Edwards, William, New Bond ſtreet, goldſmith and jeweller. (Nelſon, Maddox ſtreet
Etches, James, Daventry, mercer, trading in the firm of Etches and Poole. (Wainwright, Hare court, Temple
Engliſh, Sarah, Charing croſs, hoſier. (Hodgſon, Charles ſtreet, St. James's
Evans, Henry, Calne, clothier. (Sandys, Horton, and Trevenen, Crane court, Fleet ſtreet
Fell, Joſeph, Whitby, ropemaker. (Roſſer, Kirby ſtreet, Hatton Garden
Faſſon, Thomas, Biſhopſgate ſtreet within, pewterer. (Jones, Lord Mayor's Court office, Royal Exchange
Godfrey, Daniel, Moorfields, broker. (Cheſter, Melina place, Weſtminſter road
Heſketh, George Gaſkell, Manchester, grocer. (J. C. and C. Jackſon, Walbrook
Hindley, Thomas, and Samuel Cooling, Manchester, calico manufacturers. (Hewitt, Manchester
Hunt, Walter, Putney, grocer. (Lucket, Baſinghall ſtreet
Hopwood, Thomas, Rochdale, plumber. (Battye, Chancery lane
Haynes, Thomas, Oundle, nurſery and ſeedſman. (Kinderley, Long, and Iuce, Symond's inn
Johnſon, Thomas, Leiceſter, carpenter. (Taylor, Southampton buildings
Jenkinſon, Richard, Pocklington, money ſcrivener. (Croſfield and Moore, Salisbury reet, Strand
Kingſbury, Daniel, Exeter, factor. (Flaſhman, Ely place
Knight, William, Tunbridge Wells, banker. (Blandford and Sweet, King's Bench walk, Temple
Leeming, Thomas, of Preſton, John Myres of Cleckheaton, and William Chapman, of Preſton, worſted manufacturers. (Evans. Thavies inn
Lloyd, Thomas, Billiter ſquare, merchant. (Kayll, Tower royal
Liptrap, John, and Samuel D. Liptrap, Whitechapel, diſtillers. (Druce, Billiter ſquare
Leonard, Charles, Weſt Bromwich, ironmaſter. (Egerton, Gray's inn ſquare
Lawſon, William, and William Byron, Lincoln, drapers. (Bland, Racquet court, Fleet ſtreet
Lawton, James, Dobcroſs in Saddleworth, ſhopkeeper. (Battye, Chancery lane
Martin, Thomas, Birmingham, and Thomas Nicholls, trading at Birmingham in the firm of Martin and Co. and at Stone, in the firm of Nicholls and Co. (Conſtable, Symond's inn
Martindale, John, New Bond ſtreet, wine merchant. (Dewbery, Conduit ſtreet
Mathews, William, Long lane, Southwark, vellum and parchment maker. (Roche, Nicholas lane, Lombard ſtreet
M'Cabe, Edward, Broad ſtreet, Bloomsbury, hat maker. (Fothergill and Savage, Old Broad ſtreet
Manſergh, Richard, Weſthall, Whittington, grazier. (Hurd, King's Bench walk, Inner Temple
Murray, Samuel, Ruſſell court, bookſeller. (Cobb, Clement's inn
Mayo, Thomas, Manchester, and Peter Lunn, of Eccles, calico manufacturers. (Ellis, Curſitor ſtreet
North, William, Dewsbury, coverlid manufacturer. (Sykes and Knowles, Boſwell court
Nash, Iſaac, Briſtol, cooper. (James, Gray's inn ſquare
Poole, John, Chippenham, clothier. (Sandys, Horton, and Trevenen, 55, Crane court, Fleet ſtreet
Prince, William, Stockport, cotton ſpinner. (Edge, Inner Temple
Powis, Richard, Groſvenor mews, veterinary ſurgeon. (Robinſon, Charter houſe ſquare
Powditch, George, Liverpool, maſter mariner. (Atcheſon, Auſtin friars
Powell, William, Broad ſtreet, St. Giles's, linen draper. (Swaine and Stevens, Old Jewry
Potts, Lawrence, Briſtol, cutler. (James, Gray's inn ſquare
Rutt, Thomas, Dalſton, ſtock broker. (Walton, Girdler's hall, Baſinghall ſtreet
Read, Amplias, Aldermanbury, warehouſeman. (Hurd, King's Bench walk, Temple
Rawlings, Thomas, Glouceſter, mercer. (James, Gray's inn ſquare
Richardſon, Sylveſter, Blackburn, grocer. (Clarke and Richards
Riley, Samuel, Soyland, cotton ſpinner. (Gleadhill and Payne, Lothbury
Robinſon, Nathan, of the Paragon, Southwark, tanner. (Perings, Laurence pountney hill
Roſs, Alexander, and John Ogilvie, Argyle ſtreet, army agents. (R. and R. Shawe, Tudor ſtreet, Blackfriars
Stewart, Robert, and William Stewart, Manchester, merchants. (Kay and Renſhaw, Manchester
Stone, George, Goſport, Shoemaker. (Tarrant and Moule, Chancery lane
Speed, George, Blackman ſtreet, ſtable keeper. (Collyer, Great Eaſt Cheap
Stotherd, John, Coningsby, brewer. (Wilſon, Caſtle ſtreet, Holborn
Shipley, Thomas, Walcot, coachmaſter and cornfactor. (Bleaſdale and Alexander, New inn
Solomons, Iſaac, Osborn place, Whitechapel, inſurance broker. (Aubert, Symond's inn
Savory, Thomas, Sculthorpe, miller. (Geldart, Holborn court, Gray's inn
Thompſon, Charles John, Goſwell ſtreet, ſilverſmith. (Smedley, Aldersgate ſtreet
Teaſdale, William, Manchester, cotton broker. (Rutherford, Barthulomew cloſe
Thompſon, William, and Percival Barker, Dean ſtreet, Southwark, merchants. (Wadeſon, Barlow, and Groſvenor, Auſtin friars
Wheeler, Joſeph, Hampſtead, victualler. (Denton, Field court, Grays inn
Wardell, George, Manſel ſtreet, Goodman's fields. (Evitt and Rixon, Haydon ſquare, Minories
Wilſon, John, Nantwich, timber merchant. (Wilſon, Crown office row, Temple
Wilde, James, Dale in Saddleworth, clothier. (Battye, Chancery lane
Watkins, John, Northmoor, butcher. (Edmonds and Son, Exchequer Office of Pleas, Lincoln's inn

DIVIDENDS ANNOUNCED.

Allen, Henry, Liverpool, merchant, April 30
Andrews, Henry, Elſtead, mealman, March 31, final
Beanlands, William, and Benjamin Beanlands, Bradford, woolſtaplers, March 26
Blinkhorn, William, and John Muſgrave, Foſter lane, ſilkweavers, March 20
Bevington, Samuel, Gracechurch ſtreet, merchant, April 14, final
Brooke, Francis, William Farrar, and Robert Roſe, Baſinghall ſtreet, warehoutemen, ſeparate eſtate of Brooke, March 20
Bax, Henry, Farningham, taylor, merchant, March 27
Bird, Joſeph, Houndſditch, hatter, March 24
Blunt, Thomas, Godalming, money ſcrivener, March 27
Broadbent, Beaumont, Stainton, bookſeller, March 27
Bramhall, Richard, Sheffield, cutlers, and Patrick Bramhall, March 29
Barker, Jonathan, Upper Thames ſtreet, grocer, April 14, final
Bentfield, Bacon, Yarmouth, liquor merchant, April 7, final
Becks, Andrew Berkeley, Green ſtreet, Groſvenor ſquare, upholder, March 17
Blakeman, Jeremiah, Limehouſe, timber merchant, April 17, final
Bulfield, William, Lancaſter, ſhopkeeper, April 2, final
Boque, Peter, Whitefriars, builder, April 14
Burroughs, James, Chiſwell ſtreet, hoſier, April 18
Chapman, John, Yarmouth, linen draper, March 24
Cowlinſhaw, Charles, Asborne, grocer, April 21
Curteis, John, and John Stevens, Penryn, ſhopkeepers, March 3
Chinner, Thomas Oldham, Walſall, mercer, March 29
Copper, Thomas William, Pancras lane, warehouſeman, April 28
Chivers, William, Newgate ſtreet, upholder, April 17
Duffin, Michael, and Henry Duffin, Stratford on Avon, linen drapers, March 27, final
Doran, Edward, and Archer Whiting, Long Acre, coachmakers, March 27
Donlevy, Chriſtopher, Charles ſtreet, Hatton Garden, jeweller, April 28
Dalton, James, Deptford, bricklayer, April 28
Edmundſon, John, Carliſle, and Iſaac Edmundſon, Keſwick, dyers, March 17

Elderton,

Elderton, John, Great Carter lane, oil and colourman, March 27, final
Forbes, John, and Daniel Gregory, Aldermanbury, merchants, trading in the firm of Burton, Forbes, and Gregory, April 27, ſeparate eſtate of Gregory, final and ſeparate eſtate of Forbes, final
Frazer, Henry, Nightingale lane, grocer, April 7
Fiſh, John, (partner with James Nowlan) Newcaſtle on Tyne, ſoap maker, April 5
Gouldſmith, Richard, New Bond ſtreet, embroiderer, April 7
Gale, Iſaac, Bradford, clothier, March 28, final
Hallam, Edward, Bury, druggiſt, March 29
Hewlett, Richard, Walcot, builder, March 20
Holgate, George Thomas, Peaſmaſh, Suſſex, farmer, March 20, final
Hathway, Francis, Little St. Thomas the Apoſtle, broker, March 24
Hurſt, David, Lindley, cloth dreſſer, March 28
Hallows, James, Goldſmith ſtreet, ribbon weaver, April 17, final
Hounſell, John, Bridport, ironmonger, April 5, final
Hopwood, David, Union ſtreet, St. Mary le bonne, grocer, April 10, final
Harris, Francis, and Samuel Grove, Briſtol, merchants, April 16
Hall, Charles, Ellerton, horſe jobber, April 19, final
Herinſhaw, Richard, Palace wharf, Lambeth, corn and coal dealer, April 14
Iſdell, Nicholas, Hambleton, ſurgeon, March 26
Kempſon, Samuel, Fleet ſtreet, linen draper, April 17
King, John, Coventry, innholder April 7, final
Lowe, Charles, jun. Boſton, miller, March 8, final
Lund, William, Virginia ſtreet builder, March 31, final
Larkin, Charles, Rocheſter, coachmaſter, April 28
Lawſon, William, Mancheſter, grocer, March 26
Lloyd, John, Woolwich, victualler, March 27
Lonſdale, Edward, York, linen draper, March 29
Lickley, John, Newcaſtle ſtreet, hoſier, April 7, final
Maltby, Thomas, and George Maltby, Size lane, merchants, April 10
Matthews, George, and Thomas Turnbull, Budge row, merchants, April 9
Moulſ, John, Hampſtead, cornchandler, April 24, final
Middleton, Tho. Liverpool, cotton manufacturer, April 16
Metcalfe, Thomas, Birmingham, factor, April 19, final
Moſs, John, Salisbury, ironmonger, April 10
Mozley, Lewis, Liverpool, watchmaker, April 14
Nowlan, James, (partner with John Fiſh, jun.) Newcaſtle on Tyne, Soap boiler, April 5
Nanſan, Thomas, Mancheſter, warehouſeman, April 14
Owen, Robert, and William Mardle, Houndſditch, coppersmiths, April 14
Peterſon, James, Stradbrooke, tanner, March 27
Perrins, William, Bedworth, maltſter, April 5, final
Pourtales, Andrew, Paul, and Andrew George Pourtales, Broad ſtreet buildings, merchants, April 28
Phillips, John, Eccles, fuſtian manufacturer, April 12
Pycock, Theodoſia, and Marmaduke Ward, Pycock Kingſton on Hull, builders, April 7
Ruſſell, John, Moorfields, broker, April 21, final
Richmond, John, Skerton, gardener and ſeedſman, April 5, final
Riches, George, Queen ſtreet, Cheapſide, warehouſeman, April 10, final
Rowland, Northy, and Peter Rowland, Great Coggeſhall, blanket makers, April 13
Robinſon, Michael, Liverpool, money ſcrivener, April 17
Spender, William, Birmingham, dealer, April 11, final
Shirreff, Alexander, Newman ſtreet, tailor, March 20
Schlotel, Bartholomew, Manſion houſe ſtreet, merchant, March 31
Spears, William, Rood lane, fiſh ſaleſman, April 7
Sykes, Richard, Cheapſide, linen draper, May 11, final
Sommervail, James, Liverpool, merchant, April 7
Townſend, William, Bath, ſilverſmith, March 20
Townſend, Thomas, Bath, ſilverſmith, and John Townſend, of Bathwick, victualler, March 20
Thompſon, Andrew, and Bartholomew White, Bow lane, wholeſale hoſiers, trading in the firm of White and Co. March 24
Tarn, William, Biſhop Wearmouth, painter and glazier, March 19
Toulmin, Oliver, Eſſex ſtreet, Strand, navy agent, April 10
Thacker Anthony, Upwell, Ely, corn merchant, March 26, April 18, final
Travis, Joſeph, and Peter Nevill, Bolton le Moors, muſlin manufacturers, ſeparate eſtate of Nevill, April 13
Tredwell, Henry, Wolvercot, yeoman, April 14, final
Vandyck, Peter Dubbledemuts, Arnold John Gevers Leuven, and Wynand Adriaen de Gruiter Vink, Circus, Manorites, merchants, March 26
Wicks, William, Middle row, Holborn, haberdaſher, March 17
Wilde, James, John Watts, and John Body, Upper Thames ſtreet, wholeſale grocers, March 20
Warren, Thomas, jun. Bury, ſhopkeeper, March 29, final
White, William, (partner with John Jarvis) Southampton buildings, brandy merchant, March 24
Wilſon, Richard, Bread ſtreet, merchant, March 27
Whitehead, Edward Charles, Witham, carpenter, April 24
Wrighton, Daniel, Little Alne, flax dreſſer, April 10

Prices of Raw Hides, Hay and Straw, &c. for March, 1804.

	First Week	2d Week	3d Week.	4th Week.
Raw Hides.	*s.d. s.d.*	*s.d. s.d.*	*s.d. s.d.*	*s.d. s.d.*
Beſt Heifers & Steers, pr ſt.	3 8 to 4 0	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Middling — —	3 4 to 3 6	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Ordinary — —	3 0 to 3 2	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Market Calf — —	10 6	—	—	—
Eng. Horſe — —	15s to 17s	—s to —s	—s to —s	—s to —s
Sheep Skins — —	3 6 to 7 0	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Lamb Skins — —	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Prices of Hay and Straw.	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*
St. James's—Hay —	4 18 0	4 17 0	4 18 0	4 16 0
Straw —	1 16 0	1 13 0	1 17 6	1 16 6
Whitech.—Hay —	4 19 6	4 17 0	4 15 0	4 15 9
Clover —	6 0 0	6 0 0	5 18 0	5 14 9
Straw —	1 13 0	1 14 0	1 15 0	1 15 0
Newbury.				
Wheat — — —	33s to 58s 6d	40s to 58s 6d	40s to 59s	40s to 60s
Barley — — —	19s 6d to 23s	20s to 23s	20s to 24s	24s to 25s
Oats — — —	18s to 22s	18s to 23s	20s to 26s	18s to 26s
Beans — — —	—s to —s	—s to —s	—s to —s	—s to —s
New ditto — — —	—s to —s	—s to —s	—s to —s	—s to —s
Peas — — — —	—s to —s	—s to —s	—s to —s	—s to —s
Saliſbury.				
Wheat — — —	49s to 52s	49s to 52s	49s to 53s	49s to 53s
New ditto — — —	—s to —s	—s to —s	—s to —s	—s to —s
Barley — — —	20s to 24s	20s to 24s	20s to 24s	20s to 24s
Beans — — —	—s to —s	—s to —s	—s to —s	—s to —s
Oats — — — —	20s to 23s	19s to 23s	19s to 23s	20s to 24s
Peas — — — —	—s to —s	—s to —s	—s to —s	—s to —s

Prices of Hops, Meat, Seeds, Leather, Tallow, &c. for March, 1804.

Price of Hops.	First Week	2d Week	3d Week	4th Week
Bags.	*s.* *s.*	*s.* *s.*	*s.* *s.*	*s.* *s.*
Kent — —	96 to 108	96 to 110	95 to 112	100 to 114
Suſſex — —	94 to 100	94 to 100	95 to 105	100 to 106
Eſſex — —	94 to 1 8	94 to 108	95 to 105	100 to 106
Pockets.				
Kent — —	108 to 124	108 to 124	105 to 125	110 to 130
Suſſex — —	100 to 112	100 to 112	105 to 120	110 to 124
Farnham — —	120 to 168	120 to 168	160 to 189	180 to 200
Seeds.				
Red Clover per cwt. —	56 to 90	56 to 90	40 to 80	40 to 84
White Clover, ditto —	70 to 120	70 to 120	70 to 118	70 to 113
Treſoil, ditto —	35 to 65	35 to 65	40 to 63	30 to 67
Carraway ditto —	— to 75	— to 75	— to 75	— to 75
Coriander ditto —	16 to 20	16 to 20	16 to 20	16 to 20
Turnip, (per buſhel) —	22 to 24	22 to 24	22 to 24	22 to 24
White Muſtard Seed —	8 to 9	8 to 9	8 to 9	8 to 9
Brown ditto — —	14 to 16	14 to 16	14 to 16	14 to 16
Canary Seed	6 to 7	6 to 7	6 to 7	6 to 7
Rape Seed, (per laſt) —				
Meat at Smithfield,				
To ſink the offal, p. ſt. 8lb.	*s.d.* *s.d.*	*s.d* *s.d.*	*s.d.* *s.d.*	*s.d.* *s.d.*
Beef — —	4 4 to 5 8	4 0 to 5 4	4 0 to 5 6	4 4 to 5 8
Mutton — —	5 0 to 5 8	4 8 to 5 6	4 8 to 5 8	5 0 to 5 8
Veal — —	6 0 to 6 6	3 4 to 5 0	5 0 to 6 4	5 0 to 6 6
Pork — —	3 4 to 4 8	3 4 to 4 4	3 4 to 4 4	3 8 to 4 8
Lamb — —	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0	0 0 to 0 0
Head of Cattle—Beaſts about	2,000	1,800	2,000	2,000
——— Sheep	10,500	85,000	8,500	9,500
Price of Leather.	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*
Butts, 50lb. to 56lb. each	20½ to 21½	20 to 21	21 to 21½	21 to 21½
Ditto, 60lb. to 65lb. each	23 to 24	23 to 24	22 to 23½	23 to 24
Merchants Backs —	20½ to 21	20½ to 21	— to 21	— to 21
Dreſſing Hides —	20½ to 22	20 to 21	20 to 22	21 to 22½
Fine Coach Hides —	22 to 23½	22 to 23	22 to 23½	22½ to 23½
Crop Hides for cutting	22 to 23½	22 to 23½	22 to 23½	22 to 23½
Flat Ordinary —	21 to 22	20½ to 21½	20½ to 21½	21 to 21½
Calf Skins, 30 to 40lb. *p.* doz.	28 to 33	28 to 33	28 to 32	23 to 32
Ditto, 50lb. to 70lb. do.	29 to 32	28 to 32	28 to 33	27 to 30
Ditto, 70lb. to 80lb. do.	28 to 30	28 to 30	27 to 30	27 to 30
Sm. Seals (Greenland)	42 to 45	42 to 45	42 to 48	42 to 45
Large do.	51 to 71 10s	51 to 71½—s.	51 to 71 —s	51 to 71
Tanned Horſe Hides	20s to 30s	20s to 30s	20s to 32s	20s to 32s
Goat Skins *per* doz.	—s to —s	—s to —s	—s to —s	—s to —s
Price of Tallow.	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
St. James's Market —	4 10	4 7½	4 6	4 4
Clare Market — —	4 9½	4 7	0 0	4 3
Whitechapel Market —	4 8½	4 5	4 2	4 2½
Per ſtone of 8lb. Average	4 9½	4 6	4 4	4 3
Town Tallow — —	81 6	77 0	74 6	72 6
Ruſſia ditto (Candles) —	75 0	75 0	73 6	72 6
Ruſſia ditto (Soap) —	72 0	72 6	71 2	72 6
Melting Stuff — —	63 0	63 0	62 0	60 0
Ditto rough — —	44 0	44 0	42 0	42 0
Graves — — —	14 0	14 6	14 0	14 0
Good Dregs — —	12 0	12 0	12 0	12 0
Yellow Soap — —	84 0		80 0	80 0
Mottled ditto — —	92 0		88 0	84 0
Curd ditto — —	96 0		92 0	88 0
Candles, per dozen, —	12 0		12 0	11 0
Moulds — — —	13 0		13 0	12 0

PRICES OF COALS AT THE COAL EXCHANGE, LONDON,
For MARCH, 1804.

Names of Coals.	Wed. 2d s. d.	Frid. 4th s. d.	Mon. 7th s. d.	Wed. 9th s. d.	Frid. 2d s. d.	Mon. 5th s. d.	Wed. 7th s. d.	Frid. 9th s. d.	Mon. 12th. s. d.	Wed. 14th s. d.	Frid. 16th s. d.
Adair's Main							50 6				
Baker's Main											
Bedford Main											
Benton	46 6										
Biddick Main											
Bigg's Main	49 6		46			51					
Bladon Main											
Blyth											
Boundry										60	
Bourn Moor											
Brandling											
Birtley											
Byker											
Byker, High & Low											
Cowpen											
Derwent											
Eden Main											
Eighton Main											
Flockton											
Greenwich Moor											
Haigh Moor											
Hartley			44 6								
Heaton Main						51		57			
Hebburn Main											
Holywell											
Kenton Main	49 6		46			51					
Lambton's Low dit.											
Lawson's Main											
Morley Hill											
Montague Main											
Mount Moor											
Murton											
Murton High Main											
Newbottle											
New Tansfield											
Pitt's Tansfield M.											
Primrose											
Pontop											
Percey											
Rectory											
Ruffel's Main											
Sheriff Hill											
South Moor											
Stanley Main											
St. David											
Team											
Tyne Main											
Ufworth Main											
Walbottle Moor											
Walker											
Wall's End		50 6		46 6							
Warwick											
Wharton											
Willington											
Wylam Moor		46 6									
Wentworh											
Whitefield											
Main Wooler											

Nothing done. Nothing done. Nothing done. Nothing done. Nothing done

AVERAGE PRICES OF CORN, by the quarter of eight Winchester bushels; and of OATMEAL, per boll, of 140 pounds Avoirdupoise:
From the Returns received in the Week, ended MARCH 17, 1804.

INLAND COUNTIES.

COUNTIES.	Wheat.		Rye		Barley.		Oats.		Beans.		Peas.		Oatmeal.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d*
Middlesex	52	7			22	8	24	2	32	2	34	10	49	3
Surrey	54	8	30	0	24	1	23	8	35	0	35	0		
Hertford	48	8	35	6	21	9	19	6	31	6	34	0		
Bedford	42	2	32	0	20	0	20	3	27	10	36	0		
Huntingdon	43	3			19	0	18	8	26	7	31	11		
Northampton	49	10	30	0	19	8	18	8	27	0	30	0		
Rutland	51	6			21	0	19	0	30	0			57	3
Leiceſter	57	2			22	7	18	1	29	7	30	1	35	4
Nottingham	56	8	30	0	24	3	20	8	33	9				
Derby	58	10			26	2	20	4	38	4	39	0	26	3
Stafford	52	1			25	8	21	4	42	6			30	2
Salop	48	0	35	10	25	6	22	9	40	10	42	4	63	7
Hereford	42	6	30	4	23	0	22	4	42	1	40	11	58	5
Worceſter	46	4			24	7	23	9	39	4	44	3		
Warwick	50	6			25	4	22	7	36	4	54	8	40	3
Wilts	51	8			23	6	21	8	39	10	36	0		
Berks	54	3			22	11	23	4	33	9	33	8		
Oxford	47	3			21	1	20	6	30	2	32	5		
Bucks	51	10			21	0	20	10	29	10	32	9		
Brecon	48	0	32	0	24	0	17	8			36	8	32	1
Montgomery	45	3			19	2	16	4			37	4	38	2
Radnor	44	10			23	11	19	9			43	2	67	10

Maritime Counties.

Eſſex	51	6	27	6	20	10	23	10	30	7	29	0		
Kent	52	8			24	4	25	10	31	10	33	6		
Suſſex	53	10			26	0	24	6						
Suffolk	47	0			19	5	19	7	26	3	28	2	49	0
Cambridge	40	8			17	11	15	0	26	5				
Norfolk	42	10	52	2	18	4	16	8	27	3	31	6		
Lincoln	44	8	23	0	20	11	16	8	28	5	30	0		
York	47	3	35	0	22	5	18	9	33	3	66	8	38	2
Durham	46	11			24	8	21	4						
Northumberland	42	10	34	0	20	0	19	8			26	8	15	6
Cumberland	54	0	40	10	24	8	21	4						
Weſtmorland	52	8	43	6	26	0	21	8						
Lancaſter	56	11			28	1	24	2	40	11			19	7
Cheſter	49	7			28	2	21	0					19	4
Flint	51	2												
Denbigh	54	1			25	9	19	2	41	8	35	3	35	7
Angleſea														
Carnarvon	59	4			24	0	17	0					38	2
Merioneth	52	8	44	0	27	6	18	10			56	0	34	5
Cardigan	47	7			18	3	12	7						
Pembroke	44	9			19	8	13	4						
Carmarthen	54	5			22	2	14	8						
Glamorgan	49	2			26	8	18	9						
Glouceſter	47	6			22	6	20	4	36	4	36	0		
Somerſet	52	7			24	3	19	10	35	3	42	0		
Monmouth	49	2			24	6								
Devon	55	7			24	9	19	3						
Cornwall	53	5			24	11	19	11						
Dorſet	51	10			22	5	25	0						
Hants	49	5			22	10	25	11	35	9	40	0		

A TABLE of the Prices of STOCKS in *March* 1804.

1804	Bank Stock.	3perCt Red.	3perCt. Consols.	4per Ct. Consols.	5perCt. Navy.	5perCt. Loyalty	Long Ann.	Short Ann.	Imp. 3 per Ct.	Imp. Ann.	Irish 5 pr. Cent	Omnium	India Stock.	English Tickets.	Consols for Account
Feb. 27	152¾	55¾	55⅛	72⅜	88⅝	94¼	16 3-8			9 7-16				17 8 0	55¾
28	153	55⅞	55⅜	72½	88⅝	94⅜	16 7-16						169	17 8 0	55¾
29	154	56	55½	72⅞	88½	94¾	16½		54⅝	9 7-16			169⅛	17 8 0	55⅞
Mar. 1			55⅝	73	88¾	94⅞			54⅞					17 8 0	56
2	153½		55⅝	73⅛	88⅞	95¾		3 7-16	54⅞	9½			169¾	17 8 0	56
3			55⅝	73⅛	89⅛			3 7-16	54⅝	9½			170½	17 8 0	55⅞
5			55¾		89⅛			3 7-16		9 9-16				17 10 0	56
6			55¼		89⅛				55					17 10 0	
7			56⅛		89¾					9 9-16				17 10 0	56½
8			56⅛		89¼				55½	9⅝				17 10 0	56½
9			56⅜		90⅞				55⅝	9⅝				17 10 0	56⅝
10			56¼		89½				55⅞					17 10 0	56⅝
12			56⅜		89⅝					9⅝		2 1¾		17 10 0	56¾
13			56⅛		89⅞				55¾	9 11-16		1½ 1¼ ¾		17 10 0	56⅝
14			57⅛		90					9⅝		1 1¾		17 10 0	57⅛
15			56⅞		89⅞				56⅜	9⅝				17 10 0	57¼
16			57⅛		90				56 ¼	9⅝				17 10 0	57⅜
17			57⅛		90				56⅜					17 10 0	57⅛
19			57		90					9⅝				17 10 0	57¼
20			57¼		89⅝				56⅛					17 10 0	56⅞
21			56⅝		89¾				55⅞	9⅝				17 10 0	56¾
22			56½		90									17 10 0	56¾
23			56½		89¾				55¾	9 11-16				17 10 0	56⅝
24			56⅝		89⅞				56	9 11-16				17 10 0	56¾
26			56⅝		89⅞									17 11 0	56⅝
27			56½		89⅞				55¾	9 5-8				17 11 0	
28			56½		89¾				55⅞					17 11 0	56⅝

T. BISH, STOCK-BROKER, *Old State-Lottery Office, No. 4, Cornhill, London.*

TO OUR CORRESPONDENTS.

THE Postscript of P. J. as far as relates to any material correction, we assure him ſhall not be neglected in the concluding Number of the present volume. The manuscript has been carefully examined since the receipt of his last communication. We must observe, we do not hold ourselves responsible for any inaccuracies of the original; and we hope he will do us the justice to impute some of them to the right cause.

V. A. will observe that we have complied with his request. We shall be glad of his "word of answer" to Agricola Norfolciensis.

We are desired by Chorographus to signify to Agricola Northumbriensis, that if the latter will have the goodness to prepare a paper for No. 58, or any other he pleases, on the subject of the Agriculture of the county of Northumberland; Chorographus will be very happy to see the description in such able hands, and we are assured he will not "venture to undertake it," unless A. N. should wholly relinquish his intention adverted to in page 122 of our last Number.