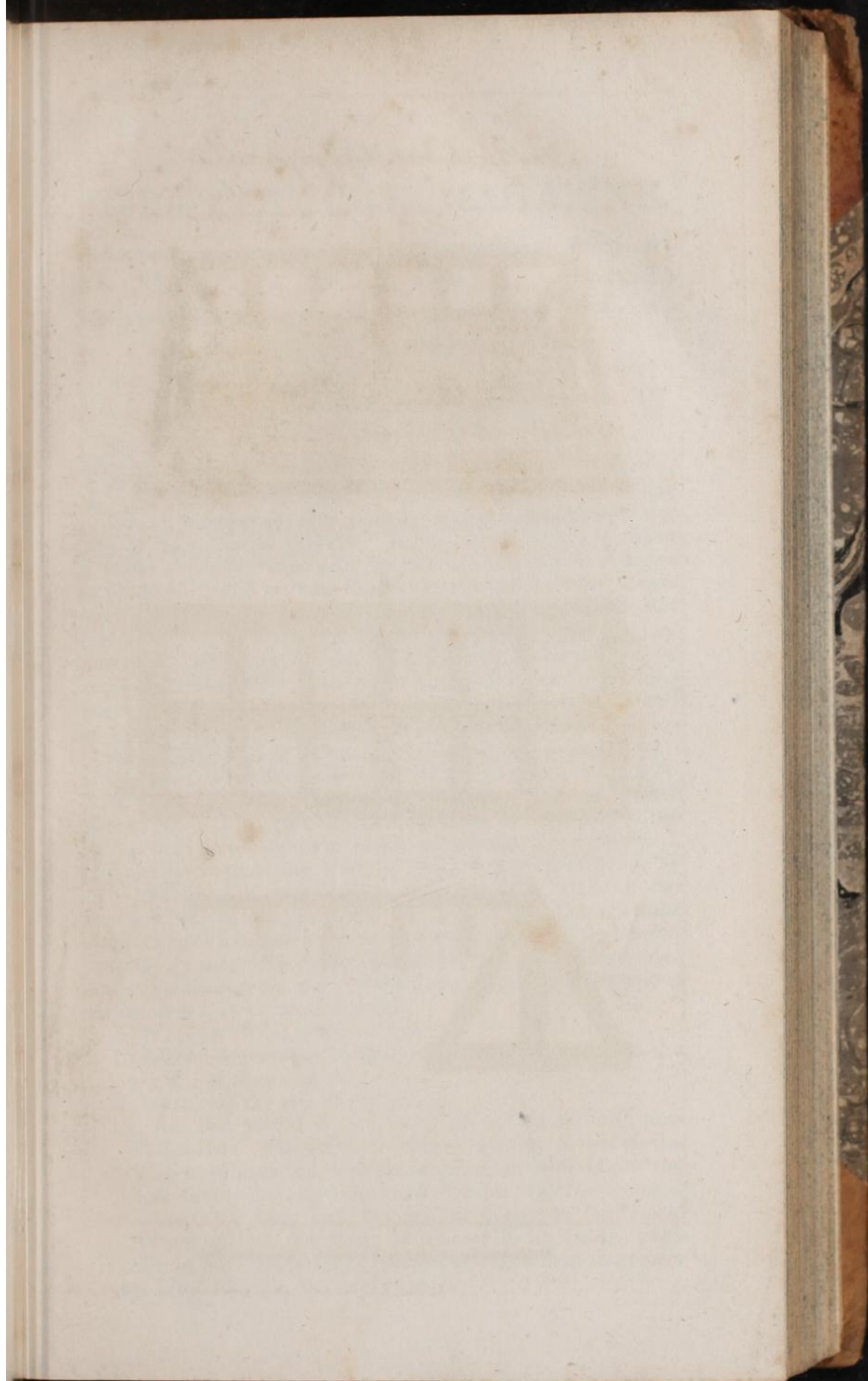
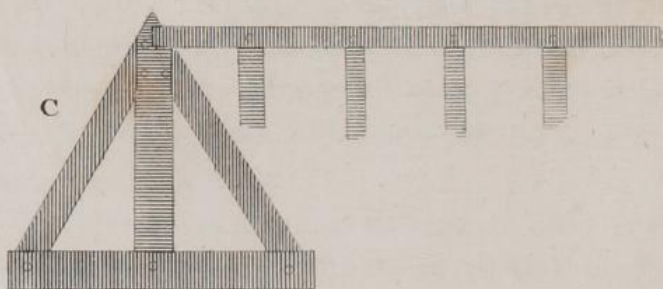
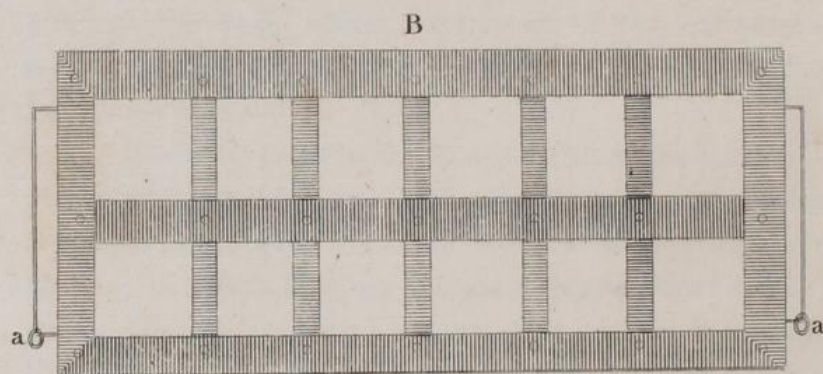
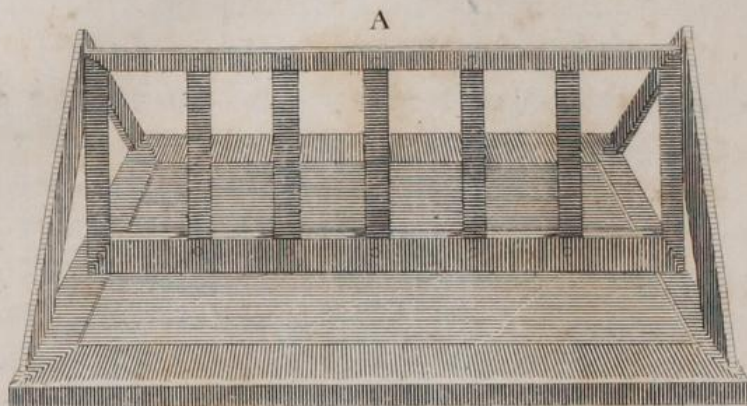




The Yorkshire Sledge for Hay.



THE AGRICULTURAL MAGAZINE.

No. LXI.]

AUGUST, 1804.

VOL. XI.]

THE YORKSHIRE SLEDGE FOR HAY.

[WITH A PLATE ANNEXED.]

To the Editor of the Agricultural Magazine.

SIR,

PERHAPS under the disadvantage of the uncertainty of our climates, one third of the immense quantity of hay produced, is either entirely spoiled, or deprived of the greater part of its nutritious qualities. It has, therefore, always been a material desideratum with farmers to ascertain expedients to preserve it, and we have had in consequence, long dissertations on the most secure way of leaving it in the field. But it is well known, that even in the last stage, when the hay seems in a perfect state, from the deficiency in the number of carts and cattle, all the care of the husbandman is often disappointed in its object, his produce is exposed to the storm, and is more suited to the dung heap, than the stack yard.

The annexed plate will assist in explaining a simple contrivance of a sledge employed in the northern districts of Yorkshire. It is used for readily collecting the hay together when raked into rows, and intended to be stacked, either in the field itself, or in a place not distant from the field. Your readers are aware, that the usual way of loading, is by two pitchers, and two loaders, who must be some of the strongest and most expert men on the ground. This machine only requires a boy as a driver, and may be loaded by women with the greatest ease and promptitude, so that the most dexterous hands may be reserved for the stack, or other situations where they may be more wanted.

A. Is a view of the whole sledge.

B. Is the frame of the bottom part, which is boarded on the upper, as shewn in A.

C. represents the side of the sledge.

aa. Are two pieces of iron fixed on the frame, with nuts and screws. On each of these is a ring, to which the horses are attached, one horse going on each side of the row, until the sledge be loaded: after which, one horse crosses the row, and the load is drawn to the stack. When arrived, the horses are turned about, and the rings run to the other ends of the iron, with which the traces

are again connected. It is unloaded almost in an instant, and the horses proceed for a new supply. If the machine be intended to go beyond the field, it is convenient to have rockers, or segments of a circle, resembling the bottom of an infant's cradle, attached to each side of the sledge.

York,

I am, Sir, yours, &c.

Aug. 3d, 1804.

A. B.

ON THE QUANTITY OF SEED, AND THE ROTATION OF CROPS.
ON A MANURE FOR TURNIPS, FROM AQUATIC PLANTS.
ON THE MANAGEMENT OF SHEEP.

To the Editor of the Agricultural Magazine.

SIR,

Norfolk, Aug. 4, 1804.

BY some mistake of my bookseller, your Number 59, was not received till yesterday, or I would sooner have noticed the remarks which "A Novice" is pleased to address to my fellow countrymen, "Agricola Norfolciensis," and me. With respect to the necessary quantity of seed, I can give him no *certain* information, as it must depend upon the quality and state of the land, and also the season at which the sowing takes place. In autumn, less for the early sowing, and more for the late, as in this it is probable that more seed may perish in the ground, and be destroyed by vermin, than in that of the early sowing. In the spring sowing, this rule will of course be reversed, as then the seed sown early will be most liable to injury and destruction. Though, as I say, I can give him no information as to the exact quantity of seed which ought to be sown, I can from experience speak to this general rule, that land of good quality and in good condition, will require a less portion of seed, than that which is lighter and weaker, the plants on the former will branch out and fill up the intervals, and the crop will be of better quality and more abundant than it would have been, had the plants been too thick; but on the latter, the plants will branch but little, perhaps not at all, and consequently it is necessary to put in a larger portion of seed, to ensure a sufficient number of stems to cover the land.

As to rotation of crops, I must advise him to make use of his own experience, but shall nevertheless be happy to give him what information I can. The land which I cultivate (and which, from his description, seems to be pretty similar to his own) is a light mixed soil, and the rotation which I prefer is, turnips, barley, layer mowed or fed, layer fed, pease, wheat. Not that I invariably adhere to this course, but act as from existing circumstances I think fit, but I like it for these reasons. The quantity of layer enables me to keep a large stock of sheep, the wheat after pease is better than that

after a two year's layer, and during the winter till the latter part of February, I have the land in layer, which is to be broken up for pease to feed my sheep upon, which would not be the case, if wheat succeeded the layer, as then the layer must of course be taken up in the autumn. As I said before, I do not invariably adhere to this course, but I ever bear in mind this general rule, which I will recommend to your correspondent. Keep your land as rich and clean as possible, always appropriate one half of it to raising food for stock, and never suffer two corn crops in succession, and lastly, never sell hay, straw, or turnips, but use them all on the premises.

"A Novice" says, that I asserted the superiority of the Norfolk farmers in the cultivation of the turnip crop, but that I brought forward no argument in support of that assertion. I could not agree on this subject against "*Agricola Northumbriensis*," as I never then had an opportunity of observing the comparative merits of the Norfolk and Northumberland turnip husbandry, and I believe I may say that my assertion amounted only to that, which till lately has been generally allowed. I am open to conviction. I have a very high opinion of the candour and intelligence of your northern correspondent, and happy in being able to communicate that, which may be gratifying to him, though it goes directly against my assertion. On the land of the first farmer in this county, or, I should rather say, in this kingdom, we were shown, on a late public occasion, a piece of Swedish turnips, part upon broad flat ridges, in the usual manner, except being drilled at about 12 inches intervals, and part on narrow ridges at about 24 inches intervals. I asked whether he did not find that these wide intervals lessened the produce of the crop, he said, no; and that on the contrary, he could grow a greater *weight* of turnips per acre by this, than by the former method, and that he did not doubt but the *Northumberland* turnip husbandry would soon become general in Norfolk. I hope I shall not trespass too much on your useful pages, by communicating a piece of husbandry generally practised here, and which I am led to do, by seeing a letter in your Magazine, on "The Method of converting Weeds, &c. into Manure." My farm is *blessed* with a pretty large portion of meadow land, bounded by a stream, in which we annually cut the *weeds* arising therein, at the time of turnip sowing. Two men, one on each side, walk along the banks, drawing at the bottom of the river a *gang of scythes*, that is, pieces of scythes about two feet long, riveted to each other, but so as to move upon the rivets, and form a sort of chain. By pulling this alternately, the weeds, &c. are completely cut, rise to the surface, and float down the stream till they arrive at a dam, made with hurdles, &c. and situated at

a convenient place for drawing out and carting away. As soon as a sufficient quantity are collected, men with cromes, forks, &c. draw them out, and pile them on a heap or ridge; they are then, as soon as convenient, cut down from top to bottom of the ridge, with the blade of a scythe, or, which is better, a thatcher's knife, in slices about six inches wide, which makes them more convenient to plough in. They are immediately carried on to the land, in their green state, let down in heaps as large and at equal distances with those of *muck*, spread, ploughed in immediately that they may not dry away, and the turnips sown. They are not more difficult to plough in than *longish muck*, but it is as well to have a boy or woman follow each plough, to draw them into the furrow, that they may be the more completely buried. I have myself pursued this practice for eight years, have always found rather better turnips on the land so dressed, than on that manured in the usual way, and barley next year equally good. The turnips this year, where the weeds were set on, are more vigorous than those in the same piece manured with dung, &c.

I fear I have taken up too much of your time, but I could not refrain from giving this last piece of information, thinking it may be useful to those of your readers situated like myself near streams, or large pieces of water.

I am, Sir, yours, &c.

P. J.

P. S. Since writing the above, I have read with satisfaction a letter signed P. Y. "On the Water in Sheep." I have found the method adopted by his tenant of giving the sheep a certain portion of exercise, beneficial. We also are cautious to avoid, if possible, letting the sheep on to a *fresh shift* of turnips, when the leaves are wet from rain, dew, &c. They ought always to have hay by them in racks; and lastly, before we put the sheep on turnips, we always bleed them, and occasionally afterwards. This operation my shepherd performs by thrusting a small penknife through the top of the nose. This was recommended to me by a gentleman, who has given much time and attention to sheep. I have practised it for some years, and have no doubt of its utility. He enforced his advice, by telling me, that he had at a former time sold some turnips to a butcher at Norwich, to be fed off with sheep, of which a very great many soon *dropt*, by his advice all the remaining were bled, after which he lost none.

ON THE COMPARATIVE ADVANTAGES OF THE GROWTH OF
COARSE AND FINE WOOL, AND ON THE PRODUCE OF
SHEEP, BOTH IN RESPECT TO THE CARCASE AND WOOL,
ON THE FARM OF LORD SOMERVILLE.

To the Editor of the Agricultural Magazine.

SIR,

WHILST your correspondent, *A Novice*, No. 60, p. 11, indulges himself in laughter, excited under an idea of providing high rents in *Yorkshire*, by the pasture of Spanish sheep. *Pastorius*, *ibid.* p. 9, seems to be deeply affected by an opposite sensation; for he mourns in the distant contemplation that his beloved animals of the coarse long-woolled tribe may probably be exterminated, and superseded by a new race, producing wool of the finest texture: and certainly it will not be denied, that it would be a serious subject of complaint, were we reduced to the necessity of fabricating our *mops* with fine clothing wool. I wish it were in my power to eradicate altogether the grief of this sorrowful swain. In the mean time let it be part of his consolation, that the *mops so fabricated* might be brought into the market, at somewhat about one-half of the present cost! for the new race not only produces double the weight of coat, *on an equal surface*, by comparison with the long-woolled tribe; but being so defended, *cap-a-piè*, is better prepared to brave and resist the inclemencies of a cold tempestuous climate, and this reasoning we also know to be confirmed by experience.

And here I beg leave to submit it as a probable conjecture, hereafter more fully to be appreciated, that the temperature of Britain, particularly to the race of *fine-woolled* Spanish sheep, (for in Spain there are coarse-woolled breeds) is more congenial than Spain itself.

It is well known that nothing is more oppressive to the sheep than any excess of heat, as well as the relief they are found to experience when deprived of their fleeces, and the rapid progress in condition which they subsequently manifest. May not one of the primary objects in removing the Spanish flocks to be pastured on the summits of their mountains in the summer season, have been to relieve them from the oppressive heats of their plains? It is also well ascertained, that even in Sweden, flocks descending from sheep, imported from Spain about a century ago, continue to preserve their original purity in every respect. But we would not resort to conjecture, or to foreign instances. In our own country all things rise in proof.

It appears from the last report of the state of his Majesty's flock of fine-woolled Spanish sheep, "that in the opinion of competent judges, the flock has been progressively improving

from the first introduction of Marino sheep into this country in the year 1787; and that there is every reason to believe it is still improving, insomuch that in a very few years it will equal, if not *excel*, the very best *piles* that has hitherto been imported into this kingdom; and that it is probable no pile in Spain throws out so small a proportion of F's and T's, that the prime, or R wool of the ewe flock, 1803, sold at 6s. 9d. per lb. and that of the rams at 6s. 6d."

"That the unwashed fleece of a ram, descending from his Majesty's flock, belonging to Mr. Tollet, a Gloucestershire gentleman, weighed 11 lb. 12 ounces, and that he refused an offer of 200 guineas for such ram."

In the opinion that sheep of the Spanish race in this country are in a progressive state of *general* amelioration, the several breeders, who have attentively observed their progress for many years past, universally concur.

On a former occasion I noticed, that under equal circumstances of age, condition, weight of carcase, &c. a superior weight of fleece was held to be a pretty certain indication of superior quality in the pile of the wool, and I have found this opinion to have been confirmed by the judgment of manufacturers and others conversant on the subject. But we find the weight of the fleece to be progressively increasing; insomuch that in public exhibitions, a fleece weighing less than 9 lbs. scarcely ever enters into the competition. Eight lbs. for a three-shear ram, and 6 lbs. for a ewe of the same age, were formerly considered to have been capital productions; whereas it is no uncommon circumstance at this time, to obtain weights equal to these, even from individuals of the first cross. And for myself, in the selection of rams for continuing the breed, I reject all such as are not promising to produce an unwashed fleece of at least 10 lbs. weight.

Now by adverting to sheep of this sort, one would imagine that even the "*practical farmer*," in addition to his "*amusement*," might discover something of a foundation, in aid of his exorbitant rents; and on the supposition too that his wool would sell *only* at the price of *mop* wool at 10 to 13d. per lb.

Lord Somerville, a nobleman who will be distinguished in the annals of his country, disposed of his wool of the year 1808, the growth of less than 200 acres of moderate pasture, at 446l. exclusive of the lamb's wool, and the wool of between 3 and 400 sheep that were sold and slaughtered in the course of the year. Five hundred of the fleeces were of the first and second cross *only*, and from one and two shear sheep, yielding 15s. 8d. average per fleece.

I have heard it remarked, but confess my ignorance, that the individuals of some sorts of sheep, taking wool and carcase together, would not produce annually more than 15s. 8d.

I am not particularly informed as to the rate of rents in *Yorkshire*, but imagine that in common with other districts they are considerably advanced within the last period of 12 or 15 years. In the West of England, I presume this advance cannot have been less than one-third, taking the average; or that an estate rented at 100*l.* per annum, in the beginning of the period, would now produce 150*l.* but in any district, perhaps, it will be granted by *Pastorius*, that 446*l.* would cut deep in the rent of 200 acres of land, and that in Lord Somerville's agricultural pursuits something more might be discovered than the mere tedium of "*amusement*," for in addition to the wool, the sheep sold in the same year, as the increment of his flock, amounted to 647*l.*

If I rightly recollect the quality of the soil, I incline to believe a West Country farmer would hesitate to rent it at more than 30*s.* per acre.

The rate of rents will necessarily be governed by the pressure of other circumstances; to complain is useless and unprofitable. Let us rather surmount the effect by every manly exertion to increase the rich treasures of a propitious soil; and emulating the example of Lord Somerville, with a like liberality of mind; let us cherish and adopt every rational mode of improvement, in whatever quarter they may be found to originate.

Bath,
August 7, 1804.

I remain, Sir, your obedient servant,
NEHEMIAH BARTLEY.

ON THE TURNIP-WORM, MANURES, TURNIPS,
RUTA BAGA, &c.

To the Editor of the Agricultural Magazine.

SIR, Aug. 15, 1804.
WHEN I last month sent you a paper on the state of our markets and crops in this northern district, I informed you that caterpillars resembling those which about 20 years ago committed such havock among our turnips, had this season made their appearance, and that they were committing alarming depredations. I am happy, however, to inform you, that from the knowledge acquired when they were formerly in this part of the country, we have been enabled to destroy them by myriads in a day, and that though they have materially destroyed the plants in some fields, and retarded their growth in others, we now enjoy the pleasing prospect of having, upon our best turnip soils, the most productive crop of that invaluable root with which we have been blest for several years past: we have found that the most advantageous mode of destroying them, is to put vast numbers of young ducks among the turnips, and to employ women and children to hand-pick them where they are most numerous. The

latter mode I practised on several acres. Rolling, quick-lime, &c. was used by several farmers without success. Our efforts were happily aided by some chilling dewy nights in the first week of this month, since which they have totally disappeared. They committed no depredations on my Ruta Baga; I am informed, however, that when more agreeable food was not within their reach, they ate this plant also. Disputes run pretty high relative to the generation of these destructive worms. I am feeding a few of them, which I expect will soon go into the aurelia state, from which I am of opinion that large flies, with an orange-coloured body, and brown wings, will be produced. I shall probably have the pleasure of informing you of the result of my experiment. Upon rather strong and inferior turnip soils the crops are very indifferent. I have had an opportunity this season of observing, with more than usual accuracy, the effects of various kinds of dung on my turnip crop. The crop after stable-dung is much the best. The next is that after the dung of fat cattle; next, that after cow dung; and the worst after common fold yard dung, bred from lean cattle supported on straw*. Some years ago, apprehending a scarcity of dung, I carried turnips to about 200 lean sheep, which I folded *in the latter end of March*, on about two acres of my dry land (intended for turnips) for two or three days, removing the hurdles from time to time, till about eight acres were folded on. The land was limed the preceding autumn, and produced a good crop, which I had reason to suppose was much benefited from the dung and urine of the sheep. In January last I was under the necessity of confining 160 fat sheep, *during frost and snow*, for three weeks, on about an acre of well-sheltered and very dry ploughed land, intended for turnips. It was twice ploughed in the spring, and sown in the latter end of May with Ruta Baga seed. No manure was applied except the dung and urine of the sheep. The crop is a very poor one; though on contiguous land, of equal quality, &c. sown on the same day, and in the same kind of weather, *and dunged in the usual manner*, I have a very productive one. In the latter case, I think the dung, &c. from the sheep, has not, in any considerable degree, rendered the land more productive of turnips, than it would have been without any dung whatever. Our markets are nearly as when I last informed you. Corn harvest has just commenced here, and would have been earlier, if wet weather had not prevented for 8 or 10 days past. Next month I shall inform you of the state of our crops, &c. Hay, in general, has been well, even in this quarter.

I am, Sir, yours, &c.

AGRICOLA NORTHUMBRIENSIS.

* The whole of the dung was pretty well fermented.

THE PRESENT STATE OF THE FARM OF RAMBOUILLET, AN
EXPERIMENTAL FARM, ESTABLISHED IN FRANCE, AND
SUPPORTED BY ITS OWN PRODUCE.

To the Editor of the Agricultural Magazine.

SIR,

IN your last Number, page 6, you have a letter from one of your valuable correspondents at Bath, on the subject of experimental farms; and his plan is, to attach to the Provincial Societies for the Improvement of Agriculture, certain portions of land, and "to disseminate for the instruction of the public, the circumstances, with the result of every experiment to be conducted."

I mention it with extreme concern, but it is a fact, that every establishment in this country to which lucrative places are attached, from causes it is perfectly easy for the politician to explain, sinks into the vast vortex of the executive government; and thus the best intentions are often most cruelly disappointed. I perfectly agree with Mr. Bartley, however, respecting the propriety of those institutions, as far as they can be conducted without exterior support, where we can be independent of illustrious presidents and vice-presidents, of senior members and junior members, of actuaries, treasurers, secretaries, and footmen, and this separation can only be preserved where the establishment costs nothing to government, and yields a produce competent to its own maintenance. Of this kind is the French agricultural establishment at Rambouillet, and its success, I believe, has gratified the expectations of the most sanguine projectors *. I am sure, Sir, you will consider the recital of the progress in such an undertaking deserving the attention of your readers, for your love for your country will at all times dispose you to circulate extensively information on the means of public improvement, which impose no new burthen on the state.

I shall explain the progressive condition of this farm, and the sale of wool and animals on the 15th Prairial (4th June) last.

It is an extraordinary fact, that the wool produced by sheep formerly imported from Spain, and fed at this farm, and the wool of their progeny is superior, and obtains better prices than the shorn wool brought from that country, and the superiority of the quality of this article in the contracted circle of this farm, over all the surrounding country, shews the prodigious importance of this experiment.

* Rambouillet is a town of France, situated in the Isle of France, and in Hurepoix, 25 miles from Paris, with a superb castle: formerly with the title of a duchy.

Messrs. Huzard and Teissier are the intelligent managers of this concern. In order to ascertain the most profitable interval between the shearings, they have permitted the wool to grow during three years, and the average weight of the wool on some sheep so permitted to be loaded, was 12 chiliogrammes*. One of the sheep yielded 15 chiliogrammes. The wool was more than 3 decimeters long†. The price of the sale was 26 francs and 62 centimes‡ per chiliogramme.

The deduction from this experiment is, that the wool at one shearing in the course of three years, is equal in quantity, and superior in quality. Whether the animal received any material injury from this excess of cloathing, does not appear.

M. Delarne made an excellent kerseymere from this triennial shearing, and obtained the medal for it at the late exhibition of national manufactures.

There have been sold this year 63 rams of the first importation, and the average price was 320 francs. The preceding year the same importation obtained 412 francs.

Forty-three ewes of the same period have been sold at 336 francs, the preceding year they only obtained 236.

These differences shew two things: 1st. That the buyers at Rambouillet begin to be sufficiently provided with rams with which to cross their common sheep: 2d. That they are desirous, by obtaining ewes, to avoid depending upon the establishment for the supply of young rams.

The design at Rambouillet, is certainly principally, to bring to perfection the Spanish breed of sheep, but there are other auxiliary objects to which the attention of the managers is usefully directed.

Many experiments have been made upon different kinds of horned animals. It has been discovered, that the Swiss cows, so much admired for their beautiful proportions, either for their milk, or their progeny, have not deserved the indiscriminate praise that has been applied to them.

The Italian race, distinguished by its large horns, is not adapted for the dairy, but it fattens kindly, and is well suited to the shambles.

The poll breeds are found to be good milkers, to possess great strength, and not being armed with the dangerous weapon with which the other species are provided, they are found extremely useful. The observations at Rambouillet on this kind, the less deserve attention, because they have only a score to which the experiments have been directed. They have, however, in addition to these, a bull of the same sort,

* A chiliogramme is 15,444 grains English.

† The decimetre is rather less than 4 inches English.

‡ The frank is about the same with the livre tournois, and worth tenpence. The centime is 15½ grains of copper.

which is believed to be originally from Asia. He has bulled some horned cows, and all his progeny, even from the large horned Italian race, to the number of 35, are without horns. A small number have little projections on the forehead, but they are connected only with the skin. The bulls of this stock are likewise without horns, and of the same colour as the Asiatic sire.

The buffaloes at this institution are in number fifteen, they are healthy, and are well suited to the climate of France. They are found to be as gentle as other horned animals of the same size, and are advantageously employed in the cart and in the plough. The great benefit of this species is, that they will live on a great variety of coarse herbs which the oxen reject, and they are attached to marshy grounds, where few other animals can subsist, so that large districts, hitherto esteemed useless, may, by the introduction of this animal, be rendered productive. Two buffaloe bulls have been castrated, and the intention is to fatten them, to ascertain if the flesh is adapted to human subsistence.

I shall not now notice the celebrated Tuscan ass of this establishment, or the beautiful mares which have been covered by Arabian horses; but I will not omit to observe upon a little flock, which is interesting on account of its novelty, as well as its utility, I mean the goats of Angora. Until the present time, the hair of these animals have not been advantageously applied to the purposes of man in any of the principal states of Europe. Some feeble attempts have been made to comb it, and to produce filaments from it, after it had passed through the first stage of manufacture in the Levant. It is with much pleasure I state that Mr. Berville, a manufacturer and merchant of Amiens, has overcome these obstructions; he has combed and carded it with great dexterity, so that it is as completely prepared for the loom as any brought from Smyrna. When we consider the immense quantity of yarn of this kind annually consumed in the city of Amiens, and the vast sums which have been paid by France for the importation, it will obviously be of great advantage to that country, after this discovery, to promote the increase of this prolific animal, which ignorance has so long proscribed as troublesome, and even destructive.

Such are the particulars I have the pleasure to submit to your attention on this subject, and while I invite the regard of your readers to it, they will forgive my remarking some want of respect prevalent in this country to the experiments and pursuits of ingenious foreigners. The English are capable of bringing to great perfection, what they undertake; there is a zeal and liberality manifested in the prosecution of their designs, which is applauded and acknowledged by all

nations, but they are deficient in the contracted circle of objects to which their attention is directed. The moralist will readily discern that this defect arises from some parsimony of nature to them, in respect to the inventive faculty, a principle of action constantly rising above surrounding objects, taking a comprehensive survey of their absolute and resolute properties, and considering nothing to be exotic, which can be beneficially transplanted.

I cannot commend too highly the disposition you, Sir, always show to resist this native prejudice to which I have adverted, and when I see you travelling on the shores of the Nile, or exploring the banks of the Ganges, I follow you to these remote regions with peculiar pleasure, and conceive that I derive both instruction and entertainment in the expedition*.

I am, Sir, yours, &c.

August 1, 1804,

GALLICUS.

* See the papers in the last volume, page 33, 155, 250, 254, and 345.

ON THE AGRICULTURE OF THE COUNTY OF SUSSEX.

To the Editor of the Agricultural Magazine.

SIR,

THE peculiarities in husbandry in the county of Sussex, from the singularity of an unbroken chain of downs expanding through an extent of upwards of 50 miles, and subject to a singular system, from its surface, or supplying the means of improvement from its entrails, render this county deserving the serious attention of your readers. For twenty successive years, I have been in the habit of visiting this province, not, indeed, in the pursuit of agriculture, but for the pleasures of retirement, and the information I have collected during some of the most delightful intervals of my life, will furnish the materials of this paper.

A late survey, under authority, enables me to state with accuracy the population of Sussex.

Houses inhabited	25,272
Occupied by families	30,755
Number of males	78,797
Do. of females.....	80,514
Persons chiefly employed in agriculture	38,925
Ditto in trade, manufactures, or handicraft.....	19,608
Total of inhabitants.....	159,311

The length of Sussex, from Emswith to Kent Ditch, is about 76 miles, the medium breadth about 20, and the content, pretty accurately, 933,360 acres.

The rivers are inconsiderable : the largest are the Ouse, the Adur, and the Arun. They rise in the north of the county, intersect the southern hills, and then hasten to the sea. In the fifth volume, opposite to page 81, of your Magazine, you have introduced a plate, giving the direction of the canals in this county, I shall not therefore particularly describe them ; I need only state, that of the two canals, the one follows the course of the first, the other of the last river I have named. The deficiency of internal navigation will be much less felt in a county possessing nearly 100 miles of sea-coast, and it will be seen in the sequel, that the inhabitants have not neglected to avail themselves of this advantage for the purposes of agriculture.

The northern part of Sussex is an extensive waste, in which the eye, now and then, gladly discovers relief from a few spots of cultivation. If, however, the view be disagreeable to the friend of improvement, the prospect is by no means unpleasant to the admirer of picturesque scenery : vast forests of oak overshadow the plain, and present a wild and romantic character, peculiarly gratifying to the taste of the artist.

The south downs to which I have just alluded in the wide range I have described, seldom exceed four miles in breadth. In the expanse of 80,000 acres, not one can be discerned on a level ; the undulating form is both lovely and magnificent, and while these heights seem to present a barrier to the boisterous ocean, to prevent his encroachments, they supply vast hemispheric basins of thousands of acres, to engulph his waters if he should presume to pass the prescribed boundary. These hills commence at Eastbourne, and proceed westerly to the confines of Hampshire.

The climate, in general, is warm, and favourable to vegetation, but on the south-west side of the county the farmer suffers material inconvenience, sometimes from the violence and permanence of the winds from that quarter. Hence the low situations selected for the buildings in that direction, and the corn which is left exposed is not unfrequently blown out of the ear by the tempest.

The soils are various, chalk, sand, loam, and gravel, all are found here. The first is principally on the South Downs, the second in the Weald, and the last lies between the rich loam of the coast and the chalk of the hills.

To the south of the Downs, is an extensive arable vale of singular fertility. It commences in a point west of Bright-helmstone, continues the length of 36 miles to the borders of Hampshire, forming a triangular tract of land nearly equal to the most favoured spot in the island. The clay of the Weald is very stiff, and is upon a brick clay bottom. St. Leonard's forest contains 10,000 acres, and Ashdown forest 18,000 of

this district; and in these inhospitable parts, the black sand of the rabbit warrens is a foot deep, and the clay beneath yet more.

Mr. Anthony Tatlow, submitted some particulars on the subject of the Weald of Sussex, in a manuscript, to the Board of Agriculture, of which I am very glad to avail myself, because local information is valuable or otherwise, often, in proportion to the unproductive state of the soil: because on this, sometimes depends the degree of improvement of which it is capable.

The alternate order of sand, stone, and limestone, is every where found through the Weald in all directions. The sand, stone, marle, and iron-stone, all dip into the hill. Under these at a considerable depth, the various sorts of lime-stone are discovered, and they rise in the order in which they appear, and with the thickness and shale of each species as represented in the subsequent catalogue.

	ft.	in.	ft.	in.	
First lime stone.....	3	3	thick	8	0 shale*
Second ditto.....	0	9	—	9	0 —
Third ditto.....	4	0	—	9	0 —
Fourth ditto.....	1	1	—	3	0 —
Fifth ditto.....	0	8	—	3	0 —
Sixth.....	0	8	—	2	0 —
Seventh.....	8	8	—	4	0 —
Eighth.....	2	0	—	1	6 —
Ninth.....	0	6	—	0	4 —
Tenth.....	0	9	—	1	3 —
Eleventh.....	1	2	—	0	4 —
Twelfth.....	0	8	—	1	1 —
Thirteenth.....	1	1	—	1	6 —
Fourteenth.....	0	6	—	8	0 —
Fifteenth.....	2	3	—	this last stone	

is fine enough to set a razor.

} Greys.

} The great blue—
by far the best.

This is the succession in which the different kinds are found. The Sussex limestone has been discovered to be superior to that of Maidstone and Plymouth. It is now acknowledged there is no cement equal to that procured from the former, in any part of the kingdom.

The size of the farms in the Weald, on the average, do not exceed 100l. in the year, or the rent 10s. per acre. A

* A black slaty substance, or a clay hardened into a stony consistence, and so much impregnated with bitumen, that it becomes somewhat like a coal. It is found in large strata, generally above the coal, in most coal countries of this kingdom. Dr. Short informs us, that the shale wastes the lead ore near it by its strong acid, and that it corrodes and destroys all minerals, excepting iron or coal, of whose vitriol it partakes.

very large quantity of waste under this division, to the reach of 90,000 acres, are let from 1s. to 1s. 6d. and in this are included the two forests I have noticed. In some parts, the farms are very extensive, and many opulent farmers occupy the greater part of their own parishes. This is the case in the following (where the farms sometimes very much exceed 350l. a year.) In Buttolph, Kingston, Combes, Bramber, North Stoke, Blatchingdon, Falmer, and Piddingho. Some marsh land is frequently attached to the farms, for the convenience of the occupant, to maintain and fatten his oxen. A farm of 1,200 acres, near Eastbourne, has 300 acres of that kind; another of 1,260 has 400: and I mention these, to give some idea of the proportion of marsh land required.

In the triangle, formed by three lines connecting Shoreham, Lewes, and Eastbourne, the land will be found to be highly rented, and very valuable. On the western side of the downs, the rent is lower. In Prinsted Hamlet, there are nine farmers, who rent only about 50l. each. The native down, or sheep-walks, let from 1s. to 9s. 6d. an acre. The hills between Newhaven and Shoreham average at about 6s. 6d. and the arable land in the same district obtains from 11s. to 25s. an acre. The downs, between Lewes and Eastbourne may be stated at 3s. and the arable tract at 12s.

The benefit of water-meadows, is not unknown in this part of the country. The river Levant, from the spring head at East Dean to Chichister, waters, perhaps, about 600 acres of land.

The comparative quantity of arable and pasture land is very different. Of the Weald; one third may be called arable, one third pasture, and the remainder wood and waste land. On the south side of the downs, there are thirty acres of arable to one acre of pasture. It, perhaps, may narrow the explanation I should give on this part of my subject, if I submit to the inspection of your readers a short abstract which was delivered in to the Board of Agriculture, by which it will be seen, that the average rent is 10s. per acre; that the total amount of the rent is 475,550l. and that the produce is estimated at 1,722,821l.

	Acres.	Rent.	Total rent	Produce.
Down land.....	68,000	7	23,800	at 4 rents, 95,200
Rich arable.....	100,000	20	100,000	at 4 — 400,000
Marsh.....	30,000	25	37,500	at 5 — 187,500
Waste.....	90,000	1 6	6,750	at 1½ — 70,121
Arab. & pasture } in the Weald. }	425,000	10	212,500	at 3 — 637,500
Woods, &c.....	190,000	10	95,000	at 3½ — 332,500
	903,000		475,550	1,722,821

I have very little to say, either in objection to, or in commendation of the covenants of leases in Sussex; they are very much like those in other counties, excepting, that not only for seven, fourteen, and twenty-one years, the terms run, but eleven years is not unusual. A distinction, from the large cultivation of hops, should likewise be noticed. Where this important plant is produced, the tenant is required to sow one crop of corn between the new and old crop of hops after the grubbing. One third of the farm is to be in tillage, and two thirds in meadow, pasture, and hops. No grass is to be ploughed up but for the hop-gardens.

The course of crops is of so much importance, that it should receive peculiar attention in these provincial disquisitions. On the strong loamy soils in the Weald, it is 1 fallow, 2 wheat, 3 oats, 4 clover, 5 oats, pease, or wheat. The method of preparing the land, is by a clean fallow, during which three or four ploughings are given, and on which three bushels of wheat are sown.

The oats are upon two ploughings, the first in winter, from four to five inches deep; with the oats, the land is easily laid down, on the addition of one peck of clover. The clover is sown the first year, and fed the second, or it is ploughed in as soon as mown, after having turned into it a few sheep, when the land is ploughed three or four times for wheat, peas, or oats. Others break it up in May, after Spring seed-time; and when the land is hard and dry, a bastard fallow is given it, to prepare it for the ensuing crop. A much better method has been recommended, which for the sake of the Weald farmers, ought to have a place in your Magazine. Speaking generally of the husbandry of this unproductive tract, the first operation unquestionably should be, hollow draining: after this, cabbages might be advantageously planted for feeding oxen or other cattle, next a crop of oats, clover, or any thing else peculiarly suited to the soil thus prepared for its reception. The leading object in the Weald is, to bring it into grass, for it is much better suited to permanent pasture than to any other purpose whatever. The condition of the soil is so wet, that it runs to grass of itself in the course of eighteen years.

There is an admirable method practised upon the light land of this county, which I have noticed with much pleasure. The course is, 1 rye, 2 turnips, 3 barley, 4 clover, 5 wheat.

The rye is sown the latter end of August, or the beginning of September; in the Spring, it is fed off by sheep; afterwards the land is ploughed three or four times, and one pound of turnip seed is sown at Midsummer. These are once hoed, and in October or November, are fed off by sheep. The fol-

lowing April five bushels of barley are sown after three ploughings. This succeeded by clover, trefoil, or rye-grass, laid down for two years. The land is fed with sheep the first year, and the next is subjected to the scythe.

The means of renovating the exhausted earth, will be easily conjectured, in a county where the great patria of chalk is situated. Lime is laid upon their fallows to from 80 to 120 bushels per acre, every third, fourth, or fifth year, and they are not yet sufficiently aware, that the repetition of lime in this way destroys its effect; the better farmers, however, understand, that mould or dung mixed with it prevents this pernicious consequence. It will surprise some of your readers, unacquainted with the extent of the application of this mineral, that it should supply employment for sixteen sloops or more, which are constantly engaged in carrying chalk from the Holywell pits at Beachy Head to the kilns at Bexhill, Hastings and Rye. The quantity conveyed is about 630 cargoes in the year, supplying about 400,000 bushels.

The following are some of the courses of crops most frequent in the neighbourhood of the downs.

1 Wheat	1 Wheat	1 Wheat	1 Wheat	1 Wheat
2 Barley	2 Barley	2 Barley	2 Barley	2 Peas
3 Clover	3 Clover	3 Tares or peas	3 Oats	3 Barley
4 Wheat	4 Turnips	4 Oats	4 Clover.	4 Turnips
5 Fallow.	5 Wheat	5 Clover.		5 Tares.
	6 Fallow.			

Where the light, thin surface of the downs does not cover the seed well, in scorching summers, the corn is sometimes burnt up.

Lime is so powerful a preventative of the disorder which unfortunately this year so generally prevails, that it is not wonderful in Sussex smutty wheat is rarely known.

The rotation in the rich vale is of a kind which can only be adopted on soils of such prodigious fertility. In the following course adopted there, it will be seen, that from this generous earth, three crops of wheat, one of oats, besides peas and clover, are obtained in the short term of six years.

1 Wheat, 2 oats, 3 tares or peas, 4 wheat, 5 clover, 6 wheat, 7 fallow.

Upon the light gravelly soils to the north of Chichester, the succession is, 1 wheat, 2 barley, 3 clover, 4 wheat, 5 peas; or, 1 wheat, 2 turnips, 3 barley, 4 clover.

Marling has been extensively adopted. The best way is to deposit the marle in the winter season, upon a clover ley, where it is pulverized by the frost; but the general plan here is, to strew it on the ground in the summer, ploughing afterwards three, or double that number of times for wheat, and

the quantity they apply is from 1,000 to 1,200 bushels per acre. Chalk is used in the same way.

I shall now advert to the principal feature in the husbandry of the South Downs, I mean the sheep, in which the farmers are unrivalled, both in the excellence of their management, and the goodness of their produce, and I am only concerned that the limits to which I am very properly prescribed, prevent a full explication of a subject of great national importance*.

Among the advantageous qualities of this animal, it should be noticed, that the principal weight is thrown where the flesh is most valuable; in the hind quarters, where it is worth one penny per pound in addition. The wool also is not inferior to the Hereford. On a minute calculation, prior to 1792, an increase of 7,000 fleeces and 16,000 lambs, was found in this district in twenty years. The augmentation since that period, must have been much more considerable, although the term is much shorter. The manufacturer has distinguished the fleece into nine sorts, gradually improving in fineness from the breech to the head.

1 List	4 Second	7 Head
2 Livery	5 Second fine	8 Locks
3 Abbs	6 Running	9 Choice locks.

In the western part, neither the management of the animal nor the wool, is to be compared with the conduct and produce of the eastern. There they have the Hampshire, Dorsetshire, and Somersetshire breeds, and on the Kent side they have the Romney.

Abundant and useful information may be collected from the papers of Mr. Nehemiah Bartley, and some from your less frequent correspondent Mercator Tarraconensis, on the most essential particular connected with this subject. I will, therefore, only remark on this part of it, for the satisfaction of your readers, that the carcass is not found to be at all sacrificed to the wool, and that so far from fine wool being incompatible with a fine form, it is now ascertained that the best fleeces are produced from the best carcasses.

The herbage on these Downs is a short and remarkably sweet food. To this, the delicacy and richness of the flesh is attributed, and also the superiority of the wool. No artifi-

* If this matter should, from local circumstances have fallen within the observation of Topographus, he perhaps will indulge you readers with the valuable information in this department of Southern husbandry. The nature of his plan enables him to go fully into the particulars, and when we recollect the general spirit of improvement to the country with the cross from the South Down breed, I am confident it will be a very acceptable article.

cial food is capable of producing either the one, or the other, in this state of perfection.

Your practical friends often derive more instruction from facts, than from comments. I will, therefore, give you a little abstract of a farm near Lewes, consisting of 1627 acres, composed of 800 on the Downs, 327 meadow and common pasture, and 500 acres arable. A usual stock on this farm is as follows:

Sheep.....	2200	Yearlings.....	18
Working Oxen.....	40	Two Yearlings.....	18
Horses.....	27	Three Yearlings.....	18
Cows.....	18	Swine.....	50
Calves.....	18		

The winter and summer feed for this stock is commonly	
Turnips, acres.....	30
Saintfoin, ditto.....	30
Clover, ditto.....	50
Rape, ditto.....	16
Tares, ditto.....	50

176

Down as above, acres.....	800
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The fertility of the Romney Flat is prodigious. An acre will maintain in a fattening state at Icklesham, six wethers for the summer, and four for the winter months, or an ox of 140 stone. The wool from the Romney breed is coarse, but abundant. A marsh fat wether will average about 6 lb. of wool, and 20 to 25 lb. a quarter.

The cattle for draught and for fattening, are said to be equal to any in the kingdom. The rearing system is, to have the calves dropped in January: for twelve weeks they suck before weaning, or when fourteen days old, (in the provincial phrase) the calf is bobbed upon skim milk. After being weaned, they are turned to grass during the summer; the next winter they are fed upon hay, and the following on straw. Those that are intended for labour, at $2\frac{1}{2}$ years old, are broken in, after which they are worked for three or four years, and then fatted for the shambles.

Those who do not rear their stock, buy their oxen at four or five years old, at 12l. or 15l. each; they keep them for two or three years, during which time they work their oxen, and then sell them. Oil cakes are much used in fattening. Probably, your calculating friend, Agricola Northumbriensis, will draw some conclusion in favour of the horse, when I observe, that from 8 to 14 oxen are used in a single plough, and even this number, are either

used every other day, or in light labour. The reason they give for employing this prodigious strength is, because they think the animal would not fatten kindly, if his powers were more fully exerted.

The plough worked in the Weald, is the Turn-wrist. It breaks up the land from five to seven inches deep, better than the foot-plough used in Suffolk and Essex, and will work steadily, when the other cannot be kept in the ground; but it is very absurd management, to use this instrument on loose and friable land.

The price of labour is higher in the east, than in the western part of the county, and in confirmation of a remark I noticed in *Agricola Septentrionalis*, which I observed in the middle of page 52 of your last number, it may be remarked, that in the long term of 50 years, wages have advanced very little more than 30 per cent.

I will conclude this long, but, I hope, not unimportant dissertation, with some brief strictures on the wood-land. Sussex exceeds every other county, in the perfection and quantity in which she presents to the eye the gigantic progeny of the venerable parent of the forest. The stiff, strong loam, upon a red brick earth, which is so unfavourable to the feebler productions, is best adapted to oak. This soil, I have said, prevails in the Weald, and in consequence, this ancient ornament of our country spreads far and wide over it, and thrives in all its native luxuriance. The demand for oak-bark has been so great, that the fee-simple of extensive and well-wooded tracts, has been paid by the fall of timber and underwood in the short space of two or three years. The statesman will not fail to remark with some concern, that the quantity is much diminished, and that there is no suitable preparation for a future supply. Some of your readers will have seen the complaint of Sir William Dolben, on this subject, a few days prior to the close of the last session of parliament.

The time of felling oak is governed by the season, when the sap flows, for the sake of the bark. This is usually in the month of April.

In a wood well planted with timber, underwood never arrives at any considerable size. The underwood is cut at the growth of from 13 to 17 years: it is applied for hop-poles, faggots for the kilns, and cord-wood for charcoal. Of all the species of underwood, ash pays the best. Young oaks which grow (in the country term) scrubby, are converted into posts and rails, and are used for repairs.

Large quantities of beech are raised upon the chalk-hills.

I will not make this communication longer by any idle and fruitless apologies, but subscribe myself,

Sir, yours, &c.

August 12, 1804.

CHOROGRAPHUS.

OBSERVATIONS ON THE COMPARATIVE UTILITY OF PASTURE AND TILLAGE.

To the Editor of the Agricultural Magazine.

SIR,

I HAVE lately been attending to the volume published under the direction of the Board of Agriculture, devoted exclusively to the comparison between pasturage and tillage, and it has occasioned a series of reflections in my mind, which may be rendered valuable to your readers, if I blend them with the judicious observations of the correspondents of that institution.

It is in vain that the Board of Agriculture interfere to promote tillage, unless it can shew that this sort of culture will redound to the pecuniary advantage of the land, and this observation is very fairly made in the eighth Essay by the Rev. Arthur Young.

— “the great mass of landlords pursue their real interests, and when we see them very generally prefer grass to tillage, in every part of the kingdom, and take all fair opportunities of increasing it, whether by inclosure, or otherwise, there must be some efficient circumstances that direct them. If these be weighty, and duly considered, neither the wishes of the Board, nor the efforts of the Legislature, will have any influence in changing their conduct.”

The Rev. H. J. Close, in the sixth Essay, among the obstacles to tillage, first notices tithes, and although I may not think with him, that “our political and religious policy will be more firmly established, or shaken to the very foundation, as this question shall be well or ill conducted,” yet I agree in his candid acknowledgment that tithes operate as a direct tax on the skill and industry of the country, and that in consequence of the increased tithe tillage is constrained to bear, the favourite project of the Board is greatly impeded. Mr. Close has not pointed out this obstruction, without suggesting a remedy, and it is this: that the tithes of the kingdom be valued and sold, the proprietor of land having the refusal of the tithes of his own property; the money produced by the sale to be vested in the public funds, and the interest applied to the maintenance of the clergy. This he considers more beneficial than the project attributed to the late minister, of substituting lands as a compensation to the clergy in

lieu of tithes, which for a variety of reasons he considers would be ruinous to the clergy, and injurious to the state.

The importance of inclosing the open country is now generally admitted, but it has been greatly impeded, by the necessity of parliamentary interference; for the counties of Leicester, Northampton, and Lincoln, only four hundred and thirty-five acts of parliament were obtained before the year 1797, at a most enormous charge. The reverend gentleman recommends that the decisions on inclosures should, with certain modifications, be referred to the magistrates at quarter sessions; claims to be decided by a jury in the county courts, and the verdict given at the quarter sessions to be subject to the review of the court of King's Bench, where the judgment upon the law should be final.

This expedient might settle the question with respect to the inferior claimants on common lands; but how is the great mass of land proprietors, who represent almost the whole wealth of the kingdom, to be satisfied for the loss they conceive themselves to sustain, by the increase of tillage among their tenantry, to the destruction of their ancient pastures.

"In Romney Marsh," says Mr. Goring, "there is a sort of land they call pill-rag, which is not estimated at more than half the value of the maiden land, on account of its having been formerly in tillage."

What is said of that district, is more or less applicable to a very great part of the kingdom, and here it is obvious on the renewal of his leases, the land-owner would lose half the produce of the grass land so converted into tillage.

To this difficulty Mr. Greenall considers the following a sufficient answer, which, however, in my mind, leaves so much to the punctuality, care, and knowledge of the tenant, that we believe very few landlords would be justified in exercising this sort of confidence.

"If," says he, "old pastures are broken up, some other land must be laid down for pasture; and the only advantage a tenant can reap from it will be (perhaps) a better crop of corn from the fresh land; and if he lays the land down well, that is, for pasture, the expence of manuring, &c. will be equal to any advantage he will receive from ploughing the other; no increase of rent should take place, but the tenant should buy as much manure for the land laid down into pasture as the increased value of the crop of corn, which, perhaps, on an average may be 4*l.* per acre, and also to provide all grass seeds at his own expence."

The proposal of the Rev. Arthur Young, obviates these objections, which is "by calculating the produce of the land in question, under grass, and then under corn: to allow half

that produce for the rent, tithe, and poor rates of the grass, and one-third as the rent tax of the arable." He adds very properly, "this will not, in all cases, be exact, or fair, but it is, upon the whole, coming nearer to the truth than any other general rule—easy to be understood."

Considering these observations, and the well-known authorities by which they are supported, of sufficient consequence to be circulated through the medium of your Miscellany, I have sent them for insertion in your approaching number, and remain, with respect,

London,
Aug. 2, 1804.

Sir, yours, &c.

A CONSTANT READER.

VETERINARY ART. LETTER VIII.

To the Editor of the Agricultural Magazine.

SIR,

IN my last letter, I said, that "the few succeeding ones with which I shall terminate my labours, will be almost exclusively applied to the pharmaceutic department of the inquiry, passing over those disorders and corresponding remedies, which have been introduced into the former division."

With what correctness I fulfil these intentions, will soon appear.

This paper will be confined to two subjects of pharmacy, on which the health of the most useful animal greatly depends: bleeding and purging.

BLEEDING.

Bleeding is the opening of a vein for the evacuation of corrupt, or redundant blood. It is evident, the blood thrown out of the heart, while it strikes upon the adjacent blood, and drives it forward, transfers to it part of its own motion, and is thus retarded. Lessen the quantity, its action will be less impeded, and this fluid will acquire a greater velocity, through the whole system, in consequence of which, it will become thinner, and warmer. Dr. Pringle remarks, that it is the most indispensable of all remedies in inflammatory diseases, and horses are peculiarly subject to this class of maladies.

Young horses, at the time of shedding their teeth, are liable to fevers; they should, therefore, be watched, and bled, if necessary: it is likewise proper, in continued colds, after falls, bruises, and strains, and particularly under injuries to the eyes. When horses feel hotter than usual, and mangle their hay, they want bleeding; and if the eye look heavy, dull, and inflamed, it will be a sufficient indication of the necessity.

So much ignorance has been exposed, and is still conti-

nued in the operation, that I cannot be easily too minute in explaining it.

It is usual to let the animal stand over a dunghill after the vein is opened, and whether it spin out as fine as a hair, or whether it gush forth in a full volume; there he remains a certain time, and no attention is paid to the quantity discharged, or to the state of the blood after the emission. No more should be taken away than two or three quarts at a time, excepting in extraordinary cases; it should be received into a measure, to ascertain the quantity, and left there a sufficient time to determine on the quality.

I have always myself practised bleeding with a lancet, and for a long time, gave it the preference to the fleam. The fleam, I believe, is imported from Germany, where it is still used even on the human species. Considering the hands to which this operation on the horse is usually confided, after full consideration of the subject, I resign my former opinion, and give the preference to the fleam in the hands of farriers. Bleeding should be performed without a ligature, because, when bound, the vein, on the application of the instrument, is very liable to slide away, and the indiscreet application of a bandage, not unfrequently induces apoplexy; and the horse, by a sudden privation of the sensible motions of his body, excepting those of the heart and lungs, falls down, to the astonishment of all the beholders, excepting the farrier, who attributes the accident, coolly, to the nature of his disease, and not to his own indiscretion. All that is necessary is, by a moderate pressure of the finger, to assist the extrication of the blood; but if the horse lie down during the operation, a ligature must be employed.

It is not unusual, after bleeding, to draw the skin up, and unite it with a pin. In such cases, from the escape of the blood beneath the skin, a tumour is frequently occasioned, and suppuration follows. All that I have found necessary, has been to perform the operation in the morning, (when it could be at that time conveniently done,) to apply a sponge with some cold water two or three times to the orifice immediately after the operation, and to tie the head of the horse loosely to the rack, so that he should not be able to rub the part, which he is induced to do, from the little irritation which is consequent on bleeding.

I shall not speak of the operation in any other part than in the jugular vein, because it is no where else safe for a farrier to perform it, and in very few cases any additional advantage can be derived from the puncture in other situations.

The orifice should be made in the jugular vein, about the middle of the neck. If opened below, from the redundance of muscle, a serious wound is often occasioned, and what is

called a remedy in such cases, is much worse than the disease. The method is, by forcing a quantity of corrosive sublimate into the part, with the view to reduce the fungus flesh only, and this is called coring out the vein; not perhaps incorrectly so denominated, for it sometimes destroys the very essence and heart of the vein itself, and the contiguous sound parts through which this beautiful and delicate tube rises. The spot most proper for the puncture, is that part of the jugular vein where the teguments are thin, about five inches from the head, and one inch below the branching of the vein; and the place may be clearly distinguished by a little pressure on the main branch of the vein.

The common practitioners are by no means suited to draw blood from the legs, thighs, or what are called the plate veins, situated in the breast, but from what I have explained in the beginning of this letter, it will appear seldom necessary to deviate from the usual mode and situation. Whenever it should be requisite, some expert surgeon, or veterinary professor should be employed, to prevent fatal consequences.

PURGING.

A purgative or purging medicine, is a medicament which evacuates the impurities of the body by stool. It is called also a cathartic. Dr. Cheyne thus explains its operation.

A purgative medicine being received into the stomach by the mouth, its particles do there vellicate or stimulate the fibres of the stomach, and thereby increase the digestive faculty; i. e. they bring the muscular fibres of the stomach, and the muscles of the abdomen and diaphragm into more frequent contractions than ordinary, till the medicine is admitted into the intestines; the fibres and glands whereof being more sensible than those of the stomach (whose parts, by the frequent rough contacts of one against another, and of the gross bodies often thrown into it, are, as it were deadened) it easily moves, and brings them into frequent and forcible contractions, whereby these glands are squeezed, and so emit a fluid matter, which lubricates the passages, and which, mixing with the feculent matter of the intestines (which is rendered fluid by the same active and stimulating quality of the purgative medicine) renders it more fluid; by which, and by the uncommon contractions of the intestines, it passes more easily and plentifully into the intestinum rectum, and is thence ejected by stool.

Before a horse is subjected to this stimulus, some preparation is frequently necessary. If he be full of flesh, he should be bled before the dose is administered. Several mashes of scalded bran may be usefully given, to open the bowels, and discharge from them any indurated excrement, which would occasion griping if not removed.

A fit attention to the quality of the drugs is very material, and the best security in this respect, for persons not conversant in such ingredients, is to procure them at shops of acknowledged credit. The importance of this precaution will immediately appear when we recollect that the medicine is incarcerated in the body of the animal during the long period of twenty-two hours; that the principal channel through which it has to pass, is thirty yards long; and that this extensive vessel in horses, is much more delicate and irritable than in other animals. Hence violent resinous drugs will carry off the very lining or mucus of the guts; will induce inflammatory diseases, and consequent mortification.

Purges should be given early in the morning, upon an empty stomach. About three or four hours after the dose has been received, the horse should have a feed of scalded bran, and a handful of hay may be put into his rack. Two more mashes of the same kind may be placed before him in the course of the day; and if the second or third time of its being offered, he should reject scalded bran, raw bran may be put in the manger.

Bran should be put into the water designed for him, but if he should dislike to drink it in this state, a lock of hay may remain in his water for an hour, and be taken out before the pail is offered him.

The next morning, he may have another mash, or cold bran, and as much water (prepared as just noticed) as he will drink. He should be gently exercised. All this should be repeated, and at night he should have oats mixed with bran.

I must next advert to the cases in which purges are useful; and let it be remembered, that neither these or any other medicine should be administered, without an evident reason. Horses kept in the stable, leading an unnatural life, and not having the benefit of regular exercise, often require cathartics. When the animal loses his appetite, it is an indication that he wants purging. Stubborn, dry coughs, make them necessary, but in such cases, they are more efficacious if prepared with mild mercurials. Horses subject to swelled legs and humours, need this remedy. Sometimes unskilful persons are alarmed if a purge does not apparently operate, but the probability is, that it has worked off by urine and other secretions. In the case of mercurial purges, the animal should be cloathed warm, and be treated with great care.

I will conclude this paper with a few of the most safe purges, premising, however, that bitter ingredients should be given in the form of a bolus, about the size of a poulet's egg, and that it is adviseable not to prepare physic with gross

powders, when it can be done by infusion, as the former are clammy in the mouth, and occasion nausea.

Succotrine aloes.....	10 drams	Succotrine aloes.....	1 oz.
Jalap.....	2 do.	Cream of tartar.....	1 oz.
Salt of tartar.....	2 do.	Jalap.....	2 drams
Grated ginger.....	1 do.	Cloves powdered.....	1 do.
Oil of cloves....	30 drops	Syrup.	

To be made into a ball with
syrup.

The following is much used by sportsmen.

Aloes, from 10 drams to $1\frac{1}{2}$ oz. myrrh, $\frac{1}{2}$ oz. ginger, $\frac{1}{2}$ oz. saffron, $\frac{1}{2}$ dram; oil of anniseed, $\frac{1}{2}$ dram.

Barbadoes aloes should never be used, succotrine is alone suited to so delicate an operation. Half an ounce of Castile soap may be added to any of the above, for horses difficult to purge.

When horses lose their appetite after purging, it is necessary to give them warm stomatics. An infusion of camomile flowers, anniseeds, and saffron, will probably restore it.

If the purging be too violent, and continue long, the horse should have one ounce of diascordium, given in a pint of wine.

It is not unusual, from bad drugs, that the dose, instead of being followed by the expected operation, occasions the animal to swell, and reject his food. Under this circumstance, another channel must be employed, and the subsequent diuretic will be found beneficial.

White wine 1 pint, nitre 1 oz. camphor, dissolved in spirit of wine 1 dram, oil of juniper 2 drams, unrectified oil of amber 2 drams, honey 4 oz.

I am, Sir, yours, &c.

VETERINARIUS.

P. S. The above medicines I can safely recommend, but should any of your readers wish to be informed of the ingredients recommended by Mr. Taplin, if they will signify their wish through the medium of your Magazine, I will not fail to comply with their desire.

EXTENT AND POPULATION OF THE COUNTIES OF ENGLAND AND WALES.

To the Editor of the Agricultural Magazine.

SIR,

THE general view of British agriculture given in your publication, will be materially assisted by an account of the extent and population in the different provinces of the kingdom. The recent improvements in the application of political arithmetic, assisted by a laborious search under high authority, has enabled me to give a very accurate statement

of these particulars*. The extent I have considered in two points of view, politically and agriculturally. For the first the number of square miles, and for the second the number of acres contained in each county are expressed. The population also is examined in two respects: first, as to the number of inhabitants under each division; and next, as to the quantity, on an average, to each square mile.

The fund of useful reflection this comparative calculation will supply, will be obvious to every one of your readers. For the facility of reference, I have preferred arranging the counties in alphabetical order, to giving any fanciful priority from the rank the respective counties bear, or from the extent of territory within their established boundaries.

It may be fit to observe, as no account is included in North Britain or Ireland, that these two parts of the empire are nearly equal to each other in extent, and together are as large as England and Wales: wherefore, the population of Scotland being 1,600,000, averages at 55 to a square mile; and the population of Ireland being about 4,250,000, averages at 146 to a square British mile. The united kingdom averages at 130 to a square mile, including about 470,000 soldiers and sailors.

Counties.	Sq. stat. miles.	Acres.	Population, 1801.	No. of persons in a sq. mile.
Bedfordshire.....	430	275,200	63,393	107
Berkshire.....	744	476,160	109,215	147
Buckinghamshire....	748	478,720	107,444	114
Cambridgeshire	686	439,040	89,346	130
Cheshire.....	1017	650,880	191,751	189
Cornwall.....	1407	900,480	188,269	134
Cumberland.....	1497	958,080	117,230	78
Derbyshire.....	1077	689,280	161,142	149
Devonshire.....	2488	1,592,320	343,001	138
Dorsetshire.....	1129	722,560	115,319	102
Durham.....	1040	665,600	160,361	154
Essex.....	1525	976,000	226,437	148

* I have compared my account with the extent and population given by your correspondent Chorographus in the six counties of Cornwall, Kent, Norfolk, Shropshire, Westmoreland, and the West Riding of Yorkshire, and considering the difficulty of correctness, without recourse to the means to which I have alluded, I am surprised to see so little variation. The following are the most material differences: I increase the population of Kent more than 80,000; of Norfolk more than 50,000; I decrease the extent of Westmoreland about 50,000 acres. The population of this county is stated at 8,000, but I presume that this must be a misprint for 38,000. Chorographus could not himself be guilty of this gross error.

Counties.	Sq. stat. miles.	Acres.	Population, 1801.	No. of per- sons in a sq. mile.
Gloucestershire	1122	718,080	250,809	224
Herefordshire	971	621,440	89,191	92
Hertfordshire	602	385,280	97,577	162
Huntingdonshire	345	220,800	37,568	110
Kent	1462	935,680	307,624	210
Lancashire	1806	1,155,840	672,731	372
Leicestershire	816	522,240	130,081	159
Lincolnshire	2787	1,783,680	208,557	75
Middlesex	297	190,080	818,129	2754
Monmouthshire	516	330,240	45,582	88
Norfolk	2013	1,288,320	273,371	136
Northamptonshire ..	965	617,600	131,757	137
Northumberland	1809	1,157,760	157,101	87
Nottinghamshire	774	495,360	140,350	181
Oxfordshire	742	474,880	109,620	148
Rutlandshire	200	128,000	16,356	82
Shropshire	1403	897,920	167,639	119
Somersetshire	1549	991,360	273,750	177
Hampshire	1533	981,120	219,656	143
Staffordshire	1196	765,440	239,153	199
Suffolk	1566	1,002,240	210,431	134
Surrey	811	519,040	269,043	332
Sussex	1461	935,040	159,311	109
Warwickshire	984	629,760	208,190	212
Westmoreland	722	462,080	41,617	57
Wiltshire	1283	821,120	185,107	144
Worcestershire	674	431,360	139,333	207
York, East Riding..	1268	811,520	139,433	} 143
— North Riding	2112	1,351,680	155,506	
— West Riding	2633	1,685,120	563,953	
England	50,210	32,134,400	8,331,434	166
Anglesey	402	257,280	33,806	84
Brecknockshire	731	467,840	31,633	43
Cardiganshire	726	464,640	42,956	59
Carmarthenshire	926	592,640	67,317	73
Carnarvonshire	775	496,000	41,521	54
Denbighshire	731	467,840	60,352	83
Flintshire	309	197,760	39,622	128
Glamorganshire	822	526,080	71,525	87
Merionethshire	691	442,240	29,506	43
Montgomeryshire	982	628,480	47,978	49

Counties.	Sq. stat. miles.	Acres.	Population, 1801.	No. of persons in a sq. mile.
Pembrokeshire	575	368,000	56,280	98
Radnorshire	455	291,200	19,050	42
Wales	8,125	5,200,000	541,546	67
England and Wales	58,335	37,334,400	8,872,980	152

It may, perhaps, increase the facility of reference, and render the statement of more utility in other respects, if I name the counties in the order of priority to which they are entitled from their comparative extent.

- | | |
|----------------------|---------------------|
| 1 Yorkshire. | 28 Nottinghamshire. |
| 2 Lincolnshire. | 29 Buckinghamshire. |
| 3 Devonshire. | 30 Berkshire. |
| 4 Norfolk. | 31 Oxfordshire. |
| 5 Northumberland. | 32 Westmoreland. |
| 6 Lancashire. | 33 Cambridgeshire. |
| 7 Suffolk. | 34 Worcestershire. |
| 8 Somersetshire. | 35 Hertfordshire. |
| 9 Hampshire. | 36 Monmouthshire. |
| 10 Essex. | 37 Bedfordshire. |
| 11 Cumberland. | 38 Huntingdonshire. |
| 12 Kent. | 39 Middlesex. |
| 13 Sussex. | 40 Rutland. |
| 14 Cornwall. | |
| 15 Shropshire. | 1 Montgomeryshire. |
| 16 Wiltshire. | 2 Carmarthenshire. |
| 17 Staffordshire. | 3 Glamorganshire. |
| 18 Dorsetshire. | 4 Carnarvonshire. |
| 19 Gloucestershire. | 5 Brecknockshire. |
| 20 Derbyshire. | 6 Denbighshire. |
| 21 Durham. | 7 Cardiganshire. |
| 22 Cheshire. | 8 Merionethshire. |
| 23 Warwickshire. | 9 Pembrokeshire. |
| 24 Herefordshire. | 10 Radnorshire. |
| 25 Northamptonshire. | 11 Anglesey. |
| 26 Leicestershire. | 12 Flintshire. |
| 27 Surrey. | |

Yours, &c.

P.

METHOD OF TRIMMING YOUNG HEDGES, AND ON THE IMPORTANCE OF PRESERVING FENCES IN GOOD CONDITION.

To the Editor of the Agricultural Magazine.

SIR,

YOUR readers are much indebted to your ingenious correspondent, Arbustivus, for some remarks which have been to me perfectly new, on the rustic fence. There are, however, some familiar observations to which I could scarcely believe he would condescend. They apply to the method of training young hedges, and I intreat you will have the goodness to impart them, for if common, they are not on that account the less beneficial.

Particular attention ought to be paid to those hedges which are a year old; let every twig near the root be pruned, and those near the middle thinned. I last year found that during the spring months, spreading a little tan bark at the roots, makes the hedge grow rapidly. If the hedge is close to a ditch, let particular care be taken when scouring the ditch, that as few of the fibres be cut as possible. To prevent this from happening, never come within a foot of the hedge. Cutting the ditch close to its root always hastens its ruin, not only by cutting the roots, but it may easily be supposed, that the hedge cannot grow for want of earth.

It is impossible to observe the situation of many parts of the country without regret, merely on account of the neglect of the precaution here recommended. A field of corn, sometimes sufficient to buy the fee simple of a small estate, by a little neglect in respect to the fences, is often laid waste by the depredations of animals attached to the establishment, or by the carelessness of drovers. One of the greatest deformities in a farming country, is the imperfect condition of the hedges: they resemble a natural wall, raised by a beautiful miracle of nature round an inestimable treasure, which is to supply the food, the comfort, and the happiness of the animal creation.

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

May 29, 1804.

C. D.

THE NEW ACT TO REGULATE THE IMPORTATION AND EXPORTATION OF CORN, AND THE BOUNTIES AND DUTIES PAYABLE THEREON.

To the Editor of the Agricultural Magazine.

SIR,

IN my letter of last month I observed, that if the projected statute on the bounties and duties payable on corn should go through the respective stages in parliament, I should not

“ fail to give you as clear a view of it as I am able to do, that your useful Miscellany may contain the proper intelligence on an article of so much importance to the farming interests of this country.”

In the above letter I stated the law as it stood under the regulations of 31 Geo. III. c. 30, and 33 Geo. III. c. 65.

By the new act, which is the 44 Geo. III. c. 109, intituled, “ An Act to regulate the Importation and Exportation of Corn, and the Bounties and Duties payable thereon.” The first of the above statutes is repealed from November 15, 1804, so far, as it regulates the prices at which corn, &c. may be exported or imported.”

“ I. From and after the 15th of November one thousand eight hundred and four, so much of the said act of the thirty-first year aforesaid, as regulates the prices at which British corn, grain, malt, meal, flour, and biscuit, may be exported, except to Ireland, and at which foreign corn, grain, meal, and flour, may be imported, except from Ireland, and as fixes the duties and bounties payable thereon, shall be, and the same is hereby repealed, except so far as the same relates to any duty payable on any corn or grain in respect of the warehousing thereof.”

The next clause enacts, that the importation and exportation shall be regulated by the average price of the maritime districts.

“ II. From and after the said fifteenth of November one thousand eight hundred and four, the importation and exportation of corn, grain, malt, meal, flour, and biscuit, into, and from England and Wales, shall be regulated by the aggregate average price of corn, grain, and oatmeal, of the whole of the twelve maritime districts in England and Wales; and the importation and exportation into and from Scotland, shall be regulated by the aggregate average price of the whole four districts in Scotland; such average price to be ascertained quarterly, weekly, and monthly, from such returns, and in such manner as is directed by the said recited act for ascertaining the average prices of corn, grain, meal, and flour.”

The third section directs the bounties to be regulated by the schedule I have subjoined, marked A.

“ III. From and after the fifteenth of November one thousand eight hundred and four, the several bounties specified in the schedule to this act annexed, marked A, and no other, shall be allowed and payable, and paid in respect of and upon British corn, grain, malt, meal, flour, and biscuit, exported from Great Britain, and all such bounties shall be allowed and payable, and paid, and the exportation of British corn, grain, malt, meal, and flour, prohibited according to the prices and regulations of the said table.”

The following enacts that the duties on corn be regulated by schedule B.

“ IV. The several and respective duties specified and set forth in the schedule to this act annexed, marked B, and no other, on different duties, except as aforesaid, shall be charged and levied upon, and payable and paid in respect of all corn, grain, meal, and flour, imported into Great Britain; and such duties shall be charged, and payable and paid according to the prices and regulations in the said schedule.”

This act, by the 5th clause, is not to extend to the exportation or importation of corn from Great Britain to Ireland, or from Ireland to Great Britain, and the provisions of former acts are to be applied to this act.

“ V. Nothing in this act shall extend, or be construed to extend, to the exportation or importation of corn, grain, meal, and flour, from Great Britain to Ireland, or from Ireland to Great Britain; and all the powers, provisions, authorities, regulations, penalties, forfeitures, clauses, matters, and things, in the said act, or any subsequent act contained, and not hereby altered, varied, or repealed, shall extend, and be construed to extend, to this act, and be used and applied in carrying the same into execution, as fully as if the provisions and clauses of this act had made part of the said acts.”

The next refers to the case when the average shall be under the prices at which corn may be imported into Great Britain and Ireland on the low duties from foreign parts, and then the exportation shall be allowed from Great Britain to Ireland, &c.

“ VI. Whenever the average prices for regulating the importation and exportation of corn, grain, meal, and flour, into and from Great Britain, shall be under the prices at which the same may be importable into Great Britain on the low duties from foreign parts, it shall and may be lawful to any person or persons to export any such corn, or grain, of British growth, or any meal or flour made thereof, from Great Britain to Ireland; and in like manner, whenever the average prices for regulating the importation and exportation of corn, grain, and flour, into and from Ireland, shall be under the prices at which the same may be importable into Ireland on the low duties from foreign parts, it shall and may be lawful for any person or persons to export any such corn, or grain, of Irish growth, or any meal or flour made thereof, from Ireland to Great Britain.”

The seventh section, enacts, that the importation and exportation of corn into and from Ireland, shall be regulated by the schedules C and D.

“ VII. And after the said fifteenth of November one thou-

sand eight hundred and four, the importation of foreign corn, grain, malt, flour, and biscuit, from Ireland, and the payment of the duties and bounties thereon, shall be regulated according to the schedules to this act annexed, marked C and D respectively, and the duties thereon specified, shall be charged and payable, and paid, and the bounties therein specified shall be allowed and paid, according to the prices and regulations therein contained."

The last is to incorporate into this act the powers, regulations, &c. of former acts connected with the subject.

"VIII. All the provisions, powers, authorities, regulations, penalties, forfeitures, clauses, matters, and things now in force in any act of parliament in relation to the importation into Ireland, or exportation from Ireland, of any corn, grain, malt, meal, or flour, not contrary to the provisions of this act, shall extend, and be construed to extend, and be applied and enforced for the carrying into execution the purposes of this act, in relation to the duties and bounties, and importation and exportation of corn, grain, meal, and flour, into and from Ireland respectively, and regulations relating thereto, specified in the said schedules marked C and D, as fully and effectually as if the same were repeated and re-enacted in and made part of the body of this act."

You will, Mr. Editor, have the goodness to direct that the schedules may be arranged in alphabetical order. In my next communication I shall have the honour of submitting to the attention of your readers, some remarks on the nature and effect of this legislative regulation, which is so essentially beneficial to the farming and landed interest of the country.

I am, Sir, yours, &c.

Inner Temple,
Aug. 14, 1804.

J. L. D.

SCHEDULE (B.) *Shewing the Prices according to which*

	Wheat.	Rye, Pease, and Beans.
When imported from the Province of Quebec, or the other British Colonies or Plantations in North America :		
If under.....per quarter	s. 53 - -	s. 35 - -
High Duty.....Do....	s. d. - 24 3	s. d. - 22 0
If at, or above.....per quarter	53 - -	35 - -
but under.....Do....	56 - -	37 - -
First Low Duty	- 2 6	- 1 6
If at, or above.....per quarter	56 - -	37 - -
Second Low Duty	- 0 6	- 0 3
When imported from any other foreign Country.		
If under.....per quarter	s. 63 - -	s. 42 - -
High Duty	s. d. - 24 3	s. d. - 22 0
If at, or above.....per quarter	63 - -	42 - -
but under.....Do....	66 - -	44 - -
First Low Duty	- 2 6	- 1 6
If at, or above.....per quarter	66 - -	44 - -
Second Low Duty	- 0 6	- 0 3

IMPORTATION of Wheat, Meal, and Flour, to be governed as follows :

When imported from the Province of Quebec, or the other British Colonies or Plantations in North America,	s. d.
High Duty	per cwt. 6 6
First Low Duty	1 6
Second Do.	0 2
When imported from any other foreign Country,	
High Duty	6 6
First Low Do.	1 6
Second Do.	1 0
Malt made of Wheat	Prohibited.
Rye ground, or Malt made of Rye; Pease ground, and Beans ground.	Prohibited.

High or Low Duties are to take place on Importation.

Barley, Beer, or Bigg.	Oats.		Oatmeal.
When imported from the Province of Quebec, or the other British Colonies or Plantations in North America:			
s. d. 26 0 -	s. 17	If under { per Boll of 140 lbs. Avoir- dupois, or 128 lbs. Scotch Troy.	s. d. 16 6
s. d. - 22 0	s. d. 6 7	for every Boll, High Duty	s. d. 8 0
26 0 -	17	If at, or above.....per boll	16 6
28 0 -	18	but under.....Do....	17 4
- 1 3	1 0	First low Duty.....	1 0
28 0 -	18	If at, or above.....per boll	17 4
- 0 3	0 2	Second low Duty.....	0 2
When imported from any other foreign Country:			
s. d. 31 6 -	s. 21	If under.....per boll	s. 20
s. d. - 22 0	s. d. 6 7	High Duty	s. d. 8 0
31 6 -	21	If at, or above.....per boll	20
33 0 -	22	but under.....Do....	21
- 1 3	1 0	First low Duty.....	1 0
33 0 -	22	If at, or above.....per boll	21
- 0 3	0 2	Second low Duty.....	0 6

IMPORTATION of Indian Corn or Maize to be governed by the Price
of Barley, as follows:

When imported from the Province of Quebec, or the other British Colonies or Plantations in North America,		s. d.
High Duty	per qr.	22 0
First Low Do.		1 3
Second Ditto		0 3
When imported from any other foreign Country,		
High Duty		22 0
First Low Do.		1 3
Second Do.		0 3

Barley, Indian Corn or Maize, Beer or Bigg ground; and Malt made of
Barley, Indian Corn or Maize, Beer or Bigg.—Prohibited.
Malt made of Oats.—Prohibited.

SCHEDULE (C.)—*Shewing the PRICES according to which*
into

When imported from the Province of Quebec, or the other British Colonies or Plantations in North America,	Wheat.	Rye, Pease, and Beans.
	<i>s. d.</i>	<i>s. d.</i>
If under.....per barrel British	32 7 -	22 3 -
High Duty.....British	- 14 10	- 14 0
If at or above.....per barrel British	32 7 -	22 3 -
But under.....per Do British	34 4 -	23 6 -
First low Duty.....British	- 1 6	- 0 11
If at or above.....per barrel British	34 4 -	23 6 -
Second low Duty.....British	- 0 3	- 0 1
When Imported from any other Foreign Country,		
	<i>s. d.</i>	<i>s. d.</i>
If under.....per barrel British	38 8 -	26 8 -
High Duty.....British	- 14 10	- 14 0
If at or above.....per barrel British	38 8 -	26 8 -
But under British	40 6 -	28 0 -
First low Duty.....British	- 1 6	- 0 11
If at or above.....per barrel British	40 6 -	28 0 -
Second low Duty..... British	- 0 3	- 0 1

IMPORTATION of Wheat, Meal, and Flour, to be governed as follows:

When imported from Quebec, or the other British Colonies or Plantations
in North America,

High Duty, per cwt.	—	6 6 British.
First low Duty	—	1 6 Do.
Second low Duty	—	0 2 Do.

When imported from any other foreign Country.

High Duty	—	6 6 British.
First low Duty	—	1 6 Do.
Second low Duty	—	1 0 Do.

Malt made of Wheat.—Prohibited.

Rye ground, or Malt made of Rye; Pease ground, and Beans ground.—
Prohibited.

the HIGH or LOW DUTIES are to take place on IMPORTATION IRELAND.

Barley, Beer, or Bigg.	Oats.	Oatmeal.	s. d.
s. d.	s. d.	{ If under, per cwt. of 112 lbs. Avoir- dupois }	
14 9 -	10 11 -		British 13 2
s. d.	s. d.	High Duty for every cwt.	Do. 8 0
- 12 6	- 4 2		
14 9 -	10 11 -	If at or above per cwt.	Do. 13 2
16 0 -	11 7 -	But under per cwt.	Do. 13 10
- 0 8	- 0 7	First low Duty per cwt.	Do. 1 0
16 0 -	11 7 -	If at or above per cwt.	Do. 13 10
- 0 1	- 0 1	Second low Duty	Do. 0 2
s. d.	s. d.		s. d.
18 0 -	13 6 -	If under.....per cwt.	British 16 0
s. d.	s. d.	High Duty.....	British 8 0
- 12 6	- 4 2		
18 0 -	13 6 -	If at or above.....	British 16 0
18 10 -	14 2 -	But under.....	British 16 9
- 0 8	- 0 7	First low Duty.....	British 1 0
18 10 -	14 2 -	If at or above.....	British 16 9
- 0 1	- 0 1	Second low Duty.....	British 0 6

IMPORTATION of Indian Corn or Maize, to be governed by the Price of Barley as follows:

When imported from Quebec, or the other British Colonies or Plantations in North America,

High Duty	per Barrel	s. d.	15 0	British.
First low Duty	Do.	0 10	Do.	
Second low Duty	Do.	0 2	Do.	

When imported from any other foreign Country,

High Duty	—	15 0	Do.
First low Duty	—	0 10	Do.
Second low Duty	—	0 2	Do.

Malt made of Oats.—Prohibited.

SCHEDULE D.

Shewing the Prices to which the SCALE of BOUNTY is to attach on the EXPORT of CORN, GROUND CORN, FLOUR or MEAL, MALT, &c. from Ireland, and the Prices at which the EXPORTATION is prohibited.

	Wheat.	Rye.	Pease and Beans.	Barley, Beer, or Bigg; or Malt made of Barley, Beer, or Bigg.	Oats.	Wheat Flour, Biscuit, &c.	Wheat Meal.	Rye Meal or Flour.	Barley, Beer or Bigg Flour.	Oatmeal.
When Exported to any Foreign Country.										
If at, or under, per Barrel, British } Bounty British	s. d. 29 5 -	s. d. 20 4 -	s. d. 20 4 -	s. d. 16 0 -	s. d. 10 3 -	per cwt s. d. 1 3 1 6	per cwt s. d. 1 3 1 3	per cwt s. d. 0 9 0 9	per cwt s. d. 0 10 0 10	per cwt s. d. 1 0 1 0
If above, per Barrel, British } No Export allowable.	33 1 -	22 3 -	22 3 -	17 8	12 3 -			...		

PROPOSAL TO EXTERMINATE THE SMUT IN WHEAT, THROUGHOUT THE COUNTRY.

To the Editor of the Agricultural Magazine.

SIR,

THE Smut in wheat being very prevalent this year, I think it cannot be amiss if I give my humble opinion, with some others, concerning the cause of the disorder, which is called the Smut. There seems to be different opinions concerning this. I was lately reading in a first-rate agricultural book, where the author ridicules all preparations for seed-wheat, as being useless, and seems quite certain the blight is the cause. Also, in a late Monthly Report, I saw it was called the blight; all of which I think is very erroneous. I believe very few, if any individual, has ever taken more pains to find out the cause of the smut than I have; and by making a series of experiments within the last twenty years, I am very confident that the cause is in the seed sown, notwithstanding what may be said to the contrary; which I certainly can make plainly appear, by a method which has been used for more than thirty years, and has never once failed, and has been used in different countries, and on several farms, on from twenty to forty acres of wheat annually. I think it my duty, and by the advice of my friends, I intend to advertise a recipe in a few days, in one of the London papers (perhaps the General Evening Post), as an effectual remedy against the smut in wheat, at a very moderate price. If no cure no pay. If these few lines are thought worthy of a place in your Magazine, you will much oblige me by inserting the same.

Falmer, near Lewes,
Aug. 15th, 1804.

Your humble servant,
E. DOWLEN.

ON THE IMPOLICY OF TITHES. IN ANSWER TO CLERICUS.

To the Editor of the Agricultural Magazine.

SIR,

Aug. 15, 1804.

I Earnestly request that you will permit me to inform your correspondent Clericus, that, though I ardently wish for a commutation of tithes, I am *not*, in the mean time, disposed to withhold from the sacred order those tithes they are in the habit of collecting; and that when I contend that they have no right to exact them on the whole income of the inhabitants of England, I conceive I am warranted by law. On this point, however, perhaps I am ill informed, and I should be very glad if you would allow him and Agricola Meridionalis to exercise their great talents in investi-

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R

gating the dormant power of the church; for if the former is successful in his attempt to show that his position is upheld by the laws of this country, I am fully persuaded that its publicity would open the eyes of her inhabitants to the *dangerous* power of the clergy, and tend to promote that important measure—a commutation of tithes; and if he fails in that attempt, some of your readers will be relieved from their apprehensions relative to that dreadful “weapon” mentioned in his first letter, while all of them would be highly entertained by an ingenious display of erudition. I am very sorry, Sir, to express an opinion different from yours, but I am persuaded that the discussion, either of the tithe laws, or their effects on agriculture, is highly interesting to land owners and farmers, and well calculated for your Publication. For my own part, though I am far from imputing to tithes such extensive injury as some writers have contended for, yet I consider them so very hostile to religion, and the peace and happiness of the clergy and laity, so highly detrimental to agricultural *improvements*, and so *disgraceful* to my country, that I am anxious to promote such disquisitions by every means in my power. I have said *disgraceful*, and I must beg leave to go a little farther, and state, that though England is the most free and enlightened country on earth, her practice respecting tithes is more injurious and disgraceful than that of any other country in Europe. In support of this, permit me to state what Mr. Secretary Young has published in his *Tours through France and Italy*, where, says he, “in regard to the oppressions of the clergy as to tithes, I must do that body a justice to which a claim cannot be laid in England. Though the ecclesiastical tenth was levied in France more severely than in Italy, yet it was never exacted with that horrid greediness as is at present the *disgrace* of England. When taken in kind, no such thing was known, in any part of France, as a tenth, it was always a twelfth, or thirteenth, or even a twentieth of the produce; and in no part of this kingdom did a new article of culture pay any thing. Thus turnips, cabbages, clover, chicoree, potatoes, &c. &c. paid nothing. Olives in some places paid; in more, they did not. Cows nothing. Lambs from the twelfth to the twenty-first. Wool nothing. Such mildness in the levy of this odious tax is absolutely unknown in England.” In another part of his *Tour*, previous to the French Revolution, the Secretary says, “All I conversed with in Italy on the subject of tithes, expressed amazement at the tithe we are subject to, and scarcely believed there was a people left in Europe who paid so much, observing that nothing like it was to be found even in Spain

itself." What would have been their amazement, Sir, if Mr. Young had informed them that at one period the English clergy universally and vehemently insisted that, *by divine ordinance*, tithes were part of the patrimony of the church; that they even proceeded so far as to claim a tenth of the profits of all industry, merchandize, wages, soldiers' pay, and *even of the gains of the courtezans in their illegal amours**; and that some sons of the church still contended for the right of the clergy to nearly the whole of these tithes? We have been informed, that in the late dreadful storms which raged with unrestrained violence in France and Italy, where the influence of the clergy had been greatly increased by the principles of the Roman Catholic religion, the people, *notwithstanding the mildness mentioned above as to tithes*, gave the most unequivocal signs of irreligion, and that the great attention of their clergy to tithes and other worldly affairs, had been a fruitful source of animosity and immorality. What the effects of a more rigorous system have been in this country, I shall not attempt to describe. But I may venture to assert, that when her inhabitants deem it expedient to pursue measures for a repeal of the tithe laws, they will proceed in a manner more rational and Christian-like, than that pursued in France—they will respectfully petition an enlightened legislature, without the smallest fear of being reckoned "discontented partizans avowing in the solemn hall of debate, their disrespect for the constitution in church and state, as by law established." They will repose with confidence, on the wisdom and patriotism of their legislators and their knowledge of these truths—that a more extensive agriculture is necessary to increase the population and real strength of the country, and that morality is one of the chief pillars of society—and by petitioning against laws which repress both, will evince their *regard* for the church and the state. It has been customary, when any of our senators have proposed the adoption of a more rational and advantageous mode of paying the clergy, than by tithes, to raise the cry "the church is in danger." The effects of the late severe scarcity, however, and of numerous communications to the Board of Agriculture, &c. &c. have greatly lessened the force of this cry, and it seems probable that, at no very distant period, it will be raised in vain. I am, perhaps, as warmly attached to the Church of England, and her splendid hierarchy, as your correspondent at Rudland; I quarrel not with the greatness of her revenue, for, in my mind, it is not more than sufficient for the ministers in the most opulent nation in the

* This, I believe, is stated by Mr. Hume, the great historian; and some of your readers will, perhaps, be so curious as to wish to see how Clericus and A. M. *class* these gains.

world. But as experience has demonstrated that the great cause of religion, and a national clergy, can be well supported without tithes, I wish to see an equal, or greater revenue raised without that odious and injurious tax. I referred Clericus to the mode of commutation I recommended in your Magazine in 1803, by which both the clergy and lay impropiators would receive, in all time coming, an annual allowance in money, bearing the same proportion to the future rents of land, which the amount of the tithes have borne to the past rents for a certain number of years. He does not, however, discuss any plan of commutation, nor does he make any attempt whatever to show that the collection of tithe, according to the present system, is not prejudicial to agriculture. He merely states, that in the contests between the clergy and laity, on the assessment of tithes, the former almost always prevail, and therefore that they are unwilling to have the English laws changed. But if he does not advance a better reason against a commutation, some Cynic will, perhaps, say that he wishes to preserve the "weapons" of the church, under an idea, that future times may be favourable to their use, or that the people of England may return to the ignorant and bigotted state which universally prevailed in the days of Ethelwolf, and that the sacred order would then, as in the reign of that superstitious monarch, (when tithes were established) embrace the opportunity offered by the first public calamity, to persuade them, that their opposition to the demands of the church had brought the divine vengeance on their heads. And indeed, Sir, it seems far beyond the bounds of probability that the personal tithes your correspondent says are due to the church, can be collected, till the country be entirely overspread with ignorance, bigotry, and superstition. He has acknowledged that tithes are collected only by legislative authority; and will not, I presume, dispute that the power which established the tithe system has a right to overthrow it. It is a right inherent in government to interfere with private property when the public good requires such interference; and, in such cases, the acts direct that liberal allowances shall be made to the proprietors, by arbitrators fairly chosen. Clericus has stated, however, "that the public good is ever consistent with private right, and that when private right is violated, the general good is sacrificed," &c. But if he will advert to these circumstances, namely, that with a view of promoting the public good, houses have been taken down without the consent of their owners; and that, contrary to the inclinations of land-holders, canals, roads, and harbours have been made in their estates, greatly to the national advantage, he will see that *private right* has been

often violated, and that what he has advanced is overthrown by *facts*. He should also observe, that bills for the division of commons, *compel* the tithe-owners to renounce their *right* to the tithe, and to accept an equivalent in land to be set off by the commissioners. This clearly shows the *power* of our legislators, and their ideas with regard to the advantages of a commutation; and undoubtedly, Sir, when they are sensible, from the petitions, &c. of the people, that such a measure is ardently wished for, they will, with great facility, commute tithes *throughout the kingdom*. Your correspondent has also stated, that in the multifarious subjects of my attention, I “lose that simplicity of thought necessary to just reasoning and sound philosophy.” My letter, upon which he has animadverted, contains some typographical errors, and your printer has, by mistake, omitted two or three lines; I must therefore request his attention to your promised list of errata, after which, perhaps, he may change his opinion. But be this as it may, I must remark, that though his philosophical knowledge, and his powers as a just reasoner, are, undoubtedly, much superior to mine; and though that superiority would, in most cases, be very conspicuous, yet I humbly conceive that it does not appear in his reasoning on the subject of tithes. I flatter myself, Sir, that in this, and last year’s pages of your Miscellany, I have proved that tithes, as they are now collected, are very prejudicial in preventing agricultural improvements, and in destroying morality, and the peace and happiness of the clergy and laity; and also, that the income, &c. of the sacred order, would rather be increased than diminished, by commuting them. Clericus has not controverted the facts and arguments I have advanced, and therefore we may fairly conclude that his sentiments, on those subjects, are in unison with mine. His reasoning, then, will stand thus,

Tithes, as they are now collected, are very prejudicial to that most important of all arts, agriculture; they are also destructive of morality, and the interests and happiness of the clergy and laity. Such a plan of commuting them may be devised, as would not only greatly promote agricultural improvements, but increase the income of the clergy, and remove the cause of that animosity which so generally prevails between the ministers of the gospel of *peace* and their parishioners,

Therefore, the legislature should *not* pass a bill to commute tithes.

Mine stands thus:—

Tithes, as they are now collected, are very prejudicial to that most important of all arts, agriculture; they are also destructive of morality, and the interests and happiness of the clergy and laity.

Such a plan of commuting them may be devised, as would

not only greatly promote agricultural improvements, but increase the income of the clergy, and remove the cause of that animosity which so generally prevails between the ministers of the gospel of *peace*, and their parishioners,

Therefore, a law to commute tithes throughout England and Ireland, *would highly promote the interests of this kingdom.*

Which of these conclusions is the most "just," your readers will readily determine. Clericus is a very bold assertor of the rights of the church, and I assure you, Sir, I am extremely desirous of following him, as far as my humble talents will permit, through all the turnings and windings of his crooked and pernicious mode of supporting the ministers of our holy religion; but adverting to your observations to your correspondents, I fear I have already a little exceeded the limits, I am sorry to see, you have prescribed to them in discussing this *important* subject. I shall, therefore, at present only beg leave to address a few lines to Agricola Meridionalis. An unusual press of business has, till this very day, deprived me of the pleasure of attending to your Magazine for June last. For this reason, and from a desire to pay my respects, in the first place, to Clericus, (which I am sure A. M. will readily excuse) I cannot send you a paper in answer to his observations on the size of farms, till next month, when I shall endeavour to draw him down from "the ærial regions," to which, I observe, he has made a very elegant ascent, to the "field of industry;" for that is the place where I have, *principally*, learned to estimate the comparative merits of large and small farms. I am happy, however, in saying, that in his letter I find much to approve, and that I am not, like several of your correspondents, hostile to the introduction into your Work, of subjects connected with legislative and political regulations. For these regulations, as in the case of tithes, the trade in corn, &c. &c. are sometimes great obstructions to *agriculture*, and I am decidedly of opinion that agricultural periodical publications will be nearly as advantageous to the country in exciting a spirit of *inquiry* and emulation, as in diffusing knowledge in the cultivation of the soil.

I am, Sir, yours, &c.

AGRICOLA NORTHUMBRIENSIS.

SPANISH WOOL.

To the Editor of the Agricultural Magazine.

SIR,

I Have been looking for some time in vain for the proposed communication of Mercator Tarraconensis. It appears to me, that some wrong opinions are entertained respecting

Spanish sheep, from the partial information of the ingenious and spirited persons amongst whom the experiments on exotic wool have been hitherto confined. M. T., I understand, has resided a considerable time in the south of Europe: the farmer is almost necessarily confined to his native soil; I wish, therefore, that the foreign experience of the former might be employed to correct the contracted information of the latter.

Hoping that the commercial engagements of M. T. will not prevent his attention to this hint,

London,

I am, Sir, yours, &c.

Aug. 18, 1804.

B. A.

ENUMERATIONS OF PATENTS LATELY ENROLLED.

1804. **J**OSIAH Crane and Richard March, of Barnstaple, May 1. in the county of Devon, Hosiers; for a method of double seaming and uniting the insides of stocking-net-work together, so as to consolidate and make it one compact and elastic body, for cutting into any shape required, and converting into all or any of the articles in hosiery, or other garments or wearing apparel, to be worn double.

— 3. Nathaniel Merriman, of Crutched Friars, in the city of London, Tin-manufacturer; for a stove, grate, or range, upon an improved construction; the improved construction of which is likewise applicable to those already in use, for the purpose of clearing away foul air from churches, chapels, and all other places of public resort, as well as houses, buildings, and rooms of every description.

— 14. John Swift Saxelbye, of the town of Derby, in the county of Derby, White-lead-maker; for a method of making white-lead different from the methods now practised or used, and without the aid of horse-litter or tanners' bark, or either of them.

— 14. Joseph Moseley Elliott, of the Parish of St. Mary-le-bone, in the county of Middlesex, Watch-maker; for a method of making repeaters, or repeating watches, and chronometers.

— 14. Robert Brown, of the town and county of the town of Nottingham, Lace-manufacturer; for a machine to affix or attach to horizontal warp or Vandyke knitting-frames, for the purpose of manufacturing, by a more simple, neat, and expeditious method, lace or net-work of various figures and qualities, with thread, silk, cotton, worsted, or other materials produced from animal, vegetable, or mineral substances.

— 14. Thomas Dobbs, of King's Norton, in the county of Worecester, Chemist; for a new article of trade which he

denominates *Albion Metal*, and which he applies to the making of cisterns, linings for cisterns, covering and gutters for buildings, boilers, vats, coffin-furniture, worms for distillers, and such other things as require to be made of a flexible, a wholesome, or a cheap metallic substance.

May 18. Joshua Jowett, of High Holborn, in the county of Middlesex, Ironmonger; for a fire-guard stove.

— 18. John Peter Barthelemy, of Marshall-street, in the county of Middlesex, Stay-maker, and James Stroubridge, of Old Bond-street, in the parish of St. George, Hanover-square, in the said county of Middlesex, Hatter; for a shield or protection for the preservation of the human body against sword, bayonet, or pike, as also being proof against a musket-ball at a moderate distance.

— 18. Joseph Burrell, of Thetford, in the county of Norfolk, Iron-founder; for an improved threshing machine.

— 18. Frederic Albert Winsor, of Cheapside, London, Merchant; for an improved oven, stove, or apparatus, for the purpose of extracting inflammable air, oil, pitch, tar, and acids, and reducing into coke and charcoal all kinds of fuel, and which is also applicable to various other useful purposes.

— 19. George Simmons, of ———; for a method of manufacturing hats, bonnets, and other useful articles, of paper.

— 30. Samuel Godwin, of Avoncliffe, near Bradford, in the county of Wilts, Clothier; for improvements upon machines for carding, scribbling, dressing, and brushing, wool and woollen cloth.

— 30. Samuel Lucas, of Sheffield, in the county of York, Refiner; for a method of separating the impurities from crude or cast iron without fusing or melting it, and of rendering the same malleable, and proper for the several purposes for which forged or rolled iron is now used; and also by the same method of improving articles manufactured of cast-iron, and thereby rendering cast or crude iron applicable to a variety of new and useful purposes.

— 30. John Porter, of Lemonville, near Tandragee, in the county of Armagh, in that part of the United Kingdom called Ireland, Gentleman; for a lamp upon a new construction.

— 30. John Duncan, of Glasgow, Manufacturer; for an improved method or means of tambouring, or raising of flowers, figures, or other ornaments, upon muslins, lawns, and other cottons, cloths, or stuffs, or upon silk, linen, or woollen cloths or stuffs, or upon cloths or stuffs composed partly of silk, cotton, or woollen.

June 2. John Heppenstall, of Doncaster, in the county of

York, Machine-maker and Engineer; for improvements in machinery or mill-spinning, for the spinning of cotton, wool, silk, hemp, flax, substitutes for hemp and flax, and for the laying or twisting cord, linen, line, twine, and thread.

June 2. Thomas Johnson, late of Bredbury, but now of Stockport, in the county palatine of Chester, Weaver; for a further addition and improvement to a new and improved method applicable to the dressing of cotton-warp, and also a new and improved method if and when the same shall be used for dressing linen, silk, or woollen warps.

— 7. Arthur Woolf, of Wood-street, Spa-fields, in the county of Middlesex, Engineer; for improvement in the construction of steam-engines.

— 19. Timothy Bentley, of Lockwood, in the parish of Almondbury, in the county of York, Common Brewer; for a method of seasoning new casks, and purifying musty ones, far superior to any other.

— 20. Lyon Pyke, of No. 8, Colchester-street, White-chapel, in the county of Middlesex, Pencil-maker; for improvements on pencils, which he intends to denominate "*Pyke's Patent improved Pencils.*"

— 20. Edward Martin, of Morriston, in the county of Glamorgan, Gentleman; for a method of making pig and cast iron, of every description, from iron-stone, iron-mine, and iron-ore, and of remelting, preparing, and refining of pig and cast iron of every sort, and for the making of such pig and cast iron into wrought or bar iron, by using raw stone, coal, and culm, to be worked and made by blast.

CRITICAL CATALOGUE.

Communications to the Board of Agriculture, on Subjects relative to the Husbandry, and Internal Improvement of the Country. Vol. III. Part II. 4to. NICOL, 1804. (Continued.)

NO. XXIII is the production of A. Low, Esq. of Woodlands, by Dunn, in Berwickshire. From the result of various experiments, this gentleman recommends the following mode of breaking up old grass land:—

"The best mode I know of, for breaking up these lands and restoring them to grass again is as follows. If the soil be inclined to gravel, or sand, plough in the direction of the present ridges, any time in February, with a neat furrow, from 3 to 5 inches deep, and from 7 to 9 inches broad, and sow with oats in March, harrowing well after sowing, and making furrows with a plough, or ruts with a spade, to carry off the surface water. As soon as the crop is cut down, and

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carried off, and the gleanings and foggage eaten up with black cattle or sheep, the field should be ploughed up, with a furrow an inch or two deeper than the former; afterwards the field ought to be shut up, to prevent cattle from poaching, till the end of March or first of April. It must then be cross-ploughed, and during the month of May it must be well harrowed and pulverised by frequent ploughings and subsequent harrowings, and cleared of stones; couch quickens, or grass roots, must be carefully gathered and burnt in the ground, or carted off. The field should then rest from the 1st to the 18th or 11th of June, to give time to the annual weeds to vegetate; it should then be dunged as well as the circumstances of the farm will afford, and each day, or yoking, the dung should be immediately spread and ploughed down, and the turnips sown in broad-cast or drills, as best meets the opinion of the possessor, or operator; in either case the turnips must be perfectly cleaned, and properly thinned; and ought to be eat off with sheep, and immediately when the crop is off, the land must be neatly ridged up for seed, which may be, early oats, such as Dutch, early Essex, or Poland rye, or barley; after the grain is harrowed in, roll the field, give a single of the harrow after rolling, and sow the grass-seeds, which may be rolled or harrowed in.

4 lbs. of red clover,

8 white,

4 yellow,

2 rib-grass,

1½ bushel of rye-grass,

} all well mixed together before sowing,
will be sufficient for an acre.

Great care should be taken to have the rye-grass of the pyrennial kind, and not the annual. As I suppose this class of soil has no great fertility in itself but what it has acquired from a long course of pasturage and rest, I do not recommend to take a crop of hay the fourth year, but to pasture it; the additional quantity of stock the land will pasture the first year after being sown off, will pay for the grass-seeds. It would add to the weight of the crops, and the improvement of the pasture, where lime is to be had, to lay 4 or 5 cart loads of shells, well flacked on the field before breaking up, or on the stubble after the first crop is reaped, for this course of improvement (I call it so with confidence) the lease cannot be less than four years, and the increase of rent cannot be great, unless the prices in the years when the fields are in grain be very high."

No. XXIV. is by G. Tollet, Esq. of Twining, Tewksbury. This essay is the production of a very intelligent writer. It is divided into Sections, and contains some particularly ingenious observations on the different species of grass, their management, use, &c.

No. XXVIII. by J. Wing, Esq. of Thorney Abbey, is by a very neat Essay on the convertible system in the management of fen lands. The system which this gentleman recommends is as follows:

"About one-third part of such of the land as is not reserved for permanent pasture, is permitted to be ploughed in each year, taking into the account both cole and corn; the remainder is kept in a succession of grass and tillage.

"First Year. Pare and burn for coleseed; the depth ploughed for burning being about one inch and a half, to be fed off with sheep,

which will in general fatten six (or seven) to an acre; hoeing it, has of late been introduced to great advantage, but not set out so thin as for turnips. The most approved season for sowing cole, is any time in the first fourteen days of July, and it should be sowed in the evening of the day on which the land is ploughed, in which case it hardly ever fails to grow. Unremitting attention should be paid during the time of burning, and the ashes spread as soon as made. From neglect alone proceeds the land taking fire, which has furnished objections to the process, but it may always be prevented by proper care.

"Second Year. Oats, for which they usually plough about three inches and an half deep.

"Third Year. Oats, barley, or wheat, ploughing about one inch deeper than before; with which it is laid down with grass-seeds for five, six, or seven years; the longer the better; the quality of the corn being always found to be superior, in proportion to the length of time the land has been in grass. Beans, turnips, &c. have all been tried, but have not been found to answer."

"Such," observes the writer, "is the present convertible system in the management of fen lands, no part of which appears to be very defective: it is attended with no difficulty in its execution, may be continued for ever, and the land kept in a constant state of fertility, requiring no other manure than that which it is in itself from time to time capable of producing.

"The good effects of it are, that the rents have been progressively more than doubled; and that such an increase of population, property, the various kinds of cattle, wool, and of animal and vegetable food has arisen, as to give to the country, where it is established, which before was depressed far below its due level, a degree of importance and respectability, which few of the like extent exceed, or perhaps equal."

We cannot conclude our remarks on these Essays, amounting in the aggregate to thirty-one, better than by our closing observations on the first part of the volume. On the whole, this is a very valuable collection, and amidst considerable diversity of opinion, by far the greater number agree in thinking that not only waste lands, but strong and profitable grass-lands, may be beneficially converted into tillage, and in that state meliorated and rendered fitter for profitable productiveness when again returned into grass.

Such a result, so auspicious to our prospects of increased human food, coming from such eminent authorities, must be extremely satisfactory to agricultural, political, and moral patriots.

A complete System of Veterinary Medicine, by JAMES WHITE, Veterinary Surgeon of the first or Royal Dragoons, vol. 2, the Materia Medica and Pharmacopœia, 12mo. 5s. boards. Royal Paper, 7s. 6d. BADCOCK.

A Subject so nearly connected with agriculture as the one now before us, will never fail to receive our earliest and most candid attention. Mr. White has already appeared at our tribunal, and that sentence we were the foremost to award, has been sanctioned by our contemporaries and by the public; for the author speaks of his Com-

pendium having gone into a sixth edition, affording a very substantial proof of a favourable reception.

We read with pleasure in an advertisement to the third edition of his Compendium that Mr. White had bestowed considerable labour on *another work*, whence we must confess the present volume came into our hands, after a lapse of two years, with considerable prepossession; for it was clear the authour had adopted the good old maxim of Horace, and did not publish a half digested performance. Nor have we been entirely mistaken in this conjecture; no flippancy, no random remarks, nothing inapplicable to his subject, no needless speculation, nor unbecoming censure, which distinguish too many writers on farriery, are to be found in this volume. A very neat apology is made in the preface for those few instances in which he has adverted of the practice of other farriers.

"If at any time the authour has ventured to notice a defect in the practice of farriers in general, or that recommended by any one in particular, it has been done with the properest intentions; for he was desirous, when it should appear, that there existed deep shades of difference between them, to leave no doubt in the mind of the reader which of the two authorities was right."

The preface takes a rapid view of improvements in the practice of farriery, "a name which was derived from the occupation of the persons who practised it, who were in general smiths, or workers in iron (*Farriers*)."

(Page 3.) He pays a proper tribute to the services rendered by old Bracken. When Mr. W. considers "such a work a *desideratum* in the veterinary art," he was not aware perhaps that the elder Gibbon published a *Farrier's dispensatory*, and Bartlett also followed up his book on *Farriery* by a *Pharmacopœia*.

Speaking of the *Materia Medica*, he says, "It has been the authour's aim to explain the general properties of the various substances employed in medicine, accurately describing their particular effects on the body of the horse, both in health and disease; the doses in which they may be given, their composition, and in short any thing that has any relation to them. This will be comprehended in the *Materia Medica*, or first part of the book. In the *Pharmacopœia* is comprised, directions for forming the various compositions, in the most convenient and efficacious manner, with many valuable receipts of established efficacy under each head.

Mr. W. pleads in extenuation of the *Errata*, his distance from the press, and indeed they are too numerous; to this plea he adds another respecting the application of the term *farriery* to his labours; unless this was meant to account for apparent want of consistency, we do not perceive occasion for the remark. We perceive, however, in this last passage, some of that sedulous care not to be confounded with the empiric, which always marks men of true science.

"His experience," he says, "and particular attention to this subject," were the only guides he had to direct him in the untrodden paths of veterinary therapeutics. No doubt they are the best guides, and we do not lament that our authour was unacquainted with the two works mentioned above; or, if he did know of such, that he neglected or considered them as undeserving his attention. We should be led

to believe the latter cause have operated against Gibson and Bartlett's performance; we say performance, since the latter is the copyist of the former in both his publications, amending what Bracken had in the mean time pointed out as the errors of Gibson. Later experience, however, has taught us they were all erroneous; and notwithstanding the many new propositions which the practitioner will discover in this little volume, we have no doubt a great deal yet remains to be done in this department of medical science.

Among the tonics we were not a little surprised to see arsenic strongly recommended even in the dose of 3 drams. Our authour accounts for this effect, by the membrane which lines the throat of a horse, hanging far down in the stomach, thereby preventing the poisonous quality of the arsenic from injuring the sensible coats of the stomach. A few days continuance of the dose will, however, cause considerable commotion in the bowels; and the precaution of previously administering water-gruel, infusion of linseed, or other mucilaginous liquids, strongly enjoined. We are told (page 29) that white arsenic has been known to cure the glanders, though not radically.

This latter is a very important hint, and worthy of attention; many of our greatest discoveries have been indebted to slight intimations of this kind. The writer of this article has always preferred vitriolated iron as a tonic.

On the article *Bleeding* the farrier will find the author very intelligent; we did not conceive Mr. W. could have found so much new matter on this subject after the copious directions given in the compendium, chap. 8 vol. 1, page 189; but the fecundity of his pen seems to keep pace with the new lights he is evidently receiving in the course of his practice.

In the present volume, indeed, Mr. W. has done more for this infant science (*veterinary medicine*) than any five of the writers on farriery since Bracken.

Mr. White has not only described the materials proper to be used in veterinary medicine, but likewise those which are either improper or useless. At first sight this would appear extremely incongruous; but when we reflect how much error and ignorance hath obtruded upon the old practice, censure will be turned into approbation. By this means the *horse-doctor's* list of medicines suffers an abridgement truly alarming; and if a few of his customers come to hear that his applications are either murderous or of no use, he will be compelled to learn in his own defence! A consummation devoutly to be wished. Supposing a farrier to require instruction, we would recommend his obtaining in the first place an intimate acquaintance with the *Materia Medica*. 2dly. If he thinks any one man may know more than another, he should read (study with implicit confidence in the authour) Mr. White's first volume, or *Compendium*.

We shall conclude with the following extract:

"FIGS. Mr. Taplin, who sometime ago wrote so much about 'Farriery,' recommends figs and liquorice in his *pectoral drinks* for inflammation of the lungs! a disease that requires the most powerful remedies." Our authour adds—"Figs certainly do not possess any medical qualities worth notice." Firing is the next article,

which we shall extract, as very well written, and conveying a just idea of the authour's style, in the formation of which he seems to have studied clearness and conciseness, no doubt much better adapted to his subject than that of the writer just quoted.

" Firing. A severe operation often performed on the horse, and on some occasions highly useful. It consists in the application of a red-hot iron to the skin, so as to burn without penetrating through it. The violent inflammation this occasions, rouses the absorbent vessels into violent action, by which callous or even bony swellings are sometimes dispersed; the diseases in which it is most efficacious are spavins, ringbones, old callous swellings about the back sinews, in consequence of strains, and windgalls. Firing is supposed to brace the skin, and cause it to act as a bandage on the subjacent parts. A blister often is applied to the part immediately after firing, or on the following day, to render it more effectual. It is necessary to observe, that the milder remedies should always be tried before this severe operation is had recourse to. Firing has been recommended for the purposes of strengthening the back sinews and hocks of colts, to prevent strains, and what is termed breaking down; but it is difficult, if not impossible, to conceive how the workmanship of the Deity can be improved by such means.

" It has been asserted, that when firing is employed for old callous swellings of the back sinews, the swelling should be previously reduced by blistering; that firing would then prevent any return of the complaint, whereas if the firing were performed in the first place, it would tend to fix the swelling, and render it incurable. I do not believe there is any grounds for this opinion.

" The hot iron is the most effectual remedy for those ulcers of the skin, which depend upon farcy or glanders." The word *depend* is misused here; we apprehend it is local for *caused by*.

Jalap is totally rejected by Mr. White, as is also rhubarb. He has found the newly imported *Indian salt* alone incapable of expelling the bots. An admixture of aloes he is of opinion greatly increases its anthelmintic quality; but, with due deference to Mr. White, does not aloes often expel both without other aid?

In the Pharmacopœia, a latter part of this volume, the authour has displayed an intimate knowledge of chemistry.

We shall now take leave of Mr. White's *Veterinary Materia Medica* and *Pharmacopœia*, with strong injunctions upon all practitioners and druggists, who prepare horse-medicines, to peruse carefully.

HISTORY.

Agriculture.

The Harvest.

ACCOUNTS received since the 24th inst. from various parts of the country, speak of the beneficial effects which the fine weather for some days past has produced upon the harvest. In many parts it has been got in, and in others, in as good a state as could be wished. We have thought it would be gratifying to our readers to insert some of the accounts from different counties.

Hampshire. In consequence of the very fine weather for getting in the harvest, there is no alteration in the prices of grain at Havant market since the last report. The greatest part of the wheat within reach of that market, is now saved, and chiefly in good order.

The harvest is now become general, and we are happy to announce (from the various accounts we have received) that, notwithstanding the alarming agricultural reports, the wheat is likely to produce a fair average supply. In the neighbourhood of Dorchester the wheat in general is remarkably heavy in crop—a partial blight, indeed, appeared in some fields, but to no great extent.

Wiltshire, Dorsetshire, and Somersetshire. From our observations on the state of the wheat, in these counties, we are happy to testify, that the very fine rains we have had have very much improved the wheat, so that there can now be no fear of a fair average crop. A present scarcity is not pretended; it must, therefore, be admitted, contrary to the hypothesis of many great men, that alarm alone occasioned the late rapid and extraordinary rise. On a reference to a regular statement of the markets, it will be seen that wheat fell six shillings per quarter at Warminster on Saturday.

Berkshire, Gloucestershire, and Worcestershire. On the report of several gentlemen who have minutely examined and taken samples of crops, we think we may, with great pleasure, congratulate the public in having the benefit of nearly a fair average crop of wheat in quality.

Scotland. Since the beginning of this week, the weather having been very favourable for the harvest, a great deal of corn has been cut down; if the weather continues, we may expect the harvest to be general, and a great demand for shearers next week.

Ireland. The apprehensions which the late rains had excited for the safety of our harvest, have been most happily removed by the glowing summer weather of the last four days. The lowland crops which only had suffered, are recovered, and the reaping, which had been in some degree checked by the late rains, has universally commenced, and exhibits the most luxuriant produce which has been witnessed for some years.

Sale of Part of his Majesty's Flock of Spanish Sheep.

It is a singular circumstance, considering the great length of time that fine, or broad woollen cloths have been in use in Europe, that the wool from a particular breed of sheep kept only in Spain, where there are exceedingly large flocks of them, should have been essential to its fabrication. These sheep are known by the name of the Merino breed, and were peculiar to Spain till about the year 1786, when the unfortunate Louis XVI. introduced a flock of them into France, the progeny of which are still subsisting, and their wool possessing all its original qualities, upon the national farm at Rambouillet, and in the neighbouring communes. His Britannic Majesty was not

unmindful of this object, and within a year of the same period, began, and continued from time to time, the importation of small flocks of Merino sheep, which were, with his Majesty's known liberality, presented to different agriculturists and breeders, or sold with a view of disseminating the breed, at the common prices of English sheep at the time. In the year 1792, through the medium of Lord Auckland, who had been ambassador to Spain, his Majesty procured from the Marchioness del Campo di Alange, forty of the best Spanish sheep, in exchange for eight fine English coach-horses; this flock his Majesty confided to the care of Sir Joseph Banks, Bart. President of the Royal Society, who has paid more attention to the subject of wool, and is without doubt the most perfectly informed on all points, relating to its production and uses, of any other man. His Royal Highness the Duke of Yorke's Park, at Oatlands, being selected as the scene of these interesting and national experiments.

Sir Joseph Banks had assiduously employed himself upon his estate in Lincolnshire, since the first introduction of Spanish sheep, in trying the effect on wool and carcase, of all the crosses which could be made between them and the different breeds in England; but on receiving charge of the royal Merino flock, in 1792, he disposed of all his own sheep, in which there was any mixture of Spanish, and has confined his views in the management of the Royal flock to the preservation of the original breed of 1792, having since admitted no crosses, not even of newly imported Spanish sheep, however superior their pretensions. These sheep are very far from handsome in their shape, and too generally look thin and poor; they are principally distinguished from other sheep, next to the superior fineness of the fibre of their wool, by the dirty appearance of their fleece outside, though beautifully white within, owing to the greasy matter, or yolk, as it is called, with which it abounds, causing the dirt of the land to adhere to the wool; they have also white faces, of a peculiar silky appearance; just above the nose are two or three singular wrinkles, and upon the head, behind the horns, is a soft protuberance of flesh; they are also less in size than a great portion of the English sheep. The Merino flock continued healthy, and increased very fast, but the buyers of wool were averse to the idea that any wool grown in England could answer the purpose of that imported from Spain, in the manufacture of fine cloth; and Sir J. Banks was unable to obtain more than 2s per pound for the wool of these sheep in 1796, and only 2s. 6d. in 1797. In 1798, the wool was washed previous to the sale, and sorted into three different parcels, according to its fineness, as is done in Spain, viz. prime wool, or *Rafinos* (R), which sold for 5s. choice locks, or *Finos* (F), at 3s. 6d. and *Fribs* or *Terceros* (T), which fetched 2s. 6d. The fleeces of 1799 from this increasing flock, treated in the same way, was sold, the prime wool, or R's for 5s. 6d. the choice locks or F's for 3s. 6d. and the Fribs or T's for 2s. five shillings and six-pence being in these two last years the standing price of the very best imported wool. The Royal Merino flock at Oatlands, continued to increase, in 1800, the R's produced 5s. the F's 3s. and the T's 1s. 6d. In 1801, the R's fetched 5s. 6d. the F's 3s. 6d. and the T's 1s. 9d. Eleven wether, or castrated sheep, were this year fattened, and at Christmas, 1801, sold at good prices; the mutton also proving excellent in quality,; and very unexpectedly the pelt-wool, or that obtained from the skin, by the fellmonger, produced 10s. for each sheep, after all expences attending it were paid.

In 1802, Sir Joseph Banks obtained for the wool of His Majesty's Spanish flock, the R's 5s. 9d. the F's 3s. 6d. and the T's 1s. 9d.; and in the year 1803, the prime, or R's, produced 6s. 9d. the F's 4s. 6d. and the T's 2s. The quantity of the inferior sorts of wool from each fleece, has evidently decreased since these sheep were in England, and at this time, less of the Fribs will be found in any number of fleeces of his Majesty's wool than in the same number and weight of fleeces produced in Spain; a proof that the wool

is not disposed to degenerate in our climate. The wool of the present season was washed on the backs of the sheep in the English way, and sold altogether without scowering or sorting, at 4s. 6d. per pound. The Royal Merino flock then consisted of 100 ewes, 5 rams, and 78 lambs; these 78 lambs being the produce of 90 ewes, with which 4 rams were used; also of 23 shearling rams, 7 rams of greater ages, and 14 ewes which were selected for the intended sale, which took place on Wednesday last, in a paddock in Richmond park, by the side of Kew Foot-lane, not far from the Pagoda.

Among those who have most distinguished themselves in seconding the noble views of his Majesty in introducing and extending the breed of these sheep, are to be named, Lord Somerville, Dr. Parry of Bath, Mr. Bridge of Winford Eagle, Mr. Ridgway of Upperton, Mr. Tollett of Gloucestershire, and the Bath Agricultural Society; while Mr. John Maitland of Basinhall-street, Mr. Laycock of the Borough, and Mr. Edridge of Chippenham, have done themselves great honour in their endeavours to promote the sale and manufacture of English Marino wool. Mr. Giblet of Bond-street, and Mr. King of Newgate Market, are also deserving of great praise for their exertions in removing the prejudice which was generally entertained against Spanish mutton on the first introduction of the Marinos into this country.

"Mr. Tollet possesses a ram, bred from a ram and ewe sold to him from the royal flock in 1801, which, in June last, yielded 11½lbs. of wool, of the very first quality. The same care and attention which has been for some years past paid to the improvement of other breeds of sheep in this kingdom, by breeding constantly from the most perfect animals in the flock in preference to others, has succeeded in the carcasses of several of the Royal Marino flock; and as Sir Joseph Banks in a late Address to the public observes, "Give a justifiable hope, that by a due selection of rams and a correct judgment in matching them, Marino sheep will in time be produced, with carcasses perfectly fashionable, and wool as perfectly fine." The same address, after noticing that the demand for his Majesty's Marino sheep increases prodigiously, particularly in Gloucestershire, thus introduces the notice of the present sale from his Majesty's flock: "As speculation on the value of Spanish sheep is evidently on the increase, and a reasonable probability now appears that his Majesty's patriotic exertions in introducing the breed, will at last be duly appreciated and properly understood; it would be palpably unjust, should the views of those who wish to derive a fair advantage from the sale of the progeny of Spanish sheep, purchased by them from the royal flock, be in future impeded by a continuation of the sale of the King's sheep, at prices below their real value."

"This circumstance having been stated to the King, His Majesty was graciously pleased to permit the rams and ewes that are to be parted with from the Royal Merino flock this year, to be sold by auction, in the same manner as is done at Woburn, by his Grace the Duke of Bedford, and at Folkham by Mr. Coke, on the presumption of this being the most likely manner of placing the best individuals of their improved breeds in the hands of persons most likely to preserve, and further to improve them."

Notwithstanding the heavy and almost incessant rain on Wednesday morning, near fifty gentlemen and breeders of sheep assembled soon after eleven o'clock, at the pens of sheep intended for sale, and minutely examined them. Sir Joseph Banks, who has but just got abroad from a severe fit of the gout, ventured out, and staid in the field the whole time.

About two o'clock, Mr. Farnham, the auctioneer, of Richmond, opened the business, by a short, but neat speech, on his Majesty's gracious views in promoting the breed of excellent sheep before them, and read the printed conditions of the sale; after Sir Joseph Banks had stated, that his friends Sir Richard Worsley, of the Isle of Wight, and Sir James Reddal, of Scotland, not being able to attend, had commissioned him to bid for six or more of the

sheep, the sale commenced; at which much keen bidding was seen among the amateurs and breeders present.

The first twenty-three lots consisted each of a single shearling ram.

Lot 1, was a ram, labouring under a temporary privation of sight, which Sir Joseph Banks and Richard Stanford, the King's shepherd, stated to be not very uncommon with these sheep at this season, but from which there was no doubt but he will perfectly recover; the weight of his fleece was stated to be, at the last shearing, 3 lb. 4 oz.; he was knocked down to Captain Macarthur, at 6l. 15s. after Sir Joseph had apprised him, that an old Act of Parliament stood in the way of exporting sheep from this country. The Captain's object being to take the sheep, which he was purchasing, to New South Wales, in about three weeks time, to add to the flock which he is rearing near to Botany Bay, with a degree of success, which promises to be of the greatest national importance. The sheep intended for Lot 2, was unwell, and not offered for sale. Lot 3, fleece 4 lb. 3 oz. was sold to George Home Sumner, Esq. at 7l. 12s. Lot 4, fleece 3 lb. of very fine wool was sold to Mr. Knowles, at 9l. 10s. Lot 5, fleece 4 lb. was bought by Mr. Andrews, for Mr. Beckingham, near Canterbury, at ten guineas. Lot 6, a very lively sheep, was bought by Capt. Mac-Arthur, at 11l. Lot 7, fleece 3 lb. 12 oz. with bad eyes at present, was knocked down to Sir Joseph Banks, for one of his friends, at 6l. 7s. Lot 8, fleece 5 lb. 4 oz., was sold to Mr. Knowles, at 10 guineas and a half. Lot 9, fleece 3 lb. 12 oz. was bought by J. W. Allen, Esq. near Bury, at 30 guineas. Lot 10, fleece 3 lb 6 oz. was sold to Mr. Leith, at 10 guineas and a half. Lot 11, fleece 3 lb. 12 oz. of better wool than the last, sold to Capt. Mackarthur, at 15 guineas. Lot 12, fleece 5 lb. 4 oz. was sold to G. H. Sumner, Esq. at 27 guineas. Lot 13, fleece 3 lb. 4 oz. was bought by Capt. Macarthur at 16 guineas. Lot 14, was sold to Mr. Warren, at 15 guineas. Lot 15, a sheep at present blind, fleece 4 lb. 18 oz. sold to Capt. Macarthur, at 22 guineas. Lot 16, a very perfect sheep and fine fleece, 4 lb. 4 oz. sold to Sir Joseph Banks, at 20 guineas. Lot 17, a sheep having the disorder called the foot-rot, fleece 4 lb. 12 oz. was sold to Mr. Warren, at 12l. Lot 18, fleece 4 lb. 8 oz. was bought by Sir Joseph Banks, at fourteen guineas. Lot 19, fleece 4 lb. 12 oz. very fine wool, was sold to G. H. Sumner, at 20 guineas. Lot 20, fleece 4 lb. 6 oz. was bought by Sir Joseph Banks, at fifteen guineas. Lot 21, fleece 5 lb. to Mr. Beckingham, at twenty-five guineas. Lot 22, fleece 4 lb. 4 oz. to Captain Macarthur, at twenty-one guineas. Lot 23, fleece 4 lb. 8 oz. to Sir Joseph Banks, at twenty guineas. Lot 24, fleece, 5 lb. 12 oz. to Mr. Freeman, near Henley, at forty-two guineas, which finished the shearing rams. Lot 25 was a full mouthed ram, which had not been used, though so expressed by mistake in the bill; he sold to General Robinson, of Scotland, for seven guineas and a half. Lot 26, a full mouth ram, called *Young Snag*, four years and a half old, whose sire was in as much repute among the King's sheep as Eclipse among race horses, and who had been used in the King's flock, fleece $5\frac{1}{4}$ lb. was sold to G. H. Sumner, for eighteen guineas. Lot 27, a four-tooth'd ram, which has not been used in the royal flock, fleece 7 lb. 8 oz. was sold to Mr. Jefferson, at thirty-eight guineas. Lot 28, a ditto, fleece 28 lb. was sold to Mr. Heaven, at twenty-five guineas. Lot 29, a four-tooth ram, which was used last year in the King's flock, was sold to John Proctor Anderson, Esq. at twenty-four guineas. Lot 30, a ditto, fleece, 7 lb. 2 oz. was sold to Captain Macarthur for twenty-seven guineas. Lot 31, a good ditto, fleece, 6 lb 8 oz was sold to Mr. Kidd, at twenty-four guineas, which completed the lots of rams; the remaining fourteen lots being full mouthed ewes, which had been bred in the Royal flock, and were warranted to have good bags. Lot 32 sold to Mr. Beckingham at nine guineas. Lot 33, to Mr. Haller at eight guineas. Lot 34, to Mr. Beckingham, at seven guineas and a half. Lot 35, to Mr. Freeman, at seven guineas. Lot 36, to Mr. Freeman, at eight guineas. Lot 37, to Mr. Leith, at nine guineas and a half. Lot 38, to Mr. Eyton, at eleven

guineas. Lot 39, to Mr. Knowles, at seven guineas. Lot 40, to Mr. Beckingham, at eight guineas. Lot 41, to Captain Macarthur, at eleven guineas. Lot 42, to Mr. Campbell, at nine guineas. Lot 43, to Colonel Greville, at nine guineas. Lot 44, to General Robinson, at seven guineas; and Lot 45, to Mr. Hallet, at six guineas. The sale ended about a quarter past four o'clock, when Sir Joseph Banks stated, that the prices at which the sheep had been sold exceeded His Majesty's and his own expectations and wishes on the subject; His Majesty never having before sold a Spanish sheep for more than six guineas, they having been sold by private contract, while he had given away more than 170 sheep: but from the eagerness exhibited this day in bidding, he had no doubt but His Majesty's intentions of placing the sheep in those gentlemen's hands, who would most value and attend to the increasing of the breed, would be fully answered. It was stated, that the sheep might stay three days in His Majesty's pasture, or even a longer time, at the risk of the purchaser, if not convenient to remove them sooner; but such was the eagerness of the buyers to bear off their lots, that two or three carts appeared in the field in a few minutes, and were loaded with the sheep; and one gentleman took away a sheep he had bought, in a chaise with him! Besides the gentlemen mentioned above, at present, we noticed Henry Hugh Hoare, Esq. Mr. Chute, Mr. Smart, superintendant of His Majesty's farm at Richmond, Mr. Lawrence, author of "The New Farmer's Callender," &c. Mr. Farey, &c. &c. This shew and sale of sheep is intended to be annual; and, next year, a larger number of ewes are intended for sale, His Majesty's flock having now arrived at the number intended to be kept.

Hereford, August 1.

The wheat harvest has already commenced in this neighbourhood, and a very luxuriant and abundant crop is expected. The hop-gardens also appear very healthy and strong, but the apple-trees, generally speaking, have failed this year. In several places having southern aspects, peas have been bagged and housed. Hay-making is now very nearly finished throughout the principality, and the accounts from various places state, that the crops have generally proved abundant, and are well got in.

We understand that an ingenious artist in the neighbourhood of Llanelly, in Carmarthenshire, has invented a cast-iron nave for a wheel, which bids fair to become of considerable importance to the public, being light, more durable, and less expensive in the first instance than those now in general use for carts and waggons; it has also the peculiar advantage of admitting a single spoke to be replaced without disturbing any other part but the place required.

Lewes annual Wool Fair.

This fair was well attended the beginning of this month, by the London and other wool-staplers, but as usual, no business was done before dinner. Lord Sheffield, who presided, having proposed the health of Sir Joseph Banks, as a principal promoter of these meetings, expressed great concern at his absence, occasioned by a fit of the gout, especially as there was no man better informed on the business most interesting to those who were assembled, and who would have communicated more complete information on every part of the subject. His Lordship then stated, that he had not obtained very complete intelligence respecting the Ross Fair, but that he had acquired some knowledge of what had passed at the Thetford Fair, which might be more interesting to the meeting, as a considerable quantity of wool of the South Down breed was sold there. He observed, that the price of fine wool was generally higher than it was last year; the best Hereford 2s. per stone of 12lb. advance. Little of the South Down wool had sold at Thilford Fair at more than 2s. per pound, some not more than 23d; but if South Down wool in Norfolk or Suffolk is worth 2s. per lb. surely the wool of this neighbourhood, being in greater perfection, was worth more, and it was never supposed we had sent our best wool and sheep out of the county. He had great pleasur

in observing, that it was now proved beyond a doubt, that we could now raise wool in England of the Spanish kind, as good as any that is usually imported; and addressing himself to the wool-staplers, added, that if they would give an adequate price it might answer to the former (which it had not hitherto done) to cultivate the best kind of wool; and he learned, with much satisfaction, that a Staffordshire gentleman who had obtained some of his Majesty's Spanish sheep, had raised the wool in such perfection as to sell it at 6s. 6d. per lb. He remarked, that without taking advantage of the occasional difficulty in obtaining Spanish wool, a moderate price for that article considered, South Down wool ought to produce at least 2s. 6d. per lb. that a few pence difference in the lb, amounted to very little on a yard of cloth, and that it would ultimately answer best to the manufacturer to give that price, which would encourage the farmer to look to the quality rather than to the quantity of the wool. None of these statements were controverted. In the evening, a great deal of business was done at advanced prices. Several lots of wool were sold at 64s. per tod of 32 lbs. or 2s. per lb. and we hear Lord Sheffield sold at 65s.

Bury St. Edmonds, August 1.

A Suffolk farmer thus writes: "No man who wishes well to his country can ever desire the price of corn to be so shamefully high as it was in 1802; but at the same time I am thoroughly convinced that no one can grow corn for last years prices without absolutely losing money, after paying the taxes and necessary expences, which, considering how intimately more or all other trades in the country are connected with the prosperity of the farmer, must in my judgment be impolitic, setting aside the justice and propriety of every one living by his business."

On Tuesday the 14th instant, at a show of gooseberries, held at the house of Mr. Barber, Low street, Sunderland, the prizes were adjudged as follows: Mr. Butterwick, first, with Watson's Cranstoun, measuring 3 $\frac{1}{4}$ inches. Mr. Dunn, second, with Robinson's Jackson, measuring 3 $\frac{1}{4}$ inches; and Mr. Thomas Arlott, third, with the Green Walnut, measuring 3 32-48 inches.

Newcastle, Aug. 18. At the Lammas fair held here on Monday last, the show of horses was but small, and good ones sold high: we have been informed, that three of no very extraordinary breed brought 370l. The show of cattle was also very small, and the prices of fat ones great, there being only very few that could be said to be fit for the knife. Lean ones, on account of the great quantity of grass, brought good prices, and had a very ready sale. Pigs sold very high, as high indeed, by the stone, as the present price of bacon.

Newcastle, Aug. 21. On Sunday last, some gooseberries were pulled in a garden belonging to Mr. Allen, of Mill-head, near Ravensworth, three of which measured four inches in circumference, and one of them weighed eight dwts, twelve grains. Any of the above, had they been presented at the show last week at Sunderland, would have carried off the prize.

At Morpeth, on the preceding Wednesday, there was only a short supply of cattle, and not many sheep, but a full market of lambs. Great demand, and fat ones met a ready sale. Beef, 7s. 6d. to 8s. 6d. Mutton, 7s. 9d. to 8s. 3d. per stone, sucking the offal. Wheat, 56s. to 68s. per quarter. Rye, 40s. Oats, 26s. to 28s. Pease, 42s.

Average price of corn and grain per quarter from the counties of Durham and Northumberland, Aug. 11, 1804. Wheat, 57s. 10d. Rye, 34s. 10d. Barley, 27s. Oat, 25s. 3d. Beans, 38s. Pease, 39s. 9d. Oatmeal, 17s. per boll.

Extraordinary produce. In a garden at Great Broughton, near Cocker-mouth, a bean was accidentally planted in a bed of onions. It sprung up, and a few days ago, 147 beans were gathered from it.

An inhabitant of Astracan, in Asiatic Russia, has made a very valuable

discovery. A plant, which grows every where in Europe and Asia, in marshy and damp places, and on the banks of rivers, called by the botanists, *Batons Cimbellatus*, produces after a very short and easy preparation, flour of which bread may be made almost as white as wheaten. The inventor has sent a proof both of the flour and the bread to the minister of the interior, and in return received from the emperor a very valuable present.

On Monday the 13th, there was a most violent thunder storm at Great Yarmouth. The corn in the neighbourhood is mostly levelled to the ground, the straw is very much mildewed, but it is thought that the kernel had not yet received any damage.

Worcester, Aug. 18. At Ledbury new fair, on Tuesday se'nnight, there was a considerable quantity of new cheese, which sold at high prices. Two meal, from 60s. to 68s. Best making, from 74s. to 80s. per cwt.—At our fair this day, there was a large shew of fat and lean cattle and sheep, which sold at declining prices, and many were driven away unsold. There were a few good horses, which were sold at high prices.—Current prices of hops at the fair, 3l. 14s. to 4l. 4s. per cwt.

There is at this time a two-years old pig, in possession of Mr. Evans, attorney, near Caernarvon, of the very great weight of 50 score, or 10 cwt. measuring from the nose to the tip of the tail, 10 feet.

Stafford, Aug. 4. Monday last two fine store pigs, belonging to Mr. Lowe, of the Green Man, Eccleshall, were turned into a yard, where a quantity of vegetables, among which was some *hemlock*, had been thrown, and the pigs, partaking of that noxious herb, were poisoned, and died in a quarter of an hour. We insert this as a caution. *Hemlock* frequently grows among *parsley*, and is not much unlike it.

London, Tuesday, July 24.—A very ingenious mechanic in Piccadilly, has lately received a premium from the Society for encouraging Arts and Manufactures, for the invention of a machine without a flail to thresh corn. It has been used in the presence of Lord Somerville and several members of the Board of Agriculture, all of whom declared it a very valuable machine. The great use of it is to save time, the expedition of its process being astonishing. When the experiment alluded to was made, a truss of wheaten straw from the market, being put under it, more than three pints of grain were obtained from the straw, which was such as is used in common in stables, &c. The machine is worked by a single horse, and principally consists of a cylinder of a large magnitude which turns horizontally, and is perforated with holes with two horizontal wheels working in unison. The grain is no way bruised by the process, but is considered more fit for sowing than that threshed in the ordinary way.

Aug. 22.—Carmarthen fair, on Monday, exhibited a great shew of cattle, the sale was rather dull, but such as met with buyers brought fair prices.

The Pig fair on Tuesday was well supplied, and many were well sold.—

There was a good shew of cattle and horses at Swansea fair on Wednesday, but so dull a sale has not been known for many years.

At Brentford fair, the shew of sheep and lambs exceeded that of any of late years, by at least 3000, the whole number being 20,000. They sold well, ewes 20s. to 30s. some at 32s. and one lot of 100 at 36s. The most general price, 23s. Lambs 13s to 20s some as high as 22s but the most general price 17s. There were a few tolerably good horses and plenty of foal colts, the former were eagerly bought at high prices. The latter proved of so little value that it may be said the buyers had them on their own terms.

Canterbury, Aug. 24.—The condition of our hop plantations has by no means mended; the cold weather has every where checked their growth, they are small and uncommonly backward, and in some places mouldy.

A one year old new Leicestershire sheep, fed with cabbages, turnips, and grass only, by Mr. Barker, of Willebrough, slaughtered here this day, weighed 116 lb. the carcase, including the head.

Edinburgh, Aug. 21.—A field of oats was cut down on Tuesday last, at Stormont in Perthshire; where the ground was sheltered the crop was abundant, but part of the field was exposed, and suffered much by the Spring frosts—the history of the crop is somewhat novel. The field was sowed in Spring 1803 with potatoe oats, and about the tenth return reaped. On the ground being soon thereafter ploughed, it appeared there had been a considerable shake—the breer appeared promising, it was allowed to remain as it arose from the furrow till Tuesday last. The roots in the exposed part of the field (about a third) were very thin, but a great number of stalks pushed from the same root, and from the roundness of the grain and the numbers on the stalks, the crop promises to be more abundant than last season. On counting three stalks, there appeared 201 on one of them, 214 on another, and 240 on the third, without including the bosom grain. This experiment may merit the attention of the speculative farmer, and in the end be of use to the practical. One fact is ascertained, the potatoe oats will survive the Winter at no great distance from the Grampian Hills.

Barley harvest began at Kemnay, on Tuesday, the 7th of August. It has also begun at Tyvil, and several other parts in the County of Aberdeen.

There is now in a garden at Collington, an apple tree which has blossomed thrice this season—the first is nearly ripe, the second set, and a third in bloom. There was likewise taken from a field at the same place, a stalk of oats which produced 243 grains. Harvest has commenced in that neighbourhood.

Shrewsbury, Aug. 17.—Average price of wheat in our market on Saturday last, 9s. $\frac{1}{2}$ d. per bushel of 38 quarts. Oats 7s. per customary measure of 57 quarts.

At our fair on Monday last, wool sold briskly, and at advanced prices: cattle were heavy in sale, and somewhat lower: pigs and sheep, nearly as at last fair: of good horses the show was not large, and they were sold at good prices. Bacon from 5 $\frac{1}{2}$ d. to 6d. per lb. Cheese from 55s. to 70s. per cwt.

On the 8th of August, was cut by Mr. Griffin, gardener to I. C. Girardot, Esq. of Kelham, near Newark, a pine apple, of the New Providence kind, which weighed nine pounds three ounces;—and in July last one was cut weighing seven pounds two ounces. The above plants produced fruit when two years old. Mr. Griffin also cut a common queen pine, in 1803, which weighed five pounds three ounces, and in 1802, he cut 20 queen pines, which together weighed eighty-seven pounds three ounces.—It is presumed the above are the largest pine apples of the kind ever grown in this country.

The Caledonian Gardeners Lodge held their anniversary meeting at the King's Arms Tavern, Edinburgh, on Thursday, the 9th of August. The prizes for the best pinks, melons, and cauliflowers, were adjudged as follows:

Mr. John Shanklie, foreman to Messrs. Dickson and Co. Leith Walk—1st pink.

Mr. David Wighton, gardener to Dr. Munro—Second pink.

Mr. John Chalmers, gardener to Sir James Dalryell, Bart. of Binns—First melon.

Mr. William Hose, also got the first cauliflower.

Mr. William Wood, foreman to Mr. Chas. Peacock, Bonnington Road—Second cauliflower.

About one hundred members dined in the ball-room, which was decorated in the usual style of elegance, with flowers, shrubs, &c. Mr. Alexander Anderson, nurseryman, President, was in the chair. Mr. Walter Dickson, nurseryman, Preses of the Competition Committee, in the Croupier's Chair on the right; and Mr. Walter Maitland, gardener, Croftangry, the Treasurer, was in the Croupier's Chair on the left. The evening was spent with harmony and conviviality.

PROCEEDINGS OF AGRICULTURAL SOCIETIES.

Norfolk Agricultural Society.

At a general meeting of this Society, held at Swafham, July 13, 1804.

THO. WILLIAM COPE, Esq. President.

The following premiums were voted, for the encouragement of Agriculture in Norfolk :

First.—A piece of plate, value 20 guineas, to any person who shall convert the greatest number of acres (not less than nine) into Water Meadows, in the most complete manner, between July 1804, and July 1805. Notice of the claimants to be given on or before the meeting of the Committee, previous to the anniversary in 1805.

Second.—A piece of plate, value 10 guineas, to any person who shall convert the greatest number of acres (not less than four) into Water Meadow, in the most complete manner, between July 1804, and July 1805. Notice of claimant to be given as above.

Third.—A piece of plate value 5 guineas, to any person who shall produce upon his farm, in March 1805, the greatest number of acres, (not less than ten) of Turnips, protected and preserved in the cheapest and best manner.

Notice from claimants to be given on or before the meeting of the Committee, previous to the general meeting in Feb. 1805.

Fourth.—A piece of plate, value 10 guineas, to any person who shall underdrain the greatest number of acres, in the cheapest and most effectual manner, between July 1804, and July 1805. This premium is offered provided no claim is made for the premium voted last year. Notice from claimants to be given on or before the meeting of the Committee, previous to the anniversary in 1805.

Fifth.—A piece of plate, value 10 guineas, to any person who shall have growing, in the year 1806, the best piece of Lucerne, upon not less than three acres. Notice from claimants to be given on or before the meeting of the Committee, previous to the general meeting in February 1806.

Sixth.—A piece of plate, value 10 guineas, to any person who shall have growing, in the year 1806, the best piece of Saintfoin, not less than twenty acres.

Also a piece of plate, value 10 guineas, to any person who shall have growing in the year 1806, the best piece of Saintfoin, upon not less than 10 acres. Notice from claimants to be given on or before the meeting of the Committee, previous to the anniversary in 1806.

For the Encouragement of Breeding Sheep in Norfolk.

To those persons who shall produce at the general meeting, in February 1805, ten of the best shearling wethers, fed with vegetable food only, of the Leicester, South Down, or Norfolk breeds, for each ten of the respective breeds, being the best in competition, a piece of plate, of seven guineas value, or being the second best, or without competition, of five guineas value.

N. B. These wethers must not have been selected from their flocks, more than ten days before the meeting, and must have been bred by the persons who produce them. Notice from claimants, to be given on or before the meeting of the Committee, previous to the general meeting in February.

The Committee meet one month before each general meeting, and all notices of claims must be delivered to the Secretary in Writing.

ST. JOHN PRIEST, Secretary.

The next meeting of the Committee, will be on the first Wednesday 1805, at the Crown Inn, in Fakenham.

Scarning, Aug. 1804.

York Agricultural Society.

At the Half-yearly meeting of the Society, held at the Robin Hood Inn, Castlegate, York, on Monday, August 13, 1804.

Sir W. M. Milner, Bart. President, in the Chair.

Mr. George Addinell, of Tadcaster; Mr. George Hardwicke, of Burton House; and Mr. Hodgson, of Haxby, were appointed judges of stock, who gave in their decisions as follows, viz.

	£.	s.	d.
To M. B. Lund, for the best three years old heifer	3	3	0
To Mr. Kettlewell, for the second best ditto	2	2	0
To Mr. R. Treffitt, for the best two years old heifer	3	3	0
To Mr. Edward Carter, for the second best ditto	2	2	0
To Mr. James Ward, for the best shearling tup, No. 2.	5	5	0
To Mr. James Ward, for the second best shearling tup, No. 3.	3	3	0
To Mr. James Ward, for the best two-shear Tup, No. 1.	4	4	0
To Mr. Robert Treffitt, for the second best two-shear tup, No. 7.	2	2	9
To Mr. Robert Wiley, for the best ten shearling gimmers	3	3	0
To John Kilby, Esq. for the best boar	2	2	3
To John Birbeck, for the second best ditto	1	1	0

The premium of ten guineas was voted to Mr. George Addinell, of Tadcaster, for his Moor Farm, (which he holds of the Earl of Egremont) being in the best state of cultivation, and on which the best course of cropping, together with the best manner of converting the straw into manure is practised, likewise neatness of fences, ditches, &c.

Two guineas were also voted to Mr. William Judson, for a quicking rake, which he exhibited.

WILLIAM MILNER, President.

Sussex Agricultural Society.

At a general meeting of the Society, to award their several prizes, agreeably to their resolutions, held at the White Hart Inn, in Lewes, on Wednesday, Aug. 1, 1804.

The Right Hon. Lord Pelham, in the Chair.

The judges appointed to determine the merits of the cattle, sheep, and oxen, shewn for the prizes, reported the following to be the successful candidates, viz.

Mr. Alfrey, of Friston, a piece of plate, for the best bull, two years old.

Mr. Purseglove, of Herstmonceux, a piece of plate, for the best bull, two years old.

Mr. Rogers, of Kingston, a piece of plate, for the best bull, four years old.

Mr. Alfrey, of Friston, the piece of plate, value ten pounds, adjudged at the shew of cattle in 1802, to his late brother, for the best bull produced in the field. This piece of plate was challenged in 1803, by Mr. Purseglove.

Mr. Scraie, of Pnoyle Place, a piece of plate, for the best heifer, two years old.

Mr. Elphick, of Framfield, a piece of plate, for the best cow, four years old, which had produced a living calf, between the first of January and the first of April last, and was in milk on the day of shew.

Mr. Elphick, of Framfield, a piece of plate, for the best yoke of working oxen.

Messrs. Davies, of Bedingham, a piece of plate, for the best South Down ram, one year old.

Mr. Saxby, of Northcote, a piece of plate, for the best South Down ram, two years old.

Mr. Packham, of West Dean, a piece of plate, for the best South Down ram, three years old.

Mr. Hamshat, of Patchman, a piece of plate, for the best South Down flock ram, two years old.

Mr. Farncombe, of Stoneham, a piece of plate, for the best South Down ram, 3 years old.

Mr. Ellman, of Shoreham, a piece of plate, for the best pen of 12 South Down ewes.

Mr. Farncombe, of Stoneham, three pounds, for the second best pen of twelve South Down ewes.

Charles Gilbert, Esq. of Eastbourne, two pounds, for the third best pen of twelve South Down ewes.

Mr. Saxby, of Northcote, two pounds, for the best South Down ram fleece.

Mr. Farncombe, of Stoneham, one pound, for the second best South Down ram fleece.

Timely notice will be given in the Lewes Journal, of the day when the premiums to the industrious and deserving poor will be distributed.

Subscriptions received at the Lewes Bank, where those gentlemen, who have neglected to do it, are requested to pay in their subscriptions for the present and former years.

Manchester Agricultural Society.

The annual meeting of this Society was held at the Bridgewater Arms, in Manchester, on Monday, August 6th.

PRESIDENT.

The Right Hon. the Earl of Stamford and Warrington.

When the following premiums were adjudged:

To Owen Owen, of Lostock, for floating the greatest quantity of land, a silver cup, value seven guineas.

To Joshua Barnesly, of Norbury, for covering the greatest quantity of land with compost, a silver cup, value five guineas.

To William Appleton, of Ashton, for thirty-nine years servitude in one place as farm servant, cash, five guineas.

To Betty Brookes, of Ashton under Line, for twenty-nine years servitude in one place as farm servant, cash, five guineas.

To James Whittle, of Little Bolton, for the best character as farmer's apprentice, cash, three guineas.

To John Horrocks, of Turton, for draining the greatest quantity of land with stone, a silver cup, value seven guineas.

To William Johnson, of Worsley, for improving the greatest quantity of waste land, a silver cup, value seven guineas.

To John Horridge, of Raikes, for planting the greatest quantity of white thorns in old fences, a silver cup, value seven guineas.

NEW MEMBERS ELECTED.

Samuel Clowes, Esq. Broughton.

John Bradshaw, Esq. Darcey Lever.

John Pilkington, Esq. Bolton.

Benjamin Gaskell, Esq. Lancaster.

John Cross, Esq. Manchester.

William Hampson, Clerk, Peel.

John Hewitt, Bolton.

William Johnson Manchester, Land surveyor.

Thomas Bartley, ditto, ditto.

Matthew Fletcher, Brightmet.

William Wright, Bolton.

Officers for the Year ensuing.

PRESIDENT.

The Right Hon. the Earl of Stamford and Warrington.

VICE PRESIDENTS.

Richard Ainsworth, Esq. Mofs Bank.

John Isherwood, Esq. Marple.

Robert James, Esq. Manchester.

INSPECTORS.

Peter Hewitt, William Gregory.

JOHN ASHWORTH, Secretary.

Turton, Aug. 8, 1804.

Drayton Agricultural Society.

At a meeting held at the Talbot Inn, on the 26th of July, 1804.

Sir Corbet Corbet, Bart. President.

The following premiums were adjudged.

To Mr. Dicken, for the best two years old heifer (own breeding) gold medal.

To Mr. Bellayse, for second best ditto, silver medal.

No claimant for the three years old heifer.)

To Mr. Bartlam, for the best N. L. ram, two shear (own breeding) gold medal.

To Mr. Benjamin Harding, for second best ditto, silver medal.

To Mr. P. Davies, for the best pen four N. L. theaves, ditto, gold medal.

To Mr. Foden, for the best grey-faced ram, ditto, gold medal.

To the Rev. O. Crowe, for second best ditto, silver medal.

To Mr. John Harding, for the best pen grey-faced theave, gold medal.

To Mr. Dicken, for the best boar pig, gold medal.

To Mr. Bellayse, for the best sow, gold medal.

Mr. P. Davies proposes to give, next year, a silver cup, value five guineas, to the person producing the best five acres of common turnips, sown with the drill, and horse and hand hoed.

The following subscription of one guinea each, to be laid out in a silver cup—for the best N. L. theave, to be shewn at the July meeting, 1805.

Mr. P. Davies, Mr. John Harding, Mr. Dicken, Mr. S. Bradbury, and Mr. Benjamin Harding.

The members in arrears are requested to pay their subscriptions to the Secretary. The next meeting will be held on Thursday the 15th of November.

THOMAS DICKENS, Secretary.

Northampton Horticultural Society.

Will hold their Annual Meeting on Wednesday the 8th of August inst. at Mr. Cullen's, the Angel Inn, Bridge-Street; when the following Prizes will be given, viz.

For the first six best whole-brown carnations, a silver castor, value 1l. 10s.

For the second six best ditto, a polished silver table-spoon, value 1l.

For the third six best ditto, a silver punch-ladle, value 15s.

For the first best-flavoured Melon, weighing not less than four pounds, a mustard-vase, silver mounted, gilt inside, value 1l. 1s.

For the second best ditto, a pair of desert-spoons, value 15s.

For the heaviest gooseberry, a pair of sugar-tongs, value 10s. 6d.

Dinner at two o'clock.

Mr. Ald. JOHNSON,

Mr. Ald. FREEMAN,

} Stewards.

The Northampton Original Horticultural Society.

Will hold their annual meeting on Wednesday the 8th day of August inst. at Mr. Samuel Fitzhugh's, the Swan and Helmet Inn, in Gold-street; when the following prizes will be given, viz.

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

<i>Price of Hops.</i>		<i>First Week</i>		<i>2d Week</i>		<i>3d Week</i>		<i>4th Week</i>	
<i>Bags.</i>		<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>
Kent	—	72 to	84	70 to	80	70 to	84	72 to	84
Suffex	—	70 to	78	66 to	75	70 to	80	70 to	80
Essex	—	72 to	84	66 to	75	70 to	80	60 to	84
<i>Pockets.</i>									
Kent	—	74 to	88	70 to	90	70 to	90	74 to	92
Suffex	—	70 to	92	66 to	84	70 to	80	72 to	80
Farnham	—	100 to	140	106 to	140	120 to	160	100 to	140
<i>Seeds.</i>									
Red Clover per cwt.	—	40 to	75	40 to	84	40 to	90	30 to	94
White Clover, ditto	—	60 to	100	60 to	90	40 to	90	30 to	100
Trefoil, ditto	—	21 to	35	16 to	30	16 to	32	24 to	32
Carraway ditto	—	63 to	65	63 to	65	63 to	67	67 to	70
Coriander ditto	—	16 to	15	13 to	15	13 to	15	12 to	15
Turnip, (per bushel)	—	14 to	22	16 to	21	16 to	21	14 to	22
White Mustard Seed	—	8 to	10	8 to	10	8 to	10	8 to	10
Brown ditto	—	11 to	17	12 to	16	12 to	16	12 to	16
Canary Seed	—	7 to	8	7 to	8	7 to	8	7 to	8
Rape Seed, (per last)	—	680 to	740	700 to	760	780 to	820	740 to	800
<i>Meat at Smithfield,</i>									
<i>To sink the offal, p. st. 8lb.</i>		<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Beef	—	4 0 to	5 2	4 6 to	5 4	4 6 to	5 6	4 4 to	5 0
Mutton	—	4 6 to	5 2	4 8 to	5 4	4 8 to	5 4	4 4 to	5 0
Veal	—	4 8 to	6 0	5 0 to	6 4	5 0 to	6 4	5 0 to	6 0
Pork	—	3 8 to	4 4	4 0 to	5 0	4 0 to	5 0	4 0 to	5 0
Lamb	—	4 8 to	5 4	5 0 to	6 0	4 8 to	6 0	4 0 to	5 4
Head of Cattle—Beasts about		1,600		1,700		1,800		1,800	
— Sheep		22,000		22,000		21,500		23,000	
<i>Price of Leather.</i>		<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>
Butts, 50lb. to 56lb. each		22 to	23	22 to	23	22½ to	23½	23 to	24
Ditto, 60lb. to 65lb. each		24 to	25	24 to	25	24 to	25	24 to	25
Merchants Backs	—	— to	22	— to	22	22 to	22½	— to	22½
Dressing Hides	—	22 to	23	22 to	23	22 to	23	22½ to	23½
Fine Coach Hides	—	23 to	24	23 to	24	23½ to	24½	23½ to	25
Crop Hides for cutting	—	22½ to	23½	22½ to	23½	22½ to	24	23 to	24
Flat Ordinary	—	21½ to	22½	21½ to	22½	21½ to	22½	22 to	23
Calf Skins, 30 to 40lb. p. doz.		28 to	34	28 to	34	28 to	34	28 to	34
Ditto, 50lb. to 70lb. do.		28 to	33	28 to	33	27 to	33	28 to	34
Ditto, 70lb. to 80lb. do.		28 to	30	28 to	30	27 to	30	27 to	30
Sm. Seals (Greenland)		48 to	52	48 to	52	46 to	52	45 to	50
Large do.		51 to	71 10s	51 to	71 10s	51 to	71 10s	51 to	71 10s
Tanned Horse Hides		22s to	32s	22s to	32s	24s to	32s	18s to	32s
Goat Skins per doz.		30s to	63s	30s to	63s	—s to	—s	—s to	—s
<i>Price of Tallow.</i>		<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
St. James's Market	—	4	3½	4	5	4	6	4	8
Clare Market	—	4	4	4	4	4	6	4	7½
Whitechapel Market	—	4	3	4	4	4	5½	4	6½
Per Stone of 8lb. Average		4	3½	4	3½	4	6	4	7½
Town Tallow	—	73	6	74	6	77	0	78	0
Ruffin ditto (Candles)	—	78	0	74	0	74	6	75	0
Ruffin ditto (Soap)	—	69	0	70	0	71	6	70	0
Melting Stuff	—	58	0	60	0	60	0	60	0
Ditto rough	—	40	0	40	0	42	0	42	0
Graves	—	4	0	14	0	14	0	14	0
Good Dregs	—	11	0	11	0	11	0	11	0
Yellow Soap	—	80	0	80	0	82	0	82	0
Mottled ditto	—	88	0	88	0	90	0	90	0
Curd ditto	—	92	0	92	0	94	0	94	0
Candles, per dozen,	—	11	0	12	0	12	0	12	0
Moulds	—	12	0	13	0	13	0	13	0

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 AUGUST 14, 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	66	10			31	9	28	9	40	3	41	4		
Surrey	71	0	38	0	32	8	29	0	40	0	42	0		
Hertford	55	8	35	6	27	9	21	6	31	6	32	9		
Bedford	54	11					25	8	39	7	45	2		
Huntingdon	54	4			27	4	22	3	31	9				
Northampton	52	0	30	0	30	6	27	6	37	9				
Rutland	57	0			29	6	25	0	38	0			57	3
Leicester	55	3			31	0	24	2	40	6			37	4
Nottingham	64	8	32	0	28	0	28	8	40	0				
Derby	64	6			26	0	26	6	41	0	38	0	30	2
Stafford	58	7			33	10	27	2	43	10			39	4
Salop	61	3	42	0	35	10	30	0					66	5
Hereford	52	8	33	6	38	5	30	11	44	3	43	9	59	3
Worcester	55	0			37	8	31	11	43	1				
Warwick	60	4			40	0	30	1	45	9			45	3
Wilts	67	6			34	8	30	2	47	4				
Berks	71	8			33		29	2	42	3	41	6		
Oxford	59	10			32	10	28	6	38	0	40	0		
Bucks	61	6			29	6	28	4	35	4	39	9		
Brecon	57	6	36	9	31	2	24	0					38	9
Montgomery	55	3					25	7					50	10
Radnor	52	2			35	4	26	6					65	9

Maritime Counties.

Essex	66	8	35	9	30	0	30	0	38	4	38	6		
Kent	62	4			32	8	29	2	39	0	42	0		
Suffex	63	8			33	6	30	8					41	7
Suffolk	57	2	29	5	30	2	28	7	33	1	39	11		
Cambridge	49	8	32	0	26	6	19	9	32	0	32	0		
Norfolk	48	6			29	4	23	11	33	4	42	0		
Lincoln	55	1			32	0	23	1	36	0				
York	60	1	40	8			23	4	36	11			40	2
Durham	63	7					26	1						
Northumberland	57	1	40	0	28	0	25	2			38	0	18	0
Cumberland	65	10	43	11	29	10	25	10					20	1
Westmorland	66	2	41	0	30	8	26	3					20	8
Lancaster	64	9			34	4	27	9	39	4			21	0
Chester	60	6					26	8						
Flint	51	4			32	10								
Denbigh	61	8			32	0	25	8					45	10
Anglesea					24	0	18	0						
Carnarvon	60	8			28	8	19	0					44	6
Merioneth	61	1	44	0	40	0	26	8					39	2
Cardigan	58	6					17	10						
Pembroke	51	5			32	8								
Carmarthen	57	3			31	6	20	0						
Glamorgan	63	0			39	4	23	11						
Gloucester	57	8			36	0	25	8	42	1				
Somerset	63	4					26	7	44	10				
Monmouth	62	1			37	4								
Devon	69	0			32	0	29	6						
Cornwall	63	4			35	11	23	7						
Dorset	72	4			37	0	30	1						
Hants	64	8			31	6	31	9	43	10				

LONDON PRICES OF GRAIN for *August, 1804.*MARK-LANE, *Monday, August 6.*

FROM a short supply of Wheat, and plenty of buyers, that article has advanced this morning full 2s. per. quarter. Barley remains nominally at last Monday's prices, there being very little at Market, and but few sales effected. Malt is rather cheaper. White and Grey Pease went off nearly at last currency; but Horse and Tick Beans, from an abundant supply, are cheaper by 2s. per quarter. Oats, of which we have further great arrivals (both foreign and coastways), are cheaper; many of the first mentioned out of condition. Flour is dearer.

Price of Grain, on board Ship, as under.

Wheat	48s to 67s	Malt	67s to 72s od	Grey Peas	36s to 39s od
Fine	69s to 71s od	Oats	21s to 35s	Beans, new	33s to 37
Rye	27s to 29s	Polands ditto	26s to 27s 6d	Old ditto	—s 40
Barley	28s to 32s od	White Peas	40s to 44s cd	Ticks	27s to 34

Monday, August 13.

Wet weather in harvest time, occurring on a Market-day, has generally produced a rise in the price of corn, and that being the case this morning, with the attendance of many buyers, Wheat advanced full 3s. per quarter. Rye, Barley, and Malt, were likewise dearer. Pease of the different sorts did not move quite so briskly as other articles; but Beans sold at better prices than last week. A scarcity of fresh Oats, with a pretty good demand, occasioned the sales to be effected at about 1s. per quarter advance since last Monday.

Wheat	52s to 71s	Malt	66s to 72s od	Grey Peas	38s to 41s 0
Fine	72s to 74s od	Oats	22s to 27s	Beans, new	40s to 42s od
Rye	30s to 33s od	Polands ditto	28s to 29s od	Old ditto	45s od
Barley	30s to 35s od	White Peas	40s to 46s od	Ticks	30s to s 40od

Monday, August 20.

At the close of last Monday's Market, an extraordinary start took place in Wheat and Flour, and higher prices were demanded than contained in our report of that day. The sales were brisk at the early part of this morning, but left off rather heavily at noon, at the advanced prices below. Fine Dantzic samples bear the highest prices, and exceed our currency. Barley is still scarce, and dearer; Malt, of course, higher. Other articles, v. z. Pease and Beans of the different kinds, and Oats (for which latter there is a brisk demand) are all dearer.

Wheat	58s to 76s	Malt	70s to 75s od	Grey Peas	38s to 42s od
Fine	78s to 80s od	Oats	24s to 29s	Beans, new	38s to 44s od
Rye	33s to 36s od	Polands ditto	30s to 31s od	Old ditto	46s od
Barley	36s to 41s od	White Peas	40s to 46s od	Ticks	30s to 41s od

Monday, August 27.

The late and present fine weather, with a better ascertained state of the Wheat crops, and large importations, having dispelled all apprehensions of scarcity, these considerations, with a most uncommon supply up for this day's Market, have lowered the price 6s. and 7s. per quarter on the fine, and rather more on the inferior sorts. Barley, Malt, and other articles, partaking of the fall in Wheat, are likewise cheaper, excepting Oats (a short supply), which maintain last week's prices. Flour is full 5s. per sack lower.

Wheat	54s to 70s	Malt	68s to 74s od	Grey Peas	37s to 40s od
Fine	72s to 75s od	Oats	24s to 29s	Beans, new	33s to 39s od
Rye	33s to 36s	Polands	30s to 31s od	Old ditto	42s od
Barley	32s to 37s od	White Peas	40s to 46s od	Ticks	30s to 38s od

PRICES OF COALS AT THE COAL EXCHANGE, LONDON,
For AUGUST, 1864.

Names of Coals.	Mon. 6th	Wed 8th	Frid. 10th	Mon. 13th	Wed 15th	Frid. 17th	Mon. 21st	Wed 23d	Frid. 25th	Mon. 28d.	Wed 30th	Average.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Adair's Main												
Baker's Main												
Bedford Main												
Benton					46		47 9			46 9	45 9	
Biddick Main				49 6		48 6						
Bigg's Main		48								50 0		49
Bladon Main												
Blyth	41 6											
Boundry										45 6		45
Bourn Moor	44 6											
Brandling												
Bowes Main												
Byker												
Bedford												
Chous												
Cowpen					43 6							
Eden Main	40											
Eighton Main					44					45 6		
Flatworth												
Greenwich Moor												
Harraton												
Hartley		43 6		43 6		44				51		
Heaton Main										51		
Hebburn Main		49		43 6	49 6	50		50		43 6		
Holywell	42 6					44				49 6		
Kenton Main		45 6	47									
Montague Main		40							42			
Murton												
Murton Moor												
Newbottle												
New Tansfield												
Old Ducks												
Primrose												
Pitt's Tansfield M.	45 6				45 9	40				44 6		
Percy		47		48 6						50 6		
Rectory										44		
Ruffel's Main												
Simpsons Pontop				44 6		45 6					42	45
Sheriff Hill												
South Moor		36 6						41				
Stanley Main												
St. David												
Team												
Temple						48 6				48 6	48 6	
Percey												
Tyne Main												
Eighton												
Walbottle Moor	39 6											
Walker		45 6			48	48 6				51 0	50 6	
Wall's End	47 9		49	50	51	51 0				50 6	50	53
Willington	47	45 6	47 6	48 6		49 6				50 6		
Windsors Pontop												
Wylam Moor										43		
Wentworh												
Whitefield												
Wooller Main												
Warwick Main												
Warwick												

TO OUR READERS AND CORRESPONDENTS.

WE are glad to hear from our Correspondent who has favoured us with the article respecting the Farm at Rambouillet, and hope that he will favour us with some further particulars within his own knowledge, on the subject of foreign agriculture.

The proposed article on the effect of the new Corn Law, by our friend J. L. D. of the Inner Temple, we can anticipate (from a knowledge of his talent) will be very acceptable to our readers.

While we continue to feel and to acknowledge our obligations to *Agricola Northumbriensis*, we cannot avoid declaring our difference of opinion on the frequent discussion of the question on tithes in our periodical work. Our publication is not designed to promote Reform, either in Church or State; we call it, a Work, "devoted to Farmers and Rural Affairs," and to these useful individuals and their important occupations, we are determined as much as possible to confine it.

We are extremely sorry that the ammunition of *Agricola Meridionalis* arrived too late, not only for insertion but even for inspection this month. He well knows our established regulation, with regard to the time the papers should be received for their introduction in the Magazine of the current month; and he need not be informed of the intimation we were constrained to give last month to P. R. that, "a requisition of immediate insertion is by no means agreeable to us, because inconvenient for the purposes of the work, unless the subject of the communication be of a temporary nature, and the design of it would be defeated by delay."

We thank the friend of Mr. M'Arthur for the information he has given us respecting the purchase made by that gentleman, of some of the Spanish rams from his Majesty's flock, for the supply of his extensive sheep-farms at Botany Bay, and if this Correspondent should favour us with any interesting particulars regarding that concern, we shall not fail to insert them in our Miscellany the very first opportunity.