



MR WESTCAR'S PRIZE OX-BOWL.



THE DUKE OF BEDFORD'S PRIZE OX-BOWL.
And by the Honble. Lieutenant-General's order.

THE
Commercial and Agricultural Magazine.

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THE TWO PRIZE OXEN, 1801.

For the Commercial and Agricultural Magazine.

THE two Oxen, which we have endeavoured accurately to represent in the Print at the front of this Number of our Magazine, were the property of Mr. Westcar and his Grace the Duke of Bedford.

They were exhibited at the Annual Shew of Fat Cattle, at Smithfield, Dec. 12, and were both candidates for the first prize of the first class, which was to be given to the handsomest and best ox, without any restriction respecting the kind of food, or time in fattening.

The White Ox was fed by Mr. Westcar, and obtained the most honourable of the prizes given by the above Society. This beast was seven years old, of the Herefordshire breed, and was one of the eight purchased, in a lean state, at the enormous price of £35 each, at Ledbury Fair, on Lady Day, 1799. This ox, from his size, fineness of bone, and extremely beautiful proportions, was reckoned by far the most valuable of the above party, and esteemed then worth £50. He was in colour a perfect white, which is rather uncommon in this breed, excepting a small intermixture of red spots. His hips were as prominent, well covered, and widely extended, as represented in the print. He is said to have been sold for an extremely high price, to Mr. Chapman, of Fleet Market. His weight was more, when dead, than 240 stone.

Mr. Westcar exhibited the own sister to this ox, the same in colour and general merits, which likewise obtained a prize.— She was one year younger.

The Red Ox was fed by his Grace the Duke of Bedford, and gained the second prize of the first class, value 20 guineas. This ox was likewise of the Herefordshire breed, seven years old, and was esteemed by many judges to be as fat as his opponent, but was rather heavier in bone, and inferior in size. We venture to say, however, that Mr. Westcar felt himself harder pressed this year, in the contest, than he has ever been before; even than he was last year, by Mr. Grace. This beast weighed, when alive, 28 hundreds and a half; and, when dead, the carcase weighed 240 stone. He was sold for a high price to Mr. Wacie, butcher, in Newgate market, who found no difficulty in disposing of the meat at an extraordinary rate. This Ox, like-

wife, as will be seen in the Plate, was beautifully extended in the hips, and extremely well formed in the back, and indeed, in every part.

We venture to assert, that two such beasts, for general symmetry, have not hitherto been exhibited at this shew; nor do we expect again to see here their equals in merit, although we hope this exhibition will be long continued.

GENERAL REMARKS ON THE SHEW OF FAT CATTLE IN SMITHFIELD.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

YOU were kind enough to indulge me last year with the insertion of a few observations on the fat cattle which were exhibited by candidates for the honorary prizes given by the Smithfield Society. I hope you will now favour me with the same indulgence. I call these prizes honorary, because they are truly and merely such. They are not of sufficient magnitude to require a less liberal epithet, nor can they be sought after purely from an idea of gain. Indeed the premiums must be very considerably enlarged before the prospect of private emolument can have much weight with the competitors at this exhibition; especially with those who are desirous of obtaining the first of these prizes.

I am sorry to have it again to remark, that there still exists a prejudice against this evidently well-intended and well-conducted institution, so malicious as to proceed to direct slander and vulgar abuse against every one who looks with a favourable eye towards the above Society. In *The Times* paper, of the 16th instant, there appears a venomous letter of this kind, founded entirely on ignorance, prejudice, and falsehood.

The writer of this Letter, who signs himself Agricola, instead of Broker, addresses himself to the Lord Mayor of London, in the following terms:—"If we may judge by the decisions which have been made upon the like occasions at Smithfield, the *fattest* animals are considered the *best*." This assertion (as this writer either knew at the time when he made it, or ought to have known before he had ventured to make it), is unfounded in truth, directly contrary to every rule of the Society, and at variance with every decision which it has hitherto made. That peculiar form in the animal which indicates a disposition to fatten, and at the same time a delicacy in the meat which it produces, the smallness of its bones, the small proportion of its offal, and likewise the size of the beast, are always taken into consideration in the determination of these prizes, as well as the *fatness*. This, I think, has been strongly exemplified in the late decision, in which the preference has been given to Mr. West-

car's ox; for the Duke of Bedford's, it was generally allowed, was the fatter ox; but was inferior in size, and in other qualifications.

This writer proceeds, and says, "It is a well-known fact, that most of the *oily* animals (he calls them *oily*, as appears from a subsequent part of his letter, because they are fed with *oil-cake*, which he mistakes for an animal substance) which were produced at the Christmas Shew, in Smithfield, in the year 1800, had consumed more than double the quantity of food that would have been required to produce double that quantity of butcher's meat in the ordinary course of grazing, in the same time." Now if Agricola had possessed any well-founded pretensions to the title he has assumed, he would have known that a beast, when in a fat state, will consume only about half the quantity of food which a lean beast will devour; consequently the two beasts which the writer proposes to fatten with the quantity of food which the one fat ox is said to eat, will not, in this case, receive sustenance sufficient to support life. And I can assure this Gentleman, that if every one of the oxen that have thus been extraordinarily fed had been thereby totally rendered useless, that still these public exhibitions and rewards have been already productive of advantages to the community too great to be set in competition with such losses. The County of Hereford can inform him, that for these supposed losses of units, it has received its real thousands; and has not received them without communicating an ample equivalent; for, from the breed of cattle which the Herefordshire Farmers have, with spirited and wise selection, raised to a high degree of manifold utility, the Public is now on the eve of receiving great and incalculable benefits. By the above Society it is now fully ascertained, that the Herefordshire breed of cattle stands unrivalled for general utility, for their aptitude to fatten, for their ability and disposition to labour, and for (what ought always to be esteemed, as your correspondent Practicus very justly observed, in your last month's Magazine, the first object in the breeding of cattle) a propensity in the females of this breed to afford as large a quantity of valuable milk as any other species in the kingdom. This breed is spreading very fast, and will, in a few years, exhibit their white faces in almost every pasture in this Island. There is scarcely a calf, of either sex, of the true Herefords, that is now thought unworthy of being saved from the hands of the butcher.

This mock-farmer, in his rage against the use of oil-cake, further asserts, that the fat of the prize cattle "resembles more the blubber of a whale than good beef; and that it never becomes firm in the coldest weather." This I can aver to be untrue, having just seen the meat of both the aforefaid oxen in as firm a state as fat beef is capable of assuming.

“ The greatest public and private benefits will be derived to the country,” says this writer, “ from producing the largest quantity of wholesome food for man, at our public markets, at the least expence.” This is the very end which this Society has had in view from the beginning, which it is pursuing by the most direct path, and which, if he will only wait a year or two longer, with the patience of a rational being, he will see fully attained.

I would ask Agricola, before I take my leave of him, how it comes to pass that the butchers who purchase this “ *oily meat*” do not thereby injure their trade? How it comes to pass that these men, who have the reputation of selling *blubber-like meat*, do thereby not only procure more, but better customers? I have heard one of these butchers say, that he has been a manifold gainer by repeatedly buying the above kind of beasts at an enormous price. I cannot help thinking, then, that if blame is at all due on this occasion, that it ought to fall on the consumers, rather than on the Society, or the providers of this extraordinary food. Though, by the bye, there were very few beasts this year exhibited that were of *extraordinary* fatness. There were only two of the oxen that had any pretensions to more than common fatness: and those two, in my opinion, by no means equal in that quality, to two that were exhibited last year. The heifers were in general handsome, but not very fat; the same may be said of the sheep. There was, however, one sheep, the property of Mr. Walker, which very deservedly obtained a prize; and which, on the score of real profitableness, was worthy of high commendation. This sheep had all the boasted qualities of the new Leicester breed, without its shortness of carcase, and scantiness of wool, and did great credit to the breeder, who must have made some judicious cross between the new Leicester and a larger sort, probably the Gloucestershire breed. This sheep had at least ten pounds of wool upon him, which, at present, is no mean consideration.

I was very glad to see a valuable addition made to this year’s shew by the introduction of two fat Hogs. The Berkshire hog was very much admired, and though only ten months old, had attained a degree of fatness and size which will serve to spread still more widely the fame of his family; and is likewise a striking proof that the hog is capable of bringing to market, in a short space of time, more food for man than perhaps any other animal in existence. Of the other, of the Guinea breed, I have only to remark, that it appeared to me, from its diminutive size, to be better calculated to amuse the Gentleman, than to profit the Farmer, or the Public.

At this exhibition were likewise to be seen the carcasses of ten fat sheep, of different breeds, in order to shew the respective improvements which each had made since the month of March last. The weight of each sheep, both when alive and dead, was

affixed thereto. For this part of their entertainment the public are highly indebted to his Grace the Duke of Bedford, who, in consequence of some very laudable and judicious experiments which he had made upon this animal, in the course of this year, was induced to send hither these carcases for general inspection. I did not hear many particulars respecting these experiments, but what I did hear were very curious, extraordinary, and well deserving of general attention. His Grace, it seems, had collected (of course at no small expence), in the month of March, a certain number of every distinct breed of sheep that is to be met with in Great Britain. His first object was, to try how each sort would bear hard or short keep; he accordingly ordered them to be turned into an inclosure, at the rate of fourteen sheep to an acre. The weight of each was accurately taken at the time of turning in; and again, at certain periods, each species was weighed, to ascertain its improvement or loss. And "strange to tell," the large breeds were daily increasing in substance, during their starvation, whilst the small sheep were almost constantly suffering loss. Contrary to the expectation of every one, the South Down breed bore this short allowance worse than any other sort, even worse than the new Leicesters, though they were very much out of countenance with it. The Gloucestershire sheep gained during this part of the trial, which extended from March to the month of August, each 23lbs. in weight; the Durham breed, 22lbs. each; and the Lincolnshire, about 20lbs. each. These are three of the largest and longest woolled breeds in the Kingdom, and will, after a few more such experiments as this, become more fashionable, I trust, than they have been of late.

In the month of August, the aforesaid variegated flock was indulged with a good pasture, and then the small breeds came forward, took the lead, and in general kept it, till they were consigned to the slaughter-house, about the 9th of the present month.

I hope his Grace (who, I am informed from the best authority, has less prejudice, and almost as great judgment as any man, in live stock in general), will not feel entire satisfaction in this single experiment, but will hereby be stimulated to proceed to others of a similar nature. I am no friend to mere speculation and theories; but such trials as the above, and others, which it is well known that his Grace is making (with the assistance of the ingenious, experienced, and cautious Mr. Cartwright) in every branch of agriculture, upon more than 2000 acres of very poor land, reason itself cannot but approve, and the community will, some time or other, admit and acknowledge as a debt.

What new regulations the Smithfield Society have made for next year's shew have not transpired.

Piccadilly, Dec. 19.

I am, yours,

T. WESTON.

ON AGRICULTURAL EDUCATION.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

I Have often lamented that agriculture, which ought to be the first attention of every Government, should, in all, have been so much neglected, as not even to have formed any particular system of Education for those who are intended to follow it as a science, or as a means of livelihood.

A youth destined for the military line of life is placed in an academy where the course of learning and reading is adapted to the line of life he is intended for, according to the nature of the service he means to adopt, the marine, artillery, &c. It is the same with other professions and arts. Agriculture, is it less interesting? Is it less susceptible of preliminary studies? Can it not leave to him who exercises it some moments for reflection to apply his readings to practice?

It is only from experience, and observation reduced to system, that the practice of arts is established on true principles, and becomes a body of science. — Practice must be added to theory; but this junction is always incomplete if it is not the result of the operations of the same head. It is thus that Physick, Surgery, Pharmacy, Architecture, and the fine arts of Music, Painting and Sculpture have arrived at such a high degree of perfection—it has been Physicians, Architects, and Painters who have laid down the principles.

In Agriculture, on the contrary, theory has scarce ever been the line of any but speculators; or, if a small number have united practice with speculation, their works whatever merit they may have been supposed to possess, have been but of trifling utility, because they have not been understood by farmers.

Societies of agriculture have almost always laboured in vain; and will ever do so, until they have found out the means of making those whom they wish to instruct capable of receiving instructions; and as long as the principles and language of Mineralogy, Botany, Zoology, Natural History, and even Chymistry, are such total strangers to the general class of farmers.

Let youths who are intended for farmers receive an education founded chiefly on the study of the principles of those sciences which throw any light on this first part of economy, and one may than expect to see a body of farming produced free from those prejudices of ignorance and custom, and from the vain theories of the imagination.

In consequence of this, I would have proposed, through the medium of your Magazine a very large premium for the best plan of education for those who are intended for farmers. The sums to be raised, and other particulars, I shall not now trespass on your time to detail, but if this hint is favourably received you shall again hear from

X. D.

ON CERTAIN SMALL SEEDS FOUND IN EARS OF WHEAT, &c.

BY R. S. OF COLCHESTER. *See last Magazine, p. 318.*

To the Editor of the Commercial and Agricultural Magazine.

SIR,

MEN do not gather grapes of thorns, nor figs of thistles,
No more will ears of wheat produce cockle.

If R. S. had been an experimental farmer, he would have known the difference between Smut-balls and Cockle, two things which he has evidently confounded, and mistaken one for the other, notwithstanding the most manifest difference both in seed and plant.

Cockle-feed is of a firm texture, nearly triangular in shape, in a black skin, not easily nipped open, but when open is found filled with a substance perfectly white, for which reason the millers make but little objection to cockley wheat, the flour being as white as that of wheat, and the skin going off with the bran. In its growth it nearly resembles a marygold, while young—in the summer it rises with a round hollow stem, then throws out several branches, at the end of every one of which comes a pale red flower, shaped like a primrose flower, and after it an egg-shaped seed vessel, which when ripe, is nearly as big as an acorn, and is filled with black seeds in abundance. It increases so fast that I always endeavour to have my seed-wheat as clear of it as I can, else it would take the place of the wheat in a few times sowing; and it cannot be perfectly separated from the wheat in dressing, being nearly of the same weight and bigness—but it may be drawn from the wheat in the winter and spring, whilst the plants are young; or hooked from it, whilst it is in flower, just before harvest; it is then easily distinguished. It is as distinct from wheat as charlock or thistles, and as different also from smut-balls.

Smut-balls, bladder-wheat, or pepper-kernels, is diseased wheat; sometimes make up a part, and sometimes occupy the whole ear. Smut is found in barley and oats, and in them destroys the whole ear, but the rind of those grains being perfectly smooth, does not communicate the infection to another crop, as it does in wheat; the downy end of each kernel of wheat holds the infectious powder, and if sown in that state, without a preparation to counteract its effects, will, almost to a certainty, spoil a future crop; especially if sown late in a wet season.

Smut-balls every farmer knows (and R. S. would have known had he examined them by breaking them open) are filled with a black stinking powder; which, bursting under the flail or mill-stones, stain the wheat, and make the flour of a bluish cast, and the bread dark and unpleasent. Nor will the miller buy wheat that has smut-balls among it, or that is stained by them, but at an inferior price.

Cockle then is not damaged wheat as R. S. supposes, but is a plant of a very different nature. Pity but had he examined a little more before he had published; he would then have seen the difference.

Your humble servant,
Whittlesford, Dec. 15, 1801.

D. MAYNARD.

For the Commercial and Agricultural Magazine.

STATE OF THE STRATA OF EARTH NEAR WOOLWICH
IN KENT, AS IT APPEARS AT A SAND-PIT NEAR THE
WOOD LEADING TO CHARLTON.

	Feet.	Inches.
BLACKISH Vegetable Mould - - - - -	0	6
Gravel.—In another part of the pit this stratum is near twenty feet thick - - - - -	7	6
Blue Marl, full of Shells.—The shells are Turbines and Cocurs, of each of which there are two species : towards the bottom of the stratum there are some Oyster-shells, of various shapes and sizes; they are mostly whole, but the number of Cocurs that are whole is very small, in comparison with the great quantity of broken ones. The Oysters mostly lie in an horizon- tal position, but the Cocurs and Turbines in all direc- tions; they are all very brittle. The Marl abounds with vitriolic particles - - - - -	7	0
Yellow Sand.—This stratum, particularly the upper part of it, contains veins and lumps of a poor kind of iron-ore, chiefly disposed in concentric crusts round a nucleus of ochre, or sand; those which are not formed in this manner sometimes contain the Cocur-shells	7	6
Yellow Sand, veined with white - - - - -	4	0
Grey Sand - - - - -	6	0
Grey Sand, full of smooth blackish pebbles.—The thickness of this stratum is very regular, not varying above an inch or two in any part of the pit - - - - -	1	0
Grey Sand without pebbles - - - - -	1	0
Very fine White Sand - - - - -	50	0
Total	84	6

It may be proper to mention that the above account was taken twelve or fourteen years ago; since which time some small variation may have appeared in consequence of the pit having been dug considerably further.

Dec. 15, 1801.

J. J. G.

CATO'S METHOD OF FATTENING POULTRY.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

HAVING entered, lately, on a careful perusal of the old Greek and Roman writers on Rural Economy; I was induced, at the same time, to order from my bookseller, a set of the volumes of your Magazine, and to direct him to send me the future numbers, in the course of their publication; that I might compare the husbandry of my contemporaries with that of the ancients, and might thus form a just estimate of their respective merits.

In your last number, I find an enquiry pleasantly proposed from a good country housewife, concerning the best modes of breeding, rearing, and fattening Poultry. The enquiry took my attention; for, I am no enemy to good turkey, goose, and capon on a table; and, I hope to see the day when I shall enjoy a snug parsonage-house, feed my own fowls, and brew my own beer. I have, therefore, upon that Lady's suggestion, looked into what old Cato says on the subject. I have translated his directions for fattening common dunghill hens, geese, and pigeons. I with some diffidence, send them to you, in my version, that you may, if you please, make them public. I should be exceedingly glad to learn the modern methods, from any of your correspondents who may not greatly admire those of Cato.

“Take,” says Cato, “young HENS which have not reared more than one brood of chickens. Confine them in a house or cage. Prepare little balls of dough of wheat or barley flour. Moisten these in water. Give them then to your fowls. Daily increase the quantity. Let the balls be of such size, that your fowls may swallow them unbroken. Feed the hens, with this nourishment twice a day. At noon, give them water to drink. But never let the water stand above an hour before them.

“GEESE may be fattened in the same manner; with this difference, that you are always to make these drink immediately before you give them food; so that they may have twice water, and twice dough-balls, in the day.

“To fatten PIGEONS. Give them, for the first seven days, boiled beans to eat; and, for drink, water which you will have to pass out of your own mouth into their bills. Take then two thirds of clean barley with one-third part of bruised beans; the barley by itself being too insipid. Boil them together, for some time. Then knead the mixture softly; having first moistened your hand with a little oil. Take more oil; and knead harder. Divide the mass into dough-balls. With these,

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feed your pigeons moderately, giving them water at intervals till they shall be as fat as you wish them."

Such was the practice of old Cato the Censor, about two thousand years since.

I am, Sir, your obedient servant,
Cambridge, Oct. 20, 1801. W. B——w.

ON THE FERTILIZING EFFICACY OF THE FROSTS,
RAINS, AND SNOWS OF WINTER.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

YOU propose a question concerning the effects of Winter on the fertility of the earth, for illustration by your correspondents. Will you oblige me, by publishing in your next Number the following remarks which have occurred to me upon this subject?

I. The general utility of RAINS to vegetation is sufficiently obvious.

Water, by entering directly and undecomposed into the substance of plants—by suffering decomposition, that its principles may nourish their growth—by acting, even more than air, as a fit vehicle or medium by which they may be supplied with other nourishment, becomes the grand agent in all the successive productions of vegetables. But, springs, rivers, lakes, tides, and the expanse of the ocean, however admirably contrived for the constant diffusion of this element over the surface of the terraqueous globe, would, if there were no other provisions for its supply to vegetation, quickly leave all vegetative life to die, without a chance of its being, under the present laws of nature, restored. Rains, fogs, and dews are indispensably necessary to disperse water in that equality, and to apply it in that attenuation, and in those diversities of temperature, without which, no plants could, on most parts of the earth's surface, rise, increase, and attain to maturity. Where the influence of Rain is not felt, the face of nature is but a sandy waste. Even in these humid northern latitudes, a very short continuance of drought is, in Summer, sufficient to alarm our minds with just fears of a scanty harvest. The Nile supplies in Egypt for the want of rain, by its periodical inundations; but is itself first swollen by the Rains which fall periodically towards its sources, among the Abyssinian mountains.

But, in the months of Spring, Summer, and early Autumn, there is a large proportion of the water, in any climate, partly fixed in vegetables, partly carried off by winds, partly taken up by the decomposition, which heat naturally favours, in new combinations in the animal, fossil, and aerial kingdoms. Im-

mediately before the autumnal rains commence, the surface of the earth is comparatively arid; the rivers run considerably within their banks; the depth of the lakes is diminished; the brooks have become dry; and even many of the Springs which afforded plenty of water at an earlier time in the season, appear to be now exhausted. Were the vegetation of Spring to be, of necessity, renewed, before the rainy months of harvest come in; that vegetation would entirely fail, on account of the want of water in the air and at the earth's surface, for its support.

Now, Sir, it appears to me, that the RAINS, which ordinarily commence about the middle or towards the end of September; and, with vicissitudes of snow and frost, prevail till late in March, are principally beneficial as serving to *replenish* the *atmosphere*, and the proper repositories at the *earth's surface*, with those *stores of water* which are indispensibly requisite for the vegetation of the Spring and Summer which are next to ensue.

It is, in comparison, but a small part of the vegetables of this or any other country, that is merely annual, and is to perish at the end of harvest. But if the Rains of September, October, and November, did not bring a new supply of aqueous nourishment to those plants which are to live over winter, the design of nature for their preservation would be frustrated; and the biennial and perennial plants could no more survive, than the annual ones.

The greater part of the fertile mould at the surface of the earth, is formed of the exuvæ of decayed vegetables. It is commonly named *vegetable earth*. The fact is universally known. That mould is increased in quantity, chiefly at the end of Autumn, every year. But, if the season of the annual decay of ripened vegetables were a time of heat and drought, the putrefaction in which that decay consists, would take place much more slowly, and to a much smaller extent; and a large proportion of the matter which moisture and a cold temperature now fix in a liquid or solid state, would, instead of this, fly off in a volatile form, in which it would be lost to the uses of vegetation. Were it not, then, for the autumnal rains, there would not be on the surface of the ground half the present quantity of *vegetable earth*. Our lands would, in this case, soon become entirely incapable to support vegetation.

Besides, the *fossil* and *mineral* parts of nature, are equally prepared for the uses of vegetation by these autumnal and winter RAINS. They wash down and pulverize calcareous, magnesian, argillaceous, and even siliceous rocks. They act as vehicles for the conveyance of the ores of iron, of nitrous salts deposited in remote places, of sulphur, of carbonaceous matters, &c. which thus diffused, become great agents in the production of vegetables. Clays, marls, and most other soils, in which

earthy, not vegetable matter, predominates, could neither be formed nor retained in a state easily fit for tillage and manure, if it were not that they are so plentifully steeped in the winter RAINS. It is also by these RAINS, that soil is continually brought down from those heights and upper extremities of the earth's surface which are the least accessible to human labour—and is deposited in the vales and plains, where we can the most advantageously avail ourselves of its fertility. The gravel on the surfaces of the rocks, just as the sands on the bed of the ocean, and the channels of the rivers, is, by the attrition which it suffers by water, at length comminuted into clay and mould.

Add to this, that water being in some sort an universal solvent, takes up not only oils and earths from decayed vegetables, but also potash, soda, vegetable acids of all sorts, resinous matters, and every other product which they afford. The *vegetable salts* would, for the greater part, be lost by decomposition and aeriform dispersion, were it not for the Winter RAINS, and the temperature which accompanies them. But those salts are the most active and beneficial agents in the renewal of vegetation.

A vast quantity of *animal matters* are constantly in a process of dissolution at the surface of the earth. Their parts afford matter of nutriment for vegetables, which is highly rich and productive. But in Summer, and in drought, the dissolving principles of any animal substance are carried in great part away in air; while under the rains and temperature of winter, they are macerated without volatization, and are intermixed with the soil so as powerfully to fertilize it. Look at your dunghill in Summer: almost all but its carbonaceous and merely earthy parts are carried off by evaporation. In Winter, on the other hand, if you do not suffer the water to convey away its juices in a stream, but detain that water in suitable reservoirs around it, how much does it comparatively gain both in weight and in fertilizing power?

The very *atmosphere* is exhausted by the heat and drought of Summer, of those salts, and other substances in a gaseous form, which it is necessary for the uses of vegetation that the air should continually deposit on the surfaces of growing plants. It becomes overcharged with electrical and igneous matter. It becomes deficient in vital air, and carbonic-acid gas: It acquires an excess of gas-hydrogen, and gas-nitrogen. Nothing is adequate to refresh it sufficiently, and to renew those stores, in consuming which it will be again duely salutary to vegetation, except the RAINS whose fertilizing uses I have thus endeavoured to trace.

2. The RAINS, of Winter, however, could not alone, and without any vicissitudes of FROST, contribute nearly so much as they do, by the assistance of FROST, to fertilize the ground.

FROST is the change which takes place upon aqueous liquids, when they cannot give out heat to raise the mercury in the thermometer above the point of 32°. Fahrenheit. A quantity of the heat or caloric, ordinarily latent in *fluid water*, is then more or less suddenly detached from it. A new permanent combination of water with a much smaller proportion of heat or caloric is formed; and to this we give the name of ICE. This change in the state of aqueous fluids cannot take place till, by the remoteness of the sun, by the vast consumption of caloric in evaporation, by the loss of such quantities of it as are necessarily carried away by the winds in humid air to more western climates, and by the influx of cold winds, rains, &c. from the north-east climates—the free heat or caloric of this climate, and likewise that latent heat or caloric which existed in compounds more ready to part with it than water is, have been, both wholly, or almost wholly, exhausted. Water must then yield a portion of its heat, or caloric, to supply the necessary waste: and FROST ensues. During the continuance of FROST, there takes place in the atmosphere, and at the surface of the earth, a continual accumulation of caloric or heat, in the form of ELECTRICITY. This accumulation is the more considerable, because all new moisture, brought by the winds is congealed as it arrives, till there be in the atmosphere a quantity of caloric in the easily decomposable combination of electricity* which shall be sufficient, with the help of the sun's rays, and of the caloric coming in air and moisture from other regions of the atmosphere, again to saturate the frozen water with the heat necessary to its liquefaction.

Now, in undergoing the changes of first freezing and then thawing, that water which the autumnal and winter rains have profusely dispersed over the surface of the earth, effects alterations highly fertilizing on all the terrene and vegetable matters with which it is intermingled—alterations which, if permanent in its liquid state, it would not produce. It had before penetrated through all the fibres and pores of vegetables, as among the particles of mould, and of less dense stones, to which it had access. The FROST expands as well as congeals it; and in this expansion *mechanically* pulverizes the clods of earth, bursts even the stones, and breaks the vegetable fibres, with a power by which the quantity of the fertile soil ready to nourish vegetation is largely augmented.—Vegetables, however, retaining within them, considerable strength of vegetative life, resist the action of FROST till it becomes so intense as to over-power their vitality, and either to wither them entirely, or at least greatly to lacerate their parts, and hurt their growth.

* Electricity seems to me to be merely an OXIDE OF CALORIC.

Those mechanical effects of FROST upon mould and decaying vegetables are accompanied with many *chemical* changes, such as necessarily attend the agency of water and caloric upon all occasions. Saccharine matter, for instance, is evolved by FROST in all vegetables capable of yielding it. The formation of nitrous salts, is greatly promoted by the same action.— Gelatinous matters undergo by it a partial change of nature.— A thousand other chemical effects, in like manner, take place. The common tendency of them all is to leave the matter of the soil at the earth's surface in a state much more suitable than before for the support of a new vegetation.

Such are the effects which ensue while the FROST commences, and continues unabated. When a THAW comes on, other beneficial changes of course follow.

The maceration of the vegetables thoroughly affected by the FROST, and the pulverization of the soil, are now complete.— New putrefactive processes commence: you may observe, for instance, how soon a potatoe, that has been throughout its substance frozen, becomes entirely rotten after a thaw. The whole soil is now in a state of openness and comminution, in which it can take up and retain, for the expenditure of vegetation, a good deal more water than it could before the FROST.— The water on the earth's surface, and in the lakes, springs, rivers, and other conservatories into which it passes, now holds in solution various fertilizing matters, the produce of new chemical combinations, which are destined greatly to enrich the earth. And all these chemical changes by cold and moisture, are accomplished with the smallest loss of the finer matter of the new compounds by evaporation. Nature, just as well as the chemist in his laboratory, performs some of her operations in cold, others of them in heat: and, as the chemist, in his experiments in the cold way, loses comparatively little by gaseous sublimation; so are the processes of nature performed in the cold and frosts of winter, adapted to enrich the earth by the fixation of the products, to a degree equal to that in which it is in summer impoverished by the constant volatilization of a great part of whatever products result from the chemical changes which then take place at its surface.

3. SNOW is merely water frozen in the atmosphere. Its formation takes place when there is an uniform cold from the surface of the earth to the region of clouds in the air, such as cannot be saturated with heat above the degree of freezing, without an entire abstraction of all the heat which the present clouds contain, more than is required to exist in their substance when it shall be converted into ice. Thus SNOW is formed by the sudden congelation of vapour. It takes the consistency of SNOW, not of common ICE, because its particles were, when the con-

gelation began, in the state, not of water, but of vapour. It is comparatively less cold than ice; because access of an air highly charged with electricity is more freely admitted among its minute component particles.

Now, this SNOW tends to fertilize the earth by mitigating at its surface the excessive intensity of the FROST. Ice has been found, on account of the air which its interstices admit, to indicate on the thermometer a temperature several degrees higher than was that of the water immediately before its freezing. SNOW being in a still looser state of mechanical aggregation, receives among its parts still more of air than can enter into the substance of ice. Besides, the surrounding air abounds now much more than before with electricity, a combination probably of heat with oxygen—one of the most easily soluble of all the compounds into which caloric enters, and therefore ready, upon every mechanical movement, to contribute somewhat to the warming of the SNOW amidst which it passes. Besides, the dry surface of the ground, if only bound up by FROST and remaining bare, could not detain any warmer gales which might pass over it, but would be liable to become continually colder by the contact of air that was colder than itself. Thus, the first use of SNOW is to hinder the living vegetation of winter from being so much withered as it otherwise would by intense FROST; and SNOW effects this by preserving at the surface of the ground an atmosphere of a temperature somewhat mitigated.

Its next use is, still to augment the quantity of moisture which nature applies in winter to fertilize the soil. After the lakes, rivers, brooks, marshes, springs, and pits have been, by the RAINS, filled with water; after the mould on the fields has been saturated with as much of the same fluid as it could detain and absorb; a new quantity is yet wanted—to supply for that consumed in the new combinations effected by the FROST—to fill the upper reservoirs which are, in the drought of summer, to feed the springs—to water those heights on which the liquid could not be detained in any other form than that of SNOW or ICE—and, in short, to fill the soil with as much as possible of a fluid which is in some sort the universal, though not primary and uncompounded element and vehicle of life and vegetation.

It seems to be certain that FROST not only congeals and consolidates water, but, as well as heat, actually consumes it by decomposition. Hence, ground that has been frozen, without being filled with water in great plenty, would, if not laid for some time under SNOW, be more acid within a short time after the cessation of the FROST than it was on the preceding Summer. Now this effect is happily prevented by the SNOW, and could not otherwise.

It is of the utmost importance that there should be an ample supply of water in readiness to enter among the clods at the moment of the first dissolution of the Frost. They then imbibe it the most greedily. But, if not in SNOW, how otherwise should this supply be provided?

Long digestive processes, whether in cold or heat, are required for most of the nicer and more delicate operations of chemical art. It is by similar processes infinitely more perfect in their kind, that the most wonderful chemical changes in nature are accomplished. Now the presence of SNOW, and the long duration of FROST, appear to have some power of this sort in that fertilization of the ground, to which they are made by nature subservient.

In the course of ending Autumn and Winter, there are usually many alternations of Rain, Frost, and Snow. These appear to be requisite, for the use of effectually applying to all diversities of soil exposure, &c. &c. the full benefit that would arise from even a single course of Rain, Frost, and Snow, where all circumstances are duly favourable to the immediate and adequate operation of that course. Besides, the renewal of Rains, Frosts, and Snows, in the progress of a single season, may be of use, just as repeated distillations, long trains of separating and combining processes in the humid way, or frequent mechanical grindings, mixings, poundings, and siftings are of importance to the complete attainment of our purposes in art.

Thus, Sir, the Rains, Frosts, and Snows of Winter may be considered as so many great operations in Agriculture. They do much more to improve and fertilize the ground than all the petty labours of the Farmer. By these the barren rock is gradually brought to bear a rich vegetation. Much more, where vegetation has already long flourished, and where human care does the utmost to improve the fertility of Nature, are luxuriant Springs, bountiful Summers, and rich Harvests to be expected, after Winters in which there have been frequent and even severe alternations of the accustomed forms.

I am, Sir,

Your obedient servant,

Blackheath, Dec. 2, 1801.

P. P.

THE BRITISH MERCHANT. No. XI.

HISTORY OF COMMERCE FROM THE BEGINNING OF THE
FOURTEENTH CENTURY TO 1344.

AT the beginning of the fourteenth century Bruges had arrived to a great height of wealth and grandeur, and the second of the century that incomparable invention of the mariner's compass was discovered. The power of the magnet had been known to the ancients, but not its directive principle. The

compass at first is said to have consisted only of the four cardinal points; eight, however, were the most which it had; the number was afterwards increased to what they now are. The most judicious authors give the honour of the invention to Flavio Giora, of Amalfi. The numerous advantages which have been derived from this invention are too many to be here noticed.

About this period we find that the Cinque Ports were obliged to furnish the King of England with fifty-seven ships. Edward the First, who then reigned, published a charter, securing his protection to foreign merchants, and fixed the duties they were to pay on goods imported and exported. These duties had been paid before, but by this charter they are correctly ascertained. By this charter the right of prisage, or the privilege of taking a certain quantity of goods from each ship at a lower price, was given up, and a fixed duty laid in lieu thereof. Notwithstanding this, Anderson shews us that the foreign merchants in Flanders were treated on a much more liberal footing than foreigners were in England. The King of England, however, employed some Florentines as his merchants, bankers, receivers of his customs, and coiners of money; but they were sometimes accused of cheating him.

To give an idea of the immense extent of the commerce of the Netherlands, we are told, that in the city of Louvain alone there were four thousand woollen-draper, clothiers, and master weavers, and above an hundred and fifty thousand journeymen.

We learn that in the reign of Edward the First the trades of the city, such as dyers, brewers, &c. began to use sea-coal, which was deemed by the nobility a public nuisance, and a severe proclamation was issued against that practice; necessity, however compelled them soon after to pursue it.

Yarmouth was now one of the chief ports of trade in England, for we find Edward the Second, in the second year of his reign, complaining to the King of France of a rich ship being seized belonging to that port. The cargo is enumerated, and will shew in what our export-trade then consisted, viz. woollen and linen cloths, canvas, iron, cables, &c.

By a law of King Edward the Second, wool was allowed to be exported from the ports of Weymouth, Southampton, Boston, Lynn, Ipswich, and Newcastle only. In Ireland, the chief towns of note now were Dublin, Cork, Waterford, Ross, Drogheda, Trymm, and Kilkenny.

In the beginning of this century the Princes and States of the Continent began to coin gold; but we had not any in England until the next reign, that of Edward the Third. The commerce of England still continued to be carried on principally by foreign shipping, as we find no less than five Venetian gallees at one time in the port of Southampton.

The Kings of England seem, however, anxious to encourage even that kind of commerce, for we find safe conducts granted at various times to the Venetians, the subjects of the King of Majorca, and to the Spaniards; but Mr. Anderson judiciously observes, that there appears no counter-security given to the subjects of England, and he therefore concludes that we had little trade in our own ships. The names of the various nations to whom Edward the Second granted privileges, were the French, Germans, Spanish, Portuguese, those of Navarre, Lombardy, Catalonia, Provence, Aquitain, Toulouse, Flanders, and Brabant.

Several of the traders of London had been incorporated, and formed into what is called companies, before the reign of Edward the Third. When he ascended the throne the taylor, armourer, skinner, goldsmith, and some few other companies, existed; the other principal companies were incorporated as under, the grocers, anciently called pepperers, in the year 1349, the fishmongers 1433, vintners 1437, drapers 1439, haberdashers 1451, ironmongers 1464, merchant-taylor 1466, clothworkers 1482.

In the year 1328 Edward passed an act stating the breadth and length of cloth to be imported, and appointed an officer called an *aulnager*, to see this act enforced. This is the first time we observe the *aulnager* mentioned. In the same year we find a statute enacting that the staples both beyond sea and on this side should cease, and that all merchant strangers may go and come with their merchandize into England, according to the tenor of the great charter.

Edward, in 1329, borrowed of the Lombard merchants 12,000 marks, and made them a present of 2000l. which present seems intended to avoid the laws against usury.

About this period gunpowder, which has made so very essential an alteration in the art of war, and it may be said in the state of mankind, was invented; and the art of making guns to use it in war, soon after. Our King Edward used guns as early as the year 1345 at the battle of Cressly.

The island of Majorca, from the beginning of this century to that of the sixteenth, had a very considerable degree of commerce, and likewise of maritime power. They reckoned at one time 12,000 seamen belonging to this island.

Edward the Third observing that the people of the Netherlands had arisen to great power and wealth by their woollen manufactures, and knowing his subjects had the raw materials in great abundance, contrived to draw from thence some of the workmen; and in 1531 he granted a letter of protection to one John Kemp, of Flanders, a woollen-cloth weaver, to exercise his trade in England, and to teach it to such of his people as were inclined to learn it: at the same time he promised the same to any others

of the like occupation, and also to all dyers and fullers. In consequence of this offer, seventy families were brought over the same year. Edward therefore has the merit of introducing the woollen manufacture into England; a manufacture which has greatly contributed to raise this country to its present state of opulence. Woollen-cloths were, it is true, made in this country, but they were coarse and such as would by no means find a sale in opposition to the Netherland fabric.

The same King turned his attention to the supply of fish, and allows such persons as imported herrings, or other fish, to be free from the offices of exchange established at the great ports. This office of exchange seems intended to keep the coin of the kingdom from being exported, and to oblige all foreign merchants to exchange the coin they received in payment for their goods, either for the manufactures of England, or for foreign bullion. It might also act as a tax on them, and possibly was a branch of revenue. Sir Robert Cotton tells us, that the customs of the port of London, anno 1331, amounted to 1000 marks per month, or 8000*l.* per annum.

The prejudice against foreigners, and the jealousy entertained of them with respect to their trading concerns, ran so high in the great towns which had charters, that Edward found it necessary to procure an act of Parliament to restrain it, and in 1335 one passed, directing that all merchant strangers, as well as denizens, should be allowed freely to buy and sell fish, flesh, and other provisions, wool, cloth, and other wares, as well in cities, towns, &c. having franchises, fairs, and other places. It seems the corporations of the great towns had made use of their exclusive privileges to injure the foreign traders. This law was a good protection for foreign artists, particularly weavers, which the King was so very desirous to encourage.

By a statute of the same year, no one is allowed to carry money or silver in plate, or vessels of gold and silver out of the realm, but all bullion or plate may be brought to the King's office of exchange to be coined. This was another attempt to keep gold and silver from being exported, a scheme which no country can possibly succeed in, if the balance of trade is against it.

But the great effort of Edward the Third to keep the manufacture of wool in England, was made in the year 1337, when he procured an act of Parliament, directing that no English wool should be exported until otherwise ordained, and that all cloth-workers should be received from foreign parts, and fixed places assigned them, with divers privileges. It is also said, that the King made these people an allowance until they were settled in a way to live. By another act it was ordained that none, except the King, Queen, and their children, should wear any cloth for the future but such as was made in England. This prohibition of

exporting wool answered for a time, but it was long after before these prohibitions could be made perpetual. Anderson supposes these laws to have been enacted to injure the Earl of Flanders, who had offended Edward; and we certainly find Louvain, Brussels, Antwerp, &c. towns belonging to the Duke of Brabant, have limited privileges granted them this year to export wool.

In 1338, Edward made a treaty with the three great towns of Flanders, independent of their Earl. A circumstance which proves that the privileges of these towns were very extensive. The Earl and King, however, soon came to an understanding, finding it to be their mutual interest.

Within two or three years after this, encouragement had been given to the weavers of woollen cloth. We find looms set up at Bristol, which were soon extended over the neighbouring counties, Somerset, Gloucester, Worcester, and Wilts.

The wars which raged between France and England rendered the seas unsafe. Edward was prevailed on to grant his safeguards to Spanish and other ships coming to the Netherlands,

About this time the Venetians and Genoese had the largest trading ships in Europe, in which they were soon after followed by the Hans Towns and Spain. This increase in the size of ships seems chiefly to have arisen from the use of cannon, which now became necessary for their defence.

In the year 1340, the Isle of Man was conquered from the Scots by Montacute, Earl of Salisbury, who was permitted to enjoy the title of King; which, on a forfeiture for treason, was again granted to the Earl of Derby, and by a female carried into the family of the Duke of Athol, from whom the royalty has been purchased, in the reign of the present King.

Anno 1341, Edward found it necessary again to establish a staple for wool, wool-fells, leather, and fir, at Bruges. The same year he granted permission for a free correspondence between his subjects of England and Guiana and those of the King of Majorca.

Amsterdam began now to be enlarged; and a few years after was admitted into the Hanseatic Confederacy.

The current price of a sack of wool, in England, each sack weighing 364 pounds.—To keep up the price of wool, Edward procured a price to be fixed by Parliament on the wool of certain counties, agreeably, we must suppose, to their relative value. Shropshire wool was fixed at 14 marks, Oxford and Staffordshire 13, Leicester, Gloucester, and Herefordshire 12, other counties progressively less, and the Cornish, the lowest, at only 4 marks.

Gold money seems first to have been coined in 1344. Three coins appear to have been made, one of 6s. 8d. value, one of 3s. 4d. and another of 1s. 8d.

(To be continued.)

PREPARATION OF THE FAMOUS BRESCIAN, OR
CARINTHIAN STEEL.

(Concluded from our last, page 310.)

IN Carinthia, near the border of Styria, rises a brook, which has the name of the Paal. This brook runs, with a winding course, through a deep and narrow tract called Paal-Glen, and at Staol, a village about five miles walk, or sixteen English miles east, from Turrach, falls into the Mur. On this stream are three forges, or works for the manufacture of steel. The crude iron from the Turrach mines is the material there wrought into steel. The forges and the mines belong both to one proprietor. The dwelling-houses in which the workmen live, compose a small village, named Paal, from the stream on which it stands, and situate nearly about two English miles from Staol.

The work in these three forges suffers an interruption in summer, on account of the want of coal and water; and the whole annual produce of these three works does not exceed sixty-seven tons of steel; and of the crude iron of Turrach is made, in these forges, all the steel that is sold under the denomination of Brescian steel, in Saltzburgh, Bavaria, Switzerland, Holland, and England. This sort of steel was originally made only in Carniola; the process was thence introduced into Styria and Carinthia. Most of the workmen employed in this manufacture are still from Carniola. There are not at the forges at Paal more than three or four Germans; all the rest are from Carniola, or the children of men of Carniola.

The whole apparatus of one of these forges consists, 1st, Of a hearth; 2d, A fire-place; 3d, An ash-pit; 4th, The mould; 5th, The bellows; 6th, The hammer; 7th, The mill-work, consisting of the machinery and the water-course, by which the bellows and hammers are put in motion.

The *fire-place* is formed of four plates of iron, each twenty-eight inches long; and sixteen inches broad. It is an oblong square. The plate of iron on the fore-side is named the ash-plate, and has two holes by which the slag or ashes may run off. Of these holes, one is four inches and a half, the other nine inches, above the level of the fire-place. They are stopped while the work goes on. Under the plates which inclose the *fire-place*, is a *work of fire-proof stones*. The plates rise to the height of about twenty-two inches over it. Over these *fire-proof stones*, and within the circumference of the plates, is put a stratum of the *best great coals* which can be picked out. These are to be pressed together as closely as possible. The stratum is increased, with successive pressings and additions of coals, to about a foot in thickness. The *fire-place* requires to be seasoned by heating, with a due fire, for some days before the fluxing of the

metal begins; and upon any days of cessation in the course of the work it should be still kept hot. The moulds weigh each eighteen or twenty pounds.

When every thing has been duely prepared, *the manipulation* begins. The fire-place is filled with coals; crude iron is added; the bellows then begin to play. When the fire rises to sufficient intensity of heat, more of the crude iron is put in. The bellows continue to play till the iron in the furnace is entirely fluid, and almost as thin as water. This fluid mass is denominated by the workmen the *SOUR*. Into it they put a number of blocks of steel, in a certain state of preparation. These are left in this state for, it may be about ten minutes, in which space of time they are once turned. The *heat* from the fluid mass or *SOUR*, insinuates itself, by this means, throughout their interstices. When taken out, they are subjected to the action of the hammer.

They receive some strokes of the hammer, are again exposed to the heat, and are then wrought into bars. The Brescian hammer here used is not more than about six or seven cwt. in its medium weight. Out of one of these blocks six or seven bars may be made.

The matter in the furnace or fire-place is, in the mean time, entirely smelted. The person who attends the furnace from time to time examines the state of that matter; if he finds the surface smooth and equal, he takes away some small part of the coals, and leaves the slag to pass off by the uppermost of the two holes. When the matter is somewhat cooler, the lower hole is also opened; some portions of iron run out by the holes with the slag. These, therefore, are returned with the shovel into the furnace, when it appears, that, by the burning of the coals, the heat becomes too intense.

The coals are next removed, and the action of the bellows is turned off. The state of the mass within the furnace is then, with a rod, carefully examined; and, if necessary, a pitcher of water is poured over it, that it may fix the more closely into one mass.

When this mass is judged to be *sufficiently firm and uniform*, it is to be removed with the help of large iron crows. The workmen who perform this task are exposed in it to a dreadfully intense heat. The mass is then subjected to the action of the hammer, and is under it divided into four portions; each of these portions is again parted into two or three blocks, and the blocks are to be farther *prepared*, as was abovementioned.

The steel thus prepared in the furnace, at one time, is commonly from one cwt. and a half to three cwt.; but to make it too large is not profitable.

Under this mass, and immediately upon the floors of the furnace, is usually a thinner stratum of the metal, which has been

separated by some impurities from the superior stratum. That bottom stratum is removed after the other, and is added to the crude iron in the next process of fluxing and cementation.

This process, from its beginning to the end, takes up commonly about five or six hours. The furnace is, after the above operation, shut up; and every thing is left in this state till there shall be occasion for a renewal of the same operations.

In the same furnaces, and by an operation but little varied, are thin plates of steel prepared in the following manner: the coals and crude iron to be fluxed are put in as before. When the metal is fused to the thinness of water, the coals are removed, and a quantity of water is poured upon the fluid metal; a thin plate is soon after seen congealed on the surface; it is removed with a shovel, and set aside. The same manipulation is renewed till the whole quantity of fluid metal is entirely exhausted, or nearly. Each of these plates is from two lines to half an inch in thickness. The fluxed metal from which these plates are made must be of the best quality, without any impurity whatsoever.

These plates thus prepared are reserved for use in future fluxes when there occurs any extraordinary difficulty in bringing the metal into fusion, and even that state of it which is called a *SOUR*, cannot be by other means produced. Some of these leaves or plates are then added, and these, by their ready fusion, act as a flux to bring on the fusion of all the other matter in the furnace. *Quartz* is likewise used as a flux, when the metal is refractory.

The blocks, after a sufficient quantity has been prepared, must undergo a farther process. They are, on this, exposed again in the furnace, and in a *SOUR* to the action of the fire, till they may be brought to a red heat. When a block attains this heat, it is withdrawn out of the furnace. A person is ready to subject it instantly to the operation of the hammer. The stroke of the hammer cuts off a small bar, of a definite breadth and thickness. This small bar is instantly dropped into water. The remaining part of the block is again heated, to come again under the hammer. The bars are each removed out of the water, after a few minutes. When thus taken out they are the steel in the last perfection to which it is here brought. They are then rubbed with sand and sparks such as fly from the red iron under the action of the hammer. They are next dried before the fire, and put aside for sale. Before being conveyed to a distance, they are usually reduced into pieces of one or two feet in length. When they break with a dark blueish fracture, they are reckoned to be of good quality as genuine *Brescian Steel*.

A PROPOSAL OF A SYSTEM OF PUBLIC MEASURES, FOR THE
 PERPETUAL PREVENTION OF SCARCITY, AND EXORBITANT
 DEARTH OF CORN, AND OTHER PROVISIONS.

(Continued from page 339.)

BUT why confine the application of this principle to trade alone? Why not extend it to every branch of human exertion, over which Legislature and Government exercise their regulating, inspecting, and controuling power? This, in fact, the Constitutionalists, the Fœderal Republicans, the Jacobins, and indeed the whole nation of the French Reformers, laboured with all their might to do. Was the attempt happy? Has it been less ruinous to industry and commerce than to the other parts of the system of civil affairs? The book in which Thomas Paine—for some moments too successfully—strove to excite the spirit of jacobinical reform in England; that book only repeats, and applies to all parts of the controul of our Government, the commercial principle of Smith. The dreams of our philosopher Godwin only carry this same principle through a variety of masquerade-dresses. To diminish the multiplicity of laws, to confound those ranks and orders into which human society naturally sub-divides itself—to explode law for undefined and precarious equity—to deride even the constraint and ties of marriage—to demand for man, in the present state of his powers and relations, a freedom from all obligations, all habits, all settled principles: what is this, but to put the whole system of human conduct upon the same footing on which Smith would leave all the intercourse and transactions of trade? The ridiculous absurdity of the system of Godwin, so much the more conspicuous for the eloquence in which it is invested; the wild malignity of that of Paine, which, though vigorously opposed, has yet had power to harrass Britain with many afflictive ills; the awful example of the mischief which has resulted from the same principles, in France, where they were carried fully into act; the eager zeal with which those principles are now abjured by all the surviving disciples of the French school of reform; the indignant sentiments which kindle in every breast if those principles be now but named; the invigorated power, *in fine*, of every European Government; evince, beyond contradiction, that, however in trade, certainly in no other department of human exertion, is it possible for society to subsist, in useful order, and in a reasonable state of civil happiness, otherwise than under salutary restraints, imposed by the wisdom of an enlightened and patriotic Legislature, enforced by the vigilance and energy of a powerful executive Government.

Let it be for a moment supposed that trade has no relation to the other parts in the system of human affairs; that trade can be left entirely free, while all the other departments of human pleasure and business are under the necessary restrictions and con-

troul.—“ There are no legal weights and measures. We export and import at pleasure, without the smallest regard, except to one's own immediate and private profit. Trade contributes no taxes to the support of the Government. Its correspondences are carried on without the aid of packet-boats, mail coaches, and post-office messengers. The rates of the interest of money are not fixed by law. We are without canals, highways, wharfs, docks; except such as merchants, unrestrained and uncountenanced by the Legislature, have formed for their own private accommodation. There are no banking companies, nor any trading incorporations whatsoever: no regulations of wages, or prescribing mutually the terms of usage and behaviour subsisting between master and servant. In the great trading and manufacturing towns, there is no police that can, in the smallest degree, interrupt the universal freedom of the labours and speculations of trade, however that may be abused. We are free, even to try adventures of piracy, if we can give to these, with any shew of plausibility, the name of commercial enterprise. There are no restraints upon fraud, till it assumes a character and an appearance remote from all alliance to mercantile transactions: Especially, there are no regulations to protect any home manufacture, or traffic, or produce, by the virtual proscription of whatever might be, by importation, brought into competition with it. Custom-houses, Stamp Offices, Excise Offices, and all their dependencies, are at once abolished.”— Let all this be effected; and Adam Smith's and David Hume's golden age of the universal freedom of trade will begin. But, can common sense imagine to itself the accomplishment of such changes, without an entire destruction of all the present wealth and energies of our commerce. As well might you destroy the British Constitution, in order to restore it with improvements, as attempt, in the present state of things amongst us, to set our trade at once absolutely free. Introduce this unlimited freedom of trade, at this moment, in any one country of Europe; while trade remains in all the rest under the accustomed restrictions: you shall see the wealth of that country become—just like the goods in a vessel wrecked on an inhospitable shore—a sudden and entire prey to all the rest. Suppose, that the trade of all the nations in the world had never arisen out of this state of neglect and freedom restraint; no industry would ever have been exercised above that of the condition of the most inert savage life,—the condition which Rousseau, in his essay on the inequality of ranks, so fondly and extravagantly pictures.

Besides, can no restraints be laid on the course of sale and barter, except those which are imposed by Law and Government? *Monopolizing speculation* has, in truth, power to impose restraints infinitely more mischievous than any which are to be feared

from a regular Government and well-meaning Legislators. Here are fifty poor, yet independent families, who want a certain quantity of eggs and butter for their ordinary consumption. There resides a great Lord, whose numerous family, living in waste and luxury, consume as much of the two commodities specified, as do all the other fifty families. The farmers or producers of the neighbourhood cannot bring regularly to market more than eggs and butter exactly sufficient for the supply of either the fifty small and humble families, or the one opulent and luxurious family. It is easier to serve only one customer, who can always pay for your goods on demand, than to distribute the same quantity of goods among fifty different customers. Of course, the great Lord *monopolises*, in this instance, all the butter and eggs which we suppose to be produced in the neighbourhood: and the fifty other families must absolutely want, or bring their supplies from a distance, at an enormously increased expence. This is one instance of *monopoly*, arising without the interference of Government, and operating to create grievance and outcry, with a force not less effective or invidious, than if it had its origin in the rapacity of a tyrant.—Carry the supposition a little further. Imagine the articles of food above named, or any others, to be supplied to all the families which were specified, or to so many more as might fill a large town, by not above half a dozen different merchants. Suppose that these merchants, instead of being content with the fair profits upon their capital and personal labour, wish to get rich all at once, upon a small capital, and with little or no personal toil. They have only to keep back their articles from sale, upon unreal pretexts of scarcity, to deal them out by little and little at prices continually and enormously enhanced, to invoke the principle of the freedom of trade to the aid of their forestalling speculations, and to make their customers buy bread, at the price of its weight in gold, till the whole wealth of the community has been thus inhumanly transferred to themselves. Is not this a case but too obviously within the bounds of common probability? Is it not one in which the natural course of sale and purchase is obstructed even to the ruin of the society in which it happens? Does not its possibility evince, that the restrictions of private injustice are much more to be dreaded, in a commercial country, than any restrictions which an enlightened Government can ever be led to impose? Does it not shew that men are prone to crimes against the welfare of commerce, just as they are prone to crimes of robbery, assault, and assassination against the common peace of society; the former demanding, not less urgently than the latter, the regulations of law and the controul of Government for their prevention or their punishment? Set the trade of Great Britain at this moment free from every restriction of law and Government,—free even as the very winds of Heaven.

You shall, in an instant, see it in every part fettered by fear, by avarice, by dangerous speculation, by confusion, by insecurity, and by all the dæmons of bankruptcy and mercantile ruin, to a degree of incumbrance and depression, in comparison with which the British merchant might contemplate with envy the condition of the Greek one who is condemned, in the isles of the Levant, to suffer by all the exactions of a Turkish Government and its Pachas.

But Smith, and Hume, his associate in the same opinions, and Quesnai and the other *economistes* their masters, and the whole generation of their disciples, tell us, with triumph, in answer to every objection; "that every evil arising, in the first instance from the operations of trade in unrestrained freedom, will, by the great order established by fate, or divine wisdom, in human affairs, quickly produce its own remedy. Provisions, for instance, say they, may be for a time forestalled, and kept back from the market till the people die of famine: but the dishonesty with which that is practised will soon be conspicuously detected; the indignant feelings of those who are thus nefariously starved, will rise in arms and vindicate their right, to the utter ruin of their oppressors; even villainy and avarice will shrink from the renewal of an artifice which has ended thus miserably. Again, in respect to the importation of goods from abroad, dangerous and monopolizing speculations might daringly and unjustly be tried by certain mercantile adventurers: but such speculations would be so rarely successful, would prove so often utterly ruinous to their authors, would so much seldomer than cautious traffic, create fair fortunes; that even upon these considerations solely, they would soon be in all countries entirely abandoned. Besides, the fair and moderate traders would naturally co-operate against the speculators and monopolists: and such co-operation, added to other circumstances, would have the greatest power to extinguish the evils of gambling speculation and monopoly. Corn will never be consumed in starch and in the distillery when it is wanted for bread; for this plain reason, that when there exists for its consumption in bread, such a demand as should withdraw it from all other uses, the people will then, and only then, cheerfully pay for it, at an higher rate in this, than in any other form. Even in the commercial intercourse between any two nations, if the trade be left in full freedom, things will soon take that course of export and import which is reciprocally the most advantageous to both; that produce which nature gives in each the most abundantly, will become in each a subject of export; those manufactures which are in each peculiarly adapted to the circumstances of the country, and the genius of its people, and only those, will there flourish in a degree which shall not be elsewhere rivalled. There will be no forcing of trade and manufactures, like hot-house vegetables, in countries

where it is not natural for them to thrive ; but human industry will, in the department of trade, go every where hand in hand with the propensities and the provisions of nature."

These are the most specious arguments which the votaries of this doctrine can produce in its support. But to what do they amount? Why, truly, to much the same thing as those arguments against the use of means to prevent disease or destruction by fire, which the Turks draw to their practice in life, from the Mahometan doctrine of predestination. It is true, that by the order of nature, every apparent evil, whether in the moral or the physical world, operates more or less immediately as its own remedy. But, the free agency of human beings, is one of the means by which Providence has ordained its designs to be carried into execution, in regard to whatever lies within the sphere of human action.—Two persons quarrel in my presence; come to blows and persist till one at last falls by the other's hand. I, in the mean time, sit still and view the fray, without any attempt to prevent the crime in which it ends; saying to myself, that, if the one should even murder the other, the murderer must himself perish by the vengeance of the laws; so that the two who fought shall ultimately remain on an equal footing; and the example of the punishment will be salutary in regard to others. All this may happen, as I coldly reckoned upon it. But was my conduct, therefore, blameless? Might not a happier issue have been, by my timely intervention, secured?—That field will probably be covered with herbage, though neither manured nor tilled by me. But am I, therefore, to make no attempt to improve and regulate its fertility by culture?—Are there to be no treaties of peace and alliance contracted by different nations, because the social principle of benevolence, and the selfish one of resentment, have been implanted by nature in the human breast, to excite men mutually to friendly intercourse, and to protect that intercourse, if not perhaps fully in all the detail of civil life, yet certainly with adequate force in the rarer communications of the people of one nation with those of another?—These savages may in time, perhaps, advance without foreign instructions, to an high pitch of knowledge and civilization: Few of the endeavours have proved eminently successful, which have been made by nations calling themselves civilized, to enlighten and improve the condition of the barbarian and the savage; but does it, therefore, cease to be the duty of a good man to instruct those who are rude and ignorant, to correct the morals of the grossly wicked, to rouse the sluggish to useful industry, to diffuse the sciences and arts among such as have not yet felt the benignity of their influence? Certainly not.—And it is precisely in the same analogy that we are to reason respecting the freedom of trade. Were trade universally free from the controul of government, and the restrictions of laws; the ignorant or unjust

attempts of its agents to create new obstructions in its course, would every where, sooner or later, directly or indirectly, operate as punishments and remedies of themselves. But, in the intermediate space of time, between the origin of the mischief and the natural correction of it, innumerable evils would take place, which suitable legislative regulations might have prevented. Even when that natural correction ensues; its effects will, most probably, be to correct the mischiefs in question,—“not for the benefit of the town, the county, the island—no, not even of the nation, nor the age in which the mischief was first felt—but by a transference of that particular branch of trade in which the grievance has existed, to a different country, in which no such ruin to the interests of trade has been hitherto known—or to another age, opening after those who lived in the former have left the example of their commercial misfortunes, to warn even their remote posterity from the same follies.”—Let, for instance, those merchants who supply the corn-markets of London, engross and hoard, every one, corn on speculation to an immense amount. Let that consequence follow, which is the most devoutly to be wished for, in a crop, of which the abundance exceeds every hope, and almost every wish. Let the market-price, in consequence, fall suddenly below that at which the engrossers made their first purchases. They have purchased upon hope and speculation; they have kept up on bank credits; Providence has defeated their guilty speculations; they are ruined. Now, however just their fate, and however the people may be pleased to contemplate it; yet their general ruin would quickly prove more unfortunate to the poor people, whom they had half starved, than even their deepest impositions upon the public necessities as engrossers. Agriculture would languish, when there were no longer merchants from whom the farmers might expect immediate money for their whole grain, without the necessity of awaiting the slow returns of the markets. When a year of scarcity should again recur; there would be no capitalists ready to adventure their fortunes in the dangerous, though for a time gainful, traffic of the importation of grain and even those who rejoiced the most in the fall of the engrossers, would be the greatest sufferers by its consequences.—Swift, in one of his political pieces relative to Ireland, mentions, that the Irish had, at one time, gained an advantage over the Flemings and the Dutch in the competition for the linen trade of Spain. But their honesty was not equal, he continues, to their manufacturing industry. They made their linen so slight and bad, and used such frauds in making up their parcels, that the probity of the Spaniards was not less shocked than their interests were injured. They shrunk from all commercial intercourse

with such egregious rogues. The Spaniards returned to purchase their linen from the former chapmen, and the Irish manufacturers were punished by exclusion from the Spanish market for the knavery and frauds which they had exercised in it. I stay not now to enquire historically into the truth of this detail. I quote it only as accurately exemplifying the manner in which the freedom of trade would naturally correct its own evils. Here was an admirable exercise of distributive justice towards the Irish. In losing the Spanish linen-trade at that time, they had but their desert. But, then, it was in the highest degree unfortunate for their country, that a trade so gainful should have been so lost. The evil was corrected, but not corrected for the benefit of Ireland. Just so, upon the plan of Smith, Hume, and their disciples, all the evils arising in the English trade, might be in time corrected by a course of nature without the interposition of Government. But this natural correction, as might be easily shewn in detail, would, for some ages, ruin England as a manufacturing and trading country.—Let us suppose that the culture of grain has been carried to a considerable extent in this or any other country: And let the quantity coming, in any one season into the market, be in consequence of this so great that it cannot be sold at a price answerable to the husbandman's wishes, to the expence at which it was raised, or to the rates of profit afforded from grazing, or any other mode of industry, to which the producer can readily turn his labour and his capital. What follows? The farmers are losers; they plow and sow less next year; prices then rise to their wonted level; and the producers have their usual gains. Thus is the mischief to the farmers, naturally corrected by its own consequences: and the profits from tillage continue to be not less considerable than before. But the progress and improvement of agriculture have received a check: And as the prosperity of manufactures, the extension of commerce, the increase of population, the refinement of the elegant arts, nay, the enlargement of science, and the advancement of virtue, depend all, *ultimately*, upon the improvement of that radical part of human industry; the whole progress of civilization shall be stopped or reverted by the single circumstance of a year of low prices being left to operate, with its natural discouragement, on the pursuits of the husbandman.

Nay, there is not a single point of view in which it is possible to consider the question respecting unlimited freedom of trade, that does not shew such freedom to be, in all respects, utterly incompatible with the genuine prosperity of commerce.—By the rule of Hume, Smith, and the disciples of their school, the trade of lawless, savage hordes, must have been at all times infinitely more prosperous than that of civilized nations, living under laws and regular government. Trade has never, in the

industry and intercourse of civilized nations, subsisted in a state of entire freedom from the controul of the executive power, and the restrictions of the laws. The barter of the simplest savages can alone be unconstrained by exaction or regulation. In most instances, the regulations instituted for the benefit of commerce, among even the most enlightened commercial nations, are not founded upon a duely extensive and just consideration of its interests and relations: In almost every commercial country the contributions exacted from trade are not exacted in a manner the least injurious that may be conceived to its welfare. Now if entire freedom of trade be better than even the wisest restrictions, which human wisdom can contrive, much more must it be infinitely preferable to restrictions which are injudicious, and to a controul too often oppressive. Yet who would refuse to own the commerce of Britain to be in a better condition than that of the Esquimaux?

(To be continued.)

A REMEDY FOR THE FOOT-ROT IN SHEEP, AND THE
FOULS, OR LOW, IN CATTLE.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

ONE of your correspondents, a Warwickshire Grazier, asks for a remedy for the foot-rot in sheep. I can recommend to him a very simple one, which I had from an old shepherd, and have used once effectually in my own flock. I doubt not but it will effect a cure in other instances, especially if the complaint is taken in an early stage, and the feet of the sheep are not very liable to be wet in the time of the application. It is nothing more than a little common blue vitriol, applied in the state of a powder, dropped into, or thrust into the wound, or the separation which is made between the hoof and the other part of the foot. Two applications were, in most instances, effectual. I believe the disease to be infectious. I bought a few wethers in the spring of the year, one of which was tender-footed at the time; and these were turned into a pasture with twenty others, very few of which number escaped a slight attack of this malady.

I have known vitriol likewise used, mixed with lard, or some greasy substance, as a remedy for a disorder in the feet of cattle, which is, in the North of England, called the Fouls, but in the Western part, the Low. I am,

Your humble servant.

A. HILL-FARMER.

Shipston, Dec. 20.

A NOTE OF VARIOUS MEASURES, CALCULATED FOR THE IMPROVEMENT OF THE COUNTY OF CAITHNESS, IN EXECUTION, IN THE YEAR 1801.

1. **M**R. Headrick, and Mr. Bushby the Mineralogical Surveyor, have been sent North, by the Barons of the Exchequer in Scotland, to bore for Coal at Scrabster, in the neighbourhood of Thurso, on lands belonging to the Crown, where there is a great probability, that a very valuable Mine of Coal will be discovered.

2. Mr. Telford, a respectable and intelligent engineer, has received orders from the Treasury, to survey the harbours on the coast of Caithness; in particular, those of Wick, Thurso, and Dunbeath; and to estimate the expence of making the same. Some public assistance may be expected for carrying on these important undertakings; in the promotion of which, the Directors of the British Fishing Society, and Mr. Vansittart, Secretary to the Treasury, have much interested themselves.

3. For the purpose of improving the Fisheries on the coast of Caithness, Government has sent North, free from expence, some Dutch Fishermen, to be employed in the Herring Fishing at Wick.

4. Mr. Charles Abercrombie, so celebrated for his skill in lining out roads, has received orders from Lieutenant-General Vyse, authorized for that purpose by Lord Pelham, Secretary of State for the Home Department, to line out the roads, about the Ord, and hills of Berridale, and along the borders of Caithness and Sunderland, so as finally to settle the direction, throughout a tract of country which is reckoned the most difficult to make of any in Scotland.

5. Application is made to Government for authority to lay out a sum of money, this year, in making the roads of the county, to be repaid out of the balance of the Forfeited Estates in Scotland; with a view, not only of carrying on so essential an improvement, but also of furnishing a number of industrious labourers with the means of subsistence.

6. A person from Perth, well acquainted with the Linen Trade, has examined, in the course of this year, the advantage which Caithness possesses for carrying on that Manufacture; and has placed them in so striking a point of view, that no doubt is now entertained of its being soon established on a large scale in the County. Some Flax is already raised, and great quantities of Yarn spun, wove, and bleached, to as great perfection as in any part of Scotland.

7. When the Harbour of Dunbeath is made, it is proposed to carry on a regular intercourse with the opposite coast of Moray and Banff, for the purpose of importing lime from Portsoy, &c. and for exporting cattle, too large for sending round by the heads of the Friths, or in too good condition to be driven to any great distance, through a rugged country.

8. A number of Farmers from the Lothians, and other Southern Counties, have been examining the Farms in Caithness, where it is supposed that several of them will settle. They have every inducement to do so, as the crops in Caithness were abundant for the two last years, when they failed in so many other districts.

9. Robert German, from the county of Cambridge, has come to Caithness, with the peculiar sort of Ploughs, adapted for trying the Fen Husbandry, as practised in Lincolnshire, Cambridge-shire, &c. This is the most profitable of all farming; producing, at a small expence, great crops of Grain, Grass, Rape, Tares, Turnips, &c. by paring and burning mossy lands*, not worth, in their present state, a shilling per acre. There is every reason to hope, that this important improvement will answer, equal to the most sanguine expectations of those by whom it has been introduced.

10. Mr. Stephens, junior, proposes being in Caithness in October, to examine to what extent Watering of Land, and Draining, can be carried on in the County; that such essential improvements may be pursued, with proper spirit, in the course of next season.

11. The Resolutions adopted by the Gentlemen of the County, last year, for establishing Winter Herding, preventing the casting of Feal and Divot, and including other branches of Police, have already had so beneficial an effect, that it is resolved to enforce them as much as possible. Indeed, all the intelligent Farmers in the County are so sensible of the advantages resulting from them, that it is hoped no compulsory measures are necessary, to insure their observance.

12. Mr. Scott, a respectable Builder from Edinburgh, is employed in erecting houses in the New Town of Thurso. He has discovered a very valuable Free-stone Quarry in the neighbourhood, which will be of the utmost service in promoting the building of that town; and it may become an article of export to London, and other places, being of an uncommon good quality. The town of Thurso now contains about 2000 inhabitants; and has increased about 400 within the last ten years.

13. The trees which have been planted in the hilly parts of the County promising to answer, it is proposed to carry on Plantations there on an extensive scale, and to establish Nurserymen, by whom the Gentlemen of Caithness may be supplied with young trees, accustomed to the soil and climate, and consequently more likely to thrive than any that can be imported.

14. Some promising veins of Copper, and of Lead Ore, and specimens of the most beautiful Marble, having been discovered in different parts of Caithness, Mr. Hutchinson, of Alston-

* Paring and burning are the least profitable of all modes of agricultural improvement.

moor, in Cumberland, came North to examine them; and is so much pleased with their appearance, that he intends, in conjunction with his friends, to establish a company for working such as are likely to be the most productive and valuable.

15. The introduction of the Cheviot Breed of Sheep has succeeded so completely, that it is proposed to increase them considerably. The flock of one proprietor already amounts to between 3000 and 4000; and he proposes augmenting the number to 10,000, which will probably be the largest flock, of so valuable a sort, in the island. Materials will thus be furnished for the establishment of a Woollen Manufacture, which has been long much wished for.

16. Though Sheep must be the staple article in the hilly districts, yet Cattle ought to be principally attended to in the plain country, until there is a market for considerable numbers of fat sheep. The Cattle of Caithness are much improving in quality, particularly those which have been crossed with the Galloway breed. In order to accommodate the Drovers, who may wish to purchase them, and that the Cattle may be brought to their proper value, it is proposed to hold stated Fairs, in the beginning of the months of June, August, and September, which several considerable dealers have already engaged to attend.

17. A regular and frequent communication with other places, is essential to the improvement of any district. To obtain that advantage for Caithness, it is necessary that a daily post should be established to the two principal towns; and it is to be hoped, that an intended application to the Postmaster General for that purpose, will be successful. It is farther proposed, to have packets or vessels, that will sail, at fixed periods, from Leith, to the towns of Wick and Thurso; and also to carry on an intercourse with the metropolis, by means of the fishing-smacks which supply the London markets with cod and other fish, and which rendezvous, for several months in the year, at Scrabster-Road, near Thurso.

18. Instead of applying, either to Courts of Law, or to Parliament, for authority to divide the Commons, it is not unusual, at present, to refer the same to the decision of one or more Gentlemen of the County, who are not interested in the division; and so much are the Proprietors, in general, disposed to promote such measures, that a favourite toast here is likely soon to be realized "May a Common be an uncommon spectacle in Caithness."

19. The late scarcities have pointed out the necessity of improving the Agriculture, and extending the cultivation of the kingdom. In regard to the latter point, there is every reason to hope, that the County of Caithness will not be deficient. A great extent of Waste Lands have been improved, this year, in various parts of the district; and the crops promise amply to repay the expence, more especially on Mossy Lands. The spirit of inclosing and cultivating wastes is now so prevalent, that one

Gentleman has pledged himself, that he and his tenants shall improve five hundred acres in the course of the next year; a Subscription Paper is proposed, to ascertain the quantity which the different Proprietors of the County will undertake to improve, in the course of next season.

20. As Education is the basis of all permanent improvement, it is intended, immediately, to erect an Academy at Thurso, where all the principal branches of education will be taught by proper masters. A Boarding School for Girls has already been established there, and is conducted much to the satisfaction of the town and neighbourhood; and as Thurso will soon rival, in regard to the important article of Education, any town of its extent in Scotland; that, joined to the cheapness of provisions, and other conveniences, must be a great inducement to persons of moderate income to settle there.

It will appear, from the preceding enumeration, what a variety of important improvements are now carrying on in Caithness, which the late favourable seasons, and the high price of the articles which the country produces, have greatly tended to promote. In the course of last Spring and Summer, from 400 to 500 labourers came in from the neighbouring Counties in quest of work; and hitherto they have all found occupation in Building, Inclosing, Ditching, Trenching, Road-making, and other substantial improvements. Indeed, such has been the happy situation of Caithness, during seasons which have unfortunately borne so hard on other places, that no persons, either living in it, or who chose to come into it from any of the neighbouring Districts, have felt the want, either of food or employment.

For the Commercial and Agricultural Magazine.

A NEW METHOD FOR COPYING, IN A FEW MINUTES. WITHOUT INSTRUMENT OR EXPENCE, LETTERS, BILLS OF LADING, AND ALL SORTS OF WRITINGS; USEFUL CHIEFLY TO MERCHANTS, BANKERS, MEN OF BUSINESS, AND TO ALL PERSONS WHO HAVE MUCH TO WRITE.*

SEVERAL years ago, the very useful and advantageous discovery was made in England of copying writings by means of a cylindrical machine. But this method, notwithstanding its advantages, did not become of general use; and though merchants, bankers, men of letters, and all who have much to write are very often under the necessity of taking copies in a hurry of different writings, and of verifying them by collation, yet that useful instrument is to be found only in Public-Offices, and in the first houses of commerce. Its high price is very likely the cause; no one being willing to advance a sum of from 10l. to 40l. who is not likely to use such an instrument every day. Be-

* This is the invention of an ingenious Foreigner, and we present our readers with it in his own words.

sides, those English copying-machines, notwithstanding they are undoubtedly of great utility, have still greater inconveniencies, which have prevented many from making use of them.

There are properly two sorts of them, one of which is made so as to be fastened upon bureaus or counters, and has the appearance of a little table. These are commonly fastened to a particular spot, so that they are in constant readiness for use.

The other sort is used by persons travelling. They have the shape of a little chest, in which are to be found the essential parts to this machine, viz. two brass cylinders and a curve.

When it is intended to use this latter sort, the chest is fastened upon a table, by means of screws at each end; each part is properly put together, and after being used, may be unscrewed, and put up as before.

From this it may be plainly seen, that in order to make use of the former kind, one must confine one's self to the house, and to the room originally appointed for the instrument; and that it is of no use to the owner, when instantly wishing to copy anything he is writing in another room, since it is not at hand.

With respect to the latter sort, which may always be at hand, another inconvenience is, the indispensable necessity to unpack, fit up, and pack this instrument up every time it is used. Such an apparatus naturally requires trouble, and takes some time; and to spare trouble and time are the intended objects of the copying-machine.

Indeed, both machines are useless unless one has fit paper and ink in readiness; which are prepared and sold by the English proprietors of those machines. These observations and complaints, which have not been made by me alone, but by every one I have heard speak of this truly fine invention, have led me to think it not only necessary, but truly important, to bring this discovery to the highest degree of perfection possible. The chief point would be, in my opinion, how to proceed to perfect the use of the known copying-machine, without adding to the first expence. The whole process ought likewise to be simple, easily shifted from one room to another: and the necessity of providing a multiplicity of implements ought to be completely removed.

Meditating upon the subject, I naturally proposed to myself to avoid all the mechanical appendage of a common machine, and a paper and ink of a peculiar preparation. But it is nearly impossible to avoid all this, for it is always necessary to have a kind of dressed paper, as well as a particular ink, which should, however be simple, yet, without appearing too thick upon the original, have substance enough to communicate to the copy a portion of its colour, without injuring the appearance of the original writing.

My first thoughts were about the fire. Might not this powerful element, which has performed so many astonishing, and often

seemingly incompatible effects, and continues to perform such every day—might not, thought I, the fire come to our aid. May not I expect from it what I am looking for? I turned it one way and the other in my mind, and viewed the object on all sides, till at last I hit upon the common way to discoveries; that is, I went on from a regular and initiatory process, whose results were pretty various, to the last, which is so simple and easy that any one may readily understand and imitate it.

I then composed a proper sort of ink, of which I intend to give the receipt by and by. With this ink I wrote a sheet of paper, and let it dry sufficiently. No sooner was the writing thoroughly dry, than I damped a sheet of silk-paper *, (I got it from a new hat I had bought, which it served to wrap up), laid it on the written leaf, then laid a few sheets of dry paper over the damp one, and began to iron it over with a common flat-iron, quite hot, such as women use to iron linen, and which are to be found in any family. My copying was as perfect and neat as might be wished for. This mode of proceeding, as every one may see, is neither complicated nor difficult to imitate, and nobody will ever be able to find out a more simple process.

I hope the Reader will, before I go any further, let me claim the privilege to advance (and it is all I make pretension to), that if the preparing of the ink is as easy as the mode of copying, I can assert before the world, that I have discovered the easiest and most simple mode of copying. And this *ingenious* preparation of the ink consists of—a small piece of white lump sugar, which is thrown into the ink, and suffered to melt in it.

Let us examine, likewise, if my invention is expensive. I promised a mode altogether simple and easy, which would require neither expence, nor the apparatus of any machine. It will be found that I have kept my word. Flat-irons, fire, and sugar, are to be found in every house, as well as shop-paper *without any stiffening*: and the use of these things is so easy that a child may proceed with the best success.

I think it will not be disagreeable to the reader, if I give him a detail of the principles upon which this method stands. They are as follows:—

The fire is, as every one knows, a fluid, which possesses the property of penetrating all bodies. The mass of each dry, or fluid body, which is exposed to the effects of fire, becomes

* The silk paper is a sort of paper very thin, without size, which, on account of its being extraordinarily soft and light is made use of by a great number of manufacturers of fine wares, that these may not suffer by rubbing and be injured, as might happen with the common paper. The Sommer's Booksellers in Leipzig, who have undertaken the sale of this commodity, have pledged themselves to supply tradesmen with this paper to any amount. The quarter of a ream or 120 large sheets, which go a great way, cost one Rix dollar, 16 gros of Saxony, or three florins of the Rhine.

thinner, increases in its circumference and stretches on all sides, so that as long as the heat continues it takes a greater room than before.

When one brings into action the parts of the water which are more spread and less contracted than those of the paper, they force their way into the pores of the paper, fill them up, and keep them open till an efficient cause, acting outwardly, forces them back to their former state.

Whilst this takes place, the water evaporates, which was in the damp paper without size, and leaves empty its pores, which the moment before were full, so that the humidity, more dissolved and spread about by the heat, can penetrate deeper. By passing the hot iron three, or four, or more times over the paper, the evaporation of the watery particles takes place, and that, through the particles of sugar, to such a degree, that at last the latter, which have received from the former a sufficient tint of black already, come and fix themselves in the pores of the copying-paper: and, as every particle of sugar must penetrate closely into the spot of the copying-paper facing it; the natural consequence is, that this copy must resemble the original exactly.

From what has been said above, it is already evident, that in order to copy, three things are necessary; viz. The Ink—Copying-Paper—and Flat-Iron.

The INK which is to be used to write any thing to be copied needs be no other than good common black ink, in which is to be put a small lump of fine white sugar. It is impossible to determine the exact quantity of sugar, as this depends on the strength or weakness of the ink; the only rule that can be given, however, is that the writing must, after the sugar is properly melted, and well mixed with the ink, even before it is entirely dry, be clear and distinct, and the ink not thick or muddy: to prevent this thickening of the ink, it ought to be covered or corked till there is occasion to write something that is to be copied, that it may not be damaged by the open air.

Is there but seldom an occasion for copying? There is then no occasion for a particular ink-stand: but drop upon a small piece of sized paper, or in a tea-cup, if at hand, two or three drops of the common ink: add to it a little sugar upon the point of a pen-knife, or more according to the quantity of ink.

Now, when a person mixes sugar and water; all the small parts of the sugar are parted and united with the water, so that each seems to be formed of portions of equal fluidity. This mixture, which is generally called *dissolving*, has its principle in the intimate properties of the separate particles of these two bodies, and in a certain degree of motion which is necessary to the complete mixture of both. In the common order of things, where this motion is not felt, as for instance, in that of the atmosphere; this dissolution takes place but slowly. In order to for-

ward it, we must strengthen it, or make use of the fire, as the most efficient medium in that case; which penetrates every thing in an instant, and divides, and puts it in action very fast. We know by experience, that sugar is dissolved quicker in water when stirred about, and much quicker if hot.

By this mode of dissolving, however, the water and sugar are not made one, but only mixed together; they can both be parted, and mixed again with the same facility, by means of the fire. This universal and ever efficient agent expands first the body of water, soon after raises its particles, and then evaporates them as itself ascends. In the mean time the small particles of sugar, which the dissolution raised, not being of so subtle a nature as the water, resists the action of the fire, and, according to the laws of attraction, draw near, stick to one another, and at last resume their former hard form.

After what has been said, almost every one can conceive how and wherefore my mode of copying has its proper effect. Whilst the hot iron is brought over the apparatus, the heat penetrates quickly and powerfully the objects lying underneath; the water which is found in the pores of paper without size, and the sugar mixed with the ink, are brought into great agitation and activity; and the effect soon takes place. The mass which is to be dissolved becomes thinner by means of the heat, expands, wants more room, and finds it in the pores of the paper. The sugar will soon be melted and the ink ready.

Copying Paper.

For myself I have always made use of any kind of paper without size, and found it answer very well. I have noticed also, that paper which absorbs the ink the quickest is the best for that purpose, let it be thin or thick, as long as it is not sized or hot-pressed; in short, that sort of paper will answer the end very well which gold-beaters, hatters, silk-weavers, and generally all finishers of fine wares make use of to wrap up their goods.

The paper must be cut of the same size as the original, or that which is mostly made use of.

In case, however, such paper cannot be procured, any common paper will answer the purpose, being prepared in the following manner. Let it stand a few minutes over boiling water; the effect of which will be to dissolve the size with which the pores of the paper were stopped up, and to make it more apt to suck up the particles of sugar and ink. The best way is to prepare a small quantity at once, and to have it always at hand when wanted.

When there is occasion for it; it remains only to make it sufficiently damp. Take about twenty sheets, lay them one over another on a piece of oil-cloth, which ought to be of such a size

as to be folded over the paper, and cover them at each end; then pour over your paper as much spring water as you think necessary to penetrate the whole, beat the oil-cloth about, let it stand a little while, that the water may have time to get through the paper. Thus can any quantity of this paper be soon got ready as often as wanted.

Where there is seldom an occasion for copying, and for a large quantity of sheets; this preparation is useless. It will be sufficient to take one or two sheets of the above copying-paper, and lay them upon a sheet of white paper, and to wet them over with a sponge or brush, not over-full with water; or, in want of either, with an handkerchief made very damp, or by sprinkling it moderately with the hand, and giving it time to penetrate every part.

Instead of the oil-cloth, which I have proposed for cheapness, and the convenience of its being removed from one place to another; houses of commerce, or those who have much to copy, may have, in order to keep their paper damp and always ready, a square box or trunk of a size a little bigger than the paper; and have it inlaid with a thin sheet of lead. If the paper has been damped; lay it in the said box, cover it over with a lid that will fill exactly the inside of it, and cover it underneath with another sheet of lead.

Flat-Irons.

This is the same as is used in every house to iron linens. It ought, to be fit for use, to have acquired such a degree of heat that when you drop a little spittle on the face of it, the spittle shall disappear instantly, and leave no spot behind.

This experiment is familiar to every woman, and I notice it merely that the flat-iron may not be made too hot; for otherwise the dampness will leave the paper before the ink impregnated with sugar of the original can have time to dissolve, and to pass into the copying-paper.

Precautions in Writing.

1. When the letter or writing intended to be copied is written on one side only; the following process ought to be closely attended to. Write upon a good paper, with ink prepared as before directed; let the writing dry by the air or fire; it may even be laid by one or more days before it is copied; all that is required is, not to pass the iron over it, before it is quite dry.

2. Lay the written sheet on a few sheets of other paper, as commonly practised in writing, so that the writing be upwards. Those sheets will form a kind of matras, which procures a soft impression, and contributes to the cleanness and fairness of the copy.

3. Take one sheet of the damp paper out of the box where it is preserved, and observe that it be not too dry, or too damp;

if it appears too damp, lay it between two dry sheets of the said copying-paper, and press upon it softly with the flat of the hand. Part of the dampness will attach to the dry sheets, and the copying-paper will retain the degree of dampness requisite. The proper degree of dampness is known in a short time from experience; which also teaches us what quantity of water is requisite to obtain it. The paper ought by no means to be too damp, else the ink of the original will run, and the copy be unfit to read.

4. Lay your sheet of copying-paper exactly even upon the original. Then lay a few sheets of common dry paper over it, and hold it fast, with the left hand, that it may not slip.

5. Take the hot flat-iron in your right hand, lay it close with your left, and lead it with proper care, leaning pretty hard on the paper, and the copy will be exact.

6. As you go over it with the flat-iron, great care must be taken lest something stir, for the copy would immediately be blotted, and unfit for reading. The flat-iron ought not to be kept longer in one place than another; that every part of the original may be equally warmed, dissolved, and sucked in by the copying-paper. It must not be kept too long upon any part, else the copying-paper will get dry before it has had time to suck in the dissolved ink. All this, however, may easily be learned, by trying the experiment two or three times over.

7. Although the copy may appear exact, and sufficiently impressed, yet it is better to pass the hot iron over it till it is thoroughly dry. The reason for it is this, the evaporation is not accelerated either by the removing of a greater or less number of the particles of water which cover the surface, but by the removing of a less or greater quantity of the particles of fire which are mixed with the former, and evaporate with them. Was the copy to be exposed to the cold air before it is thoroughly dry; the latter would take from the water, part of the particles of fire, and prevent the due evaporation of the particles of water, which would cause the ink to spread in the copying-paper more than it ought; or, to use a common expression, it would cause the ink to sink into the paper.

When the original is written on both sides, take a double sheet of copying-paper and put the original between, then proceed as above. If the original consist of a leaf and a half, or three pages; proceed with the first leaf as before directed; then lay a sheet of white paper upon it; next, proceed to the third page of the original, put your copying-paper upon the written side of it, and then iron as before.

If the original consists of four pages, take two sheets double of copying-paper; in one of them lay the third and fourth pages of the original, then a sheet of white paper; and at the top of

this, the first and second pages of the original, equally inclosed in a sheet of the copying paper. Ten, twelve, nay a greater number of pages, might be copied at once in this manner. Great care, in the mean time, should be taken that no two sheets of the copying-paper touch one another; else either of them will communicate the ink, after it is dissolved, to the other. It is therefore indispensibly necessary to lay a sheet of white paper between every two sheets of copying paper.

In case more than one sheet is to be copied; you ought to be as quick as possible; that the paper may not get dry while in hand, or communicate its dampness to the ink: in the former instance, the ink would not take; in the latter, it would sink. It is necessary, likewise, when there are several sheets, to keep the flat-iron much longer upon the paper than when there is only one; in order that the heat may have sufficient time to penetrate through the whole of the sheet, and effect both the dissolution and evaporation required.

Method of preserving the Copies.

From the observations of merchants, and men of business, who constantly use the well-known cylindrical machine, and who, of course, have sufficient experience; the best mode of preserving the copies which are pulled on detached leaves is as follows.—Fold the sheets in the middle, and write the necessary notes upon the back with a red pencil: for instance, the name of the person to whom the letter is directed, the date of its being sent, &c.

Another mode of preserving the copies is, to stitch them together, in the way of public Acts, and put them carefully away.

Another yet, and perhaps the most convenient and safe, is, to get a book full of white sheets, bound in a loose manner, and provided inside with guards, upon which the copies may be fastened by means of wafers. Two copies may thus be preserved on a single leaf.

ON OATS, WHEAT, AND HORSES.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

I Cannot help thinking that your Magazine is very entertaining; for shewing it to two or three of my neighbours the other evening, it afforded them and me a good laugh for an hour or two, therefore no one can say but it entertained us. But I must inform you it was two ridiculous letters which made us so extremely merry, one from H. Hutchinson, the other from R. S. of Colchester. Now let me advise them not to expose themselves by writing on agriculture, for I will take the liberty of

saying that they know nothing of farming. I can assure you and them that I have not the least wish or intention to offend them or any other person. H. Hutchinson tells us in his letter of a curious fact in the growth of Oats, a remarkable event which happened in Wiltshire. Now this remarkable event, this curious fact, is no more than what happens in every county, perhaps every year, but let me inform H. H. that it was not from the small fibres or root of the Oat-stem that the second crop sprang, but from the seed that shed upon the land, either by cutting or heaping, or perhaps blown out by the wind before cutting, which second crop is commonly called self-sown Oats. This Wiltshire Farmer certainly was at no expence in either seed or tillage, but I apprehend his land was foul enough after the second crop. I have always seen it so, therefore I advise H. H. not to follow the practice, if ever he should be a farmer, for it puts the land out of course. Putting the land out of course, few but practical farmers know the meaning of, much more the consequence. H. H. says he is at college, and that he spends great part of his time in the study of agriculture, but I can assure him that he may study as long as he lives, and know no more about it than he does now; unless he attends to the practical part of the business, and that for several succeeding years; but it ought to be inculcated at an early age, when the mind is unincumbered with other pursuits. H. H. perhaps will retaliate and laugh at me in his turn; but let me inform him of this fact, that no one can form a true estimate of the ability of a practical farmer, but one who is well qualified in the art.

The other letter which created my friends so much merriment bears the signature of R. S. and is, to be sure, quite as ridiculous as H. Hutchinson's story respecting the Oats. I believe R. S. is the only person in the world that ever had the least suspicion that cockle grows in a wheat ear. How any man in his senses can ever hint such a thing, is to me very wonderful. He may with just as much propriety walk into his garden and examine the pods of his beans to see if they do not produce onions, or climb his apple trees to look for strawberries. These small black seeds he says, he believe, generally pass for cockle. Now they are so different from cockle that I will undertake to say they never were taken for cockles by any farmer; for every farmer is well acquainted with the nature of them. It is needless to say any thing more on that head, except that I advise R. S. to ask any plain plodding farmer what they are, and I dare say he will inform him.

I shall just make a short reply to your correspondent who styles himself a Breeder, respecting the Woodbridge breed of horses, though they are commonly called the Suffolk breed, the Suffolk moulds, I never before heard them called Woodbridge, nor can I say I am sufficiently acquainted with

the blacks to decide; but as much as I know about them, I much prefer the Suffolk moulds to them, or any other sort: one reason in particular I will give, which is this, that most of the blacks that I have seen, are very rough legged, whilst the true Suffolk moulds are very clean there; which is undoubtedly preferable, especially on dirty land, and especially in the winter, as the rough-legged horse is much more liable to the greafe. The true Suffolk mould is not as your correspondent observed long in the leg, but the contrary, very short in the leg and back, and very hardy. I seldom meet with any other sort that can work with them.

I remain, Sir, your humble servant,

A NORFOLK FARMER,

ON A SECOND YEAR'S PRODUCE FROM OAT-SEED.

To the Editor of the Commercial and Agricultural Magazine.

SIR

SURE no one will so far depend upon what Mr. Hutchinson or others assert, "that the small fibres or roots of the Oat-stem, even after it has been cut down, run along but a small depth under the surface of the ground, and then shoot up again into a perfect stem, and bear seed," as to let their oat stubble remain unploughed in expectation of a second crop from the old roots; if they do, it is more than probable they will be disappointed. The second crop Mr. H. speaks of was (I think) obtained, not from the old roots, or fibres from them, throwing up fresh stems; but from the seed that the first year remained in the earth without vegetating; as it might do, either being laid in too deep, sown too late in the summer, or the vegetation obstructed by drought, or by the acidity of the moisture received in the sack—more likely still from the scattered seed of the first crop, and more liable to be scattered from it being a thin crop. These young plants might easily be mistaken for plants rising from the old stems, by superficial observers. But from one or other of the causes abovementioned, the first seed might not vegetate until a winter's moisture had unlocked the clods, washed away the acidity received in the sack, or the vivifying force of the returning sun had brought the dormant juices into action. One or other of these ways a second crop might be obtained; but never shall I expect to see the roots of oats, or other grain, bring a second crop to perfection after having ripened a first.

Your humble servant,

D. MAYNARD.

To the Editor of the Commercial and Agricultural Magazine.

IN one of your Magazines for the present year I remember some Queries were made by a correspondent to procure a Receipt to make Yeast, and for an account of its use in putrid fevers; also for a Method of taking Grease out of the Leaves of Books. The account here annexed of these subjects will, I hope, be found satisfactory to your readers, and probably contains the best information hitherto known respecting them. A. Z.

METHOD OF GENERATING YEAST, COMMUNICATED IN THE 8TH VOLUME OF THE TRANSACTIONS OF THE SOCIETY INSTITUTED AT LONDON FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

PROCURE three earthen or wooden vessels, of different sizes and apertures, one capable of holding two quarts, another three or four, and the third five or six; boil a quarter of a peck of malt for about eight or ten minutes in three pints of water; and, when a quart is poured off from the grains, let it stand in a cool place, till not quite cold, but retaining that degree of heat which the brewers usually find to be proper when they begin to work their liquor. Then remove the vessel into some warm situation near a fire, where Fahrenheit's thermometer indicates between 70 and 80 degrees; and there let it remain till the fermentation begins, which will be plainly perceived within thirty hours. Add then two quarts more of a like decoction of malt, when cool as the first was; and mix the whole in the larger sized vessel, and stir it well in, which must be repeated in the usual way as it rises in a common vat. Then add a still greater quantity of the same decoction, to be worked in the largest vessel; which will produce yeast enough for a brewing of forty gallons.

N. B. A proper quantity of hops boiled in the liquor accelerates the fermentation; and the liquor after the yeast is taken off will, when barrelled, make good beer if well managed. But the yeast may be generated without the addition of hops: and the bread made from such yeast will not be bitter, as is frequently the case with that made from common yeast.

PROCESS PRACTISED IN GERMANY TO PRESERVE YEAST FOR A GREAT LENGTH OF TIME.

AFTER having brewed and taken off the yeast, put it into a napkin or clean cloth, and bind it so as to prevent its running out. Lay it in a vessel which is half filled with dry sifted wood-ashes (which may be had at the baker's, or wherever wood is burned); then strew over the cloth more of the same kind of ashes, three or four inches high, and press the whole well together. After this, permit the yeast to remain in this situation a day, or longer; by which means the ashes will absorb all the moisture from the yeast, so that it becomes in substance like a thick solid paste.

The thinner the yeast is when taken from the wort; the greater is the quantity of ashes required, and the longer the time to drain out the moisture.

When the yeast is become of the consistence of paste; it must be taken out of the cloth, and, with clean hands, made into small lumps or balls, about the size of the fist, which must then be laid on a clean board, and dried by an oven, or a temperate degree of heat.

When completely dried, they may be pressed together, and kept in a bag in a dry airy place, free from damp.

When wanted for use take a handful, more or less, as may be necessary for the fermentation, and dissolve it in water, or rather in warm beer.

ACCOUNT OF THE USE OF YEAST IN PUTRID FEVERS.

Discovered by the Rev. EDMUND CARTWRIGHT, and published by Murray and Highley in the Appendix to his Memorial, addressed to the Society for the Encouragement of Arts, &c in 1800.

THIS ingenious Gentleman, in the pamphlet abovementioned, gives a variety of instances of the wonderful effects of yeast in putrid fevers, putrid sore throats, and similar complaints. In some cases, the internal use of two large spoonfuls of yeast repeated every three hours, have alone effected a cure. In others, the assistance of Peruvian bark was found serviceable in the intervals of exhibiting it. In some instances an emetic and cathartic were administered, previous to the use of the yeast. In all the cases there mentioned the yeast never failed of success eventually*.

For the Commercial and Agricultural Magazine.

RECIPE FOR TAKING GREASE OUT OF THE
LEAVES OF BOOKS.

FOLD up in two small bags, made of fine open muslin, some ashes of burnt bones, finely powdered, (or of calcinated hartshorn, which is always ready prepared at the shops of Druggists and Apothecaries) lay the bags of muslin, containing the powder, one on each side of the greasy leaf, and having heated a pair of fire-tongs, or hair-dressers pinching-tongs, of a moderate warmth, press with them the two bags against the grease spot, and hold them some time in that situation. If the grease spot is not wholly removed by the first operation, repeat the process.

When the irons cannot be conveniently used, the powder may be heated over the fire in a clean earthen vessel, and, whilst hot, applied, without any muslin on each side of the grease spot, and a weight laid upon it to assist its effect.

† Dr. Lidderdale, of Paternoster-Row, has lately given yeast in cases of putrid fever. It acted in all with good success, but in some not with the full efficacy of a specific remedy.

ENUMERATION OF PATENTS LATELY
ENROLLED.

- Aug.* 31. JOHN Theodore Koster, late of Lisbon, but now residing in St. Andrew's-Court, Holborn, Middlesex, Merchant; for a new method of building carriages.
- Sept.* 3. James Whitby, of Collumpton, Devonshire, George Bodley, of the City of Exeter, Iron-Founder, and John Davis, of Collumpton, aforesaid; for a mill for grinding bark.
- 12. Thomas German, of the parish of St. George, Bloomsbury, Middlesex, Gentleman; for a method of greatly easing the labour, and lessening the number of horses, in the draft of coaches, carts, waggons, drays, and all land-carriages whatsoever.
- 15. Thomas Jotham, of Bradford, Wiltshire, Clothier; for a machine for raising the wool pile, or fibres on woollen, cotton, or other piece goods, preparatory to shearing; and for dressing or dubbing cloths, either wet or dry, otherwise than by Geren cards and pickards.
- 18. Zachariah Barratt, of Gealing, Nottinghamshire, Cabinet-maker; for a method of grinding corn, or other grain, by a new-invented mill or machine, either moveable or immoveable, and intended to be worked by water, wind, horses, hand, or otherwise.
- Oct.* 5. James Tremere, of Lambs Conduit-passage, Middlesex, Carpenter; for a method of working barges and other vessels.
- 8. William Bullock, of Portland-street, Soho, Middlesex, Cabinet-maker; for a fastening to be applied to fashies or dining-tables.
- 13. Samuel Miller, of Cleveland-street, St. Pancras, Middlesex, Engraver; for a machine and process for manufacturing materials for the better securing walls and roofs of houses from lateral pressure, and the inclemency of the weather, by which process the buildings will be built of better materials, and rendered more durable.
- 14. William Symington, of Kinnaird, Stirlingshire, Engineer; for a mode of constructing steam-engines, and applying their power to the purpose of producing a rotary and other motions without the interposition of a level or beam.
- 30. Thomas Fryer, of Rastrick, near Halifax, Yorkshire; for a method of manufacturing and finishing goods from cotton, cotton and woollen, cotton and silk, cotton and linen, or cotton and mohair, in such manner as to make the same appear as if covered with ermine or fur, and in imitation thereof.
- 30. Richard Brayshay, of Liverpool, Lancashire, Gentleman, and William M'Mahon, of the same place, Gentleman; for a machine for the purpose of gaining an increased speed and power to all mechanical operations by land and water.

CRITICAL CATALOGUE.

- I. *General View of the Agriculture of the County of Fife, with observations on the means of its improvement, drawn up for the consideration of the Board of Agriculture and internal improvement. By JOHN THOMSON, D. D. Minister of Markinch. Nicol. 1800.*

FIFE, on three sides encompassed by the ocean and the friths of two large navigable rivers, was, from its peninsular situation, known in ancient times by the name of Ross, which, in the Gothic or Pictish language, signifies peninsula. Two ranges of hills bounding two vallies, respectively watered by the rivers Eden and Leven, the first joining the ocean near St. Andrew's, the second falling into the Frith of Forth a few miles above its junction with the ocean, served to shape this county. The author accordingly divides Fife into four districts; the first along the Frith of Forth, where, from the western to the eastern boundary, the land rises gently, and has little elevation above the sea. Here the soil is deep rich loam, good clay, and gravel mixed with loamy earth. In many places, the soil lies on rotten rock; and, when this is the case, it seldom fails to be dry and remarkably fertile. About Largolaw, Kinghorn, Burntisland, and some other places, where the ground is broken and uneven, swelling abruptly into eminences or little hills; the soil is deep and rich, not only in the interjacent vallies, but as far up the hills and rising grounds as they are accessible to the plough.

The second district is that hilly tract which divides the former from the vale of Cupar, and extends from St. Andrew's on the east, to the western extremity of the county. Here, a very large proportion is cold poor clay, and very wet; and the strata under it, for the most part, free-stone, and close till. In this district there are extensive tracts of mossy, moorish, rocky, and barren ground, either altogether incapable of tillage, or incapable of being tilled with advantage. The high exposure of this large division, its want of shelter, the heathy and barren moors it contains, and the scanty crops it produces, render its general aspect bleak and forbidding; and indicate the propriety of occupying it for the purpose of breeding and rearing cattle, for which it is much fitter than for yielding crops of corn. Among these bleak and barren hills, however, are several fertile, though small dales.

Next to this district, is a tract between the northern and southern ridges already mentioned, which extends from the mouth of the Eden along the course of that river on both sides until it reaches the frontiers of Perthshire. From Cupar westward is a low and level valley, expanding in some places to the breadth of three or four miles, and which, from its situation between the two ranges of hills, anciently called the How of Fife. Along the middle, and on the south side of this vale, the soil is generally light, dry, and sandy; on the other side of this valley, as it approaches the hilly ground on the north, the soil becomes gradually deeper and stronger, in some places clay, and in others rich loam; with the exception of Eden's Moor, which is a thin mossy soil, with a sub-stratum, in some places, of sand, and in

others of cold till, and covered with short heath. From Cupar eastward, the ground rises, the surface is more unequal, the valley narrower, but widens as it declines and approaches the sea.

The fourth district consists of the hills, which, bounding this valley on the north-east, extend to the Tay, and are a continuation of the Ochill hills; the elevation of these above the sea is considerable; but notwithstanding this, the soil is in general excellent, and, except on the very tops of the hills, where it is thin and exposed, scarcely inferior to any in Fife. The sloping ground upon the south side of these hills, from the western boundary to the extremity on the east, is rich clay, loam, and gravel. On the north side, along the Tay, the soil is nearly of the same quality. Few counties in Scotland can furnish such an abundant supply of both coal and lime as the county of Fife: from the Forth almost to the Eden these minerals are to be found in a great variety of places, and of the best quality. On the subject of coal, the author gives a very accurate detail of the various strata of that valuable mineral.

Highly conducive to the purposes of agriculture is the state of landed property. Here (says the author) we find no overgrown estates, such as are frequently to be met with in other parts of the kingdom, the proprietors of which, exalted so far above the rest by their princely fortunes, and perhaps by the splendours also of hereditary honours, think themselves entitled to take the lead in all public business; and, by the influence usually attendant on rank and opulence, seldom fail to secure to themselves the full power of directing all the political affairs of their respective counties.

Fife is, indeed, remarkable for the spirited independence of gentlemen proprietors who act for themselves, and not, as in small neighbouring counties, as the retainers of grandees. Hence it happens, that the Noblemen and Gentlemen in Fife live on the most friendly and intimate terms; and all county business is conducted with the greatest harmony and care, alike undisturbed by the insolence of family pride, or the mean jealousy of inferior rank, the violence of party spirit, or the disgraceful artifices of political intrigue.

A great majority of the proprietors are constantly, or occasionally resident; a circumstance highly favourable to their own private interest, as well as to the general prosperity of the county to which they belong. In Fife there are two complete districts of burghs, each of which sends a member to Parliament, viz. one comprehending the burghs of Dysart, Kirkaldy, Kinghorn, and Burntisland; and the other Pittenweil, Easter and Wester Anstruthers, Crail, and Kilrenny. The burghs of Cupar and St. Andrews are united to Perth, Dundee, and Forfar; and Dunfermline and Inverkeithing, to Stirling, Queensferry, and Culrois. Fife, therefore, has, in effect, four representatives in Parliament, and consequently nearly the eleventh part of the whole representation of Scotland. This, however, is no more than its just share, being nearly in proportion to its valuation, and the amount of cess and land tax which it is bound to pay.

Farms in this county, in respect of extent, differ much from one another; they are found of all sizes, from fifty or sixty acres to four or

five hundred acres; the average perhaps may be one hundred and twenty acres. There are besides many tenements from fifty acres downwards to eight or ten; but few of these are occupied by actual farmers; many of them are the property of small heritors, and many of them are taken by manufacturers, tradesmen, mechanics, and others, merely for convenience, or amusement, who do not depend upon their produce for the support of their families, or the payment of the rent.

The aggregate character of the farmers, moral and religious, is very highly praised.

In this county the cultivation of oats is more universal and extensive than that of any other kind of grain; the reasons are obvious, oats are more generally adapted to the soil and climate. Oatmeal still continues to be a principal article of food among the lower classes of the people; and the consumption by horses has been on the increase for some years past. The progress of luxury has increased the number of carriages and saddle-horses, as well as those employed upon the road, and those in the hands of private gentlemen. Oats, and every other kind of grain, are threshed, partly by the flail and partly by the lately invented threshing mills. On rich land in high order, the produce will be twelve bolls per acre and upwards; it is often ten, and from that down to four bolls, according to the quality and condition of the land; the medium cannot be estimated above six bolls per acre. About thirty thousand acres are sown with oats.

Barley is cultivated in Fife to a very considerable extent, and is considered as a crop of great importance to the farmer. Not less than twenty thousand acres are annually applied to this purpose. The average of produce is about six bolls and a half per acre. About ten thousand acres are sown with wheat, producing at an average eight bolls per acre. Flax is also very successfully and profitably cultivated. Peas, beans, potatoes, turnips, and other crops, nearly the same as in Perthshire, are also grown.

The Fife farmers are thoroughly skilled in a rotation of crops adapted to the nature and strength of the soil. The author quotes the following instance of rotation in a soil too light for bearing wheat, by Mr. Cheap, of Rossie, upon a farm which he has lately improved, and keeps in his own hands: "First, potatoes and turnips, and partly pulse; second, barley; third, hay; fourth, pasture; and fifth, oats. The farm consists of one hundred and fifty acres, inclosed and subdivided into parks of thirty acres each, corresponding to the above course. The land, in its original state, consisted of a poor, thin, deafish soil, without any good property to recommend it except its being dry, and not worth five shillings per acre. By judicious management, and a plentiful supply of manure, particularly of marl, the quality and appearance of the soil is entirely changed, and the land brought to such a state of improvement, as to bear abundant crops of any kind of grain.

Fife is very much deficient in wood, there being scarce any to be seen, except about the seats of Gentlemen.

Fife has been long distinguished for black cattle; the indiginous breed is much better than those introduced from other countries. As agriculture has advanced, sheep are much less numerous than formerly.

From fertility in corn and cattle, as well as abundance of fuel, manufactures flourish in this county: from its maritime situation, commerce also prevails.

The manufacture of linen is more extensive, more valuable, and employs a much greater number of hands, than any other in the county. The different kinds of linen goods manufactured here, are, damasks, diapers, checks, ticks, Osnaburghs, and Silefias, or brown linens, besides plain linen of various fabrics, for shirting and other domestic purposes. Mills for spinning flax have been lately introduced into this county, and are of the greatest importance to the linen manufactures; they deserve to be particularly taken notice of. The first erection of these mills was so late as the year 1793, and at that period only three began to do business. The saving of labour by these engines is immense.

Some years ago the roads in Fife were extremely bad; in many parts of the county, where roads are evidently necessary, not only for the safety of passengers, but for the convenience of the neighbourhood, none were to be seen, except such tracks as had been formed by the occasional tread of horses, the wheels of carts, or the footsteps of the traveller. It was not till the year 1790 that this important evil was remedied, when the Gentlemen applied for, and obtained an act of Parliament for the purpose. Now the roads are equal to any part of the country.

There are no canals in Fife; the situation of the county, between two large navigable rivers, furnished with numerous convenient harbours, from which the greater part of the county is removed not more than three or four miles, and no part above eight or nine miles, renders this public accommodation less necessary here than in many other parts of the kingdom.

In population Fife exceeds any county of the same extent within Scotland, except those in which Edinburgh and Glasgow are situated. The most populous town is Dunfermline, being near ten thousand; more than double the city of St. Andrew's: the university of this last place, since mentioned by the author, ought to have been more particularly detailed.

This agricultural survey is a work of much industry, judgment, and ability, and adds to the favourable impression which we had before received of the agricultural advances of Scotland; of the agricultural knowledge, and literary talents of its clergy.

One general fact which the author has not mentioned in his account of Fife is, that it has been uniformly distinguished for a zeal for civil and religious liberty; thence arises that spirit of resistance to aristocratical encroachment and domination, on which he has bestowed the just tribute of praise; perhaps its maritime situation and commercial capabilities may be the principal causes which rendered Fife a grand reservoir of Whigs, while more inland counties were filled with voluntary vassals, who acknowledged in fact the heritable jurisdiction of some paramount Thane, long after it was abolished by law.

II. *Travels in the Ottoman Empire, Egypt, and Persia; undertaken by order of the Government of France; during the first six years of the Republic.* By G. A. OLIVIER, Member of the National Institute of the Society of Agriculture of the Department of the Seine; translated from the French. Longman, 1801.

The origin and object of this work the author presents to us in the commencing paragraph. "At the end of October, 1792, the Executive Provisional Council, penetrated with the advantages which were likely to result from travels into the Ottoman Empire, Egypt, and Persia, respecting commerce, agriculture, natural history, general physics, geography, the medical art, and even our political relations with Turkey; persuaded that those interesting countries had not been considered under their true point of view, or had been so but partially, and that there still remained much information for us to acquire respecting them, fixed their choice, for the accomplishment of this object, on Citizen Bruguiere and myself." Arriving at Constantinople they found Turkey affected by the revolution of France; they encountered enmity from various classes of inhabitants. Even the Greek women, formerly, according to this author, so attached to French visitors of the opposite sex, bestowed their affections and endearments on men not infected with the political malady of France; time, however, reconciled those charming females to men who, whether monarchical or republican, were willing to render homage to their beauties.

Mr. Olivier, possessing all the sprightly sensibility of his country, devotes a great portion of his concern to the state of the ladies immured in the seraglio; expatiates on their wants and privations, and with much particularity of detail describes the feelings which may arise in female breasts so circumstanced, *from the contemplation of the usual sentinels* placed over beauty by Mahomedan monopolists.

Though the Turkish Government and Religion allows polygamy and concubinage, yet it is extremely severe against prostitution. A Mahomedan woman convicted of promiscuous subserviency is often punished with death. It would appear, that among the Turks, whoever wishes to converse with the fair sex must either marry one or more wives, as may suit his inclination and purse, hire concubines, or purchase slaves.

Conjugal infidelity, allowed to men, is in women punished with death. The restrictions, however, as may be naturally expected, tend to sharpen female invention. Ladies of a Seraglio having so small a portion of the attention of their husband or master, are propense to intrigue with other men. The author details the progress of such gallantries evidently *con amore*. There are, at Constantinople, not wanting procuresses, though generally employed by the lady, who usually makes the first advances. Besides the common arts for conveying intelligence between lovers, these matrons express ideas very effectually by *certain dispositions of flowers*, before concerted. Strangers visiting Constantinople find most readily objects of their wishes in Greeks, and auxiliaries to the attainment of those objects, in Jewesses. Priests, so extremely accommodating in this way in Roman Catholic countries, sometimes lend their aid.

Constantinople, placed at the entrance of the Euxine and Mediterranean, is peculiarly favourable to maritime power; but, from the character and disposition of the people, its advantages are not improved. The Turks, in general, are not fond of the sea; they cannot conform to the active life which a seaman is obliged to lead; they cannot accustom themselves to the privations which that profession requires; they commonly prefer making use of the Greeks, who display, in this line, as in every other, an intelligence and an activity of which the Turks are not capable. The Greeks manœuvre tolerably well, and conduct their little vessels with much skill, in the seas with which they are acquainted; but they have not the smallest theory of navigation; almost all of them navigate without a compass, steer only by the knowledge of the mountains and coasts, bear up for every wind that blows somewhat strong, and go and wait for fine weather in the nearest port.

The sailors and soldiers of the navy were formerly called *Levens* and *Leventis*; they are at this day distinguished by the name of *Galiondgis*: the former are Turks of the maritime villages, or Greeks of the Archipelago; they are permanent, constantly receive their pay, and are to embark at the first order. The *Galiondgis* soldiers are all Mussulmen, and receive pay only when in employ; after the ship is put out of commission, they obtain leave to retire into their own country, and to resume their usual occupations. The Greeks are employed in a ship of war only for working her, her defence being reserved for the Mussulmen.

The Captain Pacha is the High Admiral and the Superintendent General of the Navy; he usually commands in person the fleets and all the naval forces of the empire, he nominates all places and employments, he orders the building and repairing of ships; but the *Tersana-Emini* is properly the Naval Minister; since he has the administration of the funds appropriated to the navy, the direction of the supply of stores to the arsenal, the care of the equipment of the ships, and the superintendance of all the works; he has under him chiefs, deputies, and different harbour-masters, as well for the execution of his orders, and for private superintendance, as for the police.

The plague, so dreadful a scourge at Constantinople, is far from arising from the climate, which is extremely salubrious; its prevalence is principally owing to Turkish fatalism; to the prejudices and ignorance of physicians. The plague is, according to the most observing physicians, contagious, that is, communicated by contact, by touching the pestilential matter, not only on the patient, but mixed with any other substance. It is not like the putrid fever, infectious through the air: thus European strangers easily prevent the plague, when residing in a city where it rages, but cannot prevent putrid fevers.

Leaving Constantinople, the author proceeded to Asia-Minor, and the Levant. Three miles from the Dardanelles are a few vestiges of the ancient Abydos, opposite to Sestos, at the most narrow part of the channel; both towns so famous from the loves, real or fabulous, of Leander and Hero.

In his excursion to Troas, he found the greatest exactness in the pictures which Homer has drawn. "It is true, (he says) there is scarcely any longer to be found a trace of the cities which existed in these countries; the inhabitants even have disappeared; but the course of the Simois, and that of the Scamander, have not changed: we perceive, on the banks of the latter, the marshes of which Homer makes mention; time has not been able to destroy the hillocks of earth under which repose the ashes of the heroes whose names have been handed down to us; the waves of the sea have not produced any perceptible change on the coast; the lands are still fertile, and susceptible of supporting a great number of inhabitants: forests of pines and oaks still cover Mount Ida, and all the mountains which present themselves to the east of Troas."

From Asia-Minor, the author proceeds to the Archipelago; spent a considerable time at Chios, and afterwards in Candia; the account of both which islands are extremely amusing. The production lively and light, is, on the whole, very entertaining, and contains several articles of new information, especially respecting the state of the Grecian islands.

The present publication appears to be only part of the work projected; the sequel will probably include an account of Egypt, Syria, and Persia, into which we are informed, in the title page and introduction, that our author has travelled.

III. *A Tour through the whole Island of Great Britain; divided into journies, interspersed with useful observations, particularly calculated for the use of those who are desirous of travelling over England and Scotland. By the Rev. C. CRUTWELL, author of the Universal Gazetteer, In Six Volumes. Robinson, 1801.*

This is a very useful collection of very common materials. The reader of agricultural reports, and of Patterson's Road-Book, with Guthrie's Geography, will find very little which he has not seen before, except in the accounts of towns, which are well enough abridged from the *Guides* of the respective places, such as Oxford, Bath, Brighton, &c. The author has also been indebted to the Scotch almanack, from which the ecclesiastical state of Scotland is compiled with much accuracy and industry. We wish, however, he had examined the geography of Scotland with equal attention as that which he bestowed upon the geography of England. The *tourist* might have found *books* and *maps* on the one subject as well as the other.

Though we cannot bestow very great praise upon this work as a *TOUR*, yet, as a *road-book* upon an extensive scale, it possesses considerable utility. Its usefulness perhaps would not be lessened by a diminution of its size, which might be easily effected by simply leaving out all that was not to be found in other books.

The first volume is devoted to a kind of statistical report of the different counties; some of those are very trite, and others very frivolous. The account of Middlesex is chiefly confined to two subjects, *milk cows* and *Members of Parliament*; of two pages, however, the members possess but one-eight, whereas the cows have six-eighths, or

a page and half. The small remainder from legislature and pastorage, is devoted to history, politics, and curiosities.

To diversify narrative, the author frequently intersperses poetry copied from grave-stones. The author is fond of quotation, and not unfrequently cites authority to prove propositions that will be very readily granted as soon as they are renounced. If a grand or beautiful prospect is presented, we have a quotation from some author to prove that it ought to be admired.

These are the principal observations that the six volumes suggested to us. We strongly recommend an abridgement, of which it certainly admits.

HISTORY.

National Transactions.

TURKEY AND EGYPT.

AFTER a campaign so signal in achievement and glory, a considerable part of our brave troops is returned from Egypt. The views with which France projected the invasion and colonization of that country are entirely discomfited. They have no longer the prospect of wounding, through India, our commercial, political, and naval greatness. Could we forget that we are Britons, merely feel and reason as citizens of the world, perhaps we might have subjects for regret in the evacuation of those fertile regions, by men who possessed sagacity and invention to improve their capabilities. Were we to indulge ardent imagination, we might figure to ourselves liberty spreading from the mouth of the Nile to the mouth of the Danube, and the ancient genius of Greece reviving, and disseminating freedom beyond the ridges of Rhodope; and the descendants of enlightened heroes no more the slaves of bigoted savages. Such visions and fancies, however, suit not the statesman who must be guided by present and urgent national interest. If the French had kept Egypt, that they would prove certainly extremely hurtful to this country is morally certain; therefore, as Britons, we must rejoice that they were expelled.

ITALY.

Italy is busily occupied in endeavouring to recover from the evils incidental to a theatre of war, and completing the arrangements which peace procured.

SPAIN.

Spain, slow in all her motions, appears peculiarly dilatory in the present negotiation. Many conceive, that she supposes her interests by the preliminaries of peace sacrificed to the politics of France, and that she is unwilling to accede to the treaty, unless upon more favourable terms. This alledged demur, though it might involve complex details, could soon be reduced to very simple alternatives.

Is not Spain, whatever she calls herself nominally, really the dependant of France? Will she pretend to reject the treaty stipulated by France; and, without the concurrence of France, will she resume war with Great Britain? If she does, the consequence in that case would be very obvious. We certainly will not yield to her, contrary to expressed stipulations; she must either abide by the treaty, or encounter our force. Spain certainly has shewn herself refractory; but unless France were to support her, the present stubbornness cannot be either lasting or efficient.

The conclusion and continuance of the peace, no doubt, depends on the dispositions of Bonaparte. The Spaniards will, and must do, whatever he directs. If he thoroughly understands, and resolutely pursues the interest of his country, he will seek permanent tranquillity. We have no ground to doubt his integrity. Our best security for peace is in the interest of the French rulers and French people.

FRANCE.

Still, however, men are not always actuated by just views of their solid interest; it is proper that the conduct of the French and their Consul should be vigilantly watched. However expedient the French expedition to St. Domingo may be considered by his Majesty's Ministers, it is no less necessary that the proceedings of so formidable a force should be narrowly watched; the more especially as the peace between the two countries is not definitively settled. Five sail of English line-of-battle ships have already been sent out for this purpose, and seven more, under the command of Admiral Mitchell, have for some time been under orders at Bantry Bay for the same destination. These, contrary to expectation, and to the instructions sent out by the Admiralty, did not sail so soon as was intended; and there was at one time an alarming appearance of mutiny.

It was on the evening of the 7th instant that the first observations were made by the officers of several ships of the Squadron in Bantry Bay, and that indications became evidently certain of some intended and approaching act of mutiny. It appears that on its being understood that four or five sail of the line were to be ordered to the West Indies, the crews of the *Temeraire* and the *Formidable* declared, that, as the peace was made, they would sail only to England; and they declared their determination not to weigh anchor if called upon. Apprehensions were entertained that this spirit of insubordination would extend to the whole fleet.

No sailing orders arriving, and the intended insurrection being adjourned to that event, things remained in the usual position till the morning of the 10th instant, when a seaman on board the *Temeraire*, Rear Admiral the Hon. George Campbell, misbehaving himself extremely, and with circumstances of daring impudence towards one of the Lieutenants, received a flogging, and was put in irons.

Soon after this occurrence, appearances of revolt were for some time very visible upon the fore-castle, until at length a general cry was set up of "Rescue the man in irons," and attempts were made to enforce their threat.

The Rear Admiral, with undaunted resolution and presence of mind, ordered the hatches to be closed down immediately; and being seconded, with no less intrepidity, by Capt. Eyles and all his officers, supported by the Marines, who have done honour to themselves, and given a glorious example to their corps upon this occasion; he rushed into the middle of the mutineers, and brought out their ring-leaders prisoners from amongst them. They were immediately sent off, in irons, to the flag-ship of Admiral Mitchell, in order to be tried, and to receive the punishment due to the crime most unworthy of British sailors.

It may be confidently hoped that the failure of this first experiment of the conspiracy, the punishment of the guilty, and the example given to all other ships by the *Temeraire* and her Officers, have, by this time, extinguished the last spark of the sedition.

The Brest fleet has not yet put to sea, but whether on account of the remonstrances which have been made by our Government is not known. The zeal with which the French have prepared this formidable force, naturally demanded the attention of our Ministry; and, from the suspicious complexion of the expedition, we have every reason to hope, that if it should actually attempt to sail, its progress will not only be closely watched, but vigorously opposed. Were the French Government permitted to accomplish their

purposes in the West Indies, before the conclusion of the definitive treaty, abundant pretexs might be formed by them for renewing the war. A measure which, though evidently opposite to the sound policy of France, it still behoves us to guard against.

We should be far from presuming to impute treacherous intentions to the First Consul; such, indeed, would be very unworthy of the powerful genius and magnanimity of his character. In the history of his wars and negotiations we find nothing to justify the imputation of such ignoble conduct. On the other hand, so powerful a fleet certainly will not be allowed by us to sail for the West Indies without being watched.

But there is another point of view in which it requires the most active vigilance of Britain, without imputing any sinister intentions to the French Government. Even if peace be concluded, we have to guard against the active rivalry of France. Never can it be too deeply impressed upon our minds that France, under her old monarchy, was not half so formidable as she is under the present constitution. Besides, wherever a Government encourages manufactures, gives facilities to trade, and free exercise to the skill and industry of individuals, capital will not long be wanting. We see the efforts France is making to divide with us the trade to Portugal—to secure the Levant trade—to appropriate to herself the commerce of Italy—to reopen the Scheldt—and to give the vast energies of the Netherlands their full range. All these circumstances, though they may not intimidate, ought at least to rouse a correspondent degree of vigour and vigilance in our own Government. Indeed we have no doubt that our Ministers are anxiously bent upon relieving our burdens, and improving our resources. They have earned and acquired, from all parties, all the credit that can arise from the most patriotic intentions. Such being their object, observation and experience will, we doubt not, devise the most effectual means for encouraging manufactures and commerce, and above all, agriculture, so that it may resume its proper station in political economy.

We trust the candour, moderation, and patriotism of the Ministers, paying the due attention to public opinion, will encourage its great engine, the Press, and attempt its relief from the burthen under which it now labours, by the exorbitant price of paper.

The Booksellers and Printers have very strenuously endeavoured to reduce the price of this article, and hope fully to effect their purpose by an application to the Government and Legislature. It is, indeed, a common cause of Booksellers, Printers, and Authors; and inasmuch as the late taxes operate to the diminution of literary adventure, and the consumption of paper, so far, as a measure of finance, they destroy their own purpose. In quest of the smaller additional impost, they prevent the productiveness of the greater. The ten per cent. loses in hundreds much more than it acquires in tens. But the defalcation of revenue from high duties on materials of professional industry, is not confined to the mere diminution of the quantity consumed; it extends to various other subjects.

Paper is the material from which Stationers, Printers, Booksellers, and Authors derive their subsistence, their means of upholding their rank in society, and of contributing to the exigencies of the State. By enhancing beyond all reasonable proportion the price of the raw material, you lessen the call for that species of industry, ingenuity, talent, manufacture, and commerce; you deteriorate the incomes of four classes of subjects, and render, not only from their income, but various other sources of contribution, the four classes less productive to the public Treasury. Since the very high price of paper, it can easily be demonstrated that the aggregate amount of income or taxable expenditure, of all those classes, is much less than before. As a scheme, therefore, of finance, the additional impost upon paper lessens, instead

of increasing revenue. These considerations have not, we believe, been hitherto urged to Ministers, but such is their importance, that we doubt not, if clearly and forcibly stated, and pressed in a memorial, they would produce the desired effect.

Ministers deserve commendation for the means which they are employing, by preventing the exportation, and encouraging the importation of meat, to reduce the enormous price of that momentous article. It is extremely dangerous in legislature to interfere in the price even of the necessaries of life, by any direct enactments; but by such circuitous regulations much good may be done.

It is generally reported and believed, that the most frequent cause of high prices, when there is no actual scarcity, are monopolising combinations, facilitated in execution, and extended in operation, by the fictitious paper of Country Bankers and other speculating adventurers. To investigate actual facts, so as to ascertain the real causes of dearth, would be an object worthy of the benevolent intentions which have uniformly marked the conduct of Ministers. A Committee might be instituted to enquire into the subject, to probe it to the bottom, and try if it be possible to remove so heavy an evil from the nation; to prevent all ranks in society from having their means of subsistence and accommodation diminished, in order that Smithfield Agents, Cornfactors, and Mealmen, should accumulate immense fortunes.

Mr. Addington, like every other enlightened politician, not misled by the love of paradox, is the friend of free trade, and consequently the enemy of monopoly. If any kind of monopoly be pernicious to a commercial state, that must be paramount in destructiveness, when affecting those numerous, industrious, and important classes, which prepare our manufactures and mercantile commodities.

The man, or men, who should devise means for effectually preventing monopolising combinations for enhancing the price of cattle and corn, would be entitled to the lasting gratitude of every friend of public good.

The Minister, anxiously earnest to impose as light burdens as possible on the country, introduces no new expedient of finance before the month of April. The Bank has agreed to accommodate Government.

We learn with great pleasure, from the Parliamentary debates of the 28th, that the apprehensions entertained by the public concerning a misunderstanding between England and France, are unfounded. Another short adjournment of Parliament has taken place, but not, as expressly stated by the Minister, in consequence of any unforeseen or alarming occurrences; a circumstance which must afford additional satisfaction to the public, and revive the pleasing hope of a speedy conclusion of the Definitive Treaty. Nothing that has occurred, Mr. Addington says, will cause any alteration in the pacific arrangements at Amiens; and we rejoice to hear, that it is the expectation of an immediate adjustment of the terms of peace that induces his Majesty's Ministers to postpone the long adjournment that is about to ensue.

We have already stated, that, from prudential motives, the payment in specie by the Bank is not intended suddenly to take place, but to be gradually resumed. For this purpose, the act now in force, which expires in a month after the signature of the Definitive Treaty, is meant to be prolonged; and, as the period of that act is considered not far distant, it is deemed expedient to continue, for a short time longer, the sitting of Parliament; in order that such measures may be adopted as the circumstances of the case shall require.

Commercial Affairs.

IT is said that the celebrated commercial House of the Hopes of Amsterdam have applied to the Dutch Government for permission to return and resume their business, but have been refused, unless they consent to pay up their taxes during their absence.

The Dutch Government has made some advantageous proposals to the First Consul, if he will alter, or at least modify, the resolutions he has taken respecting the Scheldt and Antwerp; which must, in many respects, prove nearly ruinous to the commercial existence of the Batavians.

The price of shipping, which fell very considerably after the peace, has risen again, on account of the great orders for the purchase of shipping which have been received from Holland and France.

The Bank of England has been able since the peace to increase their discounts, but one circumstance must preserve them from being too free; that is, their exemption from paying their notes in gold and silver expires within a month after the signing the definitive treaty of peace. It is said that one reason for the Parliament not rising so soon as expected, is, that it may be ready to afford somewhat to the Bank in case it should be necessary.

Sugar, and some sorts of raw cotton, have declined in price. Of cotton, large quantities have, within these last few days, entered the port of London.

The improvements of our internal trading intercourse, by canals and iron rail ways, are advancing with extraordinary spirit and rapidity. The Grand Surrey Canal will, under the direction of Mr. Dodd, be very soon completed.

The coast-trade, of Leith, Dundee, Inverness, and other towns on the north coast, seems to be fast increasing.

The prices of wool rise, in consequence of the prospect which the peace affords of an increased sale of all sorts of woollen goods.

Hops.—This article has had a very brisk sale since the season commenced, as might be expected from the excessive high prices at which those of the two preceding growths had been kept up, caused by the most extensive and unexampled speculations ever known. The drop of price, from 16l. 16s. and 17l. 17s. per cwt. to 4l. and 5l. was such as to encourage brisk sales for new ones, at these prices, which has again tended to advance the markets, and reward the planter, who, it were to be wished, may henceforward see his true interest, and not be misled by designing men.

From the debate in the House of Commons, on the night of the 25th of November, we learn, that the East-India Company have at least agreed to comply so nearly with the plan for the opening of the carrying-trade to India, which was suggested by the Marquis of Wellesley, as to resolve to give full scope to the transference of private property between India and this country by British-built ships and British seamen, if not by India-built vessels and Lascar sailors. It might be painful to the Directors to come to such a resolution: and, had this been possible, we should not have been greatly dissatisfied to see the Company preserve their monopoly of the navigation to India still in its pristine rigour; but the carrying-trade with India must have otherwise been relinquished to Foreigners: how much better to open its advantages to British merchants solely, and in general! The plan said to be adopted, is, in many respects, preferable to that of employing Lascars and India-built shipping. But we would still earnestly exhort all concerned, to render the voyages as frequent and short, and the freightage as cheap, as possible.

Trade, in many of its branches, appears to be, for the present moment, in a sort of pause, between the particular state of activity in which it existed

during the war, and those new channels of operation into which it must turn itself in consequence. Every great change in the state of trade tends, for the moment, to increase the number of bankruptcies beyond their ordinary proportion. Such an effect took place remarkably at the commencement of the war. It seems to take place at present, though in a smaller degree, in several parts of the island.

The exports of cotton yarn, from Glasgow and Manchester to Germany, continue to be very large. We would much rather that the yarn would be made into cloth before exportation. Manchester begins again to find the wonted market of Leghorn open to its manufactures. That of America and the West Indies is now more free than ever; and the exports to it must, of course, be greatly augmented.

The Course of Exchange is now open with the countries which were shut up against us by the war; and bills on almost every great capital and commercial emporium on the Continent may be purchased in London. We observe, that the variation in the exchange with Hamburgh, has been, in the course of the last month, somewhat in favour of this country. Such a fact must, no doubt, be interpreted as implying, that the proportion of the money to be remitted from Hamburgh to London, is, in comparison with that due from London to Hamburgh, greater now than it was a month ago. Our exportations to the Elbe appear, therefore, to increase. With Spain, the last variations in the rate of exchange have been favourable to us; as there must be considerable remittances to come for the purchase of British goods from Spain to this country. With Portugal and Italy, the turn of the exchange is against us; as our merchants now adventure freely in the purchase of the produce and manufactures of these countries; and remittances to our fleets and armies probably pass in that course. The exchange with Dublin is still more and more to the advantage of Ireland; affording, among other things, a clear proof that the Irish nation already derives important pecuniary benefits from the Union.

The danger of capture is no longer among the risks for security against which the Insurance Premium is paid. The rates of that premium have therefore fallen to the wonted medium in time of peace.

An account of all grain, meal, flour, and rice, imported into, and exported from Great Britain, between the 5th of January 1801 and the 10th of October following.

Imports into Great Britain, between 5th January 1801, and 10th October.

	<i>Qrs.</i>	<i>B.</i>		<i>Cwt.</i>	<i>qr.</i>		
Barley	-	107,076	6	Wheat Flour	728,428	1	
Beans	-	14,600	4	Rye Meal	-	152,410	2
Oats	-	539,709	2	Oatmeal	-	63	2
Peas	-	39,398	2	Indian Meal	-	107,667	2
Rye	-	92,693	7	Rice	-	245,136	3
Indian Corn	-	40,471	2				
Wheat	-	1,035,714	7				

Exports from Great Britain, between 5th January 1801, and 10th October.

	<i>Qrs.</i>	<i>B.</i>		<i>Cwt.</i>	<i>qr.</i>		
Barley	-	1,224	2	Wheat Flour	55,606	3	
Beans	-	2,802	6	Oatmeal	-	2,501	2
Oats	-	4,194	1	Indian Meal	-	1,987	5
Peas	-	651	1	Rice	-	4,800	3
Rye	-	38	0				
Indian Corn	-	378	3				
Malt	-	1,989	6				
Wheat	-	2,483	4				

OPIUM.—Amid the extensive concerns of the British East India Company, it is well known that the growth and manufacture of opium has for many years been considered as a great source of public revenue and of private wealth: whole districts have for these purposes been devoted to the culture of the poppy; the superintendance and collection of the taxes have been the employments of Officers of high rank in the Company's service; and the privilege of the commodity for a season one of the most lucrative gifts which the Governors of the East could bestow on their nearest connexions. China was the grand mart for this article; and so strong was the attachment of the Chinese to its use, that any quantity sent to Canton was sure to be purchased at a high price. It appears, however, that this valuable traffic will now be lost to the Company, the Chinese Government having discovered that great evils result from the abuse of opium, the particulars of which have been detailed in instructions from the Fooyuen to the Hoppo at Canton; who has, in consequence, issued an Edict, which, after recapitulating the Fooyuen's instructions, wholly prohibits the importation of opium into the Chinese dominions.

Agriculture.

GOLD MEDAL OF THE BOARD OF AGRICULTURE.

AS it is satisfactory to know that the Board of Agriculture are desirous of promoting a spirit of enquiry among Gentlemen concerned in agriculture, we have the satisfaction to inform our Readers, that they have voted to the very ingenious Dr. Wilkinson, of Enfield Chace, a Gold Medal, for a paper on "the best method of converting grass-land into arable, and of returning the same to grass;" which question was recommended by the Committee of the House of Lords.

SMITHFIELD CATTLE AND SHEEP CLUB.

The following beasts were on Saturday exhibited at Wootton's, in Smithfield, for the prizes of the present year:

BEASTS.—Four of his Grace the Duke of Bedford, comprising three Herefordshire bred oxen, red and white, and a French cow, yellow.

One ox of Sir Thomas Carr, red, of the Suffex breed.

Four of Mr. Westcar, of Cristloe, Bucks, comprising three oxen and one heifer, Herefordshire breed, two of the oxen red, one white, and the heifer white.

Two heifers, Kentish breed, of Mr. Kingsnorth, of Kenningdon, Kent.

One ox, Suffex bred, red, of Mr. Sayers of Dartford, Kent.

One cow, red and white, Herefordshire, of Mr. Cook.

One heifer, red and white, Berkshire, of Mr. Trindall.

One ox, red and white, Herefordshire bred, of Mr. Wakefield, of the Hundreds of Essex.

Four beautiful oxen, Herefordshire bred, of Mr. Bendry, of the Old Jewry, London.

Two, a bull and cow, Devonshire breed, of Mr. Westcar.

One home-bred ox, of Mr. Philips, of Royston; and

A cow from Bangalore, the property of Mr. Curtis.

SHEEP.—Four South Downs, of his Grace of Bedford.

Four South Downs, of Sir Thomas Carr.

Two Leicestershire, of Mr. Westcar, brother to the Gentleman of the same name above.

Two Leicestershire, of Mr. Wilkinson.

Two ditto, of Mr. Walker.

Four Gloucestershire, of Mr. King, Newgate Market.

One South Down, Mr. Ellman, of Suffex.

Two Leicestershire, of Mr. Billing, of Bucks.

Two ditto, of Mr. Smith, Saleman.

Ten South Down, of Mr. Boyce, of Kent.

HOGS.—A Berkshire, belonging to Mr. Hanson, of Walthamstow, under ten months; and

One between the Suffolk and Guinea breed, the property of Mr. Barrett, of Essex.

When, after a most scrupulous examination, which occupied the judges several hours, they adjudged the following deserving the Prizes:

FOR THE BEASTS.—To Mr. Westcar, for his white ox, the sum of 30 guineas.

To the same Gentleman, for his Herefordshire ox, 20 guineas.

To the same Gentleman, for a heifer, the sister of the former, 20 guineas.

To his Grace the Duke of Bedford, for one of his Herefordshire oxen, 20 guineas.

To the same Nobleman, for his French cow, 10 guineas.

To Mr. Kingsnorth, of Kent, for his red heifer, Kentish breed, 10 guineas.

FOR THE SHEEP.—To Mr. Ellman, for his South Down wether, 12 guineas.

To Mr. Watkinson, for a Leicestershire, 12 guineas.

To his Grace of Bedford, for a South Down wether, 8 guineas.

To Mr. Walker, of Eton, for a Leicestershire wether, 8 guineas.

HOGS.—To Mr. Hanson, for his Berkshire hog, esteemed, for his age, the finest ever exhibited in any country, 10 guineas.

The meeting was attended by his Grace of Bedford, the Duke of Manchester, Lord Somerville, and by several of the first Gentry in every county in the kingdom.

HAMPSHIRE EXPERIMENTAL FARMING ASSOCIATION.—The object of this Association being to promote the public good, by ascertaining on a fair competition the comparative merits of the Broad Cast and Drill Systems of Husbandry; the Society, at the last General Meeting resolved, that a statement of their account should be published; and it being referred to a Committee previously to ascertain the same, the following is the statement which the Society, though now only at the close of its first year, has to lay before the public:—

BROAD CAST FARM.			DRILL FARM.		
	£.	s. d.		£.	s. d.
Amount of Stock	982	11 8	Amount of Stock	2203	13 4
Total of Disbursements	933	18 2	Total of Disbursements	1938	1 4
	48	13 6		265	12 0
Balance of the Broad Cast Farm	-	-	-	48	13 6
Ditto of the Drill Farm	-	-	-	265	12 0
Total Balance in favour of the Society, after reimbursing their Disbursements	-	-	-	314	5 6

Clanfield,
December 3, 1801:

HENRY HOOD, President.

JOHN RICHARDS, Treasurer.

THOS. AND. MINCHIEF, Secretary.

BREED AND CONSUMPTION OF CATTLE.—The following is a comparison between the average weight of bullocks, &c. as it was one hundred years ago, and as it is at the present time, viz

Bullocks,	100 years ago,	on an average,	370lbs.	now	800lbs.
Calves,	- ditto,	- ditto,	50	-	140
Sheep,	- ditto,	- ditto,	28	-	80
Lambs,	- ditto,	- ditto,	18	-	50

Notwithstanding this increase of size, the number of beasts, and the price of meat, have borne proportionate increase. The following averages, containing nine years each, shew the number of cattle and sheep fold in Smithfield from the year 1731, viz.

1732 to 1740,	yearly average,	Cattle	83,906,	Sheep	564,650
1741 to 1749,	ditto	—	74,194,	—	559,891
1750 to 1758,	ditto	—	75,331,	—	623,091
1759 to 1767,	ditto	—	83,432,	—	615,328
1768 to 1776,	ditto	—	89,362,	—	627,805
1777 to 1785,	ditto	—	99,285,	—	687,588
1786 to 1794,	ditto	—	101,075,	—	707,456

We are not informed of the precise yearly average of the seven last years, but understand that it considerably exceeds that of any former period.

Mr. Arthur Young, in his *Agricultural Surveys of Lincolnshire and Suffolk*, asserts, (and he is borne out by every other writer on the subject), that if the produce of land sells for five times the rent, (which on the average of the kingdom was stated at 15s. per acre), the farmer would be amply paid for his risk, labour, and every incidental expence, including 12 per cent. interest on his capital. These estimates were made previous to the year 1795, when the price of barley, for instance, on an average of many years, did not amount to 3s. per bushel (the average prices of 1780 and 1781 amounted to no more than 2s. 0 $\frac{3}{4}$ d.) yet the farmer was content, and amply paid; but now that barley sells at an average of nearly 6s. per bushel, measures have been resorted to still further to enhance the price, on the pretext of giving encouragement to the growers, although they have now, on the foregoing estimate, a produce of more than 12 times their rent. The fact we apprehend in some measure to be, that the landlord has taken advantage of the recent state of our markets to advance his rents to the price of grain, and has now succeeded to raise the price of product to this increase of rent. Be the occasion, however, what it may, the ultimate consequence must be an advance in the price of labour; and we may so go on till we are under-sold in foreign markets, to the loss of revenue now resulting from the exportation of our manufactures, and the famine of the thousands who are at present employed in them.

A letter from Leipzig, dated the 2d inst. mentions as follows:—The last Leipzig Fair was interesting, not only to the Bookselling business, but to other branches of Commerce. We may say, that the English had made preparations for sending thither an inundation of goods, and for regaining what they had lost by the fair of Frankfort. Leipzig is, and always will be, the central point of the commerce of the North, both on account of its position, and the encouragement given by it to commerce, though the duties are very heavy; for a bale, which at Frankfort would pay 80 cents. must at Leipzig pay 48 francs. At the last fair there was forty-six Merchants from London. Scarcely any of the German manufacturers could find a sale, as the English sold their goods at so low a price: they got possession also of the sale of the middle cloths, for they bought up, notwithstanding the opposition of the Saxon manufacturers, all the wool they could find.

The French Merchants did a good deal of business in silks, lace, and cloth. Mullins and cottons begin to be in request in Russia. Brussels lace, and point of Alençon were much sought after. Aprons *en corsage*, and *dolimans à l'Egyptienne*, found a ready sale; and the portrait of the First Consul Bonaparte was sold on cups, snuff-boxes, medals, &c. The case was the same with that of the Emperor Alexander I. who is beloved and esteemed by every body.

Among the fashionable articles were distinguished, chip hats, and other articles of straw, manufactured both in England and in France, which surpassed the best articles of the manufactories of Dresden. English plated articles were also in great abundance.

The price of wheat in the metropolis continued, during the last week without any material alteration; but rye, oats, peas, and flour, were severally dearer—fine American flour sells at 18s. per barrel.

The prices of corn in the provincial markets have been subject to much fluctuation: at Newbury wheat has fallen 4s. per quarter; at Warminster the price has risen 6s. at Devizes 5s. at Cambridge 6s. and at Sherborne (on the average) it has fallen 4s. 2d. per quarter.

At Bath the price of flour has advanced from 55s. to 68s. 4d. per sack, in consequence of which the quartern loaf has been increased from 10d. to 10½d.

At Norwich flour has had a further rise, viz. from 55s. 5d. to 60s. 8½. and the weight of the shilling loaf has in consequence been reduced from 4lb. 4oz. 4drs. to 3lb. 15oz. 12drs. The mode of regulating the assize for bread at Norwich has long been inexpressible to us, as it is neither proportionate to the price of wheat nor of flour; the last assize in London was fixed at an average price of flour of 68s. 5d. when the quartern loaf of 5lb. 5oz. 8drs. was ordered to be sold at 1s. but in Norwich, although the average of flour is nearly eight shillings per sack lower than in the metropolis, the weight of the shilling loaf is nearly three quarters of a pound less.

BATH, DEC. 9. On Tuesday and Wednesday was holden at Hetling House, in this city, the Anniversary of the Bath and West of England Society for the encouragement of Agriculture, Arts, Manufactures and Commerce; at which, in the absence of the President, His Grace the Duke of Bedford, Lord Somerville presided. There were also several Members of Parliament, and a number of Agricultural Gentlemen and principal Farmers of different parts. During these two days, as also at the preparatory Meeting on Monday, many lots of sheep and cattle, as well fat as for stock, were exhibited for the premiums and bounties of the Society; as were a very considerable number of new Implements in Husbandry; also several different samples of fine Broad-cloth, manufactured from English wool, and from wool the produce of the Spanish mixture with various races of native sheep; and these samples of woollen manufacture were found to be of admirable quality; little, if at all, inferior to Spanish cloth.

A JOBBING IN CATTLE.—At the Cape of Good Hope, the Governor, three years since, with a view to prevent forestallers from travelling about the country for the purpose of buying up cattle, and, by thus engrossing the supply, imposing on the consumers such prices as they thought proper, forbid any others than butchers embarking in such traffic, under a penalty of 3000 rix-dollars, and limiting the nature and extent of their purchases. Those measures, however, having been found insufficient, the country being overrun by these vermin, the Lieutenant-Governor, General Dundas, lately issued another proclamation; which, after noticing the inadequacy of the penalty to prevent the offence, continues thus:—"by which illicit traffic, so productive to the persons carrying it on, that they can even afford to pay the said penalty out of their profits, great and serious inconveniencies have arisen to his Majesty's Government, and the public at large; I have therefore found it expedient to order, and accordingly it is hereby ordered, that all persons neglecting the performance of any of the conditions specified in the said proclamation, shall, in addition to the said penalty of 3000 rix-dollars, suffer a confiscation of all the cattle so purchased or bartered beyond the number limited by the said proclamation, the informer to receive one third part of the penalty."

The practice of jobbing of cattle prevails in this country to a most injurious extent, notwithstanding the numerous convictions of regrating, &c. because the profits arising from this illicit trade are so great, that the persons engaged in it despise the penalty attached to it. This subject occupied the attention of Parliament in the winter of 1795, when a Committee of the House of Commons reported, amongst other matter, "that the practice of

jobbers, and others who buy cattle and sheep on speculation, which are afterwards sold at advanced prices several times, before they are purchased by the cutting retail butchers (by which several unnecessary profits are obtained between the farmer and the consumer) are principal causes of the dearth of butcher's meat; these practices having increased of late years to an excessive height, ought to be abolished." It is matter, therefore, of equal surprise and concern, that the evil being thus established by the most competent authority, six years have been suffered to elapse without any step being taken to correct it.

COUNTRY MARKETS, FAIRS, &c.

NORWICH, Dec. 10.—Wheat from 30s. to 37s. od. per coomb. Best flour average 31. os. 0½d. per sack.

CANTERBURY, Dec. 8.—Fine flour per sack 60s. od. to 61s. Second 58s. to 59s. Third 54s. to 55s. Rough meal 40s. to 43.

CAMBRIDGE, DEC. 11.—According to the assize of bread which takes place this day, the price of the quarter loaf, wheaten, is reduced to 10d. being three farthings lower than last week.

BATH, DEC. 9.—Average price of flour 66s. 8d. per sack.

At East Grintead, on Friday, the prices were still on the rise; sheep rather steady, and, if any thing, cheaper, unless of superior quality.

A Reigate (Surrey) fair, there was a very handsome shew of lean cattle, chiefly Welch, which, from the abundant feed, were eagerly bought up at high prices. Fat beasts were, in the language of the dealers, above all price. About 500 sheep were shewn, and sold well. On the whole, the prices, from the clemency of the season, are on the rise.

Gloucester fair was one of the worst that has been remembered, the number of sheep not much exceeding the supply of a weekly market. The various kinds of horned cattle were also deficient, particularly oxen for work. Fleshy cattle, though few in number, did not appear to be in equal request to those of inferior condition. The general price, as might be expected, was high, which has been the case at most of the late fairs. Fat pigs are worth about 12s. per score.

Potatoes have turned out so plentiful a crop in Cornwall, that a bushel (or three Winchester) is sold at 2s. 6d.

ASHBURTON, DEC.—Most of the necessaries of life are advanced in price in this country. Good wheats sold on Friday last at Barnstaple for 8s. per Winchester bushel, barley 5s. 6d. and oats 4s. 4d. In the South Hams the prices are much higher, wheat 10s. 6d. barley 6s. 6d. oats 3s. per bushel.

CAMBRIDGE, Dec. 12.—Wheat 44s. to 48s. per load. Rye 40s. to 44s. Oats 20s. to 25s. Peas 40s. to 44s. Beans 30s. to 36s. per quarter.

ROYSTON, Dec. 16.—Wheat 46s. to 50s. per load. Rye 40s. to 46s. Barley 40s. to 45s. Oats 20s. to 26s. Beans 32s. to 36s. Peas 40s. to 44s. per quarter.

STAMFORD.—Wheat 70s. to 80s. Barley average 40s. 4½d. Oats 18s. 11d. Beans 38s. per quarter.

CANTERBURY, Dec. 15.—Fine Flour per sack 63s to 64s. Second 61s. Third 57s. to 58s. Rough Meal 44s to 45s.

NORWICH.—Wheat 70s to 76s. Rye 34s to 36s. Barley 40s to 42s. Oats 20s to 24s. Beans 33s to 34s. Horse ditto 36s to 37s. White Peas 48s to 52s. Grey ditto 6s. Malt 32s. per coomb.

WARMINSTER.—Wheat 64s to 72s. Barley 36s to 46s. Oats 26s. to 30s. Beans 54s to 66s.

NEWBURY.—Wheat 50s to 80s. Barley 34s to 44s. Oats 20s. to 27s. Beans 21. to 31. 2s.

BATH, Dec. 16.—Average price of flour 66s. 8d. per sack.

Agricultural Challenge.—I will engage to feed, with the same quantity of hay and green vegetables, any number of small oxen, not more than three years old, which shall be equal to the weight of six large ones, of the same age when put together; each of the large ones shall not weigh less than 16 score per quarter, or eight score stone, 8lb. to the stone, when fat. The cattle to be bred by any one person. To be weighed in February, 1802, and produced at the great Smithfield Market of the same year. The hay or green food given to each sort, to be weighed out in equal quantities during the whole time they remain in house: and when turned to grass, a pasture convenient for the purpose shall be divided into two equal parts, which shall be chosen by lot.

THOMAS CROOK, Mytherton, near Chippenham, Wiltshire, who is willing to accept any bet that is offered for fulfilling the engagement.

CANTERBURY, Dec. 22.—Fine flour per sack 63s to 64s. Second 61s to 62s. Third 57s to 58s. Rough meal 44s to 45s.

ROYSTON, Dec. 23.—Wheat 46s to 48s per load. Rye 40s to 44s. Barley 42s to 46s. Oats 20s to 26s. Beans 36s. old 45s. Peas 40s to 42s per quarter.

STAMFORD.—Wheat 65s. to 82s. Barley average 45s. Oats 20s 4d. Beans 38s. per quarter.

WISBEACH.—Average price of Wheat 70s 4d. Barley 38s 2d. Oats 20s.

At Boston Mart, on Friday se'nnight, there was an unusually large shew of store beasts, which went off at very high prices. Fat cattle also sold dear.

CAMBRIDGE, Dec. 19.—Wheat 48s. to 52s. per load. Rye 40s to 44s. Barley 42s to 46s. Oats 20s to 25s. Peas 40s to 42s. Beans 36s. old 42s. per quarter. The assize of bread is 10½d. the quarter loaf wheaten.

NORWICH, Dec. 24.—Wheat 34s to 41s per coomb. Best Flour average 3l. os. 8½d. per sack.

DEVIZES.—Prime wheat has fallen, during the last week, about 5s. per quarter. It is at present 69s. per quarter.

A late Exeter Gazette has the following article:—Peace begins to make a material alteration in the markets, particularly in the article of poultry—fine turkeys were sold this day for 3s. 9d. ready for the spit.

SHREWSBURY.—At the fair, cattle sold at advanced prices. Fat pigs dropped considerably, and went off from 6½d. to 7½d. per pound. Stores were in general demand. Salt butter was from 9s. 6d. to 10s. and 10s. 6d. per gawn of 12lbs. Best cheese at 3l. and 3gs per cwt. Inferior, from 45s. to 55s. ditto. The greater part of the cheese was taken home unfold.

At Gloucester great market there was a tolerable shew of fat and lean cattle, which sold at somewhat reduced prices. Lean sheep and pigs were also plentiful, but sold high; though store pigs fell towards the close of the market.

We understand the farmers of Norfolk have resolved to erect an agricultural pillar, in Holtham Park, as a token of their respect and gratitude to Mr. Coke, the Member for that county, for the liberal encouragement he has given, as well by example as by patronage, to the science and improvement of agriculture.

Commercial Law Cases,

KING'S BENCH, WESTMINSTER.

Jones v Strut.—This action charged the defendant with having used certain defamatory words, injurious to the plaintiff's reputation, by which she had sustained a special damage. The plaintiff, Barbara Jones, was maid-

servant to a Gentleman at Hampstead; the defendant a day-labouring gardener, who had said to a young man, to whom the plaintiff was under a promise of marriage, that she was not only destitute of chastity, but was the greatest prostitute that could possibly exist. A witness proved, that the defendant had said to the young man, about to marry the plaintiff, "Barbara Jones has taken me up stairs to bed with her, when I have been drunk, and I slept with her all night." At another time, he heard him say, "Here is the hand, Frank, that has often pressed the beauties of your intended wife;" with other expressions too gross and indecent to mention. The defendant's Counsel was unable to make out, from his witnesses, any justification. After Mr. Justice Le Blanc's observations, the Jury retired for a short time, and found a verdict for the plaintiff—damages, *Fifty Pounds*.

Fenner v Crafts.—An action of Trover, to recover a quantity of lace and dowlas, which it was alleged the defendant, as assignee to Thomas Fenner, a bankrupt, father to the plaintiff, had illegally taken, they being the property of the plaintiff. It appeared, from their testimony, that he removed his furniture and sundry articles of hosiery and lace, to the residence of his father. Previous to the bankruptcy, which took place on the 24th February, 1801, Thomas Fenner, the bankrupt, removed his effects from his own house to an adjoining one, as it was stated, for better security, and not with a view to defraud his creditors. The lace in question, which consisted of several cards, worth about 150*l*. was taken by the assignees, and sold, along with the furniture, at a public sale, for 62*l*. The defendant's Counsel insisted that this lace belonged to the bankrupt, and consequently the creditors had a right to detain it. There being no positive proof to the contrary, the Jury found a verdict for the defendant.

Gregory v Kemble.—Plaintiff, a Potatoe-salesman, engaged by Mr. Kemble to purchase potatoes for him to sell to the poor, last winter, in Honey-lane market. The action was brought for 500*l*. and ten guineas a week for sixteen weeks service—a shameful demand, and most shamefully evidenced;—defendant had paid 50*l*. into Court.—Plaintiff nonsuited.

COURT OF COMMON PLEAS.

MARQUIS OF DONEGALL.

Burnell, v. Carr.—This was an action against the defendant, as the Sheriff of Sussex, for the neglect of his officer in not seizing, and making in a false return, that there was no property of the Marquis of Donegall's in that county.—It appeared, that in September, 1800, an execution was issued against the Marquis's property, on debts due to the plaintiff, to the amount of near 20,000*l*. That the Sheriff's officer was put into the house where the Marquis resided, at Brighton, which was a furnished one, and there seized some plate and linen; and that a coach, chariot, sociable, and five coach and three saddle horses, were seized in some stables in another part of the town. That his Lordship came to town, and entered into a deed of covenant with the plaintiff, that he would himself execute, and also endeavour to get his Trustees to execute a similar security to the plaintiff as had been done to some of the other creditors of his Lordship; and that in the mean time he would be allowed the use of his carriage and horses, his Lordship promising on his honour, that he would not take them out of the county, and that he would, if the security should not be given, reinstate the plaintiff in all those articles (which were enumerated in the agreement) to be so restored for his use; as well as certain pooperty which had been seized by the Sheriff of Bucks. A copy of this agreement was given to the officer in possession, who accordingly permitted his Lordship the use of the property, but remained in his house. On the 2d of November, the business not being settled, another writ was sued out upon the same debt, and sent to the officer, at the Marquis's house, with a letter from the plaintiff's Attorney, stating, that as a new writ was sued out, he was not to pay attention to his former discharge, but to keep possession as before, and that he would meet with no difficulty,

as the Marquis was aware of this arrangement. In a few days after, his Lordship, with his family, quitted Brighton, taking away with them all the property in question, in the presence of the Officer, who, it did not appear, made any opposition. His Lordship's coachman swore, that he understood the horses were, when at Brighton, the property of Sutton, the Marquis's training groom, and that the coach-horses were worth 45*l.* each. The Marchioness's footman was examined as to the plate, and other articles. The Marquis of Donegall deposed, that neither the horses alluded to, nor the carriages, though they had his Lordship's coronet and cypher, were his property. That, in the month of September, he executed a bill of sale of the horses to Sutton, his training groom, in part of a debt he owed him, of 1400*l.* or 1500*l.* and that he had agreed to allow him 160*l.* or 170*l.* a year for the use of them, but they were fed at his Lordship's expence. That with respect to the carriages, they were the property of Mr. Thompson, a coach-maker, in Mortimer-street. The Counsel for the defendant contended, that the agreement between the plaintiff and defendant having been made without the privity of the Sheriff, took away his responsibility.—Verdict for defendant.

Dawson v. Geldert.—This was an action to recover the amount of a bill for millinery articles, furnished by the plaintiff to the defendant's wife. Defendant proved, that he had given notice to plaintiff not to trust his wife: plaintiff, nevertheless, did trust her; and, by a letter, told Mrs. Geldert, she was about to introduce a new-fashioned spring hat, and hoping that she would patronize it, by giving her an order for one. The debt for which the action was brought, was 17*l.*—Verdict for the defendant.

BANKRUPTCIES AND DIVIDENDS,

Announced between the 20th of Nov. and the 20th of Dec. 1801.

BANKRUPTCIES,

The Solicitors Names are between Parentheses.

AINSLEY, J. Newcastle, woollen draper (Banbridge Newcastle).
Arthur, G. Ripley mill, Northumberland, miller (Dann and Testaile, Threadneedle street).
Avery, J. Queen square, Westminster, organ builder (Mills, Parliament street).
Broughell, S. Yeaton Buschurch, Salop, miller (Pulhens, Fore street).
Brown, W. and J. Y. Jermyn street, shoemakers (Allen, Frith street).
Bourk, M. formerly of Rosemary lane, shopkeeper, late of New square, London (Jackson, Temple).
Barker, J. Upper Thames street, grocer (Rigge and Merrifield, Cary street).
Peresford, R. Alfreton, Derbyshire, hosier (Refs and Hall, Boswell court).
Bucknell, L. Kensington, haberdasher (Smith and Tilton, St. Paul's Churchyard).
Blany, T. late of the Walthamstow East Indiaman, and late of Bouverie street, Whitefriars, mariner (Delic, Brears's buildings).
Beekman, D. N. bonus row, Mile End, sugar grinder (Rivers, Basing lane).
Benckist, G. F. Swan Mead, Bermondsey, leather dresser (Kippon, Heronstreet street).
Blagrove, W. Abingdon, miller, &c. (H. Maddock, Lincoln's inn).
Brien, D. James street, Covent garden, victualler (Sherard, Hart street, Bloomsbury).
Bullen, W. Plymouth Dock, linen draper (Williams, Lion College).
Coulthard, J. Bucklerbury, warehousman (Jackson, Walbrook).
Croydon, E. Steourbridge, baker and maltster (Strong, Still, and Strong, Lincoln's inn).
Cooper, W. Patras lane, warehousman (Shepherd & Adlington, Gray's inn).
Chamberlin, P. Norwich, linen draper (Bygrave, Norwich).
Coulson, T. Fenchurch street, cheesemonger (Robinson and Crawford, Craven buildings, City road).
Cameron, D. Aldergate street, jeweller (Kibblewhite, Gray's inn place).
Chivers, W. Newgate street, upholster (Davies, Lothbury).
Calvert, S. Liverpool, dealer (Price and Williams, Lincoln's inn).
Child, R. Walcot, Somerset, carpenter (Hollocray, Chancery lane).
Cuyvelje, A. Z. D. Lancaster, merchant (Sharpe and Eccles, Manchester).

Clayton, J. Sedgeberrow, Worcester, mealman (Edmunds, Exchequer Office, Lincoln's inn).
Caltho, T. Old Gravel lane, St. George in the East, baker (Joes, Whitefriars Wharf).
Clegg, C. Mill row, parish of Bechdale, Lancaster, woollen manufacturer (Hardy, Gray's inn).
Dyson, W. M. Almonbury, Yorkshire, dyer and grocer (Baiye, Chancery lane).
Davis, J. late of Fulwood's tenis, Holborn, victualler (Abbot, Rolls yard, Chancery lane).
Doran, E. and A. Whiting, Long Acre, coachmakers (Windus, Old Broad street).
Dawson, J. Manchester, dealer (Ellis, Curfioor street).
Deaves, H. late of New York, now of Liverpool, merchant (Milne, Temple).
Duncliff, J. Leicester, grocer (Mitchell, Union court, Broad street).
Drinkwater, P. and T. Lakeyne, [Darley dale, Derby, under the firm of P. Drinkwater and Co. corn factors (Hay and Renshaw, Manchester).
Evans, J. Wapping, linen draper (Hall, 25, Poultry).
Edwards, J. Beilington, Oxon, miller (Price and Williams, Lincoln's inn).
Evatt, J. Ross lane, gallsman (Atchefson, Ely place).
Fisher, R. Bedford street, Covent garden, tailor (Clarksons, Essex street).
Furber, J. and T. W. Warnford court, London, merchant (Ryce, Temple).
Finlayson, J. Liverpool, merchant, partner with W. Finlayson, under the firm of J. and W. Finlayson, and Co. (Lace and Hallall, Liverpool).
Fryer, G. Red Lion street, Clerkenwell, merchant (J. pion, Lincoln's inn).
Fisher, J. Chepstow, carrier (Price and Williams, Lincoln's inn).
Figgins, J. Froebidge, carpenter (French and Williams, Cattle street, Holborn).
Gränge, R. York place, Portman square, miller (Larkow, Wardrobe place).
Glover, G. Dean street, Soho, grocer (Scott, Old City Chambers).
Holmes, S. Thomas street, Southwark, merchant and ship owner (Carter and Smith, Fleet street).
Heston, G. jun. Leeds, oil merchant (Baiye, Chancery lane).
Hayman, T. Old City Chambers, merchant (Towfe, Fishmongers hall).
Hughes, R. Chandos street, Covent garden, woollen draper (Swann and Wallington, Fore street).
Hawkley, W. Liverpool, merchant (Blackstock, Temple).
Hodgson, D. Liverpool, brush maker (Cooper and Lowe, Southampton buildings).
Hudwell, J. Cauchite, parish of Huddersfield, Yorkshire corn dealer (Sykes, New inn).

- Henderson, J. Long Acre, ironmonger (Flasman and Pringle, Ely place.)
 Harris, J. Newton St. Cyres, Devon, miller (Darke, Princes street, Bedford row.)
 Hufledon, G. Liverpool, bookfeller (Windle, Bartlett's buildings)
 Holt, C. Leather lane, warehousman [Abbot, Rolls yard, Chancery lane.]
 Houldsworth, A. and H. Grosvenor, Basinghall street, warehousmen (Batty, Chancery lane.)
 James, S. Cross street, St. Andrew, Holborn, hardwreman (Kibblewhite, Gray's inn place.)
 King, J. M. Liverpool, coffehouse keeper (Blackstock, Temple.)
 Little, R. L. A. and M. E. all of Southwell, Nottinghamshire, woollen drapers and mercers (N. Milne, Fane court, Temple.)
 Lawton, J. Montague street, Spitalfields, chair maker, (Robinson and Crawford, Craven buildings, Old street.)
 Liddel, G. Newcastle upon Tyne, merchant (Atkinson, Chancery lane.)
 Moffat, D. Fleet market, grocer (Pearce and Dixon, Paternoster row.)
 Morley, J. Walcot, Somerset, victualler (Shepherd and Adlington, Gray's inn.)
 Mayman, D. Baitley Carr, Dewsbury, clothier (Sykes, New inn.)
 Masters, W. sen. and jun. Greenwich, distillers and wine merchants (Barrow and Forbes, Basinghall street.)
 Martin, A. and T. Pantou street, cabinet makers (Hodgson, Charles street, St. James's square.)
 Merriman, G. Stockport, dealer (Young, Castle street.)
 Medley, E. Parliament street, Krivener (Maddocks, New square, Lincoln's inn.)
 Moul, John, Hampstead, corn chandler (Seward, Princes street, Rotherhithe.)
 Mann, T. Howard street, Strand, dealer (Evans, Bury court, St. Mary Axe.)
 Marriott, C. Manchester, merchant (Milne, Temple.)
 Mitchell, J. Long Acre, cheesemonger (Mitchell, Union court, Broad street.)
 Marsh, J. Saad Thames, shipwright (Palmer and Tomlinson, Warrford court.)
 Madden, T. Page's walk, Bermondsey, victualler (Holloway and Windus, Southampton buildings.)
 Noble, Isaac, Fenchurch, ironmonger and grocer (Wordsworth, Staples inn.)
 Noble, N. Berrier, parish of Greyfok, Cumberland, dealer in butter (Lowndes, Red Lion square.)
 Newton, W. Exeter, druggist (Balen and Anstice, Temple.)
 Norman, J. F. Bristol, baker (Gabel, Lincoln's inn.)
 Oflner, J. P. Kingland road, brewer (Taylor, Old street.)
 Penny, B. jun. St. John's, Wapping, ship chandler (Hedley, Warren's square, Wapping.)
 Richardson, J. Carlisle, grocer (Pearson and Soh, Temple Rose, C. St. Ann's, Westminster, cheesemonger (Fielder and Burgoyne, Duke street, Manchester square.)
 Robinson, T. Fulham, Chelsea, corndealer (Wright and Reynolds, Temple.)
 Rodd, T. Gerard street, Jeweller (Parker, Palmer, and Cuppage, Essex street.)
 Rawlings, W. Gracechurch street, grocer (Figes, Norfolk street.)
 Rogers, R. C. Moamouth, dealer (Bowcher, Bath.)
 Stewart, T. Dorset square, Cannon row, broker (Merishull, Millbank street.)
 Smart, W. Vigo lane, carpenter (Simpson, King's Bench walk.)
 Solomon, L. St. Martin's le Grand, merchant (Elftol, Catharine court, Seething lane.)
 Stephens, W. Exeter, fadier, (Drew and Loxham, New Inn.)
 Sproton, J. Liverpool, merchant (Blackstock, Temple.)
 Smece, J. Newington place, Surrey, potter (Palmer and Tomlinson, Warrford Court.)
 Schultze, W. and P. Unger, Little Britain, merchants, (R. S. Taylor, Gray's inn.)
 Stone, J. Merley street, Liverpool, victualler (Windle, Bartlett's buildings.)
 Tonge, C. Liverpool, merchant (Sharpe and Eccles, Manchester.)
 Tomkins, E. and R. Dorsetend, Birmingham, plated inkstand makers (Low, Ravenhurst.)
 Wallis, J. Paternoster row, bookfeller (Eaton, Birchin lane.)
 Whiting, A. Long Acre, coach maker (Barnet, Soho square.)
 Wigful, T. King's Lynn, iron founder (Goodwin, King's Lynn.)
 Weldon, J. Lawrence lane, warehousman (Cruckthank, Basinghall street.)
 Young, A. Bristol, cornfactor (Lewis and James, Gray's inn.)
- DIVIDENDS ANNOUNCED.**
 Ashburner, J. Bolton le Moor, cotton spinner, Dec. 22.
 Artaud, S. jun. Finner, shoekeeper, Dec. 22.
 Agur W. Whitechapel road, Bethnal green, whitewash, Jan. 19.
 Andrews, T. Hackney road, brewer, Jan. 12.
 Alder, J. St. John's street, Clerkenwell, cabinet maker, Jan. 12.
 Boonham, S. Atherstone, carrier, Dec. 12.
 Barrett, W. Cheap side, linen draper, Dec. 19.
 Bradley, A. Ashburne, and T. Marial, of Birdsgrove, cotton spinners, separate estate of A. Bradley, Dec. 22, final.
 Bond, J. Britlingsea, Essex, butcher, Dec. 22.
 Bayne, W. Pateley bridge, York, inn keeper Dec. 28.
 Barnes, T. Fleet street, stationer, Jan. 26.
 Calvert, N. merchant, as partner with F. Simpson, of St. Christopher, Dec. 17.
 Covenay, E. St. Mary at Hill, victualler, Dec. 22.
 Cook, J. Royal Oak yard, Bermondsey street, tanner, Dec. 15.
 Clutterbuck, P. York street, Westminster, brewer, Jan. 5.
 Carver, T. Retford, baker, Jan. 5.
 Chauvet, L. and P. Turquand, Old Jewry, merchants, Jan. 9.
 Dry, H. Uxbridge, liquor merchant, Dec. Jan. 26.
 Dickens, F. Bristol, soap boiler, Jan. 4.
 Delaney, W. Liverpool, linen draper, Jan. 4.
 Dodgson, P. Liverpool, linen draper, Jan. 8.
 Ekins, W. Oxford street, bookfeller, Dec. 19.
 Eadon, M. Manchester, merchant, Dec. 24.
 Emmett, J. Buff lane, merchant, Jan. 22.
 Easthope, W. Bridgenorth, barge owner, Dec. 28.
 Ewins, W. and W. James, Birmingham, composition ornament manufacturers, Jan. 8.
 Elderhaw, J. Derby, dealer, Jan. 12.
 Fozard J. Jun. Park lane, Piccadilly, stable keeper, separate estate, Dec. 10.
 Finlay, A. Cable street, Oxford road, linen draper, Dec. 19.
 Fletcher, G. Knightbridge, hackney and stable keeper, Dec. 29.
 Firth, J. of the Washway, Lambeth, dealer, Jan. 23.
 Greaves, J. Royal Exchange, insurance broker, Dec. 15, final.
 Gilbertson, R. Manchester, manufacturer, Dec. 21.
 Greenwood, J. and T. B. Mason, Leeds, grocers and tobacconists, Dec. 21.
 Gwinnett, G. Bristol, cornfactor, Dec. 21.
 Glover, G. Paternoster row, warehousman, Jan. 16.
 Glover, J. Kensington, stone mason, Jan. 16.
 Gell, W. S. St. Ives's, shopkeeper, Jan. 12.
 Gregory, C. Ely, baker, Jan. 12.
 Gearing, W. Water lane, Fleet street, innholder, Dec. 22.
 Haycock, R. Wells, Norfolk, merchant, Dec. 15.
 Hyland, R. Robertbridge, grocer, Feb. 6.
 Haigh, J. Low Whitley, factor, Dec. 16.
 Harrison, J. Paternoster row, bookfeller, Dec. 19.
 Higson J. and T. Talker, Liverpool, linen drapers, Dec. 24.
 Hodgson, G. Chatter, soap boiler, &c. Jan. 12.
 Herries, C. and J. Nailor, London, merchants, Jan. 16.
 Holmes, J. Newbold upon Avon, lime merchant, Jan. 9.
 Haslewood, J. F. Bridgenorth, grocer, Jan. 22, final.
 Ireland, S. St. Clement Danes, merchant, Feb. 6.
 Jones, T. Charlton, parish of Toddington, Bedford, timber merchant, Dec. 19.
 Kemble, S. and W. Spens, Norfolk street, Strand, merchants, Jan. 2.
 Leigh, P. and J. and of J's estate separately, Dec. 28.
 Lafcelles, K. South Audley street, taylor, Dec. 19.
 Maillard, J. J. Lime street, merchant, Dec. 17.
 Macternan, J. Buckenbury, warehousman, Dec. 19.
 Millar T. and J. Hulme, Manchester, dealers in wett, Dec. 29.
 Marshall, J. and J. Longcake, Workington, mercers, &c. Dec. 29.
 Mustot, J. Colmer, merchant, Feb. 6.
 Manton, T. Fokenhouse yard, merchant, Dec. 29.
 Owen, W. Holywell Flintshire, grocer and linedraper, Jan. 9.
 Phipps, J. Bristol, innkeeper, Dec. 22.
 Parry, T. Birmingham, haberdasher, Dec. 15.
 Poppel, W. Kingston Hull, brewer, Dec. 16.
 Price, T. Holywell, Flintshire, innkeeper, Jan. 19.
 Page, C. Croydon, taylor, Jan. 12.
 Perry, R. and T. Andrews, George Brewhouse, Hackney, Jan. 12.
 Roberts, W. Rochester, grocer, Dec. 19.
 Richardson, R. partner with E. Strickland, Corporation row, merchant, &c. Dec. 15.
 Reynolds, J. late of Chestnut, now of Newington Butts, brewer, Dec. 19.
 Reider, J. C. London House Yard, bookfeller, Jan. 5.
 Senols, J. (wife of J. Senols) Fore street, shopkeeper, Dec. 15.
 Sutton, N. Walworth, victualler Dec. 22.
 Stewison, J. Chandos street, Covent Garden, woollen draper, Dec. 19.
 Shepperton, W. Oxford street, grocer, Jan. 18.
 St. Gullier, H. Richmond, Surrey, stablekeeper, Dec. 26.
 Scott, J. St. Ives, Essex, lime-burner, &c. Dec. 9.
 Sommersyall, J. Liverpool, merchant, Jan. 23.
 Skone, W. Bristol, grocer, Jan. 7.
 Smith, T. Tunfall, potter, Feb. 1, final.
 Spier, T. Gloucester, mercer, Jan. 21.
 Staples, R. T. St. Ives, draper, Jan. 11.
 Towsey, G. Lincob Regis, Berks, miller, Jan. 5.
 Taylor, W. B. Wolverhampton, japanner, Jan. 11.
 Underhill, G. Abbey Foregate, Sirewbury, horie dealer, Jan. 19.
 Wilson, R. Bread street, merchant, Dec. 29.
 Wright, T. Ealington, Bucks, coach master, Dec. 19.
 Waluo, J. Birmingham and Bristol, in England, and of Bolton, America, merchants, separate estate, Jan. 26.
 Wetherhead, C. Liverpool, merchant, Dec. 22.
 Whetral, W. and J. Poole, inn keepers, Jan. 11.
 Worthington, M. Norwich, linen draper, Jan. 26.
 Williamson, R. Wood street, Druggist, Jan. 22.
 Winter, B. Long Acre, dealer.
 Wallworth, J. Manchester, inn keeper, Jan. 25;

LONDON PRICES OF GRAIN for December, 1801.
MARK-LANE, Monday, Dec. 7.

Monday, Dec. 7.—We had a few fresh arrivals of Wheat in for this day's market, and the prices of that article are nearly the same as last week; but something cheaper than this day se'nnight.—Rye is nearly the same.—Barley, owing to a short supply, went off full 1s. 6d. per quarter dearer than last week.—Oats are brisker sale, but not much alteration in price.—Beans, of both sorts, are nearly the same.—White and Grey Peas are full 2s. per quarter cheaper.

Price of Grain, on board Ship, as under :

English Wheat	48s to 65s	Barley	32s to 36s	White Peas	45s to 48s
Fine	75 to —s	Fine	to 42s	Fine	to 50s
Superfine	78 to —s	Superfine	to 48s	Superfine	to —s
Foreign Ditto	—s to —s	Malt	48s to 50 —s	Grey ditto	36s to 39s
Fine	— to —s	Fine	to 60s	Fine	to 40s
Superfine	to —s	Superfine Malt	to —s	Small Beans	37s to 40s
Rye	26s to 36s	Oats	20s to 25s 28s	Old	46s to —s
Fine	to 40s	Fine	32s to —s	Tick new	36s to 37s
Superfine	to —s	Polands	—s to —s	Old	— to 44s

Monday, Dec. 14.—We have had a short supply of Wheat at market this day, and the buyers being very numerous, that article, early in the morning, was swept off at 7s. per quarter dearer than this day se'nnight.—Rye is nearly unfaleable.—The supply of Barley being pretty large, that article is very dull, and somewhat cheaper.—Oats, of fine quality, owing to a short supply, are full 1s. per quarter dearer.—Peas and Beans come pretty plentifully to market, both of which are nearly the same as last week.—Flour is 5s. per Sack dearer.

English Wheat	56s to 65s	Barley	32s to 38s	Polands	—s to —s
Fine	70s to 75s	Fine	to 47s	White Peas	48s to 50s
Superfine	86s to —s	Superfine	to —s	Fine	53s to —s
Foreign ditto	to —s	Malt	45s to 50s	Grey ditto	38s to 40s
Fine	to —s	Fine	to 57s	Small Beans	38s to 42s
Superfine	to —s	Superfine	to —s	Fine	48s to —s
Rye	30s to 40s	Oats	20s to 28s	Tick new	37s to 38s
Fine	to —s	Fine	30s to 32s	Fine	to 46s

Monday, Dec. 21.—We have had a very good supply of Essex and Suffolk Corn in for this day's market, chiefly Wheat and Barley; the former is about 5s. and the latter 2s. per quarter cheaper.—Rye comes very sparingly to market.—Oats, owing to a short supply, are nearly the same as last week.—In White Peas, little or no alteration; but Grey ones are rather cheaper.—Both Tick and Small Beans, owing to a good supply at market, are somewhat lower.

English Wheat	50s to 65s	Fine Barley	to 46s	White Peas	48s to 50s
Fine do.	70s to 75s	Superfine	—s to —s	Fine	to 52s
Superfine	to 82s	Malt	48s to 50s	Grey Peas	36s to 38s
Foreign ditto	—s to —s	Fine	to —s	Fine	to 40s
Fine	to —s	Superfine Malt	to —s	Small Beans	35s to 43s
Superfine	to —s	Oats	21s to 25s	Fine	to 48s
Rye	30s to 40s	Fine	28s to —s	Tick	35s to 37s
Fine New	to —s	Polands	—s to 31s	Old	— to 46s
Barley	30s to 40s				

Monday, Dec. 28.—We have had a few fresh arrivals in for this day's market, but there being a good deal of Corn left unsold last week, caused our Wheat-Market to be very dull, and full 2s. per quarter cheaper than this day se'nnight.—Barley is rather on the decline.—Oats, owing to a short supply at market, are nearly the same as last week.—Peas and Beans, of both sorts, are cheaper; the former about 2s. and the latter 1s. per quarter.

English Wheat	48s to 65s	Fine	to 47s	Fine	to 52s
Fine do.	75 to 82s	Superfine	—s	Superfine	to —s
Superfine	to —s	Malt	42s to 48s	Grey ditto	36s to 39s
Foreign ditto	to —s	Fine	to 57s	Fine	to 42s
Fine	to —s	Oats	22s to 28s	Small Beans	35s to 36s
Superfine	to —s	Fine	to —s	Fine	to 38s
Rye	30s to 40s	Superfine	to —s	Tick ditto	28s to 30s
Fine	to —s	Polands	—s to 23s	Fine	35s
Barley	32s to 40s	White Peas	48s to 50s	Old	—s to 44s

Prices of Grain, Meat, Seeds, &c. (First week, Dec.) 451

Return of Wheat in Mark-lane, from the 23rd of Nov. to the 28th Nov. inclusive.

Total 13,330 Quarters—Average 72s 3¼d.—13s. 1½d. higher than last return.

Return of the Prices of Flour, from Nov. 21, to Nov. 27, inclusive.

Total 12,110 Sacks—Average 68s 9d.—2s 5d lower than last return.

Hence results the Price of BREAD.

Eighty Quartern loaves at 1s od. 4l 0s od—Against the Baker 9d.

Price of Hops.

Pockets.			Bags.				
Kent	—	4l 14s to	1 12s	Kent	—	4l 10s to	5l 5s
Suffex	—	4l 8s to	4l 18s	Suffex	—	4l s to	4l 14s
Farnham	—	5l —s to	8l —s	Effex	—	4l 4s to	5l —s

Seeds.

Red Clover, (per cwt.)	20s to	24s	Cinque Foil, ditto	—s to	—s
White Clover, ditto	40s to	112s	White Mustard—fd. p. bu.	10s to	14s od
Trefoil, ditto	10s to	50s	Brown, ditto do.	10s to	14s 8d
Turnip, (per bushel)	12s to	17s	Canary seed do.	8s to	10s
Rye Grass (per quarter)	20s to	30s	Rapeseed, per last	40l to	42l

Meat. Smithfield, Monday, Dec. 7. (To sink the offal, per stone of 8lb.)

Beef	4s od to	5s 6d	Veal	4s 6d to	6s od
Mutton	5s od to	6s 6d	Pork	5s 4d to	6s 8d
Lamb,	—	5s 8d to	6s od		

Head of Cattle this day—Beasts about 2,000—Sheep and Lambs 6,500

Raw Hides.

Heifers and Steers (per ft.)	3s 4d to	3s 8d	Market Calf	—	9s od each		
Middling	—	2s 8d to	2s 10d	English Horse	—	12s to	15s each
Ordinary	—	2s od to	2s 4d	Sheep Skins	—	3s 6d to	7s 3d

Price of Tallow.

St. James's Market	—	4s od	Russia ditto (Soap)	—	57s 6d
Clare Market	—	4s od	Melting stuff	—	48s 50s
Whitechapel Market	—	3s 10	Ditto rough	—	35s —s
Per stone of 8lb.—Average	3s 11½		Graves	—	19s —s
Town Tallow	—	67s 6d	Good Dregs	—	12s —s
Russia ditto (Candles)	—	60s —s	Yellow Soap, 68s—Mottled 76s—Curd 80s		
Price of Candles per Dozen,	11s. od.	—	Moulds	12s od	

Prices of Hay and Straw on Saturday, Dec. 5.

St. James's—Hay	3l 0s to	5l 8s	Average	4l 4s od
Straw	1l 10s to	2l 2s	—	1l 16s od
Whitechapel—Hay	4l 0s to	5l 10s	—	4l 15s od
Clover	5l 15s to	6l 10s	—	6l 2s 6d
Straw	1l 8s to	1l 14s	—	1l 11s od

Coal Exchange for the week.

Monday—Edon	40s	Tyne	34s
Hartley	43s 9d	Bourn Moor	40s
Newbottle	39s	Wallfend	47s
Walker	46s 6d	Willington	45s
Wednesday—Benton	42s 9d	Friday—Brandling	42s
Blyth	43s 3d	Benton	43s 9d
Biggs Main	46s	Coupin	44s
Kenton	45s	Bighton	38s 6d
Montague	41s 6d	Holywell	40s 9d
Murton	38s 6d	Tyne	35s
Tanfield Main	42 6d	Ruffels	39s 5d

Delivered in Town at 8s advance on the above on the price.

352. *Prices of Grain, Meat, Seeds, &c.* (Second week, Dec.)

Return of Wheat in Mark-lane, from 30th of Nov. to the 5th of Dec. inclusive.

Total 10,016 Quarters—Average 70s. 1½d.—1s. 11½d. lower than last return.

Return of the Price of Flour, from Nov. 28, to Dec. 4, inclusive.

Total 9493 Sacks.—Average 65s 4d.—3s 5d lower than last return.

Hence results the Price of BREAD.

Eighty Quartern loaves at 0s 11¼d 3l 18s 4d—In favour of the Baker 1s od.

Price of Hops.

Pockets		Bags	
Kent	4l 6s to 5l 12s	Kent	3l 10s to 5l —s
Suffex	4l —s to 5l 5s	Suffex	3l 5s to 4l 10s
Farnham	6l —s to 7l 10s	Essex	3l —s to 4l 8s

Seeds.

Red Clover, (per cwt.)	20s to 84s	Cinque Foil, ditto	—s to —s
White Clover, ditto	40s to 116s	White Mustard Seed, p. bu.	12s to 13s
Trefoil, ditto	10s to 52s	Brown, ditto do.	12s to 14s 6d
Turnip, (per bushel)	12s to 16s	Canary Seed, do.	8s to 12s
Rye Grass, (per quarter)	20s to 30s	Rape Seed, (per last)	36l 0 40l

Meat. Smithfield, Monday, Dec. 14. (To sink the offal, per stone of 8lb.)

Beef	4s 6d to 5s 4d	Veal	5s od to 6s od
Mutton	4s 4d to 6s 6d	Pork	5s 8d to 7s od
Head of Cattle thi day —Beasts about 2,000—Sheep and Lambs 6,500			

Raw Hides.

Best Heif. & Steers, per ft.	3s 4d to 3s 8d	Market Calf	9s od each
Middling	2s 8d to 2s 10d	Engl sh Horse	12s to 15s each
Ordinary	2s od to 2s 4d	Sheep Skins	3s 6d to 7s 3d

Price of Leather.

Butts, 50 to 56lb. each	16½d to 18d	Calf Skins, 30 to 40lb. p. doz.	20d to 25d
Ditto, 60 to 66lb. each	19d to 21d	Ditto, 50 to 70lb. do.	24d to 29d
Merchants Backs	16d to 17d	Ditto, 70 to 80lb. do.	24d to 27d
Dressing Hides	13d to 15d	Sm. Seals (Greenland)	28d to 32d per lb.
Fine Coach Hides	15d to 17d	Large ditto	100s to 120s p. doz.
Crop Hides for cutting	17d to 19½d	Tanned Horse Hides	18s to 32s p. hide.
Flat Ordinary	14d to 16d	Goat Skins	21s to 65s p. doz.

Price of Tallow.

St. James's Market	4s 1d	Russia ditto (Soap)	57s to 57s
Clare Market	4s od	Melting Stuff	48s 50s
Whitechapel Market	3s 9d	Ditto rough	35s —s
Per stone of 8lb.—Average	3s 11½d	Graves	19s —s
Town Tallow	67s 6d	Good Dregs	12s —s
Russia ditto (Candles)	60s od	Yellow Soap, 68s. Mottled	76s—Curd 80s
Candles, p. doz. 17s od—Moulds, 12s od.			

Prices of Hay and Straw on Saturday, Nov. 12.

St. James's—Hay	4l 0s to 5l 8s od	Average	4l 14s od
Straw	1l 10s to 2l 2s od	—	1l 16s od
Whitechap.—Hay	4l —s to 5l 8s od	—	4l 14s od
Clover	5l 10s to 6l 6s od	—	5l 18s 6d
Straw	1l 6s to 1l 15s od	—	1l 15s 6d

Coal Exchange for the Week.

Monday—Blyth	43s	Willington	44s 9d
Bigg's Main	45s 3d	Bourn Moor	40s 3d
Wallfend	46s 3d	Edon Main	40s 6d
Wednesday—Kenton	44s 6d	Newbottle	39s 9d
Hebburn Main	44s 6d	Friday—Wallfend	46s
Wallfend	45s 6d	Willington	44s 6d
Walker	44s 6d	Bourn Moor	39s 9d

Delivered in Town at 8s advance on the above price.

Prices of Grain, Meat, Seeds, &c. (Third week, Dec.) 453

Return of Wheat in Mark-lane, from Dec. 7, to Dec. 12, inclusive.
 Total 12, 04 quarters.—Average 71s. 3½d.—1s. 2½d. higher than last return.
Return of the Prices of Flour, from Dec. 5, to Dec. 11, inclusive.
 Total 26,903 sacks.—Average 64s. 8d.—0s. 8d. lower than last return.
 Hence results the Price of BREAD.
 Eighty Quartern loaves at 11½d.—3l 16s 8d—No Fraction against the Baker.

Price of Hops.

Pockets.		Bags.	
Kent	— 4l 8s to 5l 13s	Kent	— 3l 18s to 5l 5s
Suffex	— 4l 6s to 5l 8s	Suffex	— 3l 18s to 5l —s
Fa-nham	4l 4s to 5l 8s	Edex	6l — to 7l 1s

Seeds

Red Clover (per cwt.)	20s to 34s	Cinque Foil, do.	—s to —s
White Clover, do.	40s to 116s	White Mustard Seed (p. bush)	12s to 13s
Trefoil, do.	10s to 52s	Brown do. do.	12s to 14s 6d
Turnip (per bushel)	12s to 16s	Canary Seed do.	8s to 12s
Rye Grass (per quarter)	20s to 20s	Rape Seed (per last)	36l to 40l

Meat, Smithfield, Monday, Dec. 21. (To sink the offal, per stone of 8lb.)

Beef	— 4s 6d to 6s 6d	Veal	— 5s 0d to 6s 8d.
Mutton	— 5s 0d to 7s 0d	Pork	— 5s 8d to 6s 8d.
Head of Cattle this day—Beasts about 2,200—Sheep and Lambs 5,500.			

Price of Leather.

Butts, 50 to 56lb. each	16½ to 18d	Calf Skins, 30 to 40lb. p. doz.	18d to 24d
Ditto, 60lb. to 66lb. each	19d to 22d	Ditto, 50 to 70lb do.	24d to 29d
Merchants Backs	15d to 17d	Ditto, 70 to 80lb. do.	24d to 26d
Dressing Hides	13d to 14d	Sm. Seals (Greenland)	28d to 30d p. lb.
Fine Coach Hides	14d to 16d	Large do.	100s to 120s p. doz.
Crop Hides for cutting	18d to 20d	Tanned Horse Hides	18s to 30s p. hide
Flat Ordinary	14d to 16d	Goat Skins	21s to 63s p doz.

Price of Tallow.

St. James's Market	— 0s 0d	Russia ditto (Soap)	— 57s 6s
Clare Market	— 4s 0d	Melting Stuff	— 48s 50s
Whitechapel Market	— 3s 11d	Ditto rough	— 35s —s
Per stone of 8lb.—Average	3s 11½	Graves	— 19s —s
Town Tallow	67s 6d	Good Dregs	— 12s —s
Russia ditto (Candles)	—s to 60s	Yellow Soap 68s. Mottled 76s. Curd 80s	
Price of Candles per dozen, 11s. 0d.—Moulds 12s. 0d.			

Prices of Hay and Straw on Saturday, Dec. 19.

St. James's—Hay	4l —s to 5l 8s	Average	4l 14s 0d
Straw	1l 10s to 2l 2s	—	1l 16s 0d
White-ch.—Hay	4l —s to 5l 5s	—	4l 12s 6d
Clover	5l 10s to 6l 8s	—	5l 19s 0d
Straw	1l —s to 1l 16s	—	1l 12s 0d

Coal Exchange for the Week.

Monday—Biggs	46s	Wallfend	47s
Adairs	42s	Walker	46s
Wallfend	47s	Wylam	43s
Eghton	43s	Bourn Moor	43s 6d
Bourn Moor	41s 6d	Eden Main	43s 6d
Ruffell's Main	2s	Rctory	41s 6d
Edon	42s 6d	Waswick	41s
Wednesday—Beuton	44s	Friday—Wallfend	48s
Adair's Main	43s 6d	Biggs's Main	48s
Biggs's Main	46s	Fltworth	39s 6d
Blyth	43s 6d	Hbburn Main	48s
Heaton Main	45s 9d	Heaton	47s 6d
Hollywell Main	43s	Kenton Main	47s
Montague Main	43s 6d	Walker	47s

Delivered in Town at 9s. advance on the above price.

454 *Prices of Grain, Meat, Seeds, &c. (Fourth week, Dec.)*

Return of Wheat in Mark-lane, from the 13th Dec. to 19th, inclusive.

Total 7776 Quarters—Average 77s. 3¼d.—5s 11¼d. higher than last return.

Return of the Prices of Flour, from 12th Dec. to the 18th inclusive.

Total 23,357 Sacks—Average 68s. 5d.—3s 9d higher than last return.

Hence results the Price of BREAD.

Eighty Quartern loaves at 1s 0d—4l. 0s. 0d.—Against the Barer—5d.

Price of Hops.

Pockets				Bags.			
Kent	4l	8s to	5l 12s	Kent	—	3l 18s to	5l 5s
Suffex	-	4l 6s to	5l 8s	Suffex	—	3l 18s to	1 —s
Farnham	-	4l 4s to	5l 8s	Effex	—	6l —s to	7l 1 ½

Seeds.

Red Clover, (per cwt.)	16s to 84s	Cinque Foil, ditto	30s to 40s
White Clover, ditto	30s to 120s	White Mustard Seed, p. bu.	10s to 13s 6d
Trefoil ditto	10s to 50s	Brown, ditto do.	11s to 14s 6d
Turnip, (per bushel)	16s to 8s	Canary Seed do.	10s to 13s 6d
Rye Grass, (per quarter)	20s to 30s	Rape-feed, (per last)	36l to 38l

Meat. Smithfield, Monday, Dec. 23. (To sink the offal—per stone of 8lb)

Beef	—	4s 4d to 6s 0d	Veal	—	5s 0d to 6s 6d
Mutton	—	5s 0d to 6s 6d	Pork	—	5s 4d to 7s 0d

Head of Cattle this day—Beasts about 2,000—Sheep and Lambs 5,000.

Raw Hides.

Best Heifers & Steers (p. r.)	3s 4d to 3s 8d	Market Calf Skins	9s. 0d each	
Middling	—	2s 10d to 3s 2d	English Horse hides	12s to 15s each
Ordinary	—	2s 2d to 2s 4d	Sheep Skins	4s 0d to 7s 6d

Price of Leather.

Butts, 50 to 56lb. each	16d to 18d	Calf Skins, 30 to 40lb. p. doz.	20d to 24d
Ditto, 60 to 66lb. each	19d to 22d	Ditto, 50 to 70lb. do.	24d to 28d
Merchants' Backs	16½ to 17½	Ditto, 70 to 80 b. do.	24d to 26d
Dressing Hides	13½ to 14½	Sm. Seals (Greenland)	22d to 32d p. lb.
Fine Coach Hides	14½ to 16d	Large do	100s to 120s p. doz.
Crop Hides for cutting	17d to 20d	Tanned Horse Hides	18s to 30s p. hide.
Flat Ordinary	15d to 17d	Goat Skins	21s to 63s p. doz.

Price of Tallow.

St. James's Market	—	0s 0d	Russia ditto (Soap)	—	57s 6d
Clare Market	—	4s 0d	Melting stuff	—	48s 50s
Whitechapel Market	—	3s 11d	Ditto rough	—	35s —s
Per stone of 8lb—Average	—	3s 11½	Graves	—	19s to —s
Town Tallow	—	67s 6d	Good Dregs	—	12s
Russia ditto (Candles)	—	6s to —s	Yellow Soap 68s	Mottled 76s	Curd 80s
Candles per Doz. 11s 0d—Moulds 12s 0d					

Price of Hay and Straw, Dec. 26.

St. James's—Hay	4l —s 0d to 5l 8s	Average	4l 14s 0d
Straw	1l 10s 0d to 2l 2s	—	1l 16s 0d
Whitechapel—Hay	4l 4s 0d to 5l 8s	—	4l 16s 0d
Clover	5l 10s 0d to 6l 14s	—	6l 2s 0d
Straw	1l 10s 0d to 1l 16s	—	1l 13s 0d

Coal Exchange for the Week.

Monday—Walker	46s	Wednesday—Walker	45s 6d
Bigg's Main	45s 6d	Wallend	45s 6d
Brandling	44s	Bigg's Main	45s 6d
Hebburn Main	45s 9d	Hebburn Main	45s 9d
Heaton Main	45s 6d	Friday—Christmas Day	

Delivered in Town at 9s. advance on the above price.

AVERAGE PRICES OF CORN, by the quarter of eight Winchester bushels; and of OATMEAL, per holl, of 140 pounds Avoirdupois.

From the Returns received in the Week, ended DEC. 19, 1801.

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	80	2			42	7	27	2	40	3	45	6		
Surrey	81	0	38	6	44	0	27	2	38	6	41	9		
Hertford	69	6	46	3	44	3	28	3	46	6	45	1		
Bedford	69	7	50	4	41	11	26	7	34	4	40	9		
Huntingdon	73	10			41	8	19	6	33	11	41	7		
Northampton	72	0			41	0	20	6	46	0	40	0		
Rutland	71	0			45	0	21	0	42	0	46	0	70	6
Leicester	75	9	47	0	41	8	21	2	39	0	59	0	57	3
Nottingham	79	9	52	0	50	6	25	2	53	0	41	0		
Derby	82	4			51	9	25	0	52	6	41	0		
Stafford	76	0			46	0	28	0	54	1			36	8
Salop	80	6	57	2	49	8	26	8	40	10	48	9	80	7
Hereford	73	0	57	6	48	0	25	10	45	10	40	6	71	11
Worcester	81	8	48	0	41	5	31	5	49	11	42	8		
Warwick	82	4			45	5	28	9	55	8	51	6	52	2
Wilts	66	0			41	10	28	6	62	4	44	0		
Berks	76	4			39	0	27	2	4	3	43	1		
Oxford	71	0			39	5	23	7	41	11	42	2		
Bucks	73	0			39	10	24	2	41	3	42	0		
Brecon	81	7	54	4	44	6	21	4			32	0	19	6
Montgomery	76	1			51	2	19	7			36	11	50	10
Radnor	86	8			44	7	26	2			42	2	96	6

Maritime Counties.

Essex	75	0	41	0	42	8	27	8	31	3	3	0		
Kent	74	10	39	0	35	10	29	11	40	0	48	0		
Suffex	68	8			41	8	26	4	40	0	44	0		
Suffolk	70	1	40	0	42	11	24	1	32	10	43	4	63	7
Cambridge	70	0	40	8	38	5	19	0	36	1				
Norfolk	70	10	40	8	40	0	22	6	35	6	39	10		
Lincoln	73	10	52	9	41	6	20	8	37	9	59	0		
York	69	5	44	9	43	2	21	2	42	8	64	0	42	11
Durham	71	7			45	0	19	11						
Northumberland	65	6	43	0	35	6	21	0			51	4	17	0
Cumberland	89	9	57	0	44	2	24	10					21	8
Westmorland	82	3	53	8	49	5	24	10					21	2
Lancaster	79	8			53	5	28	2	52	0			22	6
Chester	72	6			56	4	25	8			64	1	22	8
Flint	70	7			62	2								
Denbigh	81	1			56	7	22	5	44	10	38	5	33	1
Anglesea														
Carnarvon	75	0	50	0	46	4	24	0					45	3
Merioneth	81	4	52	0	45	0	22	0			40	0	41	1
Cardigan	72	9			38	8	12	1						
Pembroke	62	7			39	6	16	0						
Carmarthen	69	10			41	7	17	7						
Glamorgan	75	5			39	2	21	7						
Gloucester	72	6			42	9	25	6	48	7	40	5		
Somerset	72	6			43	0	21	8	53	8	40	0		
Monmouth	78	2			48	8								
Devon	75	8			39	7	24	0	52	0	80	0	13	6
Cornwall	73	9			35	7	17	0						
Dorset	73	11			43	9	32	9	53	0				
Hants	70	6			42	6	26	7	53	6				

A TABLE of the Prices of STOCKS in December, 1801.

Days	Bank Stock.	3per Ct. R.d.	3per Ct. C. nolis	4per Ct. C. nolis	5per Ct. NAVY.	5per Ct. Loyalty	Long Ann.	Short Ann.	Imp. 3per Ct.	Imperial Ann.	Irish 5per Ct.	Ind. Stock	Eng. Tick	Irish Tick
Nov. 28		68 1/2	67 1/2	85	98 3/4	98 3/4	11-16	5 1/2	66	12 1-16		215	16	6 5
Dec. 1		67 1/2	67 1/2	84 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
2		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
3	18 3/4	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
4	18 1/2	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
5		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
7		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
8	188	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
9		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16		219	16	6 10
10	187 1/4	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
11	187	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
12		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
14		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
15	186 1/4	66 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
16	186 1/4	66 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
17	187 1/4	66 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
18		66 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
19		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
22	187 1/4	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16	96 1/2		16	6 10
23		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
24	187 1/4	67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10
29		67 1/2	67 1/2	85 1/2	98 1/2	98 1/2	11-16	5 1/2	66 1/2	12 1-16			16	6 10

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

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OF THE
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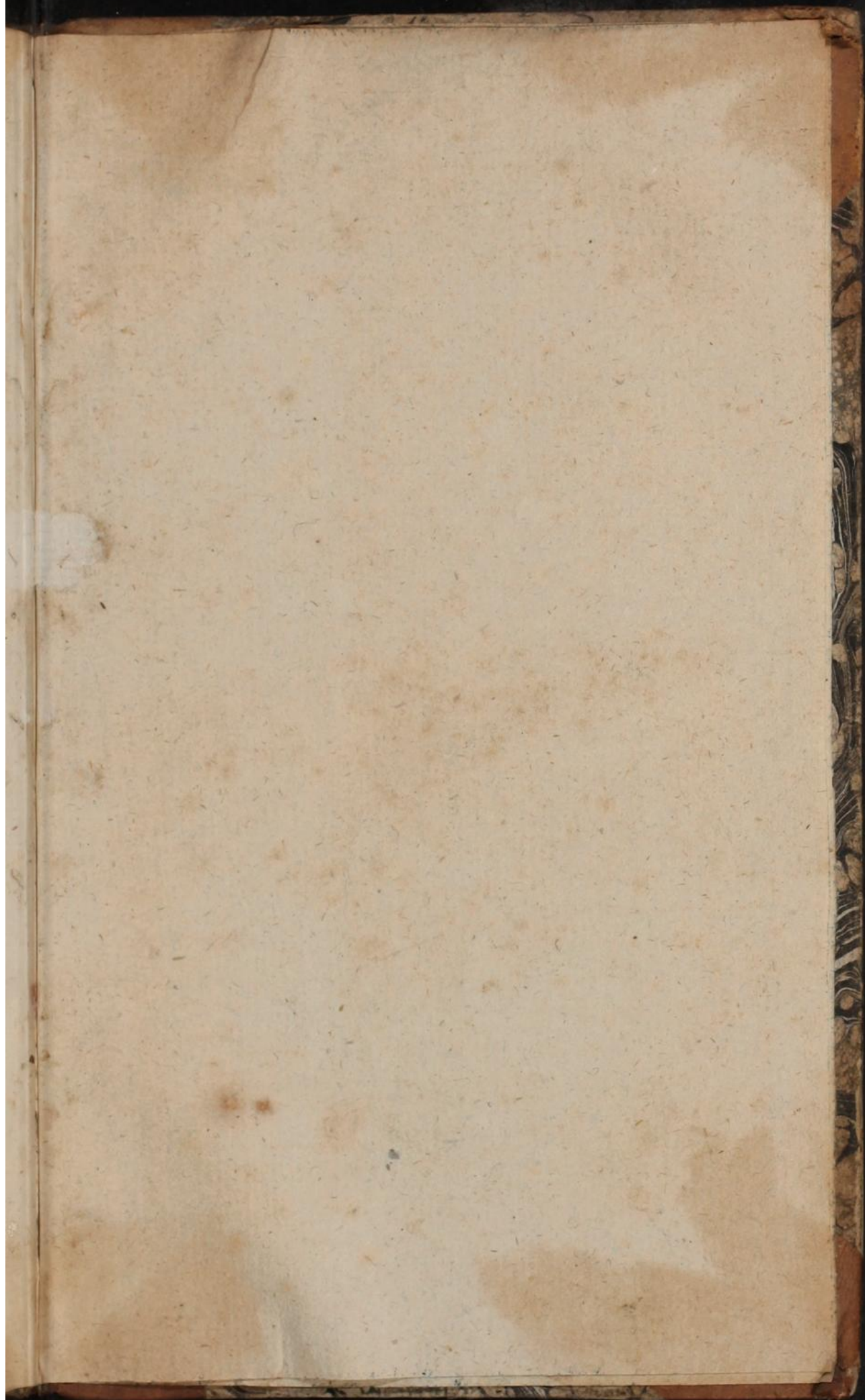
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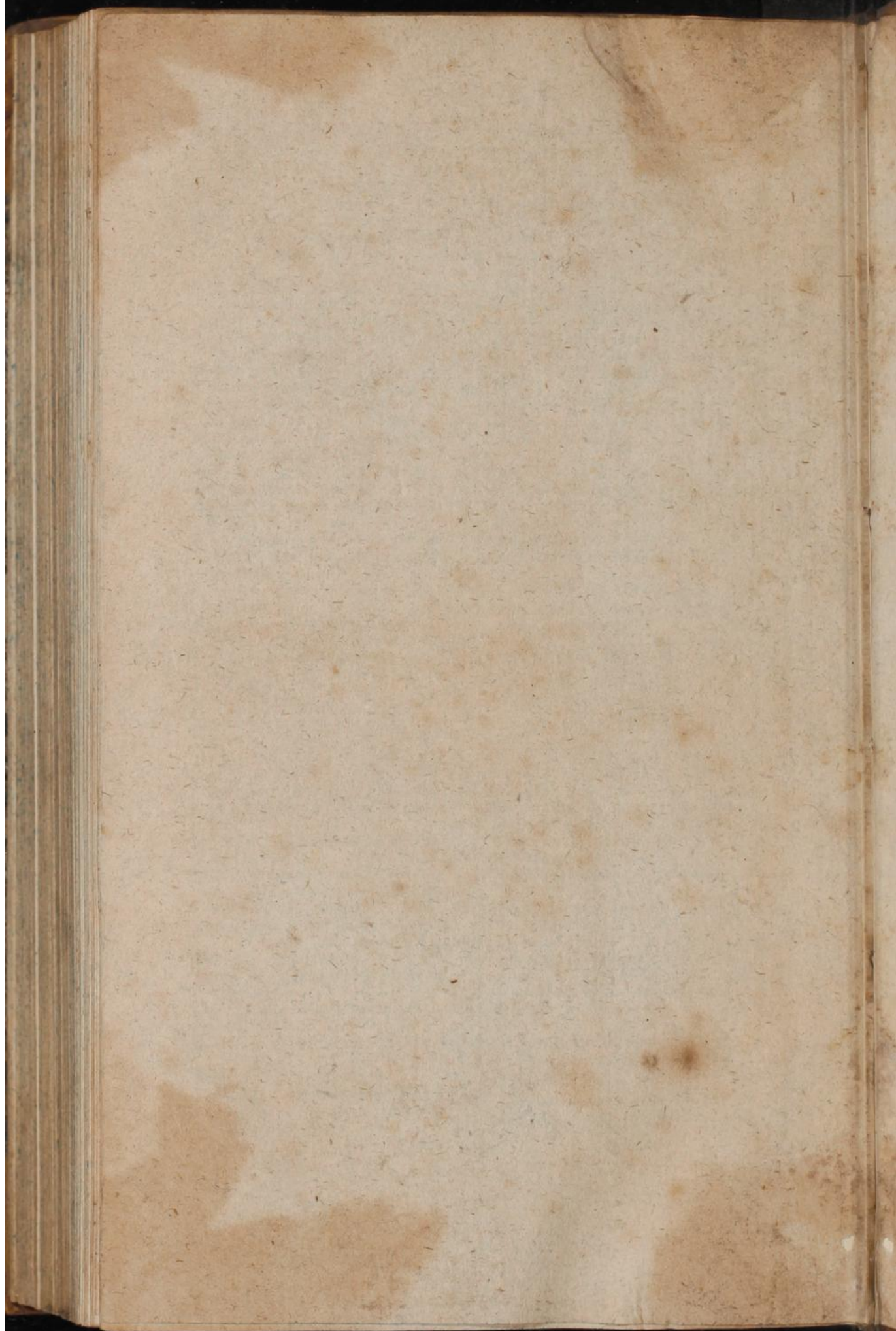
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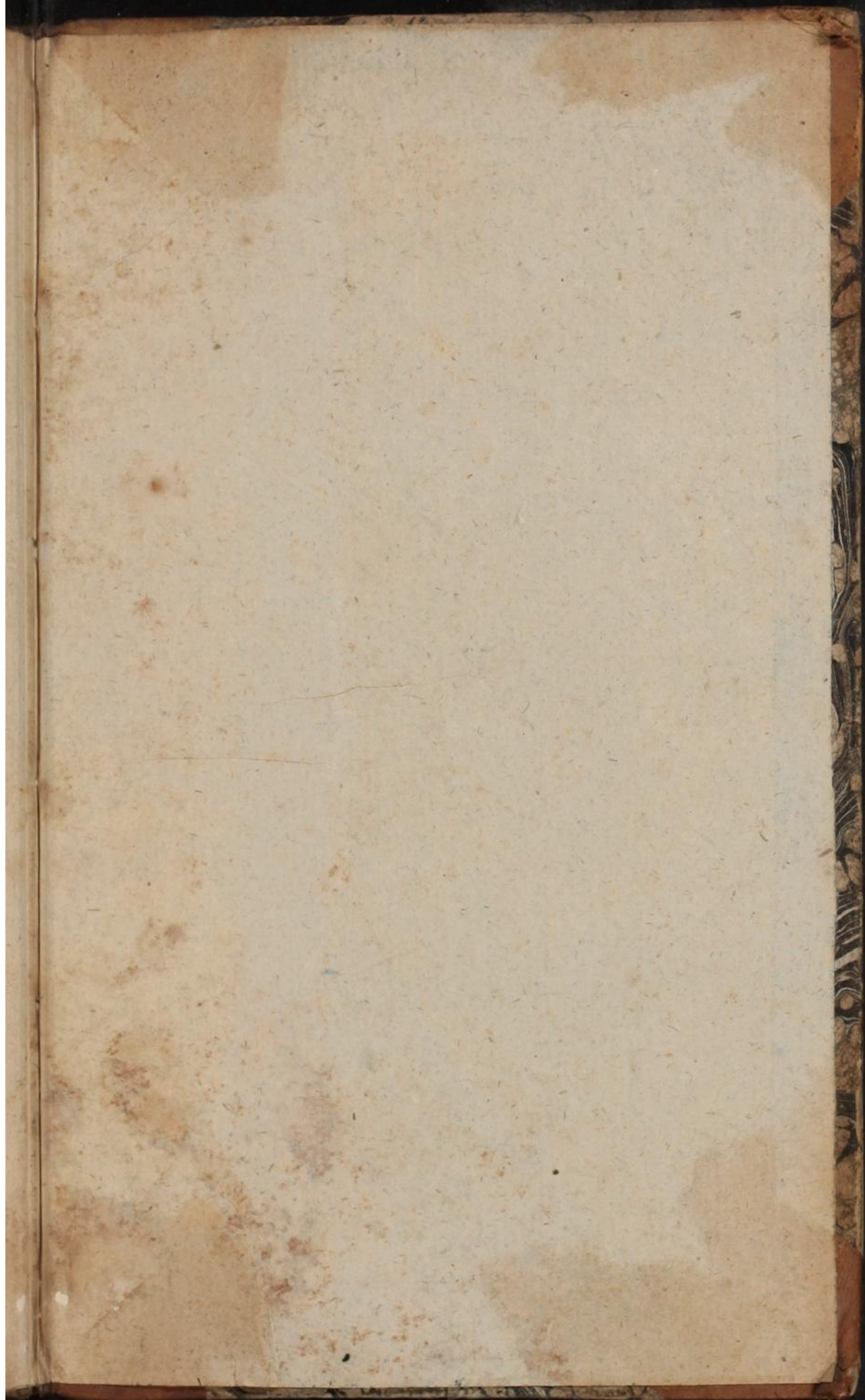
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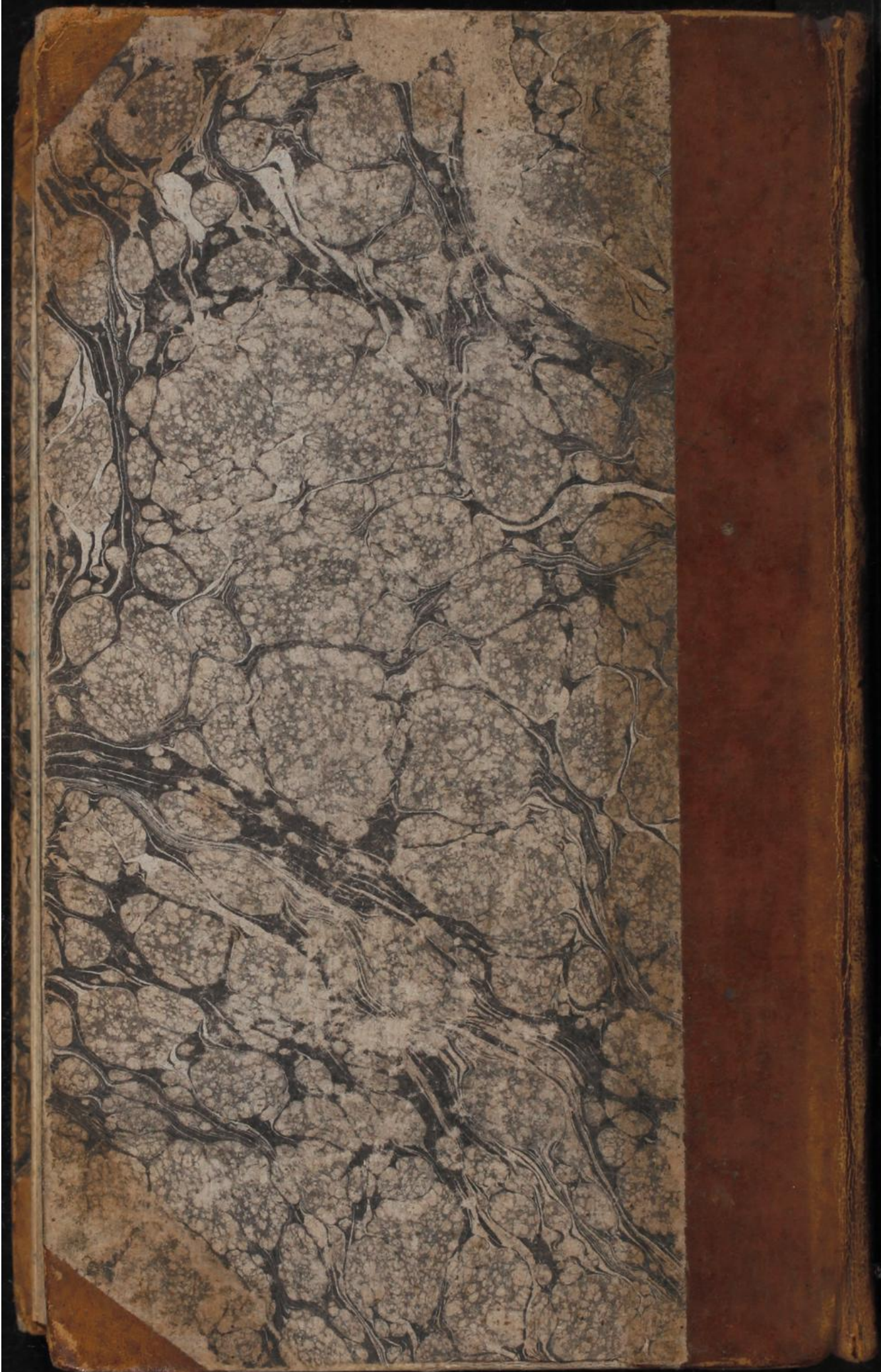
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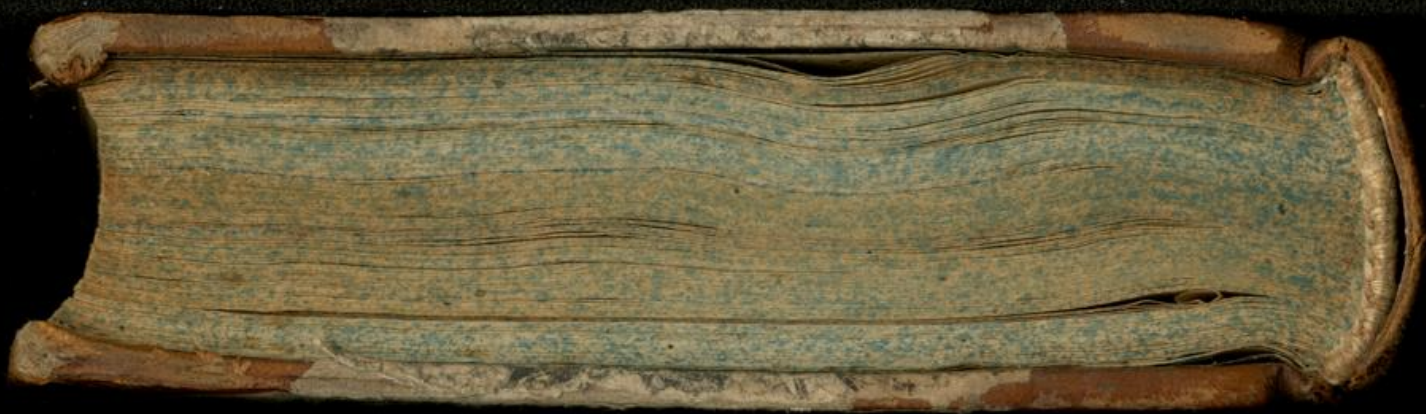
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