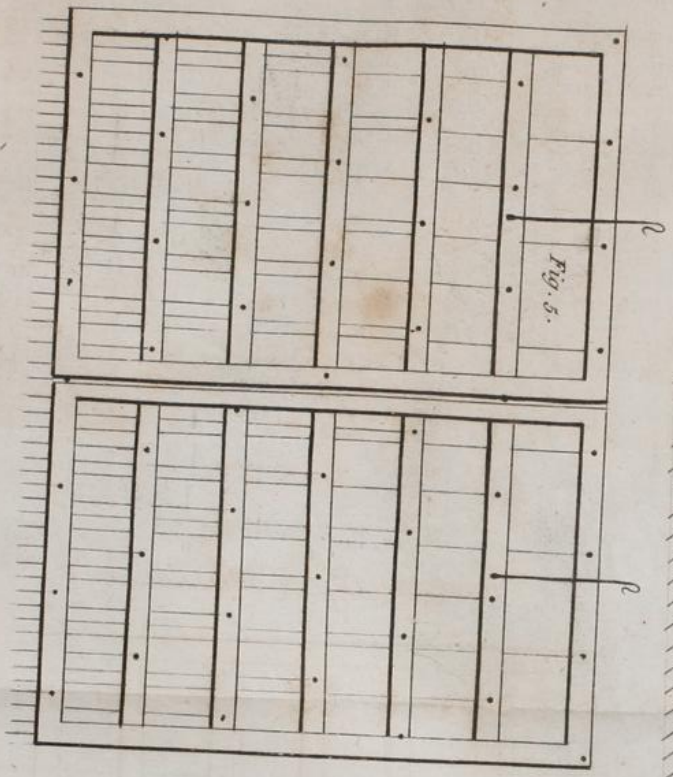
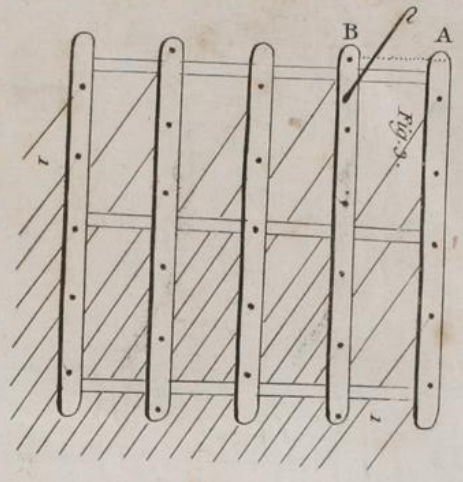
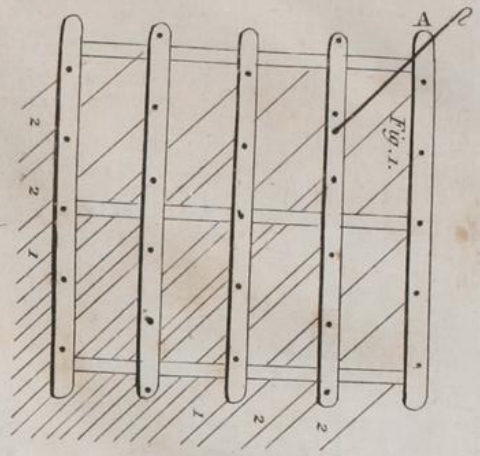
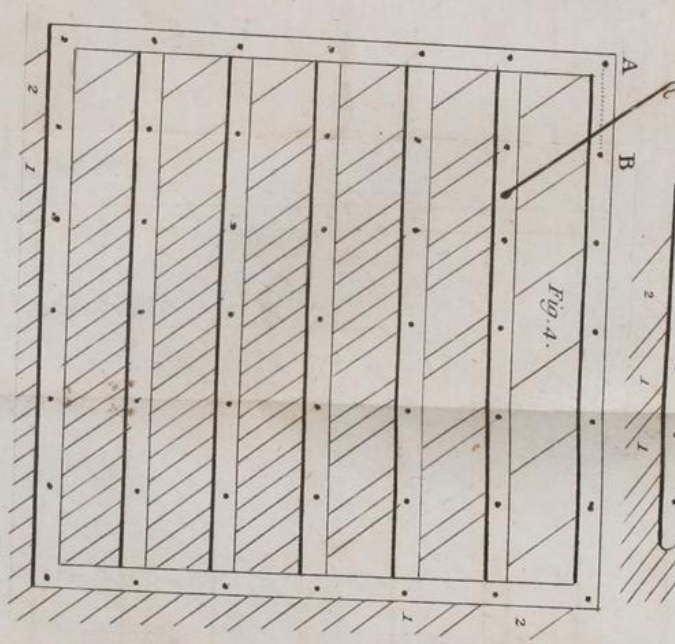
Mr BOARDMAN's HARROW.

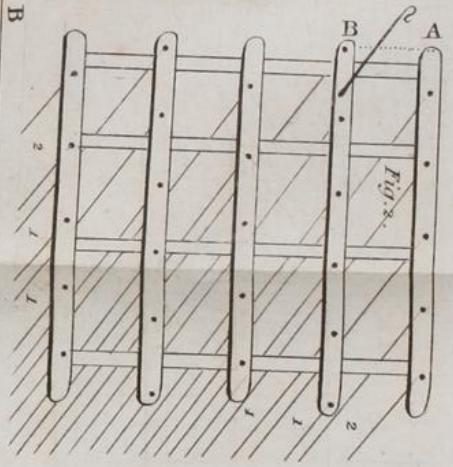
See Page 41.











THE COMMERCIAL AND AGRICULTURAL MAGAZINE, FOR 1801.

VOL. V.

FROM JUNE TO DECEMBER,

INCLUSIVE.

LONDON:

PRINTED AND PUBLISHED BY VAUGHAN GRIFFITHS,

PATERNOSTER-ROW.

ADVERTISEMENT.

AT the close of the year EIGHTEEN HUNDRED AND ONE, we complete the FIFTH Volume of the COMMERCIAL, AGRICULTURAL, and MANUFACTURER'S MAGAZINE.

In the successive Numbers of this, as of the former Volumes, the favour of INGENIOUS CORRESPONDENTS has enabled us to communicate many of the most valuable, new observations, which the experience of Farmers, Artizans, and Merchants, has continued to add to that knowledge which is directly applied to enlighten the productive industry of the People of this Country.—From the Journals, and other new publications of France, and Germany, we have extracted accounts of several of the most interesting discoveries lately made on the Continent. Several letters of news have been sent us, and inserted, from British Gentlemen resident abroad.—The *Chronicle* of Facts in the History of Politics, Trade, Husbandry, Manufactures, the Fine Arts, the Phœnomena of Nature, Morals and Manners, &c.; has been compiled with equal diligence as in the former Volumes; and will afford, even at any distant future time, the most pleasing entertainment to every ingenious and liberally inquisitive mind.—Our *Review*-department has been limited to books on subjects of Commerce, Agriculture, and the Useful Arts. Of these, we have taken much pains to exhibit faithful analyses, and very candid, temperate judgments. And in this department, we have *lately* been enabled to exhibit the most vigorous exertion of talents to which the late EDMUND BURKE (as Beconsfield still shews), one of the best farmers England ever saw, must finally owe the only respectable effort that has been tried, to render the example of his LIFE, truely useful to *future* ages.—Of the information which the Public must naturally expect to find in such a Miscellany as this, there was a large proportion which could not be, in any other form, exhibited, so advantageously as in TABLES. Extensive Tables of the State of Prices in the Markets, &c. therefore, continue to be inserted in every successive Number of this Magazine; and, our Readers will, we hope, do us the justice to own, that they are compiled, with great accuracy.

Yet, this Volume does not pretend to include all the valuable new information relative even to its proper subjects, which has become known in the course of its publication. Many new and important facts have, no doubt, escaped our notice. Of others we could not obtain satisfactory accounts, till it was too late. Some we have been obliged to omit, because, though these might be interesting, there were others still more interesting, and falling still more immediately within our plan, which we were obliged to prefer. And there are many such facts already known to us, which we reserve for early communication in the future series of our Numbers.

Some of the more learned and scientific readers of this Work may censure it as containing too many ill-written letters from plain Farmers and Tradesmen, which relate but few facts, which relate no one fact with due precision, and which display prejudices and absurd opinions with a pride and positiveness not at all instructive. To such critics, this is our answer.—A primary object in the undertaking of this Magazine, was, to invite Farmers, Merchants, and Artizans, to a mutual public correspondence with one another, and

with men of ſcience, through ſuch a channel,—a correſpondence would make every contributor to it, at once, a *more accurate obſerver* of the facts paſſing before him, in his own peculiar province, a *cloſer and clearer reaſoner*, and a more correct and perſpicuous writer. We did not epxect that the firſt letters would be models of eloquence; we did not ſuppoſe that the facts communicated, all, detailed with philoſophical preciſion; we did not, with all our reſpect for the claſſes of practical men to whom we addreſſed ourſelves, believe that they had not many prejudices and errors to be expoſed, than principles to teach: but, we looked to the great utility of the correſpondence alone; believing, that prejudices to be exploded, need only to be clearly expoſed; and that practical truth, to be adopted, wants only to be, in every proper point of view, duely ſeen. Beſides, it were impoſſible, upon any other mode of regulating the correſpondence, than that which we have followed, to exhibit ſo true a picture of the ſtate of popular prejudice, knowledge, and practice, in the concerns of Agriculture, Trade, and Manufactures; and, whether for their improvement, for the preſent gratification of a curioſity which, originating in philoſophy, in patriotiſm, and in ſound common ſenſe, cannot but be highly reſpectable, or for the ſake of giving to future times, an information of the nature of that which we delight the moſt to receive, in regard to the paſt; ſuch a picture cannot but be more truely valuable than whatever could be introduced, to ſupply its place in ſuch a publication as this. A Lawyer, to do juſtice to the management of a cauſe, muſt hear his client tell his tale in his own way; and it will, in the ſame manner, be impoſſible for thoſe who, as philoſophers, ſtudy the ſcientific improvement of the economy of Trade, of Huſbandry, or of the Uſeful Arts, to require the knowledge of the neceſſary facts without hearing and ſtudying the narratives of the practitioners themſelves, however imperfect thoſe narratives may always in certain reſpects be.

There are others who will, on the contrary, complain; that there is much of our matter which evidently does not proceed from Farmers, Merchants, or Huſbandmen. To ſuch, we would reply, in the words uſed by the eloquent BISHOP SPRATT, in his Hiſtory of the Royal Society; that "men who are not converſant about any one ſort of arts, may often find out their rarities and curioſities, ſooner than thoſe who have their minds confined wholly to them. The admirable art of compoſing letters, was ſo far from being ſtarted by a man of learning, that it was the device of a Soldier: and Powder (to make recompence) was invented by a Monk. The ancient Tyrian purple, was brought to light by a Fiſher, The ſcarlet of the moderns, was the production of a Chymiſt, and not of a Dyer." We would add with the ſame writer; that, "it is ſometimes better, to endure *vanities*, than, out of too much niceneſs, to loſe any invention."

We have only farther to expreſs our thanks for the public patronage with which we have been honoured,—our hopes that with the return of Peace, that patronage may become more conſiderable to a Work which is devoted to promote only the beſt Arts of Peace—and our reſolution by every poſſible means, to render this Work continually leſs and leſs unworthy of the public favour.

December 30th, 1801.

E.

THE
Commercial and Agricultural Magazine.

No. XXIV.] JULY, 1801. [Vol. V.

A CONCISE ACCOUNT OF INLAND NAVIGATION.

ALTHOUGH in this country Inland Navigations were at firſt much oppoſed, yet their utility ſeems now to be univerſally admitted; nor can it be denied that they facilitate the communication between one part of the country and another, reduce the price of carriage, and enable the huſbandman and manufacturer to ſend their goods cheaper to market. The ancients were aware of theſe advantages; and even in Greece, where, from the country being peninſulated by the ſea, canals were not much wanted, we find that plans were on foot, and that ſome of the Roman Emperors attempted to cut through the iſthmus which joins the Peloponneſus to Greece; and we alſo find in Bœotia traces of canals cut to carry off the water from lands which were overflowed. The aqueducts of the Romans were a ſpecies of canal, and they had alſo many for draining the water from overflowed grounds.

Egypt, which now ſo much calls our attention, contained from the remoteſt antiquity a number of canals dug to receive and diſtribute the waters of the river Nile at the time of the inundation; but the great project of a canal to communicate between the Nile and the Red Sea, deſerves more particular attention. It was, as we are told by Diodorus Siculus, begun by Necos and continued by Darius, but laid aſide from a fear that it would lay Egypt under water. Ptolemy the ſecond, however, completed the undertaking, and cauſed to be conſtructed a dam or ſluice, which opened to give a paſſage and immediately cloſed again: this canal was four days journey in length. By means of it the rich commodities of India, Perſia, Arabia, and the coaſt of Africa, were conveyed from the Red Sea to the Nile down that river to Alexandria, and thence ſhipped to the various parts of Europe. After the reign of Ptolemy, this canal ſeems to have been neglected, but was again opened by one of the Califs in 635; and again neglected, ſo that ſome traces of it alone remain. The canal of Alexandria, or, as the Arabs call it, of Faoua, has had better fortune, it was cut from a place now called Rhamanic to Alexandria, with intent to ſupply that city with water. There was alſo a canal from Alexandria to Canopus, and a great variety of other canals for the purpoſes before mentioned.

But China has for a long ſeries of years been the chief country for canals; ſcarcely a town or a village that is not waſhed by the

sea or a river, but has a canal. The great or royal canal is one of the most wonderful works of art: it employed thirty thousand men for the space of forty-three years to complete it. The length from south to north, extending from the city of Canton to the northern boundary of the Empire, is between eight and nine hundred miles, the breadth is fifty feet, and the depth nine feet, it can consequently take vessels of considerable burthen, some of which have sails, others oars, and others are towed. It passes forty-one large cities, and innumerable canals are cut into it to connect it with the rivers, lakes, and rivulets of the country. These canals are of the utmost benefit to China; and they are finished and maintained in a very complete manner; the quays are all faced with free stone, the bridges over it are innumerable, and have some three, some five or more arches, the centre of which is lofty, to permit barges or vessels with masts to pass under. We are assured that there is a passage by canals almost from one end of the Empire to the other, for the length of eighteen hundred miles, and that a passenger may go from one end of the Empire to another by water, except in crossing one mountain. In short the canals are the roads of China.

Nor are other parts of Asia without these great conveniences, the countries between Delhi and the Panjiat, in Hindostan, are supplied with water by a canal, which also answers the purposes of navigation; and Major Rennell mentions several other canals, one of which from the river Jumna is divided into seven streams.

Let us now turn to Europe, and we shall find that Russia, although much more backward in civilization than most of the other European kingdoms, has, however, been very active in this species of improvement.

Peter the Great formed the plan of an inland navigation from Persia to Petersburgh, the new city he had just founded. The goods were to be brought by the Caspian Sea to Astrachan, and thence by the river Wolga, and a line of canals, into the river Mesta and the lake of Novogorod, and then into the lake of Ladoga and the river Neva to Petersburgh, a distance of four hundred and fifty miles. He also planned a navigation from the Don to the Wolga, and another canal to the river Occa, and thus to effect a navigation to Moscow, and afterwards a line of communication to Archangel; the completion of which was prevented by his death. He employed an Englishman, Captain Perry, as his engineer, who met with great opposition from the nobles or boyars. The Czar's death stopped the works for a time, but they have most of them, with some improvements, been carried on by his successors. The convenience for inland navigation in Russia is wonderful, it being possible to convey goods by water near four thousand five hundred miles with only one interruption of about sixty miles: this length is from the

frontiers of China to Peterſburgh. Alſo from Aſtrachan to Peterſburgh by a line of water navigation, one thouſand four hundred miles, and upwards. Ruſſia has ſeveral other canals, but of leis length.

Sweden has long had canal navigation. One plan to unite the German Ocean with the Baltic, by the canal of Trothaetta, is not quite complete: and Denmark has ſome on her continental dominions.

The canals of Holland, which are out of number, have long been the theme of every traveller. The ſeveral provinces are interſected with innumerable canals, which ſerve for roads and public highways, and on theſe the Dutch are conſtantly journeying and conveying commodities from one place to another. Nor are they in this mode of conveyance confined to their own country, for they have alſo water communications with many parts of France, Flanders, and Germany. The yearly profit of theſe canals is immenſe; and Mr. Phillips, in his ingenious Hiſtory of Inland Navigation, ſays that for one diſtance of forty miles, the annual profit is 250,000l. which is 6251. per mile. The canals of Oſtend, Ghent, Antwerp, Bruſſels, &c. communicate with the Dutch canals, and mutually aſſiſt each other.

France has canals of conſiderable conſequence. The canal of Burgundy, which forms a communication between the Loire and the Seine. The canal of Orleans, which joins this canal. The canal of Bourbon, intended to effect a communication between Paris and the river Oiſe. A vaſt variety of other canals are in France, and the new government are planning many additional ones; but the great and really ſuperb work is that of Languedoc, or the canal of the two ſeas, which forms a junction between the Ocean and the Mediteranean.

It does honour to the Miniſter Colbert who patronized, and to Riquet, the engineer, who conducted the work. It was begun in 1666, and finiſhed in fifteen years, has on it one hundred and fourteen locks, and is conveyed over bridges of vaſt height, which give paſſage to rivers under them. It has alſo a tunnel to convey it under a mountain, which, as it was the firſt of the kind of any magnitude, was looked on as a moſt extraordinary undertaking. This work coſt about half a million ſterling, of which the king gave one half, and the province paid the remainder. This canal begins at Cette, and paſſes to the town of Agde, where there is a baſon with three openings, of three different depths of water, the gates ſo contrived that the maſter of the veſſel may open which he pleaſes. There are near Beziers, and alſo near the tunnel, eight locks together, which form a grand and regular caſcade 960 feet long, by which the veſſels croſs the river Orb. At St. Ferriol is a reſervoir which covers 590 acres, with paſſages for the water into the baſon of Panouf, which is the higheſt level, and is embanked and walled round

with ſtone. The canal then deſcends, paſſing many towns into the Gardane, a little below Toulouſe. The breadth is 144 feet, including the towing paths, the depth 6 feet, and the length 64 French leagues. The higheſt part is 600 feet above the loweſt level.

In Spain the canal of Arragon was begun in 1781, and when complete will open a new conveyance for the productions of that country: there are in fact two canals, both of which begin at Navarre, and run through Arragon, and at length fall into the Ebro. Theſe works have been effected by labours deſerving of admiration: beſide dykes, banks, ſluices, &c. where neceſſary; there is an aqueduct 710 fathoms in length, in which this canal runs. They have alſo other canals, but of leſs note, and as the Miniſters of Spain ſeem to attend to commercial improvements, there can be little doubt but that their number will increaſe.

Let us now turn to our own country. There we find the veſtige of a canal, now called Caerdyke, which ſeems to have been cut from the river Hyne, near Peterborough, to the river Witham, near Lincoln, and moſt probably with intention to join thoſe rivers. It was forty miles in length, and is nearly filled up; and whether cut by the Romans or Danes is uncertain. Except this, no attempt was made at canal navigation in England, till within about forty years. This might poſſibly ariſe from the many fine navigable rivers we poſſeſs, ſome of which extend far into the country, and theſe kinds of artificial navigations were poſſibly thought unneceſſary; eſpecially as ſeveral of the rivers had, by art, been rendered navigable much further than they were by nature.

About the middle of the laſt century, however, our countrymen began to turn their thoughts to this great object: and fortunately at the ſame time there lived one of thoſe wonderful geniuſes which ſeldom appear; and, by a happy concurrence of circumſtances, a ſpirited young nobleman, juſt come to the poſſeſſion of a good eſtate, and inclined to patronize him.

This man was the juſtly celebrated Mr. James Brindly, and his patron the preſent Duke of Bridgwater. Mr. Brindly conſidered that although the four great rivers of England, the Thames, the Trent, the Merſey, and the Severn, extend far into the country; yet the four great ports of the kingdom ſituated on theſe rivers, viz. London, Briſtol, Liverpool, and Hull, had no communication by water with each other, except by a navigation, circuitous, always tedious, and in winter extremely dangerous. Mr Brindly formed a plan to unite them, and private intereſt has led the way to the completion of this truly great and national undertaking.

Juſtice requires that we ſhould give ſome account of the very ſingular an who planned and laid the firſt foundation of theſe

great works. He was born at Tunsted, in Derbyshire, in 1716. His father possessed a little freehold, which he dissipated by a fondness for shooting, and other field sports; in consequence of which, his son's education was totally neglected; and, to support the family, he was employed in such kind of labour as his strength would permit. At the age of seventeen he bound himself apprentice to a millwright of the name of Banart, near Macclesfield, in Cheshire, when he quickly discovered an attachment to the mechanical arts in general, and a genius formed for extending them. In the early part of his apprenticeship he was often left by himself for weeks together, to execute works, for which his master had given him no previous instruction. These works he, of course, finished in his own way; and his master was often surprised at the improvements he from time to time introduced into the millwright business; and the millers, seeing his ingenuity, generally chose to have him employed on their work. In short, his attention and application supported his master (who was very old) and family with comfort. One singular instance of his application deserves notice. His master was engaged to build an engine paper-mill, which was the first of the kind attempted in these parts. He went to see one, but when he came to work at it he was not able to complete it. Brindly, without mentioning his design, set out on the Saturday evening after he had finished his business, travelled to the place where a mill of that kind was to be seen, took a view of it, and returned back in time to his work on Monday morning, having travelled fifty miles on foot. He then informed his master in what he was deficient, and the mill was completed to satisfaction. He afterwards engaged in business on his own account, and brought forward many useful inventions and contrivances, so that he acquired the character of a most ingenious mechanic, and was called to work at many distant places. In 1752 he erected an extraordinary water-engine at Clifton, in Lancashire, for draining coal-mines. In 1755 he was employed to make and erect the large wheels for the silk-mill at Congleton, in Cheshire, all which he executed with the most consummate skill, and invented many useful machines to further this business. He also made some valuable additions to the potters-mill, for grinding flint stone; and in 1756 he undertook to erect a steam engine on a new plan at Newcastle-under-Lyne. His inventive genius also displayed itself in many other ingenious inventions and improvements.

He was soon called to another object, the projecting and executing inland navigation, and in this we shall see this great mechanic's powers exerted in the production of some extraordinary events. This he did under the protection of the noble Duke above-mentioned, who had the discernment to single him

out, and the steadiness to support him against the opinion of those who treated Mr Brindly's plan as chimerical.

The Duke had, at Worsley, about seven miles from Manchester, a large estate, rich in coal, which had hitherto been useless, on account of the expence of land carriage, which would have rendered them too dear for the market. The Duke, wishing to work these mines, saw the necessity of a water carriage, and, on consulting Mr. Brindly, the latter surveyed the ground, and declared the scheme to be practicable. The Duke therefore resolved to effect his plan, and they thus had the joint honour and satisfaction of having first introduced canal navigation into this kingdom.

(*To be continued in our next.*)

ON SMUTTY WHEAT.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

July 16.

I HAVE anxiously examined many of the wheat crops, in Essex, and I with pleasure find a luxuriancy in almost every field, and the ears generally long and well filled. I am sorry, however, to say, at the same time, that in many crops I found a great many smutty ears, in others none. In those crops where the smut prevailed most, I observed the stems of potatoes shooting up amongst the wheat, from which I suppose that those lands had been planted with potatoes the preceding year. I rather suspect from this circumstance that the potatoe crop is not so good a preparatory crop for wheat as it is generally represented to be. I speak chiefly of the neighbourhood of Woodford.

I am, yours,

P. PRESTON.

ANSWER TO QUERIES RESPECTING SEA SLUDGE OR SALT CLOD.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

ANY information, which it is in my power to communicate, respecting that best of all manures Sea-sludge, is entirely at the service of your correspondent E. No. 23. page 422. In the recommendation of manures I cannot help feeling a degree of warmth; and when speaking or writing on this subject, I never hesitate to use any superlative word that first offers itself to my imagination: for I scarcely ever know a man disappointed in experimental manuring. Any change to the surface

of land has its beneficial effect. Only obſerve what is done in Norfolk by covering a ſandy ſoil with the moſt barren of all clays. I have known rank gravel carted upon a peaty or boggy ſurface with a wonderfully good effect. Although I have a general and deep-rooted dread of expence in agricultural proceſſes, yet in this branch of huſbandry I eſteem the coſt of the thing as a mere ſecondary conſideration. I have a friend who has ſome years been in the habit of fetching the manure called ſoap waſte, four miles, at the enormous price of fifteen ſhillings a ton, beſides cartage, and ſtill finds in the return ſufficient encouragement to continue the practice.

To the queſtions of your correſpondent I ſhall return anſwers as minute and as full as I am able.

1. Reſpecting the quality of ſea-ſludge, or (as it is perhaps more properly termed by another of your correſpondents) ſalt clod, I anſwer, that it is that part of a ſalt-marſh, which is completely graſſed over, to which the preference has always been given in the diſtricts where I have ſeen it uſed. This part of the marſh is not ſubject to be overflowed by every tide, but by the high tides only. This earth or ſludge, which is purely the depoſit of the high tides, is eſteemed much richer, of a ſtronger ſtaple, and leſs intermixed with ſand, than that which is more frequently overflowed: and, of courſe, this being found always in a more dry ſtate than the other, is worked with more eaſe, and carried at much leſs expence than the wet ſludge.

2. The above manure towards the end of ſummer is carted immediately upon the land and ſpread over the ſurface, and there ſuffered to remain in its lumpy ſtate till it has experienced the mellowing power of winter froſts; then a harrow is run over it, and afterwards it is ploughed in, with a thin furrow, for ſpring corn. There is nothing to be apprehended from any ſeeds contained in this manure.

3. Reſpecting the quantity to be uſed "as a dreſſing to give a laſting amendment to land," it is not, at preſent, in my power to give ſo preciſe an anſwer as I could wiſh. I have always ſeen it uſed in about the ſame quantity as marle is uſed; from a coat of an inch and a half to two inches thick. Perhaps this direction may be ſufficiently accurate for the purpoſe. In Mr. Holt's Survey of the County of Lancaſter it is ſaid, "Sea ſlutch, from the Bibble and Wyre, is, in ſome places adjacent, made uſe of as a ſubſtitute for marle, to which it is reckoned equal, but in general not ſo durable." To this obſervation theſe two notes are added. "Mr. Standen, Steward to Bold Fleetwood Heſketh, Eſq. ſays, more durable than marle." And another gentleman, in the ſecond note, ſays, "Sea ſlutch is certainly more durable than marle, where properly laid upon the ground, and in ſufficient quantities." In the neighbourhood of the river Merſey, in the county of Cheſter (particularly at Weſton, a village

between Frodſham and Runcorn), I have ſeen many comparative experiments made between this manure and excellent marl, which have invariably terminated in favour of the former, both with reſpect to its enriching power and the duration of its effects. It has been uſed in this diſtrict from time immemorial.

4. No common dung is required to be laid upon the land with this ſludge for a conſiderable number of years; not until the land becomes too ſtiff, for this manure has the ſame binding property that marle poſſeſſes.

5. I have generally ſeen this ſludge laid upon a ſandy loam, but have no doubt that it will anſwer equally well on other ſoils.

6. I have known lime mixed with this manure, but with no perceptible improvement. Indeed I cannot conceive it poſſible to improve its quality by the admixture of any other ſubſtance that we are acquainted with. I wiſh it to be underſtood, however, that when I thus particularly recommend one ſpecies or part of this ſalt manure or ſalt clod, I do not mean to inſinuate that any mucilage or depoſit from ſalt water would not be extremely enriching to any kind of upland. Even ſea-weed is well known to communicate very great fertility.

I have known the above manure carried by water fifteen miles for the improvement of a kitchen garden. In loading it, it is uſually cut out by one man in ſquare clods with a ſpade, and expeditiouſly lifted into the cart by means of a prong by another man.

I ſhall be very happy to hear, or ſee, in ſome future No. of your Magazine, that your very reſpectable Suffolk Correſpondent has proceeded to make actual experiments on the above not ſufficiently known manure.

I remain yours,

London, July 15. PRACTICUS.

ENQUIRY CONCERNING A VEGETABLE PRODUCTION IN SCOTLAND.

To the Editor of the Commercial and Agricultural Magazine.

SIR, *Newcaſtle, May* 23, 1801.

FROM a note in Smollett's Hiſtory of England, 1ſt vol. page 83, of the 2d edition, we learn that "the Caledonians had a very extraordinary eatable, of which *the bigneſs of a common bean was ſufficient to ſatisfy the cravings of hunger and thirſt.*"

Can any of your correſpondents inform me what that was, and whether it really poſſeſſed thoſe virtues Smollett or his authority attributes to it?

I am, Sir, yours, &c.

J. C.

ON THE INCREASE OF THE PUBLIC REVENUE DERIVED FROM FOREIGN TRADE.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

THERE is perhaps no circumſtance relative to the ſtate of the country at different periods, in which its advancement has been ſo certain and important as in reſpect to foreign commerce. In the 27th year of Edward the III. the value of all the commodities exported from England was reckoned at 294,184l. and of all the imports at only 38,970l. ſums that are conſiderably under the value of goods now frequently entered in one day. The revenue that could be drawn from ſo limited a commerce muſt have been very ſmall, and the policy of the times was by no means adapted to increaſe it: the Engliſh merchants were very jealous of foreigners participating their commercial profits, though it was chiefly to foreigners they were indebted for the little knowledge of trade they poſſeſſed; and the government being at times ſtill more jealous in this reſpect than individuals, many injudicious reſtrictive laws were made. Among others, an act was paſſed in 1429, prohibiting perſons from ſelling merchandize to alien merchants except for *ready money*. It was, however, ſoon found neceſſary to repeal this prohibition; and permiſſion was then given to ſell to them, upon giving not more than ſix months credit. The act of Charles II. impoſing a duty of 5 per cent. on goods exported as well as imported, on domeſtic manufactures as well as foreign merchandize, which laid particular taxes on our own woollens, and double taxes on all goods when exported by *aliens*, was certainly founded in very bad policy. At ſubſequent periods, as the true intereſts of the country became better underſtood, a more liberal ſyſtem was gradually adopted, though at all times, the government has conſidered commerce too much as a ſecondary object to revenue.

The duties of the *Cuſtoms*, originally conſiſted chiefly of the ſubſidies of Tonnage and Poundage: the firſt was an impoſition on Wines, laid on the quantity imported: the other was a certain duty on every ſack of Wool, and a proportional duty, generally a ſhilling in the pound, on the value of all other articles. The total produce of the Cuſtoms of England, in 1613, was as follows:

At the Port of London - -	£.109,572	18	4
At all the Out Ports - - -	38,502	9	4
Total - -	148,075	7	8

This revenue was gradually increaſing, and in 1688, it amounted, on an average of 17 years, to 555,752l. per annum. At the time of the Union (1706), the Cuſtoms of Scotland were computed at 30,000l. per annum, and of England at 1,341,559l. the great increaſe of the latter aroſe, in part, from the new duties impoſed in conſequence of the increaſed expenditure of government, and the introduction of the funding ſyſtem; but it cannot be doubted that it was principally owing to a real and very conſiderable increaſe of commerce.

The various additional duties impoſed on articles of foreign trade in almoſt every year of war ſince the revolution, with the occaſional repeal of ſome of the old duties, and the different bounties and drawback allowed on exportation, cauſed an accumulation of perplexity, which, in time, rendered the cuſtom duties a complete maſs of confuſion, and was of courſe attended with infinite inconvenience and delay in buſineſs. To remedy this, in the beginning of 1787, all the old duties were aboliſhed, and a ſingle duty on each article ſubſtituted in their ſtead. This arrangement, which was at the ſame time extended to the Exciſe and Stamp duties, may perhaps be conſidered as the moſt uſeful financial meaſure of Mr. Pitt's adminiſtration, and it is much to be regretted that the many new duties which it has been found neceſſary to impoſe during the preſent war, ſhould have ſo ſoon deſtroyed, in a great degree, the ſimplicity which had been attended with ſo much practical convenience.

The total *nett* produce of the Cuſtoms of Great Britain, in the year ending 5th January, 1801, was £.7,279,888 13 3¼ and the various payments to which the *groſs* produce was ſubject were as follows:

Drawbacks, re-payments, &c. - -	£.1,660-350	10	10
Bounties - - - - -	258,978	5	4½
Paid towards the Civil Government of Scotland - - - - -	52,534	16	9½
Charges of Management - - -	485,478	3	10¼
Paid into Exchequer - - -	6,763,297	18	10
Balance in the hands of different Collectors and the Receiver General of Scotland -	90,682	0	7½
Bills ariſing out of the Revenue of 1800, brought to account in 1801 - -	114,395	11	8¼
Total Groſs produce	£.9,425,717	8	0

With ſuch an extent of Revenue depending on Foreign Trade, there can be no doubt that the commercial intereſt will always engage the attention of government. Some ſteps have been taken for providing better accommodation for the ſhipping that frequent the principal ports, but the extenſion of bonding,

or the adoption of a still better system, is highly necessary to give the merchants the full use of their capitals, and to prevent a considerable part of the present trade from being drawn away by other states on the return of peace.

July 10, 1801. J. J. G.

ON THE ADVANTAGES OF DISCLOSING THE PROCESS OF MANUFACTORIES.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

IN consequence of your having expressed through many passages of your Magazine a wish for communications from manufacturers of the various regular details, or detached parts of such knowledge as fell under their observation, I troubled you with several queries that I thought might tend to such an elucidation. Improvement must have forerunners in the march of discovery; as yet few facts are brought into the field of public investigation, and those

> Like the glow worm's imitative ray,
> Leads the bewildered traveller astray.

Science amongst manufacturers has scarce yet reared her laurel'd head, and those who possess a practical knowledge of any manufacture, can hardly yet be expected to write, as from "the soft recesses of retirement, or under the shade of academick bowers. Even philosophy itself in many of its leaders seems to feel the want of perspicuity of language, we all of us must well know the character of a philosopher, that Germany at present, if he yet lives, contemplates with an unaccustomed degree of complacency; need I, after this, mention the name of EMANUEL KANT of Koeninsberg? And even with a perspicuity of detail many discoveries in manufactures, as well as science, must for a time appear obscure. The Principia of Newton for the twenty years after their first publication, were understood by few indeed! From the nature of this subject, it is said by a writer, the due apprecation of whose talents in your critical department was the first motive that directed me in the offering of my paper to your attention, that "the dreams of Ptolemy were destined to precede the discoveries of Newton"—So is it in manufactories from the first appearance of manufacturing science to the present dawn of discovery. What toil has MYSTERY produced! what heart-appalling accidents have JEALOUSY and PREJUDICE been the parents of! but also, what improvement has liberal communication effected! an earnestness to communicate ought therefore to stand amongst the most prominent principles of an ENLIGHTENED, BENEVOLENT UNDERSTANDING! The progress from infancy to maturity in manufactures is too frequently

like the ſtone of Syſiphus, laboured with inceſſant and almoſt hopeleſs continuity of effort,

Up the hill we leave the huge round ſtone.

Journeymen, under the influence of falſe views of intereſt, have wrapt their trades in all the myſtery that ignorance can fabricate, or a pitiful ſentiment, miſ-called prudence, can juſtify, (this they uſe, or at leaſt pretend to, but it is a moſt lamentable perverſion of its meaning). It is ſincerely to be hoped, that the time is juſt approaching when the principle of the illuſtrious hero of old will be acted upon by every manufacturer in diſplaying facts that have come under his attention;

Nil actum reputans, ſi quid ſupereſſet agendum.

but, Mr. Editor, well would it have been for the manufacturing intereſt of this conntry, had that antipathy towards diſcovery been confined to journeymen. Alas, Sir, maſters of reſpectibility, and the whole, with a very ſmall exception, are as much in favour of *myſtery* as their journeymen! both parties tenaciouſly occupy this dunghill (your farming readers will pleaſe to obſerve, that, however valuable a hill of this ſort is to *them*, to manufacturers it is quite the reverſe, and that I write to manufacturers). To your very liberal plan, impropriety of diſcloſing the ſecrets of buſineſs ſeems with one part to be an inſuperable objection. I confeſs I think *the improvement of a manufacture depends on its publicity*. The ſentiments or the endeavours of one inſulated individual may be of little avail in eſtabliſhing that principle. But when ſuch endeavours and ſuch ſentiments are ſupported by the authority of thoſe of whoſe talents this nation is juſtly proud; they are introduced to the public with a weight of authority ſufficient, one would think to entice them from their dunghill. We ſhould liſten to ſuch men rather than to the illuſive dictates of prejudice, or than to the lamentable hallucinations of error. But, Mr. Editor, with another part, it is not the diſcloſure of their myſteries that is the obſtacle they are afraid of expoſing, not their KNOWLEDGE, but their IGNORANCE: they aſſume the *maſk of myſtery* to conceal the ſuperannuated methods of traditional folly, and accuſe of unthinkingneſs and raſhneſs thoſe who think infinitely more than they do, and who would, through development, improve the manufactures of their country, and eventually extend her commerce, increaſe her comforts, and by the introduction of more machines, would add to the number of agricultural labourers. So long as we have Moors to cultivate mines of iron, lead, copper, tin, coal, and lime to open, and canals to cut, to facilitate communication, there needs no fear on the part of journeymen for want of work. If individuals would come forward, and give to the public thoſe detached parts of knowledge in any of the ſciences, arts, or manufactures under their command, through

the medium of periodical publications (and yours, Sir, appears to me the beſt for that purpoſe) we might ſoon be enabled to furniſh a compiete hiſtory of each from their riſe, and correct many errors; it ſhould have the effect, though in a ſmall degree of the agricultural ſociety.

It may be ſaid, by ſome of your readers, "I wiſh the Editor would not inſert papers giving this *detail* of manufactures into his Magazine, they are not intereſting—they are totally unneceſſary." Perhaps ſuch, Sir, are too fond of interfering in the concerns of others—of giving their indigeſted opinions unaſked, an opinion, like the Chaos of Ovid.

> ——————rudis indigeſtaque moles
> pondus iners!

let ſuch look at home—to their judgments I appeal not—when I do, then will be their time to give advice; for my own part, Mr. Editor, I have thrice called your attention to the buſineſs of hat-making. You have as many times inſerted my communications, and I return you my moſt ſincere thanks for the attention you have paid to theſe papers, and indeed to all that I have ſent you. You have noticed them in a manner highly flattering to myſelf; did you think my papers on manufactures unintereſting, eſpecially hat-making, you, I am convinced, would never have inſerted them. The objects of my letters hitherto have been chiefly the diſplay of manufactures, or the advantages of houſes of induſtry—are not the comforts of the poor, and the beſt modes of ſuſtaining them (eſpecially when it has been lately declared in parliament, that the ſum expended for the ſupport of the poor the laſt twelve months, was the dreadful one of TEN MILLIONS of money) worthy of regard, for our own intereſt, if for no other end? and to a manufacturing country is the diſplay of the *details* of manufactures unintereſting? Juſt as rational would it be to ſupport the theory of the moſt complete toleration of opinion; and at the ſame time quarrel with my friend for not going with me to join in the ſame worſhip—to cry up the greateſt freedom of enquiry, and yet run away from him if he enquires on certain topics, or recommend him to adopt the ſentiments of *more* without inveſtigation, to "call *no* man *maſter* upon earth," and then leave him with coldneſs or ſcorn if he *diſputes* my unſupported opinion! I was much pleaſed to find the ſentiments of a very ingenious friend of mine correſpond ſo nearly with what I have written above on the ſubject of diſcloſure; and as ideas ſlightly varied, but differently expreſſed, have frequently the greater weight, I beg leave to copy a part of his letter. "It is much," he ſays, "to be regretted, that artiſts in general are ſo tenacious of their technical ſecrets, that notwithſtanding the advantages they would mutually derive from reci-

procal communication, they reſerve to themſelves, in the cloſeſt manner, any diſcovery they may have made. And yet, as it may owe its origin to accident or chance, they are perhaps incapable of improving to the extent it would admit of in the hands of men of ſcience. By this conduct they do themſelves a material injury, and by it they loudly proclaim their own want of genius, and as openly acknowledge their ignorance of the real principles of ſcience in general; for if we conſider the rapid progreſs that has been made of late years in every department of uſeful and practical knowledge, we muſt attribute it entirely to thoſe liberal communications that have been made by men whoſe attention has been more immediately directed to the promotion and improvement of every thing valuable to the public at large, than to their own private enrollment." Dr. JOHNSON, he continues, in the 201ſt Number of his Rambler, has introduced an obſervation of Mr. BOYLE's, quite in point to the preſent ſubject, that "the excellency of manufactures, and the facility of labour, would be much promoted if the various expedients and contrivances which lie concealed in private hands, were by reciprocal communications made generally known; for there are few operations that are not performed by one or another with ſome peculiar advantages, which, though *ſingly* of little importance, would *by conjunction and concurrence* open new inlets to knowledge, and give new powers to diligence." Many of the above reflections (except the letter from my friend) were ſuggeſted from the peruſal of a paper in a periodical publication that offered about ten years ago; and as the ſentiments and the plan the writer propoſes will ſuit your Magazine ſo well, your readers will accept of that as an apology for its being inſerted. "As *the* MANUFACTURES of this country, ſays that writer, are the principal ſource of its great wealth and political importance, it cannot but afford matter of reaſonable ſurprize, that ſo little has hitherto been aſcertained and publiſhed relative to the origin, progreſs, and extent of their ſeveral branches. We have, in fact, ſeen no attempt made towards digeſting a compleat treatiſe, or even compiling a ſtock of materials on this ſubject. The writers of local and county hiſtories, from whom we ſhould naturally expect the completeſt information of this kind, paſs over with incurious haſte, or total ſilence, the manufactures of their reſpective diſtricts. Almoſt the only exceptions to this remark (which is ſo diſgraceful to the national taſte, and eſpecially to our topographical hiſtorians) are the accounts of MANCHESTER and its environs, by Dr. AIKIN, containing a nearly complete account of the cotton manufactory, and the ingenious * lectures elucidating the various branches of our manufactures, as they are

* To theſe may now be added the Lectures at the Royal Inſtitution by Profeſſor Garnett.

connected with the science of chemistry by Professor FARISH, of Cambridge. My object, says that writer, in this letter, is to point out an easy and certain mode of adding considerably to our present scanty stock of published materials on this important topic. Among other uses of a miscellany (of the extensive plan and circulation of YOUR Magazine) I conceive none is of such importance as its affording at all times a *center* or *focus* to the correspondence of intelligent persons, on all subjects that may be interesting to the public."—Let it then, Mr. Editor, be henceforth generally understood, that a part of *your* miscellany will be expressly allotted to communications of *facts* relating to the state of our manufactures. The insertion of these hints will imply *your earnest invitation* of such communications; in all the manufacturing towns there reside a number of well-informed persons who will chearfully contribute I hope towards a design fraught with much extensive utility—may I presume to add a few hints to persons who will undertake the useful, and as I conceive *very interesting and pleasing task* of sending you information on this subject?

1st. The raw material ought to be traced from its growth or importation through each process to its actual consumption or exportation.

2d. The machinery employed ought to be as accurately described as possible, and mention made if patent or not—if it is—where enrolled.

3d. The number and the proportion of hands, male, female, and children, which each department gives employ to, with their several enrolments, ought to be ascertained—what bye laws and how best to abolish them—what terms of art—if the journeymen have only funds, how disposed of, and to what amount?

4th. The history of the manufactory, its first rise, gradual progress, and all its improvements and speculations, ought to be minutely investigated—add to this what engines, and by whom erected, and what department of the business they occupy?

5th. Its value to the public, its gross return and profit, ought to be fairly estimated.

6th. The good or *bad* influence that government has had upon it by *duties*, *stamps*, &c.

7th. Doubtless also, every peculiar branch will suggest of itself to the intelligent and philosophical observer, with other particulars which may be *equally accepted and interesting* to the public.

I am, Sir,
with great regard,
your old servant,

Newcastle, June 29, 1801. JOHN CLENNELL.

STONE POTS OF THE GRISONS, &c.

It is generally underſtood, that only the Eſquimaux, and ſome other ſavage hordes uſe kitchen-veſſels of the *Lapis Ollaris*. The following teſtimony, however, of their uſe among the Griſons more than an hundred years ſince, is by *Biſhop* BURNET. We inſert it at the requeſt of an ingenious and communicative friend. We would gladly learn, from any of our foreign correſpondents, whether the ſame pots continue ſtill in domeſtic uſe in that country?

THERE is a ſort of Pots of Stone that is uſed, not only in all the kitchens here, but almoſt all *Lombardie* over, called *Lavege*. The Stone feels oily and ſcaly, ſo that a ſcale ſticks to ones finger that touches it, and is ſomewhat of the nature of a ſlate. There are but few mines of it known in theſe parts, one near *Chavennes*, another in the *Valteline*, and the third in the *Griſons*; but the firſt is much the beſt. They generally cut in the mine around, of about a foot and a half diameter, and about a foot and a quarter thick; and they work it in a mill, where the chizzels that cut the Stone are driven about by a wheel that is ſet going by water, and which is ſo ordered that he who manages the chizzel, very eaſily draws forward the wheel out of the courſe of the water. They turn off firſt the outward coat of this Stone till it is exactly ſmooth; and then they ſeparate one Pot after another by thoſe ſmall and hooked chizzels, by which they make a neſt of Pots all one within another, the outward and biggeſt being as big as an ordinary beef-pot, and the inward pot being no bigger than a ſmall pipkin. Theſe they arm with hooks and circles of braſs, and ſo they are ſerved by them in their kitchens. One of theſe Stone Pots takes heat and boils ſooner than any pot of metal; and whereas the bottoms of metal-pots tranſmit the heat ſo intirely to the liquor within, that they are not inſufferably hot, the bottom of this Stone-pot, which is about as thick as a pot of metal, burns extremely. It never cracks, neither gives it any ſort of taſte to the liquor that is boiled in it; but if it falls to the ground it is very brittle: yet this is repaired by patching it up; for they piece their broken pots ſo cloſe, though without any cement, by ſowing with iron wire the broken parcels together, that in the holes which they pierce with the wire there is not the leaſt breach made, except that which the wire both makes and fills. The paſſage to this mine is very inconvenient; for they muſt creep into it for near half a mile through a rock that is ſo hard that the paſſage is not above three foot high, and ſo thoſe that draw out the ſtones creep all along upon their belly, having a candle faſtened in their forehead, and the ſtone laid on a ſort of cuſhion made for it upon their hips: the ſtones are commonly two hundred weight.

E.

THE BRITISH MERCHANT. No. VII.

HISTORY OF COMMERCE DURING THE NINTH AND TENTH CENTURIES.

IN the ninth century the feodal law was fully eſtabliſhed in France and Germany, from whence it was ſoon after the cloſe of the tenth century carried into England. The cities which had exiſted in the time of the Romans were now deſtroyed, and the towns which were now in being were ſmall. Some woollen and iron manufactories were carried on in the ſouth of France; Italy was the only place where commerce reared its head, except ſome trade which the French enjoyed from Marſeilles to Alexandria and the Levant. So little was learning cultivated in this age, that a man verſed in mathematics or philoſophy was deemed a magician. Our Alfred endeavoured to promote learning, commerce, and uſeful diſcoveries; but the circumſtances of the times would not permit any great progreſs.

During this century, however, the Arabs invented the ten numerals we now uſe, which are ſo much more uſeful and ready than the Roman letters before in uſe. It is remarkable that, ſo early as Charlemagne's time, as there were real coins of gold and ſilver, ſo there were imaginary monies, or what we now call monies of account. A livre of France at this time contained twelve ounces of ſilver, but by degrees was diminiſhed to what it now is, not quite one ſixtieth part.

A. D. 803. The Venetians had now begun to carry on a very beneficial commerce to the Levant, from whence they brought ſpices, ſilks, drugs, and fruits, from the Eaſt in great abundance, and, by means of their ſhipping, now grown numerous, and by land carriage, ſupplied the reſt of Europe. This commerce was of ſo much importance, that when Charlemagne was about to declare war againſt the Greek Emperor, they choſe to make a ſecret alliance with that prince, rather than riſk the loſs of that commerce.

808. Charlemagne purſuing his conqueſts in Germany, founded Dreſden on the Elbe; and he is ſaid alſo to have eſtabliſhed couriers or poſts in Germany, France, and Italy. Meantime, in the Northern Seas, piracy ſeems the only trade carried on by the Daniſh and other Northern rovers, who made the iſland of Zeeland, eſpecially Walcheren, their places of rendezvous.

837. About this period the city of Bremen appears to have been conſiderable, and about the ſame time the Norwegians became acquainted with Old Greenland, which the Danes, according to their chronicle, had diſcovered in 770.

839. Soon after the Orkney Iſlands, which had hitherto been under their own petty kings, became ſubject to the Scots.

840. London was burned by the Danes this year, and they again viſited it eleven years after. The city was not rebuilt by Alfred till 872. This prince contributed much to civilize his country, and to raiſe it from the condition to which the Danes had reduced it. He built his palaces of ſtone or brick, for, before, the houſes of the nobles and even of the kings were built of timber.

874. Some conſiderable families, diſcontented with their ſituation in Norway, removed to and ſettled in the barren iſland of Iceland, and there opened a fiſhing for cod, and a commerce for oil, coarſe cloth, and brimſtone. Stock-fiſh caught on the coaſt and dried by froſt alone has ſince become a conſiderable article of commerce, and we believe is peculiar to that iſland.

879. The city of Ghent, in Flanders, muſt now have been of ſome conſideration, ſince the Danes, after being driven out of England by Alfred, went thither, plundered it, and made a conſiderable booty.

882. Alfred founded Shafteſbury, in Dorſetſhire, and the next year ſent Sigbert, afterwards Biſhop of Sherbourn, to Rome, who afterwards travelled to St. Thomas's, now Meliapour, in India, and brought back ſome precious ſtones and gems. Hiſtorians inform us, that king Alfred built many ſhips, which, with money alſo, he lent to the merchants to trade to India, from whence they brought precious ſtones and other commodities; but this muſt have been by means of Alexandria: indeed we are told by others that the factors or merchants went from thence over the Iſthmus and down the Red Sea in other ſhips.

887. Venice had now by commerce gained ſo much ſtrength as to become miſtreſs of the Adriatic Sea, ſhe had alſo gained good territories on the Continent. About this period, Octher, a Norman, came to England, and gave Alfred an account of his diſcoveries to the northward. He informed that prince that he had ſailed as far to the northward as where the whale hunters uſed to travel; a proof of the antiquity of that fiſhery: they alſo, he ſays, fiſhed for what he calls horſe whales, whoſe teeth were of value, and of whoſe hides they made cables: this muſt have been the animal we call the ſea horſe, whoſe tuſk is a bad ſort of ivory, and their ſkins, when dreſſed, of remarkable toughneſs. At this time they uſed their ſeal ſkins for ſmall cordage. It appears by this narration that he made a good ſurvey, not only of Norway as far as the North Cape, but along the coaſt of Lapland to the White Sea.

The commencement of the tenth century exhibited little pleaſing, except in Italy and Greece, where manufactures and commerce flouriſhed in ſome degree. But Germany ſoon aſſumed a better face under the emperor Henry the Fowler, who raiſed (about A. D. 919) the commonalty of his countries, and the artificers of them to a better ſtate than they had yet

enjoyed. In England, too, king Athelſtan turned his mind to the encouragement of commerce, and enacted that every merchant who made three voyages to ſea ſhould be raiſed to honour, and enjoy the privileges of a gentleman. He appointed alſo mints for the coinage of money at London, Canterbury, Rocheſter, Wincheſter, and many other towns.

933. Italy now began to be afflicted by the ravages of the Saracens on one ſide and the Huns on the other. The Arabs at this period ſeem to have enjoyed all the commerce of the countries beyond the Cape of Good Hope. In Africa they are ſaid to have built the towns of Bravo, Mombaza, Quiloa, Moſambique, Sopala, &c. and ſpread themſelves all over the coaſts of India. The ſilver mines of Germany, ſituated at Goſlar, in Saxony, began now to be worked (A. D. 940), as were alſo thoſe of Hartz, and great quantities of ſilver were drawn from them, which, being circulated, gave a vigour to commerce.

960. The woollen manufactory of Flanders began to flouriſh ſoon after: the Flemings, De Wit ſays, were the firſt who earned their living by weaving, and by this means they not only fed themſelves, but were enabled to put their fellow countrymen into good apparel. Baldwin, their earl, about this time alſo eſtabliſhed fairs and markets, to which goods might be ſent for ſale without toll; he alſo invited into his dominions all manner of handycraftſmen.

A. D. 970. Silver was ſo ſcarce or land ſo cheap in England that it was ſold at one ſhilling an acre. The city of Dublin now began to flouriſh. A law was made by king Edgar, directing that none but royal money ſhould be current, and that one general meaſure ſhould be uſed, the ſtandard of which ſhould be kept at Wincheſter; by the former law all the private mints, of which many had hitherto exiſted, became uſeleſs, as their money was no longer current; and by the latter the meaſures were properly regulated, and have to this day retained the title of the Wincheſter meaſure. The ſame king alſo fixed on Billingſgate as the quay for London, and directed what toll ſhould be paid there. At this time merchants of all nations had their diſtinct quays and wharfs: the Dutch had the Steel yard, the French for their wines the Vintry. Towards the latter end of this century the people of Biſcay began to employ themſelves in manufacturing their excellent iron for exportation, and the inhabitants of Bilboa had many ſhips and much commerce. The Chronicon Pretioſum, by biſhop Fleetwood, ſays, that in the year 1000 an ox was ſold for two ſhillings and ſixpence, equal in ſilver to ſeven ſhillings and ſixpence of our money. A cow was ſold at two ſhillings, a ſheep one ſhilling, a ſwine one ſhilling and ſixpence.

B.

ON THE NECESSITY AND IMPORTANCE OF TOPOGRAPHICAL INFORMATION.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

IN the 255th page of your ſecond volume you ſay, that "communications on the ſubject of Topographical Information are earneſtly requeſted from every town in the kingdom." I hope, Sir, you will give me leave at preſent to point out ſome of the advantages of this kind of information, and to hint a plan to any of your correſpondents that may be meditating ſuch a ſubject in compliance with your requeſt. The advantages are numerous and important. A regular knowledge of our own country is certainly expected from us by foreigners: and, to narrow the argument, the mutual communication of the manufactures, ſituation, population, and improvements, &c. of our provincial towns, is, when viſiting well-informed friends at a diſtance from our places of nativity, alſo expected from us for them. Of theſe things, what a ſhame is it for a man of buſineſs to be ignorant! From ſuch accounts the commercial man will obtain freſh probabilities of connection—the man of letters and of ſcience will be led directly to the curioſities, the literati, or the athenæums of the place; the antiquary will more readily feel the attraction of "mouldering walls and nodding parapets;" and the traveller, "by his own fire ſide," will be cheaply ſupplied with his favourite object, "when he will, and where." Surely, Sir, you will join with me in ſoliciting ſuch information promiſing ſo many agreeable conſequences! Will ſuch as are willing to give us their obſervations on that ſubject look over the following diſtribution of the matter,—and if they have not met with a better, this is at their ſervice,—if they have, I ſhall thank them ſincerely for imparting theirs—I would recommend

1ſt. A Sketch of the Situation and General Appearance of the Town, its Public Buildings, Inſtitutions, &c.

2dly. Of its Commerce, Manufactures, &c.

3dly. The State of Society and Manners, and of the Religious and Political Parties, &c.

4thly. Conſiderations reſpecting its *capacity of improvement, and the obſtacles which exiſt to its more rapid progreſs in this reſpect.* This fourth diviſion I would particularly recommend. Towns, like individuals that compoſe them, muſt know their faults before they can be remedied.

I am, Sir,

Your old ſervant,

J. CLENNELL.

ON SEED POTATOES, AND CHANGE OF SORTS.

To the Editor of the Commercial and Agricultural Magazine.

SIR, *Briſtol, July* 15, 1801.

I HAVE ſeen an obſervation in one of your Magazines, which ſays, "that any remark which tended to improve the culture of moſt valuable root the Potatoe is worthy of public attention." I therefore take the liberty of ſending you an obſervation or two on that ſubject.

I have heard a friend of mine ſay, that the deſtructive curl in Potatoes will be effectually prevented, by not ſuffering the bloſſoms of ſuch Potatoes as you intend to uſe for planting to grow to maturity, and to form ſeed; for in perfecting the ſeed, he ſays, a large portion of the ſubſtance and ſtrength of that plant is drawn from the root, and the Potatoe of courſe rendered leſs fit to be uſed as ſeed. If this, however, does not prevent the above malady, I can inform your readers what will effectually do it in any part of England. Let ſeed be procured every ſecond or third year from Scotland or Ireland, which may eaſily be done by application to any of our ſea-port towns, at a very trifling extra expence. I am your humble ſervant,

JOHN MILLER.

AN APPARATUS TO THE HISTORY OF THE COMMON PRACTICES OF DYEING. BY SIR WILLIAM PETTY.

IT were not incongruous to begin the hiſtory with a retroſpect into the very nature of light itſelf (as to inquire whether the ſame be a motion or elſe a body;) nor to premiſe ſome theorems about the ſun, flame, glow-worms, the eyes of ſome animals, ſhining woods, ſcales of ſome fiſhes, the daſhing of the ſea, ſtroaks upon the eyes, the Bolonian ſlate (called by ſome the magnet of light), and of other light and lucid bodies.

It were alſo not improper to conſider the very eſſentials of colour and tranſparencies (as that the moſt tranſparent bodies, if ſhaped into many angles, preſent the eye with very many colours;) that bodies having but one ſingle ſuperficies, have none at all, but are ſuſcipient of every colour laid before them; that great depths of air make a blue, and great depths of water a greeniſh colour; that great depths or thickneſſes of coloured liquors do all look blackiſh (red wine in a large conical glaſs being of all reddiſh colours between black at the top and white at the bottom.)

That moſt vegetables, at one time or other, are greeniſh; and that as many things paſſing the ſun are blackened, ſo many others are much whitened by the ſame: other things are whitened by acid fumes, as red roſes and raw ſilks by the ſmoak of brimſtone.

Many metals, as ſteel or ſilver, become of various colours and tarniſh by the air, and by ſeveral degrees of heat.

We might conſider the wonderful variety of colours appearing in flowers, feathers; and drawn from metals, their calces and vitrifications; and of the colours riſing out of tranſparent liquors artificially mixed.

But theſe things, relating to the abſtracted nature of colours, being too hard for me, I wholly decline; rather paſſing to name (and but to name) ſome of the ſeveral ſorts of colorations now commonly uſed in human affairs, and as vulgar trades in theſe nations, which are theſe, viz.

1. There is a whitening of wax, and ſeveral ſort of linen and cotton clothes, by the ſun, air, and by reciprocal effuſions of water.

2. Colouring of wood and leather by lime, ſalt, and liquors, as in ſtaves, canes, and marble leathers.

3. Colouring of paper, viz. marbled paper, by diſtempering the colours with ox-gall, and applying them upon a ſtiff gummed liquor.

4. Colouring, or rather diſcolouring the colours of ſilks, tiffanies, &c. by brimſtone.

5. Colouring of ſeveral iron and copper works, into black, with oil.

6. Colouring of leather into gold colour, or rather ſilver into gold by varniſhes, and in other caſes by urine and ſulphur.

7. Dying of marble and alabaſter with heat and coloured oils.

8. Colouring ſilver into braſs with brimſtone or urine.

9. Colouring the barrels and locks of guns into blue and purple, with the temper of ſmall coal heat.

10. Colouring of glaſs (made of ſands, flints, &c.) as alſo of cryſtals and earthen ware, with the ruſts and ſolutions of metals.

11. The colouring of life hair, as in Poland, horſe and man's hair; as alſo the colouring of furs.

12. Enamelling and anealing.

13. Applying colours as in the printing of books and pictures, and as in making of playing cards; being each of them performed in a ſeveral way.

14. Gilding and tinning with mercury, block-tin, ſal-ammoniac.

15. Colouring metals, as copper with calamy into braſs, and with zink or ſpelter into gold, or into ſilver with arſenic: and of iron into copper with Hungarian vitriol.

16. Making painters colours by preparing of earth, chalk, and ſlates; as in umber, oker, cullen-earth, &c. as alſo out of the calces of lead, as ceruſe and minium; by ſublimates of mercury and brimſtone, as in vermilion; by tinging of white earths variouſly, as in verditer, and ſome of the lakes; by concrete

juices or fæcula, as in gambougium, indigo, pinks, ſap-green, and lakes: as alſo by ruſts, as in verdegreaſe, &c.

17. The applying of theſe colours by the adheſion of ox-gall, as in the marbled paper aforeſaid; or by gum water, as in limning; or by clammy drying oils, (ſuch as are the oils of linſeed, nuts, ſpike, turpentine, &c.)

18. Watering of tabbies.

19. The laſt I ſhall name is the colouring of wool, linen, cotton, ſilk, hair, feathers, horn, leather, and the threads and webs of them with woods, roots, herbs, ſeeds, leaves, ſalts, limes, lixiviums, waters, heats, fermentations, macerations, and other great variety of handling: an account of all which is that Hiſtory of Dyeing we intend. All that we have hitherto ſaid being but a kind of remote and ſcarce pertinent introduction thereunto.

I begin this hiſtory by enumerating all the ſeveral materials and ingredients which I underſtand to be or to have been uſed in any of the laſt aforementioned colorations, which I ſhall repreſent in various methods, viz. Out of the mineral family, they uſe iron and ſteel, or what is made or comes from them, in all true blacks (called Spaniſh blacks), though not in Flanders blacks, viz. they uſe copperas, ſteel-filings, and ſlippe, which is the ſtuff found in the troughs of grind-ſtones, whereon edge-tools have been ground. They alſo uſe pewter for bow-dye, ſcarlet, viz. they diſſolve bars of pewter in the aqua fortis they uſe; and make alſo their dying kettles or furnace of this metal.

Ligarge is uſed by ſome, though acknowledged by few, for what neceſſary reaſon I cannot learn, other than to add weight unto dyed ſilk; litharge being a calx of lead, one of the heavieſt and moſt colouring metals.

I apprehend antimony is much uſed to the ſame purpoſe, though we know there be a very tingent ſulphur in that mineral, which affordeth variety of colour by the precipitations and other operations upon it.

Arſenick is uſed in crimſon, upon pretence of giving luſtre, although thoſe who pretend not to be wanting in giving luſtre to their ſilks, do utterly diſown the uſe of arſenic.

Verdegreaſe is uſed by linen dyers in their yellow and greeniſh colours, although of itſelf it ſtrike not deeper colour than of pale ſtraws.

Of mineral ſalts uſed in dyeing; the chief is alum; the very true uſe thereof ſeems to me obſcure enough, notwithſtanding all the narrations I could get from dyers about it: for I doubt,

1. Whether it be uſed to make common water a fit menſtruum, wherewith to extract the tingent particles of ſeveral hard materials; for I find alum to be uſed with ſuch materials as ſpend eaſy enough, as braſil, logwood, &c. And withal, that the ſtuffs to be dyed are firſt boiled in alum liquors, and the alum after-

wards (as they ſay) cleared from the ſaid ſtuff again, before any colour at all be applied.

2. Whether it be uſed to ſcour the ſordes, which may interpoſe between the coloranda, and the dying ſtuff; and ſo hinder the due adheſion of the one unto the other: the boiling of ſeveral things firſt in alum ſeeming to tend this way. But I find this work to be done in cloth and rugs, by a due ſcouring of the ſame in the fulling-mills with earth, and in ſilk with ſoaps, by which they boil out the gums and other ſordes, hindering or vitiating the intended colours.

3. Whether alum doth intenerate the hairs of wool, and hair-ſtuff, as grogains, &c. whereby they may the better receive and imbibe their colours? Unto which opinion I was led by the dyers; ſaying, that after their ſtuffs were well boiled in alum, that they then cleared them of the alum again: but we find the moſt open bodied cottons and ſilks, to have alum uſed upon them; as well as the harder hairs. Nor is alum uſed in many colours, viz. in no wood or indigo blues; and yet the ſtuffs dyed blue are, without any previous intenerating, quickly tinged; and that with a ſlight and ſhort immerſion thereof into the blue fat.

4. Whether it contribute to the colour itſelf, as copperas doth to galls, in order to make it black; or as juice of lemons doth to cochineal in the incarnadives; or as aqua fortis impregnated with pewter doth in the bow-ſcarlet, changing it from a red roſe crimſon to flame colour. This uſe is certainly not to be denied to alum in ſome caſes; but we ſee in other caſes that the ſame colours may be dyed without alum, as well as with it, though neither ſo bright and lively, nor ſo laſting.

5. Wherefore, fifthly, I conclude (as the moſt probable opinion) that the uſe of alum is to be a vinculum between the cloth and the colour, as clammy oils and gum waters are in painting and limning; alum being ſuch a thing, whoſe particles and aculei diſſolved with hot liquors will ſtick to the ſtuffs, and pitch themſelves into their pores; and ſuch alſo, as on which the particles of the dying drugs will alſo catch hold, as we ſee the particles of copperas and other chryſtallizing materials, do of boughs and twigs in the veſſel, where ſuch cryſtallization is made. A ſecond uſe of alum in dying, to be the extracting or drying up of ſome ſuch particules, as could not conſiſt with the colour to be ſuperinduced for we ſee alum is uſed in the dreſſing of alutas or white leather, the which it drieth, as the ſalt of hen-dung doth in ox-hides, and as common ſalt doth in preſervation of fleſh-meats; for we know, a ſheep-ſkin newly flayed could not be coloured as raſils are, unleſs it were firſt dreſſed into leather with alums, &c. which is neceſſary to the colour, even although the alum be, as it is, cleared out of the leather again,

before the ſaid colouration, with bran, yolks of eggs, &c. Wherefore as alum, as it were by accident, makes a wet raw ſkin to take a bright colour by extracting ſome impedimental particles out of it; ſo doth it alſo out of other materials, though perhaps leſs diſcernably.

Another uſe I ſuppoſe of alum, which is to brighten a colour: for as we ſee the fineſt and moſt glaſſy materials to make the moſt orient colours, as feathers, flowers, &c.; ſo certainly if by boiling cloth in alum, it become incruſtated with particles, as it were of glaſs, the tinging of them yields more brightneſs, than the tinging of a ſcabrous matter (ſuch as unalumed cloth is) can do. Analogous hereunto I take the uſe of bran, and bran-liquors in dying to be; for bran yielding a moſt fine flour (as we ſee in the making of white ſtarch;) I conceive that this flour entering into the pores of the ſtuff, levigates their ſuperficies, and ſo makes the colour laid on it the more beautiful, juſt as we ſee that all woods, which are to be gilded, are firſt ſmoothened over with white colours before the gold be laid on.

And, indeed, all other woods are filled, not only as to their greater holes and aſperities, with putty; but alſo their ſmaller ſcabrities are cured by priming colours, before the ultimate colour intended be laid thereon.

(*To be continued.*)

PRESENT STATE OF COMMERCE AND AGRICULTURE IN FRANCE.

To Mr. G—, Publiſher of the Commercial Magazine.

DEAR SIR, *Paris, July* 17, 1801.

YOU urgently requeſted me when I ſaw you laſt to ſend you a letter of intelligence for your Magazine from the metropolis of France. I could not promiſe. My readineſs to ſerve you was not to be doubted. But I knew not whether I ſhould have opportunity to learn any thing of conſequence relative to Commerce, Agriculture, and the uſeful Arts; nor was I aware whether an epiſtle on ſuch ſubjects might be eaſily conveyed to you.

I have now, however, been three weeks in Paris. I remember your earneſtneſs in the requeſt. What I know, therefore, I ſhall impart; and let it find its way to you how it beſt may.

The French, for the preſent, look on their FOREIGN TRADE by ſea, as in an almoſt hopeleſs condition. Of neceſſity they ſtrive to preſerve their *coaſting trade*: they preſerve it with difficulty, and with immenſe loſs. On the other hand, they make great and not unſucceſsful efforts to create a vaſt inland trade. They are forming *canals* in the northern provinces with an activity which, had I not witneſſed it, I ſhould have thought impoſſible amidſt their mighty exertions in war. They have a number of very able engineers; and they are ſufficiently aware of the

importance of canals to the cheap and eaſy conveyance of goods, and of the eaſy and cheap conveyance of goods to the proſperity of their traffic. Within a few years, when there ſhall be due ſecurity in funding money upon canals, this branch of improvement will undoubtedly be advanced here to a ſtate equal to that of your canal-improvements in England. The *great roads* in France were formerly better than thoſe in almoſt any other part of Europe. They had been neglected amidſt the confuſion and the difficulties of the Revolution. Since the acceſſion of Bonaparte to the Conſulate, the attention of Government has been turned to the reſtoration of the roads. The *Corvées* were aboliſhed at the commencement of the Revolution. But, it has appeared again neceſſary, that the roads ſhould for the preſent be made and repaired by the perſonal labour of the inhabitants of the diſtricts through which they reſpectively paſs. Croſs-roads begin to be multiplied throughout the country. Before the Revolution, theſe were, comparatively, few.

Bonaparte has been perſuaded, in order to eſtabliſh a great monied intereſt, to open, under certain regulations, places of mercantile exchange in all the great towns of France. This attempt is, perhaps, premature. Peace with Britain muſt give ſtability to the government in the general eſtimation of the whole people, before it can have ſufficient credit to create a great trade in its ſecurities. *Fairs* are for all ſorts of commodities, the grand occaſions of ſale in Germany and on other parts of the Continent. The preſent government has lately done much for their encouragement and regulation. I am told, that the *fairs* of the preſent ſeaſon have been unuſually well frequented, with the beſt effects, throughout all France. The ſolemnities of the 14th of July, which I witneſſed two days ſince, appeared to me much rather as the feſtivities of a fair than in any other light. The occaſion has contributed greatly to enliven for the month the buſtle and the traffic of Paris. It is certain, that much money has been brought into circulation in France by the war. It is partly a conſumption of the national capital, in part, the pillage of the conquered countries. The poſſeſſors of it are ſtill unwilling, either to lay it out in the purchaſe of lands, or to lend it to the conſular government. It is, therefore, partly hoarded up in their ſtrong-boxes—partly conſumed in preſent extravagance juſt as that of Britiſh ſailors when they come to a port and receive their pay,—and in great part uſed in plate, which ſerves for preſent ſplendour of dreſs and furniture, and may hereafter be melted down.

To the improvement of their Manufactures, likewiſe, the French are at preſent willing to pay great attention. The making of *paper from* STRAW, which has of late engaged the exertions of ſome people in London, is ſtill more perfectly, and with equal eagerneſs now executed at Paris. Almoſt all your

improvements of the *ſteam engine* have been anticipated or adopted in France. CHAPTAL and *Bonaparte* ſpare no pains to excite a ſpirit of activity and emulation among the cotton-manufacturers, which may enable them in the end to rob Britain of its ſuperiority in this great and ſtaple branch of its induſtry. They have attained to great ſkill in the art of preparing *factitious mineral waters*. They manufacture all the lighter *woollen ſtuffs* with a ſkill which more than rivals ſome of your moſt elegant fabrics. The manufacture of every thing uſeful among the ſtores and inſtruments of war has been, of courſe, greatly encouraged during th ſe laſt ten years. Excluſive privileges are, under certain reſtrictions, readily granted for the encouragement of all uſeful inventions. *Berthollet*'s mode of bleaching was firſt adopted into ſucceſsful practice in France. It is now better underſtood. And Chaptal's invention for performing the ſame effects with the *vapour of ſoda* is likely to come into ſtill more general uſe, becauſe leſs prudence and leſs ſcentific knowledge are requiſite to employ this, than to employ Berthollet's, with ſucceſs. Much attention has been lately given to the *improvement of fire-places* and the reſearch for means to introduce new *economy in the uſe of fuel*. The *ſoup-houſes* of your enlightened and benevolent Count Rumford have been adopted with the greateſt enthuſiaſm and advantage in this country. The *potteries* are in a very flouriſhing ſtate. The *mines* are likely to be ſoon wrought here with new ſucceſs. *Pit-coal* comes continually more and more into uſe. I am really inclined to think, that the *aeronauts* and *aeraſtats* will ſooner or later ſucceed in improving the balloon to ſome important uſes in the ordinary practice of life.

In AGRICULTURE, *neceſſity*, and the *new ſpirit* of the peaſantry, who work twice as heartily as before—now that it is for themſelves—not merely for oppreſſive Lords they labour,—theſe two cauſes have lately contributed to render the tillage of France more extenſive than it was before the Revolution. The average price of wheat throughout all France, in April and May laſt, did not exceed three half-pence a pound. Conſiderable attention begins to be paid to the culture of potatoes. Agricultural Societies are inſtituted, in almoſt every department. Their reſearches are much more vigilant, in various inſtances, than yours. Francis de Neufchateau, not long ſince in a much more eminent office, now preſides in the Agricultural Society of the department of the Seine. He is a conſtant reader, as I have had acceſs to learn, of your Magazine. And your correſpondents do not propoſe a ſingle improvement in huſbandry that is at all plauſible, which does not meet with the ſerious conſideration of him and eight or ten more of the moſt reſpected members of the national inſtitute.

The government itſelf has not diſdained to borrow a ſcheme which was, ſome time ſince, propoſed in one of your Numbers, for the eſtabliſhment of an European ſettlement in the Friendly or the Sandwich Iſles; and Capt. Baudin has gone out as much with that view, as for any purpoſes of new diſcovery.

Spaniſh ſheep have been introduced into France, with a great anxiety on the part of the government to improve the wool and woollen manufactures of the country. In the vicinity of the Alps is one flock; at Rambouillet another; a third was, by the munificence of General Moreau, not long ſince, preſented to the people of Straſburgh. They produce as much wool, and that as excellent in quality, in France as in Spain. It is probable that their numbers may be ſoon greatly multiplied; and that the French may hence have wool of the native growth of France in ſufficient abundance, and of ſufficient fineneſs, to ſerve every purpoſe of improvement which their woollen manufacture demands.

The foreign ſale of the wines of France has been greatly checked by the war. The vineyards have in various places, during the preſent ſeaſon, ſuffered much by ſtorms; yet the produce will this very year be moſt copious. The cellars are filled with prodigious quantities of the beſt wine in the world. And Chaptal, and other chemical philoſophers, have lately, with great induſtry, endeavoured to draw from the enquiries of ſcience new lights to perfect the common methods by which wine is prepared. The French are ſufficiently aware that their horſes are, in compariſon with thoſe of England, but a ſorry race. They have of late imported good horſes from Spain, Flanders, and Holſtein. They are even deſirous to inſtitute horſe-races. And I doubt not but in time they may come to poſſeſs teams as good as yours.

To conclude this rambling letter; I muſt inform you, that a mode of writing has been juſt invented here, by which any man may write at once to the people who ſpeak all the different languages of Europe. Form a Dictionary in which each word of theſe languages ſhall be explained into the correſponding word in every one of the reſt. Let your comparative dictionary proceed in the leading language, and of courſe in the correſponding ones, from the beginning to the end of the alphabet. Number your words by the Arabic numeral figures, in regular ſucceſſion from firſt to laſt. Let all the people ſpeaking the languages which it comprehends poſſeſs copies of it. In writing, then uſe the *dictionary-numbers* of the words, inſtead of the words themſelves. What you write will, with the dictionary's aid, be underſtood by perſons knowing any one, though only that, of the languages it compares. Any perſon, with the dictionary's help, may thus write in his own language

what people who underſtand not his ſpeech, ſhall eaſily read in theirs. The author of this contrivance is Citizen ZALKIND HOURWITZ.

I am obliged to ſtop here; nor do I know when it may be in my power to write you again. I ſet out in a few days for Straſburgh. I am, Sir,

Yours ſincerely.
W—— B——N.

AN ACCOUNT OF THE ISLAND OF NANTUCKET.

To the Editor of the Commercial and Agricultural Magazine.

SIR,

IN traverſing the United States of America, we find a variety of ways by which mankind gain their ſubſiſtence. On the maritime coaſts which abound with fiſh, the fiſhing furniſhes ſubſiſtence to ſome; others in other parts cut down the pine trees on the borders of the rivers, and forming them into rafts, conduct them with great addreſs down rapid water falls to the borders of the ſea, where they are employed for ſhipping; in ſome places they build ſhips for the uſe of any nation; in the boſom of the mountains they fabricate iron, ſteel, cannon and anchors; in other places they convert the trunks of trees into planks of different dimenſions, by means of ſaw-mills; almoſt every where they work the plough, cultivate the ground, raiſe cattle, clear and incloſe new grounds, ornament nature by their labours, and people the deſarts.

There is a place where they exerciſe none but the former of theſe employments, for its land is unfruitful, its extent very bounded, and its ſituation incommodious. Such is the iſland of Nantucket. This little place does not poſſeſs any materials for the building of ſhips, nor for the conſtruction of houſes; it ſeems to have been peopled only to ſhew what man is capable of, when his genius is permitted to exert itſelf in peace, and when his induſtry is free and unchecked. Here we may behold the happy effects of ſagacity and perſeverance. Nantucket has no other hiſtorical facts to relate, but the progreſs of the labour of its inhabitants from their firſt ſettlement, to this day. It is pleaſant to trace ſuch a people riſing from their firſt humble ſtate to the civil happineſs and opulence they now enjoy; and to take a view of their cuſtoms, religion, politics, fiſheries, commerce, and government.

No ſedition, no political convulſion ever tarniſhed the glory or interrupted the happiness of this inſulated ſociety. A ſandy iſland, containing ſcarcely twenty-three thouſand acres, the ſurface of which preſented neither meadows, nor land fit for the plough, has however a town, containing about five hundred houſes, inhabited by more than five thouſand inhabitants; has

belonging to it upwards of two hundred ſail of ſhips, and employs upwards of two thouſand ſeamen*. If this iſland had been placed under a great monarchy, it would never have nouriſhed more than a few villages of fiſhermen, who, bending under the weight of taxes, had never puſhed their projects or their hopes beyond a weak and precarious ſubſiſtence. It had never known that boldneſs of ſpeculation, that fecundity of plans ſo natural to the inhabitants of Nantucket, which has raiſed them to be merchants, ſometimes cruiſers, and the firſt whalefiſhers in the world. They ſail to the north; under the line; to the coaſt of Guinea; to the Brazils; and even within ſight of the other pole to attack that enormous fiſh, which, by its ſwiftneſs and ſtrength would ſeem unconquerable.

This iſle is ſituated in the latitude of 41. 10. north, one hundred miles N. E. of cape Cod, twenty-ſeven from Barnſtable, twenty-one from Marthag's Vineyard, eight from Boſton.—The town of Sherburn is its capital, conſiſting of the full number of five hundred houſes, all built of wood and plaiſtered within, their beſt rooms are ornamented with paper, the outſides are planked with cedar, neatly jointed and painted. Each houſe has a vault built of ſtone, and raiſed about three feet above the level of the earth. Nothing can be more ſimple than their architecture; and their only ornaments are neatneſs and cleanneſs. All the materials are brought from the continent. The town is built on a ſandy hill, which riſes gradually from the ſhore; the haven is convenient, and ſheltered from the winds. There are only two places of public worſhip; the one for the Quakers, the other for the Preſbyterians. In the middle of the town is an inſulated building as ſimple as the reſt, which is their town houſe, where juſtice is adminiſtered, and their public records preſerved; the market is near. The fields in the vicinity of the town, made fertile by the induſtry of theſe good people, now produce corn and garden ſtuff. The ſtreets of the town are not ſo ſtraight or regular as might be expected from a ſet of people who obſerve the greateſt order to every thing they do. Many of the ſtreets are ornamented with peach and cherry trees, as are the neighbouring fields; the air and the ſea prevent apple trees from coming to perfection.

Although there is not any mountain in this iſland, yet the ſurface is very unequal, and theſe inequalities form ſeveral marſhes covered with a herb called *blue bent*. Theſe marſhes alſo furniſh the poor with excellent turf for burning. There are in the iſland no leſs than fourteen different lakes; ſome ſerve as boundaries and for the uſe of the cattle, others ſupply plenty of fiſh and game. The ſtreets of the town are not paved; but as few carriages come from the country, and thoſe of the town are

* This was written ſoon after the late war; the number of ſhips and ſeamen has ſince increaſed.

only employed for the purpoſes of commerce, this is no inconvenience. The firſt thing which ſtrikes a ſtranger on arriving, is the ſtrong ſmell of the whale oil, the chief article of commerce of the place: this is an unavoidable inconvenience, to which a perſon is ſoon accuſtomed; and is an evil which even the natural expertneſs of theſe people cannot prevent. The oil is the produce of their harveſt: it is from their ſingular addreſs in taking the whale, and the boldneſs of their ſurpriſing voyages in all climates, to which they owe their riches.

They have ſeveral ſhipping quays, many extenſive warehouſes, convenient and well built, wherein the oil is depoſited, as well as the materials neceſſary for the equipment of their ſhips. They have three jetties or projecting wharfs of three hundred feet long, round which there are uſually ten feet water, they are formed of trunks of trees filled up with ſtones, and covered with ſand. To load and unload their goods from the ſhips, they have little cars drawn by one horſe, which are the only carriages of the iſland. The conſtruction of theſe jetties gives a ſtranger a high idea of the inhabitants. Some days after the arrival of their fleet, the noiſe and activity ſhewn in the town would make you think that Sherburn was the capital of a conſiderable province. They have built a light-houſe on the weather ſide of the harbour, which is lofty, ſolid, and elegant.

If the ſight of ſo many ſhips in the harbour inſpires us with inſtructive ſentiments, a proſpect of the fields on the other ſide is not leſs ſatisfactory. With a perſeverance and ſagacity which excite aſtoniſhment, the inhabitants have found the means to fertiliſe their barren ſands. The mud of their ſtreets, the dung of their cows, the ſoil of their ſheep, the ſlime of the harbour, ſtraw, ſoil of every kind, have been uſed. They have ſought for and adopted every method to give conſiſtence to their ſands, and they have ſucceeded. The land contiguous to Sherburn, produces mays or Indian corn, excellent potatoes, peas, beans, and various other productions. They have on the moſt elevated part four wind-mills to grind the corn they grow or purchaſe; and not far from hence is a houſe where they make their cordage. A little diſtance from the town we beheld an excellent meadow incloſed with care, and formed with ſo much expence as to ſhew us how valuable and ſcarce hay is in the iſland of Nantucket. Few plantations are to be ſeen in this iſland, for there are but few places where the plough can be uſed without very expenſive and indiſpenſable preparation. In 1762 this iſland was granted under the ſeal of the province of New York to twenty-ſeven proprietors, (who alſo claimed under their grant all the adjacent iſlands.) The firſt inhabitants, finding their new acquiſition ſterile, and little adapted to agriculture, agreed not to divide it: they found themſelves ob-

liged to turn their induſtry towards the ſea, the riches of which determined them to become fiſhermen. For this purpoſe they firſt ſought a harbour, at the bottom of which they built a village compoſed of twenty-ſeven houſes. Having ſurveyed the ground round this bay, they divided it into twenty-ſeven portions of four acres each, which they called *home-lots*. They afterwards agreed to enjoy the reſt of the iſland in common; and with much ſagacity concluded that the ſoil of the iſland might one day be amended by the keeping of ſheep. It was agreed that each proprietor might keep 560, ſo that the whole national ſtock would be, when complete, 15,120. That is to ſay, they calculated that the part of the iſland not divided would not only maintain that number, but that their new ſettlement ſhould afterwards be dividible into portions agreeable to the number of ſheep each perſon poſſeſſed; and conſidering likewiſe that the ſoil might in time be amended ſo as to keep other cattle, it was agreed that one cow ſhould be deemed equal to two ſheep, and a horſe to eight; and that hereafter they would fix the quantity of land which ſhould be deemed equivalent to the paſturage of a ſheep.

Such was the infancy of this ſociety, which may be juſtly called *Paſtoral*. Many of theſe poſtoral titles, or as they are called in the iſland *Sheep-paſture* titles, have been ſince converted into tenures of land, by thoſe who have been able to cultivate them. The reſt of theſe titles have been much divided by marriages and its conſequences; for it is not uncommon for women of ſome conſideration to have only their cloaths and the right to feed four ſheep or a cow; but this is a flattering property, as it may hereafter become a freehold. There is a council of proprietors eſtabliſhed by the founders, who ſettle all territorial diſputes and claims. Thoſe *ſheep-paſturel titles* are therefore eſteemed valuable. Nantucket appears like other iſlands to be the top of a large mountain of ſand riſing out of the ſea, the different heights of which under water form theſe ſhoals, known by the ſeamen by the name of Nantucket ſhoals. Toward the eaſtern part of the iſland we find ſome full meadows which nouriſh the *beach graſs*; and that makes a kind of bad hay, but is excellent when green. Some of the lakes are full, cauſed no doubt by the ruſhing in of the ſea in ſome ſtorm in ancient times. The inhabitants catch the fiſh in theſe lakes at ſtated times by draining the lakes, and this fiſhery is deemed a fortunate day. Nantucket has another harbour beſides Sherburn, called Mardiket. In the weſtern part of the iſland is a very conſiderable territory, divided into ſeven cantons, one of which is regularly ſowed every year by the inhabitants, who have a right to to do, and the reſt is employed to paſture their cattle. This expedient is uſed for want of timber to incloſe each perſon's diviſion.

Of the inhabitants of Sherburn, ſome poſſeſs lands, or are employed about them; but the greater part are employed on ſea fiſhing for the whale or for the cod on the green bank, or engaged in other commercial adventures. Strangers who come here are moſtly artiſans, and many of the inhabitants are wholly employed in commerce, and keep only the privilege of ſupporting a cow or two for the uſe of their families. Thoſe who have ſettled lands have erected very neat and pretty habitations. There are two fulling mills on the iſland for preparing their cloth, made from the wort of their ſhips. It is excellent, and is ſpun and directed by the women, who make a kind of domeſtic ſtuff for their huſbands and children, and ſell what they do not uſe to thoſe inhabitants who have no right of paſturage. Near the ſouth eaſt point is the great ſand bank where they catch their beſt fiſh; and on this ſhore they have erected little houſes for the fiſhing ſeaſon, which is their time of harveſt and amuſement.

Nantucket has a very temperate climate in the ſummer, the exceſſive heats of the continent being ſoftened by the ſea breezes. On the other hand, winter is doubly felt, the harſh weſt wind from the continent blows with uncommon violence, and the inhabitants have there no other reſources than the goodneſs of their cloathing and their houſes, the warmth of their fire and a good table; there are ſome however ſo hardy as to attend their occupations in all weathers. The ſhores of this iſland furniſh three ſorts of ſhell fiſh called *clams*, which were the daily food of the original Indian inhabitants. Nature has not any where given to mankind a more wholeſome and abundant food, or one more eaſily procured. Theſe clams remain motionleſs in the ſand, and are eaſily ſeen by an orifice filled with water. The writer of this account expreſſes his ſurpriſe that no means have been uſed to tranſport to Europe, and naturaliſe ſo uſeful a production. Some deſcendants of the ancient inhabitants of this iſland ſtill live in decent houſes on the borders of a lake on the ſouth part of the iſland, they are as fond of the fiſheries and the ſea as the whites.

This iſland with the adjoining ones now form a county; and is incorporated with the State of Maſſachuſets.

A SHORT HISTORY OF BOOK-KEEPING.

(We preſent to our Commercial Readers, "A Hiſtory of Book-keeping extracted from the Preface of a Book on that ſubject, lately publiſhed by Mr. P. KELLY.)

THE origin of Book-keeping, like that of moſt other uſeful arts, is involved in great obſcurity. It is generally ſuppoſed to have been firſt practiſed at Venice, in the fifteenth century, when that city was the grand Emporium of Europe. Some

Writers*, however, think that Double Entry was known to the ancients, and revived only in Italy with the revival of commerce; and ſeveral paſſages are quoted, which ſhew that the Ancients entered the receipts and payments of money on oppoſite pages, in the way of Debtor and Creditor †; but nothing beyond ſingle entry can be inferred from this practice: nor is it probable that any thing more was wanted in the rude and ſimple ſtate of ancient commerce. Inſurances, bills of exchange, and other modern improvements, demanded, and, in all probability, produced, correſpondent improvements in the mode of keeping accounts; but that which places the ſubject in the cleareſt light is, that none of the technical terms ‡ of double entry are to be found in the ancient languages, but appear immediately derived from the Italian, as adopted in the other languages of Europe §.

The nature of Book-keeping too admits of various conjectures with reſpect to its origin. The double purpoſe of a bill of exchange ‖, and the manner of recording the ſame, might have very naturally ſuggeſted the idea of doubly entry; the principle might have been even deduced from the Axioms of Euclid, or the properties of an Algebraic equation; and the firſt

* See Stevin's Book-keeping, applied to Finance,—or Beckman's Inventions and Diſcoveries.

† Of theſe quotations, the following may ſerve as a ſpecimen:

"Huic (*ſcil.* fortunæ) omnia expenſa, huic omnia feruntur accepta; et "in tota ratione mortalium ſola utramque paginam facit." PLIN. Lib. II. Cap. 7.

‡ Snellius, who tranſlated Stevin's Book-keeping into Latin, was obliged to coin new terms: thus he calls Book-keeping, *Apologiſtica*; the Ledger, *Codex accepti expenſique*; the Waſte Book, *Liber Deletitius*; the Stock Account, *Sors*; and the Balance Account, *Epilogiſmus*, &c.

§ A curious exception occurs in the Engliſh word Ledger, (formerly ſpelt *Leager*, *Leidger*, and *Leger*). The name of this Book, in the Italian and other ſouthern languages of Europe, ſignifies *the Maſter-Book*; in French and Dutch, *the Great Book*; and in German and other northern languages, *the Head Book*. The derivations given of *Ledger* in our principal dictionaries, are fanciful and contradictory. According to Bailey, it comes from the Latin verb *legére*, to gather; and Dr. Johnſon ſays it is derived from the Dutch verb *legger*, (a typographical error for *leggen*) to lie or remain in a place.

The word *Ledger* or *Leager* is really derived from the *Leiger Books* kept by our ancient Nobility, by Monaſteries, and all other extenſive Landholders in feudal times. Many *Lieger-Books* of Monaſteries ſtill remain, and differ not in manner from the *Terriers* of Eccleſiaſtical Preferments, of which plenty may be ſeen in the *Liber-Regis*. When rents were moſtly paid *in kind*, from the ſcarcity of money, and the coarſe manner of living, a book of the ſervices and the duties of their tenants was in fact a rent-roll. Tenants in thoſe days were all *Liege-men*; whence the derivation of *Lieger-Book* is extremely obvious.——EDITOR.

‖ *Savary*, in his Dictionaire Commercial, ſays, that the Jews firſt practiſed Inſurance; and the invention of Bills of Exchange is univerſally aſcribed to this commercial people.—Now, as they were the principal Merchants of Italy, when Italian Book-keeping was firſt uſed, it may be fairly preſumed that they had alſo ſome ſhare in this invention.

European who translated Algebra from the writings of the Arabians, is also supposed to have written the first treatise of Book-keeping. It was published in the Italian language at Venice, about the year 1495*, by Lucas de Burgo, a Friar, who likewise wrote several useful works on Mathematical subjects †.

The first treatise on Book-keeping, in the English language, of which there is any account, was published at London in the year 1543, by Hugh Oldcastle, a school-master, and it was afterwards re-printed in 1588, by John Mellis ‡.

In 1569, another system of Book-keeping was published at London, by James Peele, who says in his preface, that he had instructed many mercantile people in this art, which had been long practised in other countries, though then new in England. There is no trace of any other work of the kind until the year 1652, when John Collins, an eminent accountant and mathematician, published a large system, entitled, *An Introduction to Merchants Accompts*; and this served long as a Standard Book on the subject.

In 1736, John Mair, a celebrated schoolmaster at Perth, wrote his popular and well-known work, entitled, *Book-keeping Methodized*; which, after passing through several editions, was published, with some alterations, in 1768, under the new title of

* Vers l'an 1495. "Frère Luc, Italien de nation, en fit imprimer un "traité en Italien, (c'eſt le plus ancien Auteur que j'aie vu ſur cette mati-"ère) il fut ſuivi par pluſieurs Auteurs du meme Pays, & par des Francois, "qui au commencement du ſiecle ſuivant nous en ont donné des Méthodes "imprimées. Mais l'ordre embarraſſant, & le ſtyle long & embrouillé de "ces ouvrages, comparés à la netteté & à la briéveté qui ſont en uſage "aujourd'hui, font voir combien l'experience a poli & abrégé cette Science." —*La Science des Negocians et Teneurs de Livres, par M. De la Porte, p.* 12. *Paris* 1753.

"About the year 1495, Friar Luc, an Italian, printed a Treatiſe "on Book-keeping in that language. He is the moſt ancient au-"thor I have ſeen on that ſubject. He was followed by many of his coun-"trymen, and by the French, who in the beginning of the next century "produced ſome printed methods of Book-keeping. But the intricate order, "and tedious, prolix ſtyle of theſe publications, compared with modern pre-"ciſion and brevity, only ſerve to prove how much experience has poliſhed "and abbreviated this ſcience.——De la Porte, p. 12."

† Hiſtoire des Mathématiques, par M. Montucla, tom I. p. 441—476.

‡ The following Title of this work is preſerved in Ames's Typographical Antiquities, vol. 2, p. 743:

"A brieſe inſtruction and manner how to keepe bookes of accompts after "the order of debitor and creditor, and as well for proper accompts parti-"ble, &c. by three bookes, named the memoriall, journall, and leager. "Newly augmented and ſet forth by John Mellis, ſchole-maiſter of Lon-"don. Imprinted by him at the Signe of the White Beare, nigh Bay-"nard's Caſtle, 1588." In his Epiſtle to the Reader, Mellis ſays, "And "knowe ye for certaine that I preſume ne vſurpe not to ſet forthe this "worke of mine own labour and induſtrie, for truely I am but the reneuer "and reuiner of an auncient old copie printed here in London the 14 of "Auguſt 1543."

Book-keeping Modernized. These alterations, he says, became necessary, in consequence "of the constant change and perpe-"tual flux in the forms and fashions of Accountship." If, however, this improved edition was modelled after the real practice of the time, the forms and fashions of Merchants Accounts must have since undergone great changes also; for persons at present instructed in Mair's Book-keeping only, are, when placed in a Counting-house, generally found ignorant of what is going forward in every department.

In Mair's Book keeping, the principles of Double Entry are explained with great perspicuity and correctness; but the system is too elaborate for school practice: several other tracts have been since written, better adapted to this purpose, though differing but little in arrangement. The most generally approved are those of Dodson, Weston, Donn, Hutton, Hamilton, Gordon, Dowling, and Jackson *.

It is remarkable, that all the foregoing authors were either schoolmasters or teachers. And though their profession might have rendered them well qualified for explaining the principles of Book-keeping, it was not likely to afford them opportunities of deducing their theories from practice. The works themselves evidently shew that those writers, in general, followed each other, and took their documents from books more than from business.

A work of a very different description was published in 1789, by Benjamin Booth, a merchant, who thus observes in his Preface:—"It is surprising that in a commercial country like this, "there should not be a treatise on this subject, which, when ap-"plied to a large scale of business, can be reduced to practice. "Those I have seen appear to have been written by persons "who had not abilities sufficient for the undertaking, or by such "as never had an opportunity of bringing their theories to the "test of experience." This elaborate work, which is evidently the result of experience, contains various examples of judicious arrangement, but it is not elementary, having only a Journal and Ledger. It is, however, the only system of which the author of the present work has availed himself with any degree of advantage.

Some smaller tracts have been since written, which likewise deserve commendation, particularly those of Mr. Wicks and Mr. Shires. The latter is stated to be "the result of thirty years practical experience." There is much neatness and ingenuity in the arrangement of this work; but, like Booth's Book-keeping, it contains only a Journal and Ledger.

* In giving an account of the English writers on Book-keeping, mention may be also made of the following, and nearly in the subsequent order:—Between 1700 and 1736, Snell, Hatton, Malcolm, Miers, and Stevens; and since the latter period—Crosby, London, Shortland, Webster, Wood, Cook, Sedger, and Dilworth.

In tracing the progreſs of Italian Book-keeping, ſomething ſhould be ſaid of a rival method, entitled the *Engliſh Book-keeping*, publiſhed by Mr. Jones in 1796; a work chiefly remarkable for the enormous ſubſcription raiſed on the occaſion. A Proſpectus of this performance was previouſly circulated, announcing the diſcovery of an infallible Method of Book-keeping by Single Entry, and at the ſame time repreſenting the Italian Method as deluſive and erroneous. By high promiſes and accredited recommendations, ſubſcriptions (at a guinea each) are ſaid to have been obtained, to the amount of ſix or ſeven thouſand pounds. The work, however, did not anſwer the expectations of the public. Several ingenious tracts ſoon appeared, defending Double Entry, and expoſing the inſufficiency of this new ſyſtem; and one, in particular, written by Mr. Mill, cloſed the controverſy. This Gentleman, in order to form a comparative eſtimate between the Engliſh and Italian Methods, arranged Mr. Jones's materials into a Journal and Ledger, by Double Entry; and in the courſe of the operation detected an eſſential error:—a detection which completed the triumph of Double Entry.

This Engliſh Syſtem of Book-keeping, however, contains ſome uſeful checks by different columns in the Day-Book for entering the Drs. and Crs. ſeparately; and alſo, in the Ledger for inſerting the Daily and Monthly Tranſactions: and though the Work has not been well received, it has proved uſeful to the Public, as well as to the Author. Some of the columns have been adopted in Counting-houſes, and even by ſubſequent Writers, and the publication has, beſides, given riſe to much uſeful enquiry and inveſtigation on the ſubject of Merchants Accounts.

ON HARROWS.

To the Editor of the Commercial and Agricultural Magazine.

SIR, *Newburgh, June* 21, 1801.

If you think that the following Eſſay on Harrowing, and the Diagrams ſent herewith merit admiſſion into your truly uſeful Miſcellany, they are at your ſervice, if not you are at liberty to ſend them "*In vicum vendentem, thus, et odores.*"

I am, Sir, yours reſpectfully,

WM. BOARDMAN.

HAVING premiſed that the eſſentials of a good harrow are, 1ſt. that the teeth be ſufficiently diſtant not to clog, or drive the ſoil on heaps; 2d, that the tracts be equidiſtant, and near enough to break or ſtir the whole ſurface of the ſoil; 3d, that no tooth follow another in the ſame track; and 4th, that the teeth be as nearly equidiſtant as poſſible; let us examine in how great a degree the harrows in common uſe poſſeſs, or may be made to poſſeſs, the aforementioned qualities.

The harrows made uſe of in this county (Lancaſhire) are generally from three to four feet and a half ſquare. The harrows of three feet have five bulls, at the diſtance of nine inches, in which are fixed alternately five and ſix teeth, the number of teeth being twenty-ſeven, as in fig. 1, 2, and 3. In thoſe of four feet and a half the bulls are nine inches apart, the teeth nine inches diſtant, and the number of teeth forty-nine, as in fig. 4.

The beſt methods of drawing the ſmaller kind of harrows is when the line of draught paſſes through the point A, at the corner, as in fig. 1; or through 7-11ths of the diſtance from the point A to the tooth B, as in fig. 2; or through 3-4ths of the diſtance from A to B, as in fig. 3. In fig. 1 three tracks generally paſs between two contiguous teeth in the ſame bull, in fig. 2 two, and in fig. 3 one. In all theſe caſes the tracks are at equal diſtances; and in fig. 1 and 2, no two teeth run in the ſame track; yet in fig. 1 there will be a deficiency of ten tracks, and in fig.* are the extreme corners; in fig. 3, indeed, there will be only two tracks wanting, but eight teeth running, two in the ſame track, there will be four teeth uſeleſs, or in ſeed-time perhaps prejudicial, as the latter teeth may poſſibly root up what had been covered by the firſt.

In the large harrow, the line of draught will paſs moſt conveniently through 3-4ths of the diſtance of the tooth A to B; in this caſe ſix tracks will be wanting near the corners, twenty-four teeth will run two in the ſame track, and twelve be conſequently uſeleſs.

From daily experience it is found that the teeth in our common harrows are too near, as they frequently drive the ſoil in heaps: from an inſpection of the figures it will appear, that the tracks near the outſide corners are not near enough to break the whole ſurface of the ſoil; that one tooth often follows another in the ſame track, and that the teeth are far from equidiſtant.

Such are the defects of our common harrows, when drawn in the beſt directions poſſible; in any other they are ſtill greater, as many teeth will run in the ſame track, ſome very near, and others at great diſtances.

An harrow inferior to none hitherto invented might, perhaps, be made in the form of a parallelogram, with the bulls perpendicular to the line of draught, as in fig. 5; but, as this diſſertation is ſufficiently tedious already, I will, if you think them worthy of inſertion, tranſmit you my thoughts on the ſubject at ſome future opportunity.

W. BOARDMAN.

* The ſeal has eraſed two words. E.

LIST OF PATENTS OR BREVETS OF INVENTIONS LATELY GRANTED AT PARIS.

(To be continued every Three Months.)

THE following perſons, agreeably to law, poſſeſs the excluſive right to the inventions ſpecified as belonging to them.

1. Joſeph Charles Graſſot—a chimney for ſaving fuel, and excluding ſmoke. For 10 years.
2. Ignace Grignet, Rue de Bonne Nouvelle, No. 125, Paris. A mill for pearl barley. Excluſive right for 5 years.
3. Joſeph Adrien Vachette, Engineer, No. 57, Rue des Gravilliers, Paris. A machine to accelerate the aſcending and deſcending motions of buckets. 5 years.
4. Robert Fulton, Engineer, No. 970, Rue de Vaugirard, Paris. New operations relative to the Panorama. 15 years.
5. Francis Renchard and Edward Brune Mertien, No. 35, Rue St. Sauveur, Paris. Proceſs for printing muſic on a new plan. 15 years.
6. Armand Seguin, Member of the National Inſtitute, Proceſs for making paper of ſtraw, and other vegetable matters. 15 years.
7. Edward Adam, at Niſmes, in the department of Gard. A new apparatus for diſtillation. 15 years.
8. Charles Pictlet, of Geneva. Shawls of ſilk and woollen, either white and plain, or coloured, or embroidered. 5 years.
9. Laurent Solimani, chemical profeſſor in the central ſchool in the department of Gard. A new apparatus for diſtilling brandy and other ſpirits from wine, &c. 5 years.
10. Meſſrs. Jolivet and Cochet, merchants in Lyons, for an improvement in their former invention for the working of ſtuffs.
11. Citizen Louis Francis Henrion, No. 19, Rue de la Loi, Paris. A lamp with pipes and air courſes. 5 years.

(Signed) *Firſt Conſul*, BONAPARTE,
By the Firſt Conſul, H. B. MARET,
Secretary of State.

July 2, 1801.

ENUMERATIONS OF PATENTS LATELY ENROLLED.

1801. *March* 16. ANN Young, of St. James's-ſquare, in the city of Edinburgh; for an apparatus, conſiſting of a long ſquare box, which, when opened, preſents two faces or tables; and of various dice, pins, counters, &c. contained within the ſame, by means of which ſix different games may be played, which, beſides being amuſing and intereſting, and ſuch as children of eight years old may be taught to play, are at the ſame time an improving exerciſe upon, and ſerve to

render familiar, and to impreſs upon the memory the fundamental principles of the ſcience of muſic, particularly all the keys or modulations, major and minor, both with the common and uncommon ſignatures, muſical intervals, chords, diſcords, with their revolutions, and the moſt uſeful rules of thorough baſs.

March 27. G. F. Lenz, of Homerton, Middleſex, Tanner; for a method of conſtructing tan-pits, for tanning hides and ſkins, and for ſtriking hides by machinery.

April 20. John Gamble, of Leiceſter-ſquare, Middleſex; for a machine for making paper in ſingle ſheets, without ſeam or joinings, from one to twelve feet and upwards wide, and from one to forty-five feet and upwards in length.

——— 23. Thomas Binns, of Great Barlow-ſtreet, Middleſex; for a method of manufacturing candles of ſpermaceti, tallow, or any other ſolid inflammable ſubſtance.

——— 25. Thomas Wright, of Mark-lane, in the city of London, Broker; for an improved method of making hand-ſtone corn mills, for the purpoſe of grinding wheat and other grain into flour.

——— 28. William Bicknell, of St. George's pariſh, Hanover-ſquare, Middleſex, Hoſier; for a method of covering felt for the making of caps and helmets, and for various other uſeful purpoſes.

——— 28. Rudolph Ackermann, of the Strand, Middleſex, Printſeller, and Peter James Cutteau, of Bucklerſbury, in the city of London, Merchant; for an improved method of rendering all ſorts of woollen cloths, cotton, linen, ſilk hats, paper, and other manufactures and ſubſtances, perfectly water-proof, and ſo as to be uſed on all occaſions, where a power of repelling rain, wet, or moiſture, may be required.

——— 28. George Waring, of Buntingford, Herts; for a method of making ſoap of a peculiar quality.

——— 30. Richard Wilcox, of the city of Briſtol, Engineer; for improvements upon the fire, or ſteam engine and furnace.

——— 30. William Wilſon, of the city of Edinburgh, Smith; for an improved plan of making, adjuſting, and ſtamping, ſcale weights.

May 2. Henry Tickel, of Manſel-ſtreet, Whitechapel, Middleſex, Brewer; for an apparatus or refrigerator for more ſpeedily and effectually cooling the worts, and other fermented, fermentable, or other liquors, or melted or diſolved animal or vegetable ſubſtances, manufactured, made, or uſed, by, or in the proceſſes of, brewers, diſtillers, vinegar-makers, ſoap-makers, ſugar refiners, chemiſts, or other manufacturers of articles of a ſimilar nature, or uſing ſimilar proceſſes.

CRITICAL CATALOGUE.

I. *Lectures on the Elements of Commerce, Politics, and Finance. By* T. MORTIMER, ESQ. LONGMAN *and* REES, 1801, 9*s. Boards.*

THE introduction to this Volume very juſtly expatiates on the importance of the ſubjects which adorn its title page. We hence learn alſo, that Mr. M. has formerly publiſhed this Work in quarto, and now concentrates his Knowledge in this more portable Volume.

Our author after making an accurate diſtinction between Trade (the domeſtic traffic of a nation) and Commerce (the more extenſive intercourſe with foreign countries) proceeds to give a Hiſtory of the Commerce of the Ancients. He traces it, as uſual, from Egypt to Phœnicia, Carthage, Italy, the Netherlands, Holland, and finally to its preſent pre-eminent ſeat in England. In his progreſs he attempts to ſelect from ancient example what he chuſes to call *Elements of Commerce*. We are puzzled, as will be moſt of his Readers, to ſee the *Slave-Trade* mentioned as the firſt *Element* of Commerce. To paſs over what we do not underſtand, in the ſecond Lecture we read that "Carthage eſtabliſhed colonies, ſo did England in America." She did ſo indeed, at the coſt of many valuable ſubjects deſtroyed in the firſt ſettlement, and of ſtill more loſt in the American War to no purpoſe. Yet this experiment is taken as a concluſive proof of the expedience of the *Principle* of colonization. We hold rather a different *principle* on this ſubject; "let us *colonize* our waſte lands at home." At p. 27, Agriculture is juſtly predicated as the beſt ſource of national proſperity; but we are aſtoniſhed at Mr. M.'s inference, that "wherever great numbers of people have exiſted together in ſociety, we may take it for granted, *Agriculture* has flouriſhed." Is it poſſible that a Man, who has juſt given us a Hiſtory of Commerce, could be ſo inattentive to that Hiſtory, as not to have learnt, that the Phœnicians formerly, and at the preſent moment, the populous Batavian Republic, has no Agriculture? could a commercial Man be ignorant, that it is poſſible to import Corn as well as any other Merchandize? "The ſurplus of Corn formerly produced in England has ceaſed for half a Century," ſays Mr. Mortimer, very truly. Now as Mr. M. has alſo proved in certain *quarto* Treatiſes (ſee p. 47) that the Population of England has much *decreaſed*, therefore the produce of Culture muſt have diminiſhed lamentably indeed! under this impreſſion he enforces Dr. Anderſon's opinion about Bounty Laws,* and declaims againſt Adam Smith as weakly as the ephemeral Pamphleteers of 1800 and 1801.

"It is well authenticated, that the uncultivated lands of Great Britain amount to 22,000,000 Acres, more than a fourth of the whole territory." This outrageous exaggeration of the extent of the waſte Lands, and the aſſumption that the above extent is one fourth of Great Britain, ſhews how eaſily Mr. M. is duped, or how eagerly he tries to dupe the Public. Twenty-two Millions Acres is exactly a *third*, not a *fourth* of Great Britain; and Fourteen Millions of waſte Land is the higheſt eſtimate any reaſonable inveſtigation has afforded.

"King Henry VIII. (an abominable tyrant) ordered new paſture ground to be reſtored into arable;" when an *Act of Parliament* can *make* arable more profitable than paſture, it will be juſt to follow this example; but

* See Crit. Cat. No. 21.

till then it will be *unjuſt*, and then quite *unneceſſary*: The dilemma into which all legiſlative interference with the diſpoſal of private property muſt ultimately fall. The reſt of this third Lecture is wretched common place abuſe of Emigrants and luxury, and the delineation of a taſk for Government, to follow all Mr. Mortimer's ſpeculations about an Agrarian Law, lending Money, endowing Workhouſes and Diſpenſaries, &c. &c. As it is obvious that it is impoſſible in the nature of things, and directly againſt all example, that any Government can ſucceſsfully enter into the detail of ſuch operations, it is evident that nobody can make ſuch propoſals, except a very weak Man from the pure ſimplicity of ignorance, or a very great rogue from a hope to ſhare the inceſſant plunder of all public eſtabliſhments. However, in juſtice, we do moſt ſincerely refer Mr. M. to the former Claſs. This whole publication is a Maſs of internal evidence in his favour.

The ſixth Lecture is occupied in diſcuſſing the expedience of chartered Companies; Mr. M. is here alſo conſiſtent with himſelf, in contradicting all experience of matter of fact; "excluſive Companies are excellent inſtruments of Commerce, and Corporation Towns an admirable expedient for augmenting ſucceſsful Traffic!" yet unluckily, we know, that no Commercial Company would apply for a Charter were they not afraid of being ruined by private adventurers, who can only ruin by underſelling them, by trading on better terms. We know alſo, that thoſe Towns of England, open to the ſettlement of any body, have flouriſhed, much to the diſparagement of venerable Corporate Bodies. Birmingham is governed by a petty Conſtable; the Corniſh Boroughs by Mayors, High-Bailiffs, and Aldermen!

The tenth Lecture is better than uſual, being copied from ſome of the French œconomiſts, and Sir Joſiah Child* on the eſtabliſhment of a Chamber of Commerce. However this is ſpoiled by a recommendation of its interference with the legiſlature, in all internal Police, and even in foreign Treaties. Of courſe this is all viſionary; Government muſt be no longer *real*, before this can happen; the propoſal of ſuch a Chamber of Commerce is indeed to propoſe a Revolution of Government, to be devolved, at Mr. M.'s requeſt, into the hands of a ſelect body of Men after Mr. Mortimer's own heart.

The Book is dedicated to Lord Moira, and therefore the Debtor Law is inveighed againſt, not after the manner of that benevolent Nobleman, but with a wild declamation, which propoſes nothing in the place of what it would remove. Debts muſt be paid in a Commercial Country, or ruin muſt enſue to all. What coercion can be uſed except perſonal confinement? not corporal puniſhment ſurely: much leſs the halter; produce your ſchemes benevolent Theoriſts, but remember the neceſſity of ſubſtituting ſomething for what ye would remove!

A Sketch of the Accompliſhments of a Britiſh Merchant *only* compriſes an unbounded general knowledge, except of the dead languages; of the King and Members of Parliament univerſal knowledge, without that exception. All are to poſſeſs more knowledge than ever man poſſeſſed; and this is ſeriouſly deſiderated in a ſerious elementary Treatiſe on Commerce and Politics.

We are ſenſible that we have not *half* done juſtice to the *firſt part* of this volume, though our limits compel us to make a ſpeedy concluſion. We ſhall ſay in general, that in Commerce, Politics, and Finance, Mr.

* See our third volume, p. 121.

Mortimer's Treatiſe may ſerve as an admirable *Text-book* to any future Lecturer, who may here find the blunders of ſucceſſive ages recommended and enforced, with ſome original additions by the author; and may thence be enabled to *claſſify error*, and warn his pupils againſt the adoption of it in any diſguiſe.

The only appearance of information is on a low blackguard topic, on Stock jobbing; here we have all the *patois*, the *ſlang* of Change-alley explained.

As a *droll* we muſt give Mr. Mortimer his due praiſe; he advertiſes his book as a "Companion to Blackſtone's Commentaries;" to which, whether good or bad, it can have no more affinity than with *Jack the Giant Killer*, or *Newton's Principia*.

As a farther puff, the volume is announced as peculiarly calculated to qualify "young Noblemen and Gentlemen for Situations in any of the Public Offices under Government, and for Parliamentary Buſineſs."

Hopeful Senators they muſt become if they imbibe the opinions of "T. Mortimer, Eſq. Author of ſeveral approved Commercial, Hiſtorical, and Miſcellaneous Works!" Vide Title Page.

II. *General View of the Agriculture in the County of Perth. By* JAMES ROBERTSON, D. D. *Printed at Perth*, 1799. *Price* 6*s*.

Perthſhire is one of the moſt extenſive Counties in Scotland. It is of the ſame extent as Yorkſhire, and is ſituate about 400 Miles North of London. The mean height of the Barometer in this Climate is rather leſs than 30 Inches, of the Thermometer 42 Deg.

Perth forms the boundary of the Lowlands and Highlands of Scotland, and is ſtill more remarkable for many natural limits of the foſſil and vegetable productions of nature. To the South the ancient Woods, now buried under bogs, are all Oak; to the North conſtantly Fir; Coal is found to the South of this ſhire, none Northward; and exactly the ſame diſtinction is here marked by Nature betwixt Free-ſtone and Granite. Of the firſt none is found Northward: of the laſt none Southward.

The police of the feudal times is ſtill retained in this remote region, as far as it is beneficial in modern times. This is a more extenſive good than would be ſuppoſed; ſince under various titles, a conſiderable inſpection is exerciſed on all general improvements of the Country. Even a legal arbitration is at hand to ſettle all trifling diſputes among the tenants.

The Rebellion of 1745 threw many conſiderable eſtates into the poſſeſſion of the Crown; for the management of theſe eſtates Truſtees were appointed, whoſe enlightened activity has had the happieſt effect in improving the face of the Country. The moſt thriving villages in Perthſhire derive their origin from this ſource, and the general amelioration of all dwelling-houſes ſeems to have ariſen from this ſpirited example, which perhaps had never been exhibited at the ſingle hazard and expence of any individual.

The mode of occupation, even within theſe fifty years, was that called *Run-rig*; the moſt barbarous that can be conceived compatible with any Cultivation. Not only it laboured under all the inconvenience of minute diviſions without incloſure, (like common-fields in England) but even theſe diviſions changed property every year among the Tenants; ſo that it was every Man's intereſt to exhauſt the ground in his own year, and never to improve it. Cæſar relates the ſame thing of the barbarous

Suevi in Germany, aſſigning it to their love of arms, which they ſuppoſed would falter if they ever formed an attachment to Agriculture. The antidote ſeems to have been well contrived; in ſuch a predicament there was little fear of being enervated by the charms of the Country! However in Scotland this cuſtom originated from an intention of aſcertaining an equal allotment to each vaſſal, that no ſuppoſed partiality in the Lord might alienate his truſty followers. Neither was ſuch barbariſm very injurious in times when every clan plundered their neighbours ſo frequently, that the *Sword* was never left at home by the Ploughman, or the Herdſman.

The Farms have increaſed in extent with the improvement of the Country; they are now from 100 to 300 Acres. Formerly ſubdiviſion was expedient for the attachment of numerous followers; now the half ſtarved Holder of a few Acres turns Manufacturer, and leaves ſcope for a maintenance to thoſe who occupy his land in addition to their own.

It is always obſerved, that improvement is moſt rapid at its commencement; the rents of Perthſhire are more than doubled within the laſt thirty years, and are now from twenty to thirty Shillings per acre. However, there are no tythes or poor rates, and the Scotch acre is a fifth part larger than the ſtatute acre of England.

The implements of huſbandry are excellent; Carts have ſupplied the ancient Sledges; the Ploughs are of the very beſt conſtruction, drawn by two horſes; and even Threſhing Machines are ſaid to have been in uſe for half a century. To us this is wonderful information. If they have not anſwered expectation, ere now they had been forgotten; if, on the contrary, they are as profitable as theory promiſes, how is it that ſo lately only the knowledge of ſuch a thing has travelled into South Briton?

An excellent Cart is delineated at p. 100. By the contrivance of a curved axle, the body of the Cart hangs very low, while the Wheels are higher than uſual. If we miſtake not, this fulfills all the wiſhes of the ingenious improvers of Wheel-carriages. Eaſy-loading, eaſy-draught, and ſafety from overthrow in rough roads, is thus combined at very ſmall additional expence. We ſhould think that a ſtraight axle, paſſing through the bed of the cart, might anſwer the ſame end for moſt purpoſes, eſpecially for the conveyance of dung.

We are aſtoniſhed to learn that the Scotch legiſlature attended to rural improvement as early as 1457, enacting penalties for non-incloſure, puniſhment for treſpaſſers, and premiums for planting, by immunities from taxation and quartering horſe-ſoldiers.

In the extremeſt cold of the mountains tillage has left veſtiges, where at preſent it is not believed that corn can grow. The woods then almoſt univerſally extended a foſtering ſhelter, ſince deſtroyed from neceſſity, or caprice. Wild beaſts, and more miſchievous barbarians infeſted the woody vallies; and before theſe evils were removed, the huſbandman muſt look to comparative ſecurity rather than fertility.

Wheat, Barley, and Oats, are now raiſed in good perfection in Perthſhire; the harveſt is precarious, but proportional attention is paid to it, and we read of the expedients of neceſſity with admiration.

Flax is common, and ſpinning almoſt univerſal for domeſtic purpoſes; we rejoice to find that the quantity ſtamped for ſale has alſo increaſed from 1,700,000 to almoſt 3,000,000 yards, per annum, within theſe thirty years.

Potatoes are cultivated by every peaſant, and large quantities in fields,

The frosts are the mortal enemies to this most useful of roots, yet the crops (of about 250 bushels per English acre) cannot be esteemed unproductive.

Gardening is said to be best understood in climates where care is necessary to its success. Yet we did not expect to find that steam had been in use some time in Perthshire, for the purposes of the hot-house. In the volume of the Adelphi Society, last year, we understood a gentleman inserted a paper on this subject, as if of his own invention.

In fact, we cannot but be sensible that the residence and constant inspection of landlords is the most potent cause of the improvement of any country; they thus learn the details of improvement, and see the advance of rents always consequent on it. To this chiefly is to be ascribed the amelioration of remote counties. London is there too distant for a winter residence.

(To be concluded in our next.)

III. *The Elements of Book-keeping, both by single and double Entry, comprising a System of Merchants Accounts, founded on real Business, arranged according to Modern Practice.* By P. KELLY. Johnson and Rivingtons. *Price* 5*s.* 1801.

It is with great pleasure that we have examined this Treatise on Book-keeping. At length Mr. Kelly has produced a standard Book on this Science, which will render all farther investigation needless. His preface, (which we have extracted in our present number, for the instruction of our readers) will prove how great a service is thus rendered to the Mercantile world. Impudence and Quackery have been exerted on Book-keeping as on most other subjects. Let Mr. Kelly once more speak for himself. "Authors on Book-keeping have been composed of two different descriptions, possessing very distinct qualifications. The first, and by far the most numerous class, were teachers, who have explained the principles without adverting to the progressive improvements of practice; and the second, Merchants, who have exhibited those improvements without explaining the principles. The productions of both classes of writers is highly useful; and, to combine their utility is the object of the present undertaking."

On careful examination we can conscientiously aver, that Mr. Kelly has succeeded in his attempt.

IV. *Fourteenth and Fifteenth Reports of the Society for Bettering the Condition and increasing the Comforts of the Poor.* 1*s. each.* Hatchard, 1801.

With pleasure we resume the notice of the various methods by which this respectable and very useful society endeavour to accomplish their laudable object; many of which, not only contribute to the immediate benefit of the poor, but may be attended with permanent and valuable consequences to the community at large. The first article of the fourteenth Report relates to the advantages of dibbling wheat, or setting it by hand, in which method it appears there is a saving of half the quantity of seed, and an increased produce of about eight bushels per acre. It has been objected to many improvements that they diminish employment for the poor; but, in this, the interest of the farmer is promoted by creating additional employ for those who frequently cannot get work when they wish for it. "If this mode of cultivation was adopted in every kind of

land, to which it is ſuited, it would ſave many hundred thouſand buſhels of ſeed a year; it would make an encreaſe of one-fourth upon average crops, and give healthful and ſatisfactory occupation, and means of ſubſiſtence, to thouſands of women and children, at the dead ſeaſon of the year, when there is a general want of employment."

In No. 75, we find the Biſhop of Durham relinquiſhing part of the profits of the leaſe of a farm, in order to ſecure a ſupply of good milk for the poor at Stockton. While we give the worthy prelate full credit for his liberality, we cannot entirely approve of introducing into leaſes, clauſes which in a ſhort time are liable to become very inconvenient and inadequate to the object propoſed by them.

No. 76, is an account of the eſtabliſhment of a village ſhop at Hanwell in Middleſex, for retailing to the poor, Tea, Sugar, Cheeſe, Butter, Rice, &c. at the wholeſale prices; or to thoſe who, having tickets from Pariſh officers, or from individuals, are intitled to receive gratuitouſly the articles ſpecified in the tickets.

The judicious object of encouraging cottagers to make the moſt of their gardens, by offering ſmall premiums to thoſe who take the greateſt care of their gardens, and bring to perfection the greateſt quantity of uſeful vegetables, is deſerving of general attention; with a very trifling expence, a ſpirit of honeſt emulation may be excited, highly advantageous, in many reſpects, to the village poor.

No. 78, contains an account of the eſtabliſhment of a free chapel, in Weſt-ſtreet, St. Giles's; and a propoſal that a ſociety ſhould be formed for promoting the foundation of free chapels for the poor in London and other populous towns. It appears, that in this free chapel all the pews of the gallery are to be *let*, by which a diſtinction will be created that certainly will not have a beneficial effect on ſome part of the congregation; and there are many other circumſtances which we conceive will prevent the ſucceſs of this meaſure from being equal to what the motives from which it appears to proceed, would induce us to wiſh.

No. 79, details the plan for ſupplying bread at Exmouth; and No. 80, gives an account of a very judicious ſyſtem adopted for the relief of the poor in the pariſh of Whelford, in the county of Glouceſter, which will be found highly deſerving the attention of country pariſhes in general.

The fifteenth report commences with an account of the ſoup-houſe in Weſt-ſtreet, St. Giles's. The great utility of inſtitutions of this kind has been abundantly proved; but, though they have certainly afforded very great and extenſive relief to the poor, there are evils inſeparable from them which make us look earneſtly for the return of plenty, which ſhall render ſuch relief unneceſſary. "It ſhould be remembered, that ſoup-houſes are extraordinary reſources, only to be uſed in times of difficulty and diſtreſs, when there is a deficiency of food, or when the regular exertions of induſtry are impeded by an unforeſeen preſſure or calamity. In a well ordered ſtate *the permanent welfare of the labouring claſſes muſt be the reſult of their own energies.*"

No. 82, gives the plan of a pariſh library for the poor, perfectly ſimple and eaſy in itſelf, and executed at a trifling expence. No. 83, exhibits an example of ſingular induſtry and œconomy, in a journeyman bricklayer, who, by ten years perſeverance, has built himſelf an elegant houſe, though when he begun it he had only fourteen Shillings in pocket, and had a wife and four children to maintain. No. 84, is an account of

a female benefit club at Tottenham, which combines with its main deſign, ſome objects not generally included in ſuch inſtitutions; viz. a fund for loans, to prevent the uſe of pawnbroker's ſhops, and a bank for the earnings of poor children.

No. 85, contains ſome account of the mode of parochial relief, at and near Wendover, where the ſame principle has been adopted as at Whelford, the calculation of the relief being made on the preſumed and ſuppoſed earnings of the labourer, and not on the actual amount of what he may acquire by induſtry or by great exertion, which he is therefore left to exerciſe, under its proper inducement of procuring additional advantages. This principle is likewiſe the foundation of the regulations for the management of the poor in the pariſh of Shipton Moyne, No. 86, where many uſeful meaſures have been adopted, particularly by furniſhing the poor a regular ſupply of *employment*, by which means every one who is willing to earn his living is enabled to do it; where this is the caſe, there will ſeldom be much occaſion for charitable relief. The encouragement given to cleanlineſs may be productive of much good, but we are very doubtful whether the allowance of clothing, in proportion to the regularity of attendance at church, is not liable to ſome objections; premiums for raiſing an increaſed quantity of Potatoes may be very uſeful, but premiums for encouraging an appearance of godlineſs, we cannot entirely approve.

The manner in which the poor have been ſupplied with rice and beer at St. Albans, by the Counteſs Dowager Spencer, (No. 87) is well calculated to give extenſive relief at a moderate expence; nothing can ſhew how much the poor have ſtood in need of ſuch aſſiſtance, more than that the requeſt for the tickets extended to *five*, *ſix*, and *ſeven* miles diſtant, and could not all be ſupplied.

The ſubject of No. 88 is very important; it is an account of an eſtabliſhment for the benefit of the Poor, in the city and ſuburbs of Edinburgh, which was opened on the 22d January laſt. Previous notice had been given that mendicity would no longer be permitted in that city; there being both employment, and the means of ſubſiſtence, in the houſe, for every beggar and deſtitute perſon who was diſpoſed to work. Few of the perſons admitted, have been of the ordinary claſs of beggars; they, in general, fled upon the alarm, and retired to ſituations more adapted to their inclinations, in London, and other municipalities, where ſimilar meaſures of prudential charity have not been adopted, but where, we hope, the ſucceſs of this meaſure, and the importance of the object to be accompliſhed by it, will ſoon cauſe the example to be followed.

It is no ſmall merit in this eſtabliſhment, that it has adopted the principle ſo ſtrongly recommended by Count Rumford, of giving the poor the *whole* of their earnings, and all the benefit of their induſtry. "Thoſe earnings, it is true, are inconſiderable, and at the preſent period inadequate to their ſupport; and, indeed, whenever an eſtabliſhment of this kind ſhall be formed in London, it is probable that the produce of the induſtry of the poor, in the commencement at leaſt, will be comparatively ſmall; but if we could ſuppoſe only one half of the Beggars of London to be uſefully employed, (the other half having retired to other cities, where *ſpeculative idleneſs* is not *perſecuted*,) the gain to the public in the poſitive produce of labour, in the examples of induſtry, and in

the comparative improvement of morals, would be an importance beyond all calculation." In ſhort, if we conſider the degree of diſtreſs which ſuch an eſtabliſhment may alleviate, the comfort it may beſtow, the induſtry it may promote, the productive labour it may create, the bad habits it may amend, the good habits it may form, the improvements in ſkill and dexterity of working it may produce, the benefit to be done to the metropolis, by diminiſhing the number of beggars at the preſent, and by keeping down the poor rates in future, and the probable advantages to the country, from ſuch an example, leading to the erection of ſimilar eſtabliſhments in other parts of the kingdom; there appears every poſſible inducement for forming an inſtitution to provide for the beggars of London on principles ſimilar to thoſe which have been adopted with ſuch ſucceſs and effect at Edinburgh.

V. *Haſty Sketch of the Debate at the Eaſt-India Houſe, on the Subject of the Private Trade, on the 28th May, 1801; reported by William Woodfall.* 4to. 3*s.* 6*d.* Debrett.

The Reporter acknowledges his ſketch to be rather of a ſummary nature, which, indeed, was unavoidable, for, important as the Debate was, time would not admit of a regularly detailed Report to be written and publiſhed in time for the Proprietors to peruſe it, previous to the day of the Ballot; he appears, however, to have preſerved all the principal arguments, and to have ſtated them with fairneſs and perſpicuity. The object of the Proprietors, at whoſe requeſt the General Court was convened, was, to obtain further information reſpecting the Trade between India and Europe, apparently with the view of inducing the Directors to reſcind in part the reſolutions they had come to on the ſubject. We confeſs, that with reſpect to the employment of India-built ſhipping, for conveying the ſurplus produce to Europe, which ſeems to be the chief point contended for, the arguments in favour of the meaſure appear ſo many and great, that with the additional recommendation of the decided approbation of the Marquis Welleſley and Mr. Dundas, we are rather ſurprized the Directors ſhould be fearful of adopting it, under ſuch proper regulations as they might eaſily deviſe. It is impoſſible to check the reſort of the ſhips of foreign nations to India by any other regulation than by rendering the Trade unprofitable to foreign adventurers, and the beſt method of doing this, is to give every poſſible facility to Britiſh Traders, by removing the inconveniencies, and leſſening the heavy expences to which they are at preſent ſubject; whether the plan propoſed by the Directors will have this effect in any ſufficient degree, ſeems very doubtful, and it is highly probable that the reſult of the experiment will lead them to re-conſider the ſubject. In the mean time, the reſult of the ballot being unfavourable to the views of the party at whoſe requeſt the court was called, a memorial has been preſented to the Commiſſioners for the affairs of India, expreſſing apprehenſions that under the reſolutions of the company, paſſed on the 4th February laſt, and confirmed on the 5th June, the private trade cannot poſſibly be long carried on by the ſubjects of this country in competition with foreigners, who enjoy ſuch deciſive advantages over them both in the markets of India and Europe.

HISTORY.

National Transactions,

CIVIL AND MILITARY.

EAST INDIES and CHINA.—Disturbances in the former country still continue. The populous town of Sattarah has been completely sacked by a body of Mahrattas.

The differences between the Rajahs of Coonkair and Bustair, are not yet adjusted. The former has been successful in various expeditions, and has possessed himself of a considerable extent of territory on the north-east frontier, and along the banks of the Mahammuddy.

It is reported that the Jugdulpoor Rajah has removed from his place of residence to the hills of Kaistoor, in order to evade paying the subsidy and tribute lately imposed upon him by the Mahratta government. In this business the latter have retaliated by plundering his country; and had brought a considerable body of their troops to the borders, for the purpose of overrunning it.

A refractory Zemindar, belonging to Maddygur, who had for some time resisted the Company's authority; by considerable presents of jewels, and promises of a participation of the plunder of villages on the frontiers, raised a formidable body of partisans, with whom finding it dangerous to remain longer in the Company's territories, he entered those of the Nizam; who immediately dispatched official notice thereof to our Government, authorising it to send what troops it thought necessary for their reduction, into the dominions of Hyderabad. Captain Burrel was detached for this purpose with a party of Sepoys, and came up with the banditti near Adonee, where they had posted themselves in a very strong situation; and without giving them time for preparation, gave them battle, which they as desperately resisted, till a field-piece, loaded with grape-shot, was brought to bear full upon them, which caused such havoc, that they fled in all directions; leaving behind them all their stores, some bullocks, camels, &c. together with a number of killed and wounded.

A letter from Bombay, dated the 29th of April, observes, that notwithstanding so much inland commerce is carried on in the Mahratta Empire, it has hitherto derived very little encouragement from the Government, which pays no attention to the public roads, nor does in any other way promote the advantage of traffic, or facilitate its progress: in fact, it could not have retained its present extent, if it were not for the necessity of converting the produce of the country into specie. To attain this object, the chief encounters difficulties and hardships, which nothing but superior patience could enable him to sustain; hence the people are prevented from engaging in tumults, or causing trouble to the state. Coin is very scarce throughout the country, and they derive little more from manual labour, than the habitations in which they live. The British Government has, however, of late, ventured to represent the impolicy of many of their public transactions, which has been respectfully attended to by the court of Poonah.

All the civil servants of the Company, who may hereafter be established in the presidency of Bengal, are to be attached to the new college for the first three years after their arrival; and, during that period of time, the prescribed studies of the college are to constitute their sole public duty. And all the civil servants already on the establishment, whose residence has not exceeded the term of three years, are attached to the college for the like period, from the date of the late regulations.

Colonel Welleſly, having left ſome detachments behind him, ſufficient to expel all the remaining ſtragglers from the late Doondeah's army, had returned on the 14th February, into the Myſore country, taking with him a quantity of camels, dromedaries, bullocks, &c. &c. and notwithſtanding the diſtance of the ſcene of operation, and the obſtacles he has had to encounter, he expedited his machines in a manner which aſtoniſhed all who were acquainted with the unfavourable ſituation of the country.

We before mentioned the arreſt, &c. of the Chineſe Prime Miniſter Ho-xeno.—The following are the heads of the principal charges, preſented and publiſhed by order of the Emperor:

"That being in the late Emperor's life time ſummoned to his country ſeat at Yuen-Ming-Yuen, he had entered the left door of the hall on horſeback, behaving like a man who did not acknowledge the authority of the Sovereign; that he had divulged the ſecrets of the Empire; that he had retained in his hands, or deſtroyed ſome important letters reſpecting military operations in the Northern diſtricts; that he had concealed ſome of the decrees of the deceaſed Emperor, and fabricated others in their ſtead; that he had encouraged vagabonds and robbers; that he had cauſed himſelf to be carried out, and brought into the Imperial palace through the door Xin-U; that he had not reported the inability of ſome of the Mandarins to perform their functions; that he had in his palace many apartments built of the wood Nam Mu, a material ſacred to the Royal habitation; that he had imitated the Emperor's country-houſe in the ſtyle of his apartments, gardens, &c.: that he had in his poſſeſſion 200 ſtrings of pearls, a number far exceeding that poſſeſſed by his Royal Maſter; and, among other jewels, a ball of coral, of wonderful magnitude and incalculable value.—The gold and ſilver already diſcovered and confiſcated belonging to Ho-xeno amount to about 1,000,000l.

TURKEY and EGYPT.—The fate of Egypt is ſtill in ſuſpence. The laſt accounts received by the Engliſh Miniſtry were from Lord Elgin, the contents of which we have before given. A diſpatch has arrived in France dated from Egypt the 19th of May, at which time Alexandria and Cairo were in poſſeſſion of the French, and they boaſt that the garriſons have proviſions for a very great length of time. They confirm the account of the country round Alexandria being inundated to a very conſiderable diſtance. This not only ſecures the Engliſh from any ſally, but alſo prevents them from making any approaches to the town. The fate therefore of that place muſt depend on its receiving or not receiving ſupplies by ſea. Admiral Blanket is arrived at Suez, but has brought few troops with him.

The Ruſſian Miniſter, General Tamara, has been inſulted at Conſtantinople; whether this will have any important effect, remains to be ſeen.

ITALY.—French troops ſtill continue marching towards the South of Italy, moſt probably with two intents, one to garriſon the fortreſſes of the King of Naples, the other to embark them from the Southern parts of that kingdom for Egypt, which is moſt undoubtedly the likelieſt way to get them in.

Gantheaume's ſquadron, which has been ſo long at ſea, has lately made its appearance in the ſtraights of Meſſina, and is going to Brunduſium on the coaſt of Naples, where it is to be joined by ſeveral more ſhips, and the whole fleet, it is ſaid, with troops on board, are to attempt the relief of Alexandria.

A negociation has, it is ſaid, been on foot to induce the Pope to relinquiſh all temporal power, and to content himſelf with his eccleſiaſtical ſupremacy. This has been, they add, rejected by the college of Cardinals. The motive of the French in requiring this has been to ſecure the papal territories in Italy for the Archduke, late Grand Duke of Tuſcany, who was to have been indemniſied from the ſtates of ſome of the eccleſiaſtical princes of Germany, but to which there ſeem to have ariſen ſome very unforeſeen difficulties.

From Genoa they write that a Courier Extraordinary brought a plan of the Conſtitution, of which the following are the principal clauſes: The territory of the Ligurian Republic ſhall be divided into three diſtricts: 1. The Riviera of Ponente; 2. The Riviera of the Levante; and 3. The centre. There ſhall be a Senate of twenty-four Members, with a Doge at its head; three Conſulta or Diets. The Catholic Religion is to be the religion of the State. The three Diets ſhall remain aſſembled for one month in the year to diſcuſs, approve, or reject, the laws propoſed by the Senate.

SPAIN and PORTUGAL.—Hoſtilities between theſe two countries eventually turned out as might be expected, greatly in favour of the former, and the conſequence has been that ſome kind of a treaty has been made between the two powers. Whether it will be ratified by the French is uncertain. The terms are not yet made public, nor any of the articles except that Engliſh ſhips are to be excluded from the ports of Portugal. The French army is arrived on the frontiers of Portugal, and has even advanced into that kingdom, bending its courſe towards Liſbon. From Spain we have no further intelligence reſpecting the fate of the perſons accuſed of a conſpiracy againſt the Prince of Peace.

FRANCE.—Some great criſis ſeems again to be approaching in the affairs of this country. The Grand Conſul was either ſeriouſly or politically indiſpoſed. He has ſome time ſince quarrelled with Carnot, and now he and Moreau ſeem to be on bad terms. A general idea of ſome commotion in the capital being at hand, ſeems to prevail, and a great number of troops are drawing round it, but probably only with a view to keep peace at a time when the diſcontented might be tempted to act. The Grand fête of the fourteenth of July paſſed without any commotion, although all Paris was in motion, and an immenſe number of perſons came in from the departments. The following proclamation or manifeſto made its appearance.

PROCLAMATION.

THE CONSULS OF THE REPUBLIC TO THE FRENCH.

"FRENCHMEN,—This day is deſtined for the celebration of that epoch of hope and glory in which you witneſſed the downfall of barbarous inſtitutions, and you ceaſed to be divided into two people, the one condemned to lead a life of humiliation, and the other ſelected for the enjoyment of diſtinctions and grandeur;—in which your property was rendered free like your perſons;—in which the feudal ſyſtem was deſtroyed, and with that ſyſtem all the numerous abuſes which centuries had accumulated upon your heads. You celebrated that epoch in 1790, with an union of the ſame principles, the ſame ſentiments, and the ſame wiſhes. You have ſince celebrated it occaſionally in the midſt of triumphs, occaſionally under the weight of fetters, and ſometimes ſurrounded by the cries of diſcord and of factions. You celebrate it this day under the happieſt auſpices. Diſcord is ſilent, faction is checked, the intereſt of the country is paramount to every other intereſt. The Government knows no enemies but thoſe who are the enemies of the people. The Peace of the Continent has been concluded by your moderation. Its permanence is guaranteed by your power and the intereſt of Europe. Your brothers and your children return to their families, all devoted to the cauſe of liberty, all united to enſure the triumph of the Republic. The ſcandal of religious diſſention ſhall ſoon ceaſe. A civil code, mellowed by the wiſe delay of conſideration, will protect your property and your rights. Finally, you are ſecured by righteous but wholeſome experience from the return of domeſtic feuds, and that experience will prove for a long time the ſafeguard of your poſterity. Enjoy, Frenchmen, enjoy your ſituation, your glory, and the hopes of the future; be ever faithful to thoſe principles and to thoſe inſtitutions which have conſtituted your ſucceſſes, and which will accompliſh the greatneſs and the happineſs of your children. Let your ſpeculations and labours be no longer troubled by vain anxieties. Nothing can be per-

formed by your enemies to injure your tranquillity—All Nations envy your deſtiny.

"Bonaparte, Firſt Conſul of the Republic, orders the above Proclamation to be inſerted in the Bulletin of the Laws, and to be publiſhed, printed, and affixed in all the departments of the Republic.

(Signed) "H. B. MARET."

It ſeems now evident that the terms on which alone France will make peace, are the reſtoration of all the conqueſts taken from them and their allies during the war. A great ſhew of preparing troops for embarkation all along the coaſt of France has induced a belief that the Conſul means to put into execution the mad threat of invading this country.

THE NORTHERN POWERS.—On the 1ſt of June the following Proclamation was publiſhed by the Emperor of Ruſſia at St. Peterſburgh:—"We, by God's grace, Alexander the Firſt, Emperor and Autocrat of all the Ruſſias, &c. &c. make known to all our faithful ſubjects—That, we, by the immutable councils of the Moſt High Ruler of all earthly kingdoms, having aſcended the hereditary Throne of our Fathers, and wholly dedicated ourſelves to the promotion of the worſhip of God and the happineſs of our ſubjects, have reſolved, after the example of our Anceſtors of bleſſed memory, to receive holy unction, and have the Crown placed on our head, in which ſacred act our beloved Conſort the Empreſs Elizabeth Alexejewna will participate with us. By this notification of this our purpoſe, which with the Divine aſſiſtance we will carry into effect in the month of September of this preſent year, 1801, in our capital of Moſcow, we invite all our faithful ſubjects to unite their prayers with ours to the Moſt High, that with the ſacred oil he may pour forth his bleſſing on us and our Government, and that this myſterious act may be a ſign and pledge of his benevolence towards us; as alſo the ſeal of love which binds us to the faithful ſons of our country, to advance whoſe glory and welfare, we declare our moſt ſacred duty, in the preſence of Almighty God, by whom Kings reign, and Princes decree juſtice.—Given at St. Peterſburgh, the 20th of May (June 1), in the one thouſand eight hundred and firſt year after the Birth of Chriſt, and the firſt of our reign. In the original, ſigned by his Imperial Majeſty's own hand.

"ALEXANDER."

We have infinite pleaſure in announcing to our Readers the happy adjuſtment of the differences between this country and the Emperor of Ruſſia.——Lord Hawkeſbury addreſſed the following Bulletin to the Lord Mayor:

"*Downing-ſtreet, July* 11, *Half paſt Eight, P. M.*

"MY LORD,

"I have great ſatisfaction in informing you, that Captain Blake, of the Diſpatch cutter, is juſt arrived from St. Peterſburgh, and has brought a Convention, ſigned on the 7th of June, by Lord St. Helen's, and Count Panin, on the part of His Majeſty and the Emperor of Ruſſia, by which all differences between the two Countries have been amicably adjuſted.

"Their Daniſh and Swediſh Majeſties have been invited to accede to this Convention. I have the honour to be, &c. &c.

(Signed) "HAWKESBURY.

"*The Right Hon. the Lord Mayor.*"

The public are, however, anxious to hear the terms of the Convention, and alſo whether Sweden and Denmark accede.

GERMANY and AUSTRIA.—The Miniſter of Pruſſia has declared to the Diet at Ratiſbon, on the part of his Sovereign, that if the Eccleſiaſtical Princes of Germany ſubmitted to the Seculariſations, to indemnify the Princes deprived of their poſſeſſions in Italy; his Pruſſian Majeſty would oppoſe ſuch a meaſure in the moſt energetic manner. It is ſaid, that Baron Klapfeld, the Ruſſian Miniſter, has received orders to ſupport, in caſe of need,

the declarations of Pruſſia. It is alſo ſaid that in conſequence of the plan of indemnities agreed upon by the Emperor and the French Government, ſeveral Eccleſiaſtical Princes will be ſeculariſed, and that the Elector of Mentz will be maintained, not in the capacity of Eccleſiaſtical Prince, but in that of Arch-Chancellor of the Empire and Director of the Diet.

The Court of Auſtria, although apparently at peace, ſtill keeps up the war eſtabliſhment of troops. Count Cobenzel, it is ſaid, has ſolicited his recal from Paris, and has not been at any of the fêtes given by the French to the king of Etruria.

In Inner Auſtria all the officers have ſuddenly received orders to join their regiments, and leave of abſence is no more granted. This extraordinary meaſure in time of peace is variouſly accounted for; at the ſame time the Army in Moravia and Bohemia receives conſiderable reinforcements. By an eſtimate preſented to the Diet at Ratiſbon, the German Empire loſes by the French war the eleventh part of its territory, and revenues to the amount of 4,764,000 florins.—From Hanover there is advice, that his Britannic Majeſty's Regency in that country have preſented a note to the Pruſſian Miniſter de Dohm, deſiring that the Pruſſian troops may be as ſpeedily as poſſible withdrawn from that Electorate, unleſs the moſt urgent neceſſity exiſted for prolonging their ſtay. M. de Dohm has forwarded this note to his Court.

Some Auſtrian corps have entered Bavaria with a view of taking poſſeſſion of a part of that country, agreeably, as we conjecture, to a ſecret article in the treaty of peace between France and Auſtria. They were reſiſted, but the Bavarians were compelled to retreat.

AMERICA.—American Papers have been received to the 4th of June. The United States, indignant at the injuſtice and piracies of the Barbary States, have fitted out a ſquadron to chaſtiſe them, particularly the Dey of Tripoli. This ſquadron conſiſts of the Preſident, Philadelphia, and Eſſex frigates, and the ſchooner Enterpriſe, under the command of Commodore Dale.——The American Papers ſay, it is not only neceſſary to chaſtiſe the Barbary States, but to impreſs Europe with an idea of the energy of the United States, and to ſhew they have a marine! The ſquadron was expected to ſail from Hampton Roads on the 1ſt of June, as Mr. Nichols, one of the Clerks of the navy department, had ſet out with inſtructions to that effect.

We underſtand that the Firſt Conſul of France refuſes to ratify the Treaty with the American States, unleſs the American Government ſhall agree to it without modification. Mr. Dawſon, who is at Paris, was to apply to the French Government to ſuſpend meaſures of this nature till the matter could be reconſidered by the American Senate, or ſome other amicable mode of ſettling matters could be adopted.

The commerce with America is increaſing ſo rapidly, that the deficiencies ariſing from the falling off of ſome branches of trade are not perceptible in the general amount of exports. What we ſend to America is chiefly alſo of our own manufacture, which makes the advantage three times as great as it would be, were it Weſt India or any other produce. Each perſon in North America conſumes about 25s. worth of Engliſh goods in a year. Each perſon on the Continent of Europe conſumes about 1s. 6d.

IMPERIAL PARLIAMENT.

HOUSE OF LORDS.

MONDAY, July 15.—The Clergy Ineligibility, Iriſh Martial Law, and ſeveral other Bills, were read a third time, and paſſed.

TUESDAY, 16.—The Indemnity Bill was read a third time and paſſed, and afterwards, with the Clergy Ineligibility Bill, Iriſh Martial Law, Iriſh Members' Tax Exemption, and ſeveral public and private Bills, received the Royal Aſſent by Commiſſion.

WEDNESDAY, 17.—Paſſed the Iriſh Indemnity, and Hayes's Divorce Bills, and agreed to ſeveral Bills returned from the Commons.

MONDAY, 22.—On the motion for the ſecond reading of the Clergy Ineligibility Bill, Lord THURLOW oppoſed the meaſure; he denied that holy orders contained any myſterious quality incompatible with the duties of life, and contended that they were but relative and changeable with ſituation, and not primary, indelible, and independent of exterior circumſtances. The Biſhops ſat in Parliament, becauſe the rights and privileges belonging to their temporal property were not to be deſtroyed by their ſpiritual character. They and the Abbots ſat in Parliament as poſſeſſors of baronies owing military ſervice; and if the Rectors, Vicars, &c. had enjoyed their benefices under ſoccage, burgage, or military tenure, they would be equally called to ſerve, either among the great military vaſſals, or in the Lower Houſe. His Lordſhip here entered into a perſpicuous view of our Church Eſtabliſhment, the Houſe of Convocation, &c. and contended that nothing could be determined in regard to the inferior Clergy, which would not, by parity of reaſoning, go to diſmiſs the Biſhops from their ſeats in that Houſe.—Lord Eldon obſerved, that the Clergy never ſat in Parliament but as a diſtinct eſtate, and not on account of temporal rights, and that they had in vain petitioned during the reigns of Edward VI. Elizabeth, and James I. to be admitted into the Houſe of Commons. His Lordſhip quoted the authority of Lord Chancellor Coke, Blackſtone, and Junius, as to the indelibility of the clerical character. When the rights of electors were conferred on the Clergy, that of eligibility would not have been withheld, if it had been conſiſtent with their profeſſional character; that it had not been granted was manifeſt from the circumſtance of its not being immediately uſed.—Lords Roſslyn, Weſtmoreland, Hobart, and the Biſhop of Rocheſter, ſpoke on the ſame ſide; Lords Moira, Carliſle, and Holland, oppoſed the Bill, which was, however, read a ſecond time without a diviſion.

WEDNESDAY, 24.—After a debate of ſome length, the Iriſh Martial Law bill was read a ſecond time.—Lords Hobart, Longford, Carleton, Somerton, Kinnoul, and Warwick, were in favour of the meaſure, as was Lord Limerick, who conſidered it neceſſary to the ſafety of Ireland.—The Duke of Leinſter, Lords Carliſle, Holland, Fitzwilliam, Suffolk, and Caernarvon, objected to it, as oppreſſive, unneceſſary, and unwiſe.

FRIDAY, 26.—Their Lordſhips, in a Committee, agreed to extend the act for protecting aliens from arreſt in this country for debts contracted abroad, to Britiſh ſubjects, who, previous to the age of 15, had paſſed into foreign countries, and there contracted debts.—A debate of conſiderable length took place on the ſecond reading of the Indemnity bill, which was ſtrenuouſly oppoſed by Lords Suffolk, Caernarvon, Moira, and Thurlow, and the Duke of Bedford, and ſupported by Lords Hobart, Eldon, Weſtmorland, and Roſslyn.

SATURDAY, 27.—A number of public and private bills received the Royal Aſſent.

MONDAY, 29.—The Non-reſident Clergy Relief Bill, after a debate of ſome length, was read a ſecond time.—The Hull Navigation Bill went through all its ſtages, and was paſſed.

THURSDAY, July 2.—The Royal Aſſent was given, by Commiſſion, to fifty-three public and private bills. The Lord Chancellor, ſitting as Commiſſioner, with the Earls of Chatham, Leiceſter, and Roſslyn, read the following ſpeech:

"My Lords and Gentlemen,—We have it in command from his Majeſty to acquaint you, that, on account of the advanced period of the ſeaſon, and the ſtate of the public buſineſs, he is induced to relieve you from a longer attendance in Parliament. His Majeſty highly commends the wiſdom, temper, and diligence, which have marked all your proceedings; and particularly acknowledges the aſſiduity and zeal with which you have purſued the inveſtigation of

the important ſubjects brought under your conſideration, in conſequence of the ſevere preſſure occaſioned by the high price of corn. The beneficial effects of the meaſures you have ſuggeſted for the alleviation of this calamity have afforded his Majeſty great conſolation, and he has the utmoſt ſatisfaction in indulging the hope that, under the favour of Providence, the bleſſings of plenty will be reſtored by the produce of the enſuing harveſt.

"Gentlemen of the Houſe of Commons,—His Majeſty has directed us to return you his particular thanks, for the liberal proviſion which you have made for the various branches of the public ſervice. While he regrets the neceſſity of ſupplies ſo large, it is a relief to his Majeſty to obſerve, that the reſources and continued proſperity of the country have enabled you to diſtribute the public burthens in ſuch a manner as to preſs with as little ſeverity as poſſible on his faithful ſubjects.

"My Lords and Gentlemen,—The brilliant and repeated ſucceſſes of his Majeſty's arms by ſea and land, important as they are in their immediate conſequences, are not leſs ſatisfactory to his Majeſty's mind, as affording freſh and deciſive proofs of that vigorous exertion, undaunted valour, and ſteady perſeverance which diſtinguiſh the national character, and on which the chief reliance muſt be placed for reſpect abroad, and for confidence and ſecurity at home. Events ſo honourable to the Britiſh name derive, at the preſent moment, peculiar value in his Majeſty's eſtimation, from their tendency to facilitate the attainment of the great object of his unceaſing ſolicitude, the reſtoration of peace on fair and adequate terms. They furniſh at the ſame time an additional pledge, that if the ſentiments of moderation and juſtice, which will ever govern his Majeſty's conduct, ſhould be rendering unavailing in this inſtance, by unreaſonable pretenſions on the part of his enemies, the ſpirit and firmneſs of his people will continue to be manifeſted by ſuch efforts and ſacrifices as may be neceſſary for aſſerting the honour of his Majeſty's Crown, and for maintaining the permanent intereſts of the Empire."

Then a commiſſion for proroguing the Parliament was read. After which the Lord Chancellor ſaid;—"My Lords and Gentlemen, by virtue of his Majeſty's Commiſſion under the Great Seal to us and other Lords directed, and now read, we do, in his Majeſty's name, and in obedience to his commands, prorogue this Parliament to Thurſday the 6th day of Auguſt next, to be then here holden; and this Parliament is accordingly prorogued to Thurſday the 6th Day of Auguſt next."

HOUSE OF COMMONS.

MONDAY, 15.—The Houſe reſolved itſelf into a Committee of Ways and Means, when the Chancellor of the Exchequer, after a very ſhort preface, ſubmitted the following ſtatement:

SUPPLY, 1801. Navy, 15,857,037l. 2d. Army, England, 9,617,039l. 18s. 7d. Ditto extraordinaries, 2,500,000l. Ireland, 3,935,017l. 7s. 5d. Ordnance, England, 1,639,015l. 6s. 7d. Ireland, 299,907l. 9s. 5d. Miſcellaneous, England, 599,476l. 15s. 5¾d. Ireland, 212,391l. 11s. 4¼d. Vote of Credit, England, 500,000l. Ireland, 300,000l. 2,000,000l. Iriſh Permanent Grants, (Currency, 423,000l.) 390,462l. For Portugal, 300,000l. To be contributed jointly by England and Ireland 36,959,925l. 9s. ¼d. Deficiency Income Tax 1,000,000l. Ditto Surplus Conſolidated Fund 4,000,000l. Diſcount on Loan and Lotteries 177,330l. 18s. 10d. Deficiency Malt 1799, at April 5, 1801, 522,777l. 8s. Ditto, of Aſſeſſed Taxes, 1798, and of Exports and Imports, 1799, 250,000l. Ditto of Income Duty, 1799, 1,100,000l. Intereſt on Exchequer Bills, &c. 476,681l. 16s. 5d. National Debt, 200,000l. Total 43,086,715l. 12s. 3¼d. On account of Ireland 4,348,226l. 10s. On account of England 39,338,489l. 2s. 3¼d. To pay off Exchequer Bills 3,500,000l. Ditto 3,000,000l. Ditto 3,000,000l.

9,500,000l. Two-ſeventeenths of the above ſum of 36,959,925l. 9s. ¼d. are to be contributed by Ireland 4,348,226l. 10s.

WAYS AND MEANS. Sugar, Malt, Tobacco, &c. 2,750,000l. Lottery 201,250l. Income duty, deducting intereſt on loans charged thereon, 4,000,000l. Exports and Imports 1,200,000l. Surplus Conſolidated Fund from April 5, 1801, to April 5, 1802, 3,160,000l. To be provided for by Ireland 4,348,226l. 10s. Loan 25,500,000l. Sums uniſſued of the Votes to the Emperor of Germany and the Elector of Bavaria 499,001l. 10s. 8d. Eſtimated Surplus of Grants 1800, 65,837l. 19s. 7½d. Vote of Credit 2,000,000l. Intereſt on inſtalments to Land Tax 50,000l. Lotteries and other Monies in the Exchequer 12,361l. 8s. 6½d. Amount of Ways and Means 43,726,630l. 3s. 10d. Ditto of Supplies 43,686,715l. 12s. 5¼d. Surplus 39,964l. 10. 6⅜d. Exchequer Bills on Supplies 1800, 3,500,000l. Ditto 3,000,000l. Ditto 3,000,000l, 9,500,000l. The Chancellor of the Exchequer then obſerved, that, in the ſtatement made by his predeceſſor in office, the produce of the Income Tax was taken at ſix millions. Upon the beſt enquiry, he could not think that he would be juſtified in calculating it at a much higher ſum than 4 millions. He then concluded with moving the uſual reſolutions; which being agreed to, Mr. Addington then propoſed a duty of one guinea upon every dozen packs of cards imported into this kingdom, excepting from Ireland, in regard to which the duty was fixed at 2s. 6d. in order to equal the duty payable by the manufacturer here. Agreed to.——A debate of ſome length took place on Mrs. Addiſon's Divorce Bill, when the Solicitor-General, Mr. Jolliffe, and Mr. Simeon, wiſhed to throw it out, regarding the precedent as injurious. The Attorney-General, Sir W. Scott, Mr. Jeffreys, Mr. Alexander, and Mr. Lawrence, defended the principle of the Bill generally, as affording to females a participation of the advantages granted to men under like circumſtances, and particularly in its immediate reference to the caſe in queſtion. On a diviſion for the ſecond reading, the numbers were Ayes 68, Noes 8. The Iriſh Stamp Duty Bill was read a third time, and paſſed.

TUESDAY, 16.—The Inſolvent Debtors' relief bill, and the bill for the better accommodation of the Iriſh Judges on circuit, by enabling the Sheriffs of each County to iſſue 20l. for their expences, went through Committees.

WEDNESDAY, 17.—Mr. Tierney made his promiſed motion on the ſubject of Finance: He ſtated the public burthens to have been doubled by the war, and that although the ſtate of the revenue and the imports and exports were of unexampled proſperity, yet they were unequal to our expences. He concluded a moſt comprehenſive and perſpicuous ſpeech, by moving ſeveral Reſolutions.

THURSDAY, 18.—The Houſe in a Committee, reſolved to extend to Ireland the full operation of the American Treaty, to render the bounties payable on the importation of corn into Ireland equivalent to thoſe paid in England, and to allow rum to be bonded in Ireland for the duty. The Debtors' Impriſonment Relief Bill, and the Copper Bill were paſſed; as was the Bill for transferring the collection of the Hair-Powder Tax, after adding a clauſe, providing for the officers likely to ſuffer by the bill.

FRIDAY, 19.—The Conſtables' Allowance, Public Board, Printing Indemnity, Land-Tax Redemption, and Inſolvent Debtors Bills, were read a third time and paſſed.—Some amendments were made in the Clergy Non-reſidence Bill, limiting its duration to the 2d of March, 1802, &c.—Mr. SHERIDAN obſerved, that the Clergy were intitled to the moſt partial care of the Houſe. he mentioned ſome inſtances of their ſervices to the community beyond their mere ſacerdotal duties, and particularly that of the Rev. B. Dudley, who found a church in ruins, the country wild and deſolate, the inhabitants rude and uncultivated, the ſoil itſelf ambiguous, and from local circumſtances calculated ſolely for the rendezvous of ſmugglers and plunderers

—but with a mind and energies ſuperior to the common operations of human agency, he has reverſed the hideous ſcene; blending inſtruction with example, he has civilized the inhabitants, erected roads, reclaimed the ſoil, and forced the ocean to reſtitution; he had built a parſonage houſe, and repaired a ruinated church, where he inculcates by precept what he illuſtrates by example—the Lord Lieutenant and Magiſtrates of the county, the Judges, the Board of Agriculture, have all proclaimed and thanked his important ſervices, and Mr. Sheridan could entertain no apprehenſion from the introduction of ſuch men into the Senate. Sir H. P. St. Mildmay concurred in this eulogium, and bore teſtimony to the extraordinary ſervices of this Gentleman. After ſome obſervations from Meſſrs. Windham, Simeon, and Jones, the Bill was ordered to be recommitted on Monday. Some amendments were likewiſe propoſed in the Iriſh Controverted Election Bill, the diſcuſſion of which was poſtponed to the ſame day.

MONDAY, 22.—The Six Millions Exchequer Bill, Letters of Marque, Iriſh Sugar Drawback, and Vote of Credit Bills, were ſeverally paſſed.—— The CHANCELLOR of the EXCHEQUER complimented Mr. Tierney on the general accuracy of the Financial Statement which he had ſubmitted to the Houſe, and preſented ſome Reſolutions tending to make thoſe moved by Mr. Tierney appear in a more promiſing point of view, which were agreed to be diſcuſſed on.

That the Amount of the Public Funded Debt, on the 1ſt of Feb. 1793, was 238,231,248l. excluſive of Lorn and Short Annuities for Lives, to the Amount of 1,373,550l. of which Sums Stock to the Amount of 10,242,100l. had been purchaſed by the Commiſſioners for redeeming the National Debt; and Annuities to the Amount of 79,180l. had fallen in, and been carried to their Account, reducing the actual amount of the debt on the 1ſt of Feb. 1793, to 227,989,148l. and the annuities to 1,293,670l. and that on the 1ſt of Feb. 1801, ſtock to the amount of 36,099,562l. had been purchaſed by the Commiſſioners, and ſtock to the amount of 16,083,802l. had been transferred to them on account of Land Tax redeemed, and annuities to the amount of 123,477l. had fallen in, reducing, on the 1ſt of Feb. 1801, the actual amount debt exiſting before the war to 186,047,884l. and the annuities to 1,230,073l. That the total amount of ſtock created ſince the 1ſt Feb. 1793 (including the amount created by ſums borrowed in the preſent Seſſion of Parliament, and after deducting 16,182,094l. purchaſed by the Commiſſioners for redeeming the National Debt on the 1ſt of Feb. 1801, is 298,317,590l. of which ſum the intereſt on 7,502,633l. is payable by the Emperor of Germany, and the intereſt on 19,708,750l. is payable by Ireland; and that annuities have been granted ſince the 1ſt of Feb. 1793, to the amount of 542,661l. of which 9,791l. is payable by Ireland, and 230,000l. by the Emperor of Germany. That the total amount of the Public Funded Debt (including the amount created by the ſums borrowed in the preſent Seſſion, and after deducting 52,281,656l. purchaſed by the Commiſſioners, and 16,083,802l. transferred to them on account of Land Tax redeemed), was, on the 1ſt of Feb. 1801, 484,365,474l. of which ſum 27,211,383l. is on account of Ireland and the Emperor of Germany, leaving a Funded Debt charged on Great Britain of 457,154,091l. including 56,445,000l. the intereſt of which is to be defrayed, and the capital redeemed, by the Tax on Income; and that the amount of annuities charged on Great Britain (after deducting what have fallen in) was, on the 1ſt of Feb. 1801, in Short Annuities and for Lives, about 540,000l. and in Long Annuities 1,007,000l.

That under the heads of Treaſury, Army, Ordnance, Barracks, Advances from Civil Liſt, and in payments to be made for ſervices, not voted, but paid out of Grants for 1800 (after deducting the Surplus of Ways and Means of that year), outſtanding demands, as far as the ſame can be made up, remained

to be provided for on the 5th of Jan. 1801, to the amount of 1,548,486l.—That excluſive of anticipations of the Receipt of certain Taxes and Payments on Loans to the amount of 7,489,800l. the unfunded Debt in Exchequer Bills unprovided for, or provided for out of funds which have proved inſufficient, was, on the 5th of Jan. 1801, 17,590,300l.

That the Debt of the Navy remaining to be provided for was, on the 5th of Jan. 1801, 8,705,886l.; and that the total amount of Demands outſtanding, Navy Debt, and Exchequer Bills, unprovided for, or provided for out of Funds which have proved inſufficient, was, on the 5th Jan. 1801, 27,816,372l. of which ſum 6,900,416l. has been ſince made good out of the Supplies of the preſent Seſſion; leaving an Unfunded Debt hereafter to be provided for of 20,915,886l. and exceeding by 12,020,000l. the amount outſtanding in 1793. That the ſum applicable to the reduction of the National Debt was, on the 1ſt of Feb. 1793, 1,427,143l. and on the 1ſt of Feb. 1801, 4,989,818l.; and that the Annual Charge incurred by the Permanent Debt on the 5th of Jan 1793, was 10,325,866l. including 1,000,000l. applicable to the reduction of the Debt. That the Annual Charge incurred by the Permanent Debt created ſince the 5th of Jan. 1793, (excluſive of intereſt payable by Ireland, and including the Charge incurred by the Loan of the preſent Seſſion), is 10,375,078l. of which ſum 2,350,162l. is applicable to the reduction of Debt, and that a further Charge of 497,735l. per annum is guaranteed by Parliament in default of payment of the Intereſt of certain Loans by his Majeſty the Emperor of Germany. That the Net Produce of the Permanent Taxes exiſting previous to the war was, on the 5th of Jan. 1793, 14,284,000l. and on the 5th of Jan. 1801, 14,194,539l. That the Net Produce of the Permanent Taxes impoſed ſince the 5th of Jan. 1793, was, on the 5th of Jan. 1801, 8,079,076l. And, that the Total Amount of the Permanent Taxes was, on the 5th of Jan. 1801, 22,273,615l.

That the total official value of all Imports into Great Britain in the year ending the 5th of Jan. 1793, was 19,659,358l. and on an average of ſix years, ending the 5th of Jan. 1793, was 13,685,390l. That the total official value of all Imports, in the year ending the 5th of Jan. 1801, ſuppoſing the Imports, from the Eaſt Indies, of which no account has been made up, to be the ſame as in the preceding year, was 29,925,858l. and on an average of ſix years, ending the 5th of Jan. 1801, was 25,259,190l. That the total official value of Britiſh Produce and Manufactures exported, in the year ending the 5th of Jan. 1793, was 18,336,851l. and on an average of ſix years, ending the 5th of Jan. 1793, was 14,771,049l. That the total official value of Britiſh Produce and Manufactures exported, in the year ending the 5th of Jan. 1801, was 24,411,067l. and on an average of ſix years, ending the 5th of Jan. 1801, was 20,085,193l. That the total official value of Foreign Merchandiſe exported from Great Britain, in the year ending the 5th of Jan. 1793, was 6,568,346l. and on an average of ſix years, ending the 5th of Jan. 1793, was 5,409,014l. That the total official value of Foreign Merchandiſe exported in the year ending the 5th of Jan. 1801, was 17,166,145l. and on an average of ſix years, ending the 5th of Jan. 1801, was 12,808,013l.

That the total ſum to be raiſed in Great Britain in the year 1801 may be eſtimated as follows, viz.—Intereſt of the Public Funded Debt, Charges of Management, and Sinking Fund, on the 5th of Jan. 1801, after deducting inteteſt payable by Ireland, 20,144,586l. Intereſt, &c. to be incurred and paid between the 5th of Jan. 1801, and the 5th of Jan. 1802, on Stock created by Loans of the preſent Seſſion to the amount of 44,816,000l. is 1,812,816l. Intereſt on Exchequer Bills, eſtimated to be the ſame as paid in the year ending the 5th of Jan. 1801, 766,430l. Proportion to be defrayed by Great Britain, according to the Articles of Union, of the Civil Liſt, and other charges on the Conſolidated Funds of Great Britain and Ireland, amounted together to 1,560,000l. is 1,376,470l. Civil Government of

Scotland, Penſions on Revenue, Militia, and Deſerters' Warrants, Bounties for promoting Fiſheries, &c. &c. eſtimated to be the ſame as in the year ending 5th of Jan. 1801, 635,549l. Charges of Management of Revenue, eſtimated to be the ſame as in the year ending the 5th of Jan. 1801, 1,699,225l. Charges of collecting Income Tax, as per eſtimate, 152,620l. Proportion to be defrayed by Great Britain, according to the Articles of Union, of the Supplies voted for 1801 for Great Britain and Ireland, amounting in the whole to 43,686,715l. is 39,338,489l. Advance to Ireland 2,500,000l. Intereſt payable for Loans of Emperor of Germany 497,735l. Making in the whole the ſum of 68,923,970l.

That it appears by the Report of a Committee of this Houſe in 1791, that the actual Expenditure of the Peace Eſtabliſhment (including the Annual Million for the Sinking Fund) was, on an average of five years, ending the 5th of Jan. 1791, 16,816,985l. That the additional Charge incurred by Debt, created ſince 1793, excluſive of Intereſt payable by Ireland, is 10,395,078l. That the additional Charge to be incurred for increaſed amount of Exchequer Bills outſtanding, is 212,100l. That the additional Charge to be incurred for intereſt of Navy Debt, is 285,000l. That the additional charge incurred on the Conſolidated Fund, is 370,000l. That the additional Charge incurred for a ſum annually voted for the redemption of Debt is 200,000l. That the additional Charge on 18,000 Seamen, the number employed in the laſt peace, from augmentation of Pay, addition to their Proviſions, and increaſed price of Naval Stores, cannot be eſtimated at leſs than 351,000l. That the additional Pay to the Army, on the ſame number as in the laſt peace, deducting ſtoppages, cannot be eſtimated at leſs than 170,000l. That the increaſed Charge of Half-pay and Chelſea cannot be eſtimated at leſs than 130,000l. That the increaſed Charges of the Ordnance, calculated on the numbers in the laſt peace, cannot be eſtimated at leſt than 49,500l. And that the future Peace Eſtabliſhment of Great Britain (excluſive of any Charges to be incurred by the intereſt on ſums to be paid on winding up the expences of the war; excluſive of any augmentation in the Naval or Military Eſtabliſhments beyond the laſt peace, and excluſive of 497,000l. intereſt due by the Emperor of Germany, and guaranteed by Parliament) cannot be eſtimated at leſs than 28,979,563l.

That the net produce of the Tax on Income for the year, ending the 5th of April, 1801 (excluſive of voluntary contributions, did not exceed the ſum of 5,590,530l. That the amount of Three per Cent. Stock, of which the intereſt is to be defrayed, and the principal to be redeemed by the Tax on Income) is 56,445,000l. That ſuppoſing the war to end with the preſent year, the net annual produce of the Tax on Income to be 5,600,000l. and the Three per Cents. to be, on an average, at 80, the ſum of 56,443,000l. together with the intereſt thereon, would not be redeemed until the end of the year 1811; and that the probable annual expenditure during the firſt ten years of peace (excluſive of any charges to be incurred for ſums to be paid on winding up the expences of the war, or any increaſe in the naval or military eſtabliſhments beyond the laſt peace) cannot be eſtimated at leſs than 34,500,000l.

After ſome ſlight obſervation from the CHANCELLOR of the EXCHEQUER and Mr. LUSHINGTON, the further conſideration of the ſubject was deferred till Monday.—The Iriſh Controverted bill was recommitted, and its duration limitted to the 1ſt of May, 1802, in order to inſure the future attention of the Houſe to the ſubject.—The Weſt India Prize Court bill paſſed a Committee, which reſolved that penſions to the amount of 2000l. be granted to Judges retiring from office, provided they had ſerved five years, and other ſums under different reſtrictions.

TUESDAY, 23.—The Card and Dice Duty, Iriſh Militia Pay and Clothing, Iriſh Hop Duty, and Iriſh Judges' Accommodation Bills were paſſed.

WEDNESDAY, 24.—A debate of ſome length took place on the ſubject of the Report of the Committee on the Eaſt India Budget. Mr. JONES and Mr. JOHNSTONE repreſented the ſituation of the India Company to be extremely critical and inſecure: that their debt amounted to nearly 20 millions; and that ſuch were their embarraſſments, that they were obliged to borrow money in order to pay the Dividends on their Stock. Sir F. BARING, Mr. D. SCOTT, and Mr. W. DUNDAS, on the contrary, contended that the ſituation of the Company was proſperous beyond example; that their reſources were unimpaired, and rapidly improving; that their debt did not exceed 14 millions, incurred by the extraordinary expences of the war, which had terminated ſo fortunately; and that inſtead of being obliged to borrow money to pay their Dividends (for which purpoſe they never had leſs than one million and a half), they had anticipated their ordinary payments to ſhipowners by large advances. The Reſolutions, as propoſed by Mr. Dundas on a former night, were ſeverally agreed to.

THURSDAY, 25.—The Bills relative to the Iriſh Abſentees Duties, New Foreſt Commiſſioners, Iriſh bonding of Rum, Iriſh Trade with America, Iriſh Corn Bounty, Iriſh expiring Laws, and General Encloſure Conſolidation, were read a third time, and paſſed.

FRIDAY, 26.—The Houſe agreed to the amendment in the Inſolvent Debtor's Bill, omitting the clauſe relating to the uncertificated Bankrupts.—Lord Folkſtone withdrew for this purpoſe his motion reſpecting Corn Factors.

MONDAY, 29.—The Chancellor of the Exchequer entered into a perſpicuous diſcuſſion of the financial ſtatements preſented to the Houſe by Mr. Tierney and himſelf, and deducing from them arguments of our increaſing proſperity, and the probable early reduction of our debt by the operation of the ſinking fund. Mr. Tierney viewed the ſame documents in a very different light, and preſſed the reſolutions which he had ſubmitted; but which, after a debate of conſiderable length, were negatived, and the reſolutions offered by the Chancellor of the Exchequer ſeverally adopted.

TUESDAY, 30.—Hayes's Divorce Bill was read a third time, and paſſed. The Chancellor of the Exchequer moved the cuſtomary reſolutions for the payment of the Officers of the Houſe.—Adjourned to

THURSDAY, July 1.—When, after ſome ordinary buſineſs, the Speaker, &c. attended in the Houſe of Peers, to hear the Royal Aſſent given to ſundry Bills; and on his return the Seſſion terminated.

Commercial Affairs.

ELEVEN ſhips have, this ſeaſon, returned from the whale fiſhery, in Davis's Straits, and the ſeas adjacent, after taking 128 fiſhes, ſuppoſed to afford 3810 buts of blubber, or 1280 buts of oil, which will yield, upon the whole, a clear profit of 54,800l. The value of the ſpermaceti and whalebone is not included in this eſtimate. No inſtance can be remembered of equal ſucceſs in this fiſhery.

An account of the quantities of fiſh exported from Newfoundland in the three years ending the 5th of Jan. 1793, and the three years ending the 5th of January, 1801:

	Dry. *Quintals.*	*Wet.* *Barrels.*		*Dry.* *Quintals.*	*Wet.* *Barrels.*
1790	684,421	— 6,221	1798	353,363	— 6,026
1791	720,147	— 70,11	1799	313,756	— 3,548
1792	565,833	— 5,596	1800	481,524	— 96
	1,970,401	18,828		1,148,643	9,670

The aggregate amount of the ſales of goods from India and China, in the year 1799-1800, was 10,160,510l. which is leſs than the ſales of the laſt year, in the ſum of 154,646l. The goods ſold on account of the Company were to a leſs amount by 269,339l.; thoſe on account of private traders exceeded the laſt year in 70y,021l.; and thoſe termed neutral property, by 107,672l.; being together an exceſs of 814,693l.; making a net diminution in the amount of ſales, as above ſtated, 153,646l.—a diminution ſcarcely requiring notice, when the ſurpriſing rapid increaſe in the laſt year is taken into conſideration.

By the neareſt calculation made from the accounts laid before the Committee, the advances in India for the inveſtments for Europe, and the charges on the commerce, in the courſe of the laſt year, are eſtimated to amount to about 2,700,000l. including the ſupplies to Canton.

Rice has riſen in price nearly 4s. per cwt. within a few days—the beſt new Carolina ſells at 30s. A few weeks will bring many thouſand cwt. to the market, and there is, in fact, more in the country at preſent than at any former period, ſo that the dealers, who now ſtint the ſupply, in order to enhance its price, will probably ſuffer by the ſpeculation.

At the Coal Exchange, on Friday the 17th ult. the beſt coals (Wall's End) ſold at 41s. per chaldron.

Refined ſugars felt a general depreſſion during the laſt week, but raw articles held their prices, though of heavy ſale. Teas, with the exception of beſt Souchong, are cheaper.

The quantity of wine brought by the fleet, which on Thurſday and Friday arrived in the ſeveral ports of the Channel, has, from the unfortunate ſituation of Portugal, greatly exceeded the importation of any former year.

The price of flour in America has, in conſequence of the great demand, riſen to 13 dollars per barrel;—ſo abundant was the laſt harveſt, that the farmers did not calculate to receive more than five dollars per barrel.

The ſales of ſalt in Bengal have for many years uniformly exceeded the eſtimate. The defalcation the Company have experienced in that article of late was in part produced by impediments to the manufacture in Bengal, and in part by the non-fulfilment of the contracts for coaſt ſale.

Expence of collecting the Public Revenue.

	£.			
Cuſtoms	6	13	5	per Ct.
Exciſe	4	19	0	
Stamps	4	6	7	
Land and Aſſeſſed Taxes	3	12	8	
Poſt Office	40	17	6	
Shilling in the Pound on Penſions	1	15	5	
Sixpence in the Pound ditto	1	10	4	
Hackney Coaches	9	8	2	
Hawkers and Pedlars	42	16	10	
Total permanent Revenue	6	4	7	

The new canal from Uxbridge to Paddington was opened on the 10th of laſt month, and boats with goods now go conſtantly thereon. There is alſo a very commodious paſſage boat, in imitation of that on the Duke of Bridgewater's canal, which will go daily to Uxbridge and back again.

Agriculture.

AGRICULTURAL REPORT, *for* JULY, 1801.

SOME of the wheats are a little injured by the ſmut, and others, where the land is very rich, rather affected with mill-dew; but where the crops were rather light, the late rains have increaſed the growth, and filled the ear

in an aſtoniſhing degree, and greatly improved the crops, which are now in early diſtricts nearly ready for the ſickle. Some rye and oats are already cut.

The ſhowery weather has rather injured ſome of the hay that was not cut early; however, moſt part has been well got in, and the weather appears favourable for what remains out; and the rains have cauſed the crops in general to be heavy this year; and have likewiſe cauſed the eddiſhes to be particularly good.

The rains have fallen very ſeaſonably alſo for the coleſeed and turnips, and the young plants in general look very healthful.

The ſhowery weather has amazingly improved the barleys, beans, peas, oats, and grain in general, eſpecially on all ſoils where the crops were light.

The potatoe crops, where they have eſcaped the curl, are in general very good. The rains alſo have greatly improved the hops.

Bacon and pickled pork are not only dear, but alſo rather ſcarce; and butchers meat in general continues very high in price. Store ſtock ſtill continues very dear, and are not likely to be much cheaper at preſent.

Chatteris, July 25. J. SCOTT.

An experimental farmer at Wigton, named Stamper, laſt year, after planting the eyes cut from potatoes, depoſited in a piece of ground properly prepared the hearts and pealings of the potatoes ſo left, and, in oppoſition to the general opinion, theſe fragments have vegetated nearly to the ſame degree as the eyes, and have already produced ſome very fine roots.

Some oats in the King's farm in Windſor Park were, previous to the late rains, ready for the ſickle; the wheat and rye were nearly ripe.

The recent rains have done infinite benefit to the growing crops; they have filled the ears, and given aſtoniſhing luxuriance and vigour to the plants. A fortnight's dry weather would in the ſouthern provinces bring the harveſt forward. The wheat in a few partial ſpots is laid, but not in ſuch manner as to endanger its ripening.

Hay-harveſt began in the neighbourhood of Stirling and Grangemouth on Saturday and Monday ſe'nnight; and it is now generally on the kerſes of Kenniel, Stirling, and Falkirk. Hay-harveſt was alſo begun laſt week in the vicinity of Aberdeen.

New potatoes were laſt week ſold in Aberdeen at 1s. 6d. per pint, near 20s. per peck.

A perſon in the neighbourhood of Aberdeen this ſping planted ſome barley and wheat by dibbling the ſeed in. The produce is, of barley from 12 to 34 ears from each ſeed, and of wheat from 10 to 18! If it were practicable to do this on a large ſcale, what an immenſe ſaving of ſeed, as well as increaſed produce?

The attention of the Magiſtrates of Edinburgh, and in particular of the Dean of Guild, to the ſtate of the public markets, is highly praiſe-worthy. Of the meaſures formerly in uſe for the ſale of potatoes, greens, peas, &c. ſcarcely one in twenty was equal to the ſtandard. It is now otherwiſe; a forpit of potatoes, which, according to the old practice of heaping the meaſure, was often under ſix pounds, muſt now weigh ſeven pounds. The difference in the price of proviſions between the preſent and the laſt year is remarkable, viz.

	July 3, 1800.	July 3, 1801.
Potatoes —	6s.	3s.
Green Peas —	4s.	1s. 6d.
Strawberries —	1s. 6d.	10d.
Beſt Oat Meal	3s. 2d.	2s. 6d.

The price of green peas in Edinburgh market, on the 8th, was 1s. per peck.—New potatoes, 2s. 6d. per peck.—Strawberries, 1s. the pint.

A Gentleman who has devoted much of his time to the culture of potatoes, recommends that the bloſſoms ſhould not be ſuffered to ſeed; as in perfecting

the ſeed, a large portion of the ſubſtance and ſtrength of the plant is drawn from the root.

At Hereford Midſummer Fair, wool ſold from 20s. to 29s. per ſtone; ſome prime ſamples went at higher prices.

In the autumn of 1798 ſome potatoe apples were gathered, and in the ſpring following the ſeeds were ſown by Mr. John Scurr, at Branthwaite Row, in the pariſh of Dean, one potatoe of which is now growing with a leaf which meaſures ſeven inches in length, and the ſame in breadth.

Mr. W. Rideaux, Attorney, of Kingſbridge, Devon, laſt week reaped a field of barley, at Buckland, near Kingſbridge; the field compriſed about ſeven acres, and has produced about forty buſhels of excellent grain per acre.

A neſt of the blackbird ſpecies, with four young birds, was lately taken in the vale of Blackmore; they are now in a high ſtate of plumage, two of them black, and two perfectly white.

About ſeventy acres of open field land in the neighbourhood of Bury, the greater part copyhold, and over which there is a right of ſheep-ſhackage, was laſt week ſold by public auction for the extraordinary ſum of 3,420l.—the rental only 60l. per annum.

The Kendal Agricultural Society held their annual meeting on the 9th of May, and diſtributed many premiums to a very handſome amount. This Society, which was inſtituted in 1779, has infuſed a ſpirit of emulation among the farmers and landholders, which has been of the greateſt benefit to the county.

So forward is vegetation in the North, that on Monday, the firſt of June, a quantity of ripe ſtrawberries were gathered in the neighbourhood of Dumfries, in an open garden.

Two hundred and fifty loads of potatoes, each weighing 240lb. were offered for ſale in Mancheſter market on Monday ſe'nnight at 14s. per load, without finding purchaſers;—in the early part of the day the owners had refuſed 19s. per load.

Fine new potatoes were the laſt week in June, in Lancaſter Market, at five farthings per lb. and eggs nineteen for 1s.

The Society of Agriculture in Paris propoſed the following method to prevent the bloſſom of fruit trees from being damaged by early ſpring froſt. If, they ſay, a hempen rope be intermixed among the branches of a fruit tree, and the end be brought down ſo as to terminate in a bucket of water, ſhould a froſt take place in the night, the bloſſoms will not be affected by it, but a film of ice, of conſiderable thickneſs, will be formed on the ſurface of the bucket, although another bucket placed near it will not have any ice at all.

The hops about Farnham and Alton are of good promiſe; there are ſome ſmall patches about Cuckfield which look indifferently.

A perſon reſiding near Mr. Pitt's houſe at Holwood, lately made a purchaſe of upwards of thirty acres of land, which he ſowed with barley laſt year, and the crop produced within twenty-five pounds of what he paid for the freehold!

A correſpondent who, during the laſt month, paſſed the greater part of Surrey, Berks, Bucks, Oxfordſhire, Hampſhire, and Suſſex, reports that the appearance of the grain was of uncommon promiſe.—Wheat was luxuriant, healthy, and forward. The oats were in many places in ſtrong and full ear, as was the barley about Brighton, Cuckfield, and Patcham. Potatoes, too, looked very well.—The crop of hay has been more abundant, and better ſaved than any harveſt for twenty years paſt.

About Sutton, Riegate, Crawley, and for a conſiderable extent to the eaſt and weſt of thoſe towns, there was a heavy fall of rain on Thurſday ſe'nnight and during the night—the corn has been eſſentially benefited by the circumſtance.

Manufactures and Useful Arts.

MR. Hayley, of Wimpole-ſtreet, who has long diſtinguiſhed himſelf by the accuracy of his time-keepers, has lately made an improvement in the conſtruction of theſe machines, which is ſimple, and promiſes to bring them to the greateſt perfection. A model and deſcription of this machine is preparing by the inventor.

M. Hoff, of Berlin, has made a ſort of grain or rice, as he calls it, from potatoes, by granulating them in a machine, invented by him, through which the potatoes are preſſed. The grains thus prepared and put in broth, make a very good ſoup.

Mr. Wild has lately obtained a patent for a harrow of a new conſtruction. It is contrived ſo as to obviate the inconveniences in rough and ſloping land, where the land is often done unequally. Dr. Anderſon has alſo obtained a patent for an improved hot-houſe.

A gentleman, of Grayſtock, in Cumberland, has lately invented a churn, which is ſaid to be worked with ſo much eaſe that a boy of twelve years of age can churn with it faſter than a man with the old churn.

Fine Arts, Sciences, and Literature.

THE grand Gallery of Antiques at Paris was lately opened, in which thoſe *chefs d'œuvres* of art that were brought from Italy, with many others that the French before poſſeſſed, are exhibited; it forms the fineſt aſſemblage that has ever been collected.

A gold medal has lately been preſented to Dr. Jenner, by the Medical Officers of the Navy, for his promulgation of the Vaccine Inoculation.

At the Leipſig Eaſter fair the number of new books were 2,894, and ſuppoſing the Michaelmas fair to be little more than 1,000, the whole will nearly amount to 4,000. The Publiſher of this Magazine imports them regularly.

In England it appears, by a very correct liſt of books in the annals of philoſophy, literature, &c. that the whole number of books and pamphlets does not quite reach 700.

Natural Phoenomena.

THE wife of Mr. Leddon, near Bath, was laſt week delivered of three boys and a girl, all likely to do well.

There is now living at Bampton, Oxfordſhire, a man named Pettypher: his age is 84; his father lived 80, his grandfather 96, his great grandfather 102, and his great great grandfather 106 years.

During the thunder ſtorm laſt month, the houſe of Mr. Hill, at Marksbury, near Bath, was ſtruck by lightning, and in a ſhort time reduced to aſhes. Mrs. Hill, with her infant child, and her ſiſter-in-law, were the only perſons in the houſe, and, alarmed at the ſtorm, had bolted the doors, and cloſed the window ſhutters, and removing as far as poſſible from the windows, got to the chimney, down which ſome ſtones ſhortly fell, accompanied by ſparks of fire, and a ſtrong ſulphureous ſmell. The ſiſter-in-law, who ſtood with her back to the fire-place, was ſtruck dead, although the only marks of injury that afterwards appeared were ſome livid ſpots on the back of her neck and ſhoulders. Mrs. Hill, who ſat cloſe by her, ran with her infant into an adjoining room and fainted. The houſe became in a few minutes involved in flames; and, although the fire was immediately diſcovered, yet ſo much time elapſed in forcing open the doors, &c. that itwas

with extreme danger and difficulty that Mrs. Hill and her child could be extricated.

During the ſame thunder ſtorm, one of the pinnacles of Corby ſteeple was beaten into the body of the church; at the ſame time a ſulphureous ſmell was ſo predominant, as almoſt to prevent reſpiration; and two oxen were killed on Bourn Fen by the lightning.

Some days ago an entertainment was given by Mr. W. Smith, of Sunny Bank, near Bolton, to the deſcendants of his father and mother, who were within a convenient diſtance. Nine brothers and ſiſters, and two hundred and ten nephews and nieces attended, making with himſelf a company of 220 perſons. After dinner the whole of this intereſting aſſembly were ſeated on benches in regular order of deſcent, with their numerous progeny, conſiſting of ſeventy-one perſons, and the reſt in ſucceſſion, each ſeparate family being collected together. This extraordinary ſight was witneſſed by a vaſt concourſe of people, who were highly pleaſed with the ſcene, and generally ſtruck with the very reſpectable appearance of this family meeting; which contained a large portion of perſons in thoſe circumſtances of eaſy mediocrity and competency, that are probably moſt favourable to the moral diſpoſitions and character, and the real comfort and enjoyment of life.—It is worthy notice, that in ſo extenſive a family, not one individual was prevented attending the meeting by ſickneſs, although the ſyphus fever has for ſome time been prevalent where a great portion of its members reſide.

At Brancepeth two bats were accidentally caught in the hollow of a tree, and being brought into the caſtle as a curioſity, were placed under a glaſs-caſe for an hour or two, when one of them was delivered of a young one, which immediately on its birth appeared very active, and clung to its mother's breaſt, where it ſeemed to continue as if in the act of ſucking. This incident proves, beyond a doubt, that the bat is not oviparous, as has been ſometimes thought.

Commercial Law Caſes,

KING's BENCH, WESTMINSTER.

WHITE, *v.* BARING, &c.

ACTION brought to recover the freight of a ſhip, of which the plaintiff was Maſter. Verdict for the plaintiff 104l. The Court being of opinion that the maſter had a *lien* on his freight.

WALTHAM, *v.* THOMSON.—This was an action on a policy of aſſurance from London to Madeira, warranted with convoy. When the ſignal was made for ſailing, the Captain was not on board, and the ſhip loſt the convoy. Verdict for defendant.

WATKINSON, *v.* MERCER.—The defendant, who is a Mealman ſold the plaintiff, a Baker, ten ſacks of meal at 12s. per ſack, and this action was brought on account of the meal being adulterated. The Jury gave a verdict for the plaintiff of 44l.

NORMAN, *v.* BIGG.—Action to recover part of a reward for convicting a perſon of lamp-breaking. Verdict for plaintiff 10l. The defendant had withheld a part of the reward under frivolous excuſes, and in the opinion of the Court, illegal pretences.

TERRY, *v.* BODDINGTON.—The plaintiff purchaſed 6000l. India Stock of a Mr. Davis on the 24th of February, who died before the ſtock was transferred. The action was brought to recover the value of the difference between the ſtock when purchaſed and when the action was brought. Verdict for plaintiff 420l.

A Sheriff's Officer, named Harrop, was lately convictrd at York in 20l. damages, for a falſe arreſt, and holding the plaintiff ſeventeen hours in

cuſtody. The bailiff received a writ to execute againſt the plaintiff, and ſending his follower to appriſe the latter of the circumſtance, conſented to ſuſpend the caption till the Saturday following: in the interim the plaintiff paid the debt and 16s: 6d. coſts; but Harrop not deeming the latter ſufficient, demanded the further ſum of 4l. 10s. which being refuſed, he arreſted the gentleman on the writ which had been ſued out, although he well knew that the debt for the recovery of which it had been granted had been diſcharged.—For falſe impriſonment under theſe circumſtances the action was brought.—The Court declared the charge to have been exorbitant; a Sheriff's Officer being entitled to no more than one guinea in caſes where the debt does not exceed 200l.

PIGMAN, *v.* PARLER.—This was an iſſue from the Court of Chancery, to try whether Meſſ. Steel, of Sutton, lime-burneſs, whoſe bankruptcy had made ſo much noiſe, were indebted at any period of the year 1788 to Mr. Durant, a gentleman of fortune in the county, in the ſum of 100l. or upwards.—Upon the reſult of the inquiry depended the validity of the ſtatute of bankruptcy and all the ſubſequent proceedings. Both the Mr. Steels and alſo Mr. Durant were examined, and clearly proved that in the month of October, 1788, there exiſted a debt due to the latter for money lent, to the amount of 600l.—The Mr. Steels underwent very rigid examinations from Mr Erſkine and Mr. Gibbs; but they paſſed through the ordeal with infinite credit to themſelves. Their teſtimony was believed: and a verdict was pronounced affirming the debt.

The KING, *v.* STONE.—This was a caſe which excited a great deal of attention. It was a queſtion upon a conviction under the game laws. Mr. M'Intoſh, with great ability, argued that the conviction was bad, becauſe the evidence and abjudication did not negative the qualification of the defendant to kill game. Mr. Gibbs argued that the proof of the negative reſted with the defendant, and therefore that the conviction was right. The Judges were divided in opinion. Lord Kenyon and Mr. Juſtice Groſe thought the conviction was wrong, and Mr. Juſtice Lawrance and Mr. Juſtice Le Blanc thought it was right. Judgment was of courſe ſuſpended.

DELAKE, *v.* COPLEY.—This was a cauſe on the execution of an engraving from the picture on the death of Lord Chatham. Many witneſſes were examined on both ſides, to aſcertain whether the picture was properly engraved. The Jury gave a verdict of 650l. for the plaintiff.

DARLY, *v.* NICHOLSON.—The plaintiff had taken out a patent for a perpetual oven, which his own witneſſes proved had been taken from a Magazine of 1761. Plaintiff nonſuited.

TURNER, *v.* DOUAY.—The queſtion was, whether the plaintiff had kept a bill endorſed to her from the defendant longer than he ought to do after it was due. Verdict for the plaintiff, ſubject to the opinion of the Court.

HARRIS, *v.* MORRIS.—Action to recover for board, &c. of the defendant's wife, who had eloped.—Juror withdrawn.

WILDMAN, *v.* SMITH.—Action to recover 47l. for a mare ſold by the defendant, and warranted ſound, but failing in the proof.—The Jury gave a conduct for defendant.

FORSTER, *v.* BURGH.—The defendant, when only ſeventeen years of age, ordered a gig of the plaintiff, which was delivered, value 105l. and he has attempted to recover on a plea that the plaintiff had renewed the contract after he came of age. Failing in his proof, a verdict was given for the defendant.

L——, *v.* MILES.—Action to recover for lodging of a woman who paſſed for the defendant's wife, and on which he inſiſted. Verdict for plaintiff.

HUNT, *v.* LORING.—Action to recove the value of three puncheons of gin loſt by the negligence of the defendant. Verdict for the plaintiff, ſubject to the opinion of the Court.

BENNER, *v.* WOOLCOTS.—Action brought to recover the value of two bales of ſerge, loſt by defendant, who is a waggoner. Verdict for the plaintiff.

The KING, *v.* OWEN and MARDLE.—The defendants were copper ſmiths, and had purchaſed old copper ſtolen from the king's ſtores. They were both found guilty.

BONNER, *v.* SCRAFTON.—A Mr. Pearſon had lived with a lady, by whom he had ſeveral children, made his will, and afterwards married her; he died ſoon after, without altering the will. This being a curious point of law, a verdict was taken for plaintiff, ſubject to the opinion of the Court.

SAVIL, *v.* PERCHARD.—The plaintiff ſent goods to be dyed to one Barclay, who ſent them to Perchard, and became inſolvent. Perchard, the dyer, kept them for a debt. Verdict for the defendant.

LEE, *v.* DRENKALD.—Drenkald was a lighterman, and brought for the plaintiff ſome rice from a ſhip in the Thames to a wharf, where the barge lay three days, and then ſunk. Verdict for the plaintiff, the Judge and Jury being of opinion that the reſponſibility of the lighterman ceaſes as ſoon as the barge or lighter comes to the the wharf.

LAWSON, *v.* WESTON.—A bill of exchange for 400l. was loſt, and taken up by an unknown perſon, for whom Lawſon, a banker, diſcounted it. The acceptors Weſton, refuſed to pay it, and this action was brought to recover. Verdict for plaintiff.

FISHWICK, *v.* LORIMER WESTON.—A ſhip was valued at 6,200l. in the policy ſlip; the defendant endeavoured to prove that ſhe was of leſs value when loſt than was inſured on her, but his Counſel admitted ſhe was of that value when ſhe ſailed. Verdict for plaintiff.

KING's BENCH, GUILDHALL, July 18.

SPECIAL JURY.] The only trial of any importance was an information, filed *ex officio*, by the Attorney General, againſt a Mr. Forge, a wax chandler, in New-ſtreet-ſquare, Shoe-lane; Mr. Stevenſon, his Attorney, and a Mr. Vicars, for conſpiring together to prevent a witneſs of the name of Baythorpe, from attending at the Exciſe-Office, to give evidence before the Commiſſioners. The defendant, Forge, was charged with having hired an upper room in the houſe of Baythorpe, a tinman, in Chandos-ſtreet, in which he ſecreted 1,400 wax candles, of the weight of 94lb. without having paid the duty for them. They were diſcovered, and a ſeizure was made by an Exciſe Officer. The defendant, Forge, was afterwards ſummoned to appear on a certain day before the Commiſſioners, and Baythorpe received a ſubpœna to attend at the ſame time. Forge promiſed to indemnify Baythorpe to keep out out of the way, which he did. Defendants were found guilty.

LONDON PRICES of GRAIN for *June and July* 1801.

MARK-LANE, *Monday, June* 29.

We had but a few freſh arrivals of either Foreign or Engliſh Grain in ſince this day ſe'nnight. Fine Wheat being in demand, went off full 1s. per quarter dearer than laſt Monday, but that of inferior quality is ſcarcely ſaleable.—In Rye no alteration.—Barley and Malt are briſker in ſale—as are Oats, which are full 2s. per quarter dearer.—White and Grey Peaſe, Tick and Small Beans, are very dull ſale.—In other articles, little or no variation.—Flour is full 5s. per ſack dearer.

Price of Grain, on board Ship, as under:

Wheat	65s	to 90s	Malt	50s	to 75s	Polands	24s	to 30s
Fine ditto		to 130s	Fine		to —s	Fine		to 40s
Superfine Kent		to 150s	White Peaſe	60s	to 75s	Small Beans	46s	to 50s
Rye	50s	to 58s	Grey Peaſe	44s	to 48s	Fine		to 2s
Barley	30s	to 42s	Fine	52s	to —s	Tick ditto	36s 40s	to 48s
Fine		to 54s	Short Sm. Oats	22s	to 3 s	Fine		to —s
Superfine		to 65s	Fine		to 36s			

LONDON PRICES OF GRAIN for *July* 1801.

MARK-LANE, *Monday, July* 6.

We have had a very ſhort ſupply of Engliſh Corn at Market this day, with a little Foreign, which cauſed Wheat of fine quality to be full 5s. per quarter dearer, ſince this day ſe'nnight. Fine runs from Eſſex and Suffolk, went off from 130s. to 150s. and fine Kentiſh, 155s.—In Rye no variation.—Barley and Malt are very dull ſale, there being but little demand for either.—Oats, of fine quality, are, if any thing, rather dearer.—In White and Grey Peas, Tick and Small Beans, and other articles, little or no alteration.—Flour 5s. higher than laſt Monday.

Price of Grain, on board Ship, as under:

Wheat	65s to 95s	Malt	50s to 76s	Polands	26s to 40s
Fine	to 150s	Fine	to —s	Fine	41s
Superfine	to 155s	White Peas	60s to 75s	Small Beans	42s to 48s
Rye	50s to 60s	Grey Peas	84s to 50s	Fine	to 50s
Barley	30s to 42s	Fine	54s to —s	Tick ditto	36s to 42s
Fine	to 54s	Sh. Small Oats	24s to 38s	Fine	to 48s
Superfine	to 65s	Fine	to 40s		

Monday, July 13.

We have had a very ſhort ſupply of all Grain at market this day, and fine Wheat being very ſcarce, experienced an advance of full 10s. per quarter ſince this day ſe'nnight, and 5s. from laſt Friday. Fine runs went off readily from 155s. to 165s. but coarſe and inferior ſamples were ſcarcely ſaleable.—Rye is full 3s. per quarter dearer.—Barley and Malt are very dull in ſale, and full 2s. per quarter dearer.—Oats of very fine quality, if any thing, are rather dearer; but coarſe and inferior ſamples are ſcarcely ſaleable.—In White and Grey Peas, little or no alteration; but Tick and Small Beans are rather dearer.—Flour full 5s. per ſack dearer.

Price of Grain, on board Ship, as under:

Wheat	65s to 90s	Malt	50s to 78s	Polands	26s. to 40s
Fine ditto	to 160s	Fine	to —s	Fine	to 42s
Superfine	to 165s	White Peas	65s to 78s	Small Beans	42s. to 50s
Rye	55s to 65s	Grey ditto	46s to 56s	Fine	to 54s
Barley	32s to 45s	Fine	—s to —s	Tick do.	36s to 48s
Fine	to 70s	Sh Small Oats	24s to 30s	Fine	to 5 s
Superfine	to —s	Fine	to 39s		

Monday, July 20.

Owing to the fineneſs of the weather, and daily expectation of a very large arrival of Wheat, cauſed our market, for that article, to be full 10s. per quarter cheaper. Fine runs from Kent, Eſſex, and Suffolk, went off from 160s. to 165s.—In Rye, Barley, and Malt, very little alteration.—Oats of fine quality, are full 2s. per quarter lower.—In White and Grey Peas, little or no variation; but Tick and Small Beans are very dull, and rather cheaper.—Flour the ſame as laſt week.

Price of Grain, on board Ship, as under:

Wheat	65s to 90s	Fine	to 78s	Polands	28s to 40s
Fine do.	to 160s	White Peaſe	65s to 78s	Fine	to —s
Superfine	to 165s	Fine	to 80s	Small Beans	45s to 54s
Rye	50s to 65s	Grey Peaſe	45s to 58s	Fine	to —s
Barley	32s to 54	Fine	—s to —s	Tick ditto	36s to 45s
Fine	to 70s	Sh. Small Oats	26s to 36s	Fine	to 49s
Malt	50s to 76s	Fine	to —s		

Monday, July 27.

Owing to the large arrival of Grain, and the proſperous appearance of a very fine harveſt, cauſed our Wheat Market to be very dull in ſale, and full 30s. per quarter cheaper than on this day ſe'nnight.—Rye is full 5s. per quarter lower.—Barley and Malt are very dull ſale, and ſomething lower.—Oats are full 6s. per quarter one per ſince laſt Monday, and but very little alteration from Friday.—White and Grey Peas, Tick and Small Beans, are very plentiful; the former are 4s. and the latter 2s. per quarter cheaper.—Flour is full 10s. per ſack cheaper.

Price of Grain, on board Ship, as under:

Wheat	65s to 95s	Malt	50s to 70s	Polands	—s to —s
Fine do.	to 120s	White Peas	50s to 7[illegible]	Fine	to —s
Superfine	to 135s	Fine	to —s	Small Beans	40s to 45s
Rye	50s to 60s	Grey do.	46s to 50s	Fine	48s
Barley	28s to 30s	Fine	—s to —s	Tick-di o	30s to 40s
Fine	to 45s	Oats	20s to 30s	Fine	t 44s
[illegible] Sm White [illegible]		Fine	to		

Return of Wheat in Mark-lane, from June 15th to the 20th inclusive.

Total 14,826 quarters.—Average 107s. 0d.——s. 5d. higher than last return.

Return of the Prices of Flour, from June 13th to the 18th inclusive.

Total 12,306 sacks.——Average 99s. 1d.——3s. 5¼d. lower than last return.

Hence results the Price of BREAD.

Quartern loaf 1s. 4¾d.——In favour of the Baker 0s 7d.

Price of Hops.

	Bags.		Pockets.	
Kent —	8l —s to 10l 0s	Kent —	9l 9s to 11l 11s	
Suſſex —	7l 10s to 9l —s	Suſſex —	9l 0s to 10l 0s	
Eſſex	7l 0s to 9l 0s	Farnham	6l 0s to 18l 0s	

Seeds.

Red Clover (per cwt.)	20s to 96s	Cinque Foil, do.	42s to —s
White Clover, do.	20s to 105s	White Muſtard Seed (p. buſh.)	10s to 14s
Trefoil, do.	5s to 50s	Brown do. do.	10s to 14s 6s
Turnip (per buſhel)	20s to 36s	Canary Seed do.	8s to 10d
Rye Graſs (per quarter)	30s 0 —s	Rape Seed (per laſt)	40l to 44l

Meat. Smithfield. Monday, June 29. (To ſink the offal. per ſtone of 8lb.)

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

Head of Cattle this day—Beaſts about 2,000—Sheep 7,500.

Raw Hides.

Hides (per ſtone)	3s —d to 3s 4d	Heavy Calf ——	10s 0d each.
Middling —	2s 8d to 2s 10d	Light Calf —	7d per lb.
Ordinary—	2s 4d to 2s 6d	Sheep Skins ——	1s 0d to 0s 0d

Price of Leather.

Butts, 50 to 56lb. each	19d to 20d	Calf Skins, 50 to 70lb. *p.* doz.	22d to 26d
Ditto, 60lb. to 66lb. each	22d to 23d	Ditto, 70 to 90lb do.	22d to 25d
Merchants Backs	19 to 19½	Ditto, 30 to 40lb. do.	18d to 21d
Dreſſing Hides	14 to 17d	Sm. Seals (Greenland)	30d to 33d *p.* lb.
Fine Coach Hides	17 to 18d	Large do.	100s to 140s *p.* d.zo
Crop Hides for cutting	17 to 19½	Tanned Horſe Hides	14s to 26s *p.* hide
Flat Ordinary	15 to 16d	Goat Skins	21s to 63s *p* doz

Price of Tallow.

St. James's Market —	3s 2d	Ruſſia ditto (Soap) —	55s to 0s
Clare Market —	3s 2½d	Melting Stuff —	49s 50s
Whitechapel Market —	3s 2d	Ditto rough —	30s —s
Per ſtone of 8lb.—Average	3s 2d	Graves —	20s 0s
Town Tallow	55s 6d	Good Dregs —	12s 0s
Ruſſia ditto (Candles)	58s 0d	Yellow Soap 72s. Mottled 80s. Curd 84s	

Candles per doz. 11s. — Molds 12s.

Prices of Hay and Straw on Saturday, June 27.

St. James's— Hay	5l 8s 0d to 6l 0s	Average 5l 14s 0d
Straw	2l 5s 0d to 3l 3s 0d	—— 2l 18s 6d
White-ch.— Hay	4l 10s to 6l —s	—— 5l 5s 0d
Clover	6l 10s to 7l —s	—— 6l 15s 0d
Straw	2l 14s to 3l 3s	—— 2l 18s 0d

Return of Wheat in Mark-lane, from June 22d to June 27th inclusive.

Total, 15967 quarters.—Average, 103s. 1½d.—3s. 10½d. lower than last return.

Return of the Prices of Flour, from June 20, to June 26 inclusive.

Total, 19620 sacks.——Average, 99s. 4¾d.—os. 3½d. higher than last return.

Hence results the Price of BREAD.

Eighty Quartern Loaves at 1s. 4¾ 111s 4¾d.———In favour of the Baker 3¼d.

Price of Hops.

	Bags.		Pockets.
Kent —	5l —s to 8l 8s	Kent —	8l —s to 10l —s
Suſſex —	5l 12s to 8l —s	Suſſex —	7l —s to 9l —s
Eſſex —	4l —s to 8l —s	Farnham —	5l —s to 12l —s

Seeds.

Red Clover (per cwt.)	20s to 90s	Cinque Foil, ditto	—s to —s
White Clover, ditto	20s to 110s	White Muſtard Seed (p. b.)	10s to 14s
Trefoil, ditto	5s to 40s	Brown do. do.	10s to 14s 6d
Turnip, (per buſhel)	16s to 28s	Canary Seed do. do.	8s to 10s
Rye Graſs, (per quarter)	18s to 40s	Rape Seed, (per laſt)	40l to 44l

Meat. Smithfield, Monday, June 6. (To ſink the offal. per ſtone of 8lb.

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

Lamb 4s 8d to 6s od

Head of Cattle this day)—Beaſts about 1,900—Sheep and Lambs 7,500.

Price of Leather.

Butts, 50 to 56lb. each	18½d to 19½d	Calf Skins, 50 to 70lb.	p.doz. 22d to 26d
Ditto, 60 to 66lb. each	21½d to 23d	Ditto, 70 to 80lb.	do. 22d to 25d
Merchants Backs	19d to 20d	Ditto, 30 to 40lb.	do. 18d to 21d
Dreſſing Hides —	14d to 16d	Sm. Seals (Greenland)	30d to 30d p. lb.
Fine Coach Hides	16d to 18d	Large do.	100s to 140s p. doz
Crop Hides for cutting	17d to 19d	Tanned Horſe Hides	14s to 25s p. hide
Flat Ordinary —	15d to 17d	Goat Skins	21s to 65s p. doz

Price of Tallow.

St. James's Market —	3s 4d	Ruſſia ditto (Soap) —	55s to 0s
Clare Market —	3s 3d	Melting Stuff —	47s to —s
Whitechapel Market —	3s 3d	Ditto rough —	35s to —s
Per ſtone of 8lb.—Average	3s 3d	Graves — —	17s
Town Tallow —	61s od	Good Dregs	13s
Ruſſia ditto (Candles) —	58s os	YellowSoap,72s--Mottled,80s.--Curd,84s	

Candles, per dozen, 11s od—Molds, 12s od

Prices of Hay and Straw on Saturday, June 31.

St. James's—Hay	4l 15s to 6l 6s	Average	5l 10s 6d
Straw	2l 14s to 3l 3s	———	2l 18s 6d
Whitech.—Hay	4l 10s to 6l 8s	———	5l 9s od
Clover	6l 6s to 7l —s	———	6l 13s od
Straw	2l 12s to 3l 4s	———	2l 18s od

Return of Wheat in Mark-lane, from 29th of June to July 4th inclusive.

Total 24000 Quarters—Average 110s 2¾d.—7s. ¾d. higher than laſt return.

Return of the Prices of Flour, from June 27th, to July 3d inclusive.

Total 16922 Sacks——Average 105s 5¼d.——1s 11d higher than laſt return.

Hence reſults the Price of BREAD.

Eighty Quartern loaves at 1s 5½d 5l 16s 8d———Againſt the Baker 9¾d.

Price of Hops.

	Bags.			Pockets.			
Kent —	5l 12s	to	7l 7s	Kent —	6l —s	to	9l 9s
Suſſex —	5l —s	to	6l 6s	Suſſex	6l —s	to	8l 8s
Eſſex —	5l —s	to	7l —s	Farnham	5l —s	to	10l —s

Seeds.

Red Clover, (per cwt.)	30s to 105s	Cinque Foil, ditto	—s to —s
White Clover, ditto	30s to 112s	White Muſtard-ſd. p. bu.	10s to 14s 0d
Trefoil, ditto	4s to 40s	Brown, ditto do.	10s to 14s 6d
Turnip, (per buſhel)	16s to 28s	Canary ſeed do.	8s to 10s
Rye Graſs (per quarter)	16s to 40s	Rapeſeed, per laſt	40l to 44l

Meat. Smithfield. Monday, July 6. (To ſink the offal. per ſtone of 8lb.

Beef	4s 6d	to	5s 4d	Veal . .	4s 0d	to	5s 8d
Mutton	5s 0d	to	6s 0d	Pork . .	5s 8d	to	6s 6d

Lamb, - 4s 8d to 6s 0d

Head of Cattle this day)——Beaſts about 2,000—Sheep and Lambs 9,500

Price of Leather.

Butts, 50 to 56lb. each	19½ to 20½	Calf Skins. 50 to 70lb. *p.* doz.	22d to 26d
Ditto, 60 to 66lb. each	22d to 23d	Ditto, 70 to 80lb. do.	22d to 25d
Merchants' Backs	19½ to 20½	Ditto, 30 to 40lb. do.	13d to 21d
Dreſſing Hides	14d to 16d	Sm. Seals (Greenland)	30d to 34d *p.* lb.
Fine Coach Hides	16d to 18d	Large do	100s to 140s *p.* doz.
Crop Hides for cutting	17d to 19d	Tanned Horſe Hides	14s to 20s *p.* hide.
Flat Ordinary . .	15d to 16d	Goat Skins	21s to 63s *p.* doz.

Price of Tallow.

St. James's Market —	3s 6d	Ruſſia ditto (Soap) .	57s 5s
Clare Market — —	3s 5d	Melting ſtuff . .	50s —s
Whitechapel Market —	3s 4d	Ditto rough . .	34s —s
Per ſtone of 8lb.—Average	3s 5d	Graves . .	20s —s
Town Tallow . .	58s 6d	Good Dregs . .	12s —s
Ruſſia ditto (Candles)	55s —s	Yellow Soap, 72s—Mottled 80s—Curd 84s	

Candles, per dozen, 11s—Molds, 12s 0d

Prices of Hay and Straw on Saturday July 11.

St. James's—Hay	5l 5s	to	6l 6s	Average	5l 15s	6d
Straw	2l 12s 6d	to	3l —s	———	2l 16s	3d
Whitechapel—Hay	4l 14s	to	6l 17s	———	5l 15s	0d
Clover	6l 10s	to	7l 5s	———	6l 17s	6d
Straw	2l 10s	to	3l 4s	———	2l 17s	0d

Return of Wheat in Mark-lane, from 6th of July, to the 11th of July, inclusive.

Total 23,993 Quarters——Average 116s. 7½d.——6s. 5¼d. higher than laſt return.

Return of the Price of Flour, from July 4, to July 10, inclusive.

Total 18338 Sacks.——Average 111s 5d.—5s 11¼d higher than laſt return.

Hence reſults the Price of BREAD.

Eighty Quartern loaves at 1s 6¾d 6l 5s——In favour of the Baker 1s. 7d.

Price of Hops.

	Bags		Pockets
Kent —	5l 12s to 7l 7s	Kent —	6l —s to 9l 9s
Suſſex —	5l —s to 6l 6s	Suſſex —	6l —s to 8l 8s
Eſſex —	6l —s to 5l —s	Farnham —	5l —s to 10l —s

Seeds.

Red Clover, (per cwt.)	30s to 105s	Cinque Foil, ditto	—s to —s
White Clover, ditto	30s to 112s	White Muſtard Seed, p. bu.	10s to 14s
Trefoil, ditto	4s to 40s	Brown, ditto do.	10s to 14s 6s
Turnip, (per buſhel)	16s to 28s	Canary Seed, do.	8s to 10d
Rye Graſs, (per quarter)	16s to 40s	Rape Seed, (per laſt)	40l to 44l

Meat. Smithfield. Monday, July 20. (To ſink the offal. per ſtone of 8lb.

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

Head of Cattle this day——Beaſts about 1,800—Sheep and Lambs 7,500

Raw Hides.

Hides (per ſtone)	3s 0d to 3s 4d	Heavy Calf —	10s 0d each
Middling —	0s 0d to 2s 8d	Light Calf —	7d per lb.
Ordinary —	0s 0d to 2s 6d		

Price of Leather.

Butts, 50 to 56lb. each	19d to 21d	Calf Skins, 50 to 70lb. *p.* doz.	22d to 26d
Ditto, 60 to 66lb. each	21½d to 23d	Ditto, 70 to 80lb. do.	22d to 25d
Merchants Backs	19½d to 20½d	Ditto, 30 to 40lb. do.	18d to 21d
Dreſſing Hides —	14d to 16d	Sm. Seals (Greenland)	30d to 33d per lb.
Fine Coach Hides	16d to 18d	Large ditto	100s to 140s doz.
Crop Hides for cutting	17d to 19d	Tanned Horſe Hides	14s to 26s *p.* hide.
Flat Ordinary —	14½d to 16d	Goat Skins	21s to 65s *p.* doz.

Price of Tallow.

St. James's Market —	3s 3½d	Ruſſia ditto (Soap) —	55s to —s
Clare Market —	0s 0d	Melting Stuff —	50s —s
Whitechapel Market —	3s 4½d	Ditto rough —	34s —s
Per ſtone of 8lb.—Average	3s 4d	Graves —	20s —s
Town Tallow —	57s 59d	Good Dregs —	12s —s
Ruſſia ditto (Candles)	56s to 58s 0d	Yellow Soap, 72s-Mottled 80s--Curd 84s	

Candles, *p.* doz. 11s—Moulds, 12s.

Prices of Hay and Straw on Saturday July 18.

St. James's— Hay	5l 0s to 6l 16s 6d	Average	5l 18s 3d
Straw	2l 17s to 3l 0s 0d	——	2l 18s 6d
Whitechap.—Hay	4l 10s to 6l 8s 0d	——	5l 9s 0d
Clover	6l 10s to 7l 0s 0d	——	6l 15s 0d
Straw	2l 12s to 3l 3s 0d	——	2l 17s 6d

Return of Wheat in Mark-lane, from the 13th July to 18th inclusive.

Total 12259 Quarters——Average 124s. 9½d.——8s 2d. higher than laſt return.

Return of the Prices of Flour, from 11th July to 17th inclusive.

Total 15344 Sacks——Average 122s 4½d——5s 9d higher than laſt return.

Hence reſults the Price of BREAD.

Eighty Quartern loaves at 1s 8d. 6l. 13s. 4d.—Againſt the Baker—1s ½d.

Price of Hops.

	Bags.			Pockets			
Kent	5l 12s to 8l 8s	Kent	—	5l 5s to 7l 7s
Suſſex	-	5l 0s to 8l 0s	Suſſex	-	5l —s to 6l 10s
Eſſex	-	5l 0s to 8l 0s	Farnham	——	5l 12s to 9l 0s

Seeds.

Red Clover, (per cwt.)	20s to 90s	Cinque Foil, ditto	—s to —s
White Clover, ditto	30s to 105s	White Muſtard Seed, p. bu.	10s to 14s 6d
Trefoil ditto	5s to 30s	Brown, ditto do.	10s to 14s 6d
Turnip, (per buſhel)	12s to 24s	Canary Seed do.	8s to 10s
Rye Graſs, (per quarter)	16s to 40s	Rape-ſeed, (per laſt)	40l to 44l

Meat. Smithfield, Monday, July 27, (To ſink the offal—per ſtone of 8lb.)

Beef ——	4 6d to 5s 4d	Veal ——	4s 4d to 5s 6d
Mutton ——	5s 0d to 5s 8d	Pork ——	5s 4d to 6s 8d
Lamb ——	5s 4d to 6s 6d		

Head of Cattle this day—Beaſts about 2,000—Sheep and Lambs 7,000.

Price of Leather.

Butts, 50 to 56lb. each	19½d to 21d	Calf Skins, 30 to 40lb.	p. doz. 18d to 21d
Ditto, 60 to 66lb. each	22d to 23d	Ditto, 50 to 70lb.	do. 22d to 26d
Merchants Backs	20d to 20½d	Ditto, 70 to 80lb.	do. 22d to 25d
Dreſſing Hides	14d to 17d	Sm. Seals (Greenland)	30d to 33d p. lb.
Fine Coach Hides	17d to 18d	Large do.	100s to 140s doz.
Crop Hides for cutting	17d to 19d	Tanned Horſe Hides	14s to 26s p. hide.
Flat Ordinary	15d to 16d	Goat Skins	21s to 65s p. doz.

Price of Bark, per Load, —l. 0s. to —l. —s.

Raw Hides.

Hides (per ſt.) ——	3s 0d to 3s 4d	Heavy Calf ——	10s 0d each
Middling ——	0s 0d to 2s 8d	Light Calf ——	7d per lb.
Ordinary ——	0s 0d to 2s 6d		

Sheep Skins — 1s 2d to 2s 8d

Lamb Skins 1s 9d - to 2s. 8d

Price of Tallow.

St. James's Market —	3s 3d	Ruſſia ditto (Soap) —	55s to —s
Clare Market —	3s 3d	Melting ſtuff	50s —s
Whitechapel Market —	3s 3d	Ditto rough ——	34s —s
Per ſtone of 8lb —Average	3s 3	Graves	20s to —s
Town Tallow —	57s 0d	Good Dregs —	12s
Ruſſia ditto (Candles)	56s to 57s	Yellow Soap 72s Mottled 80s Curd 84s	

Candles per Doz 11s.—Mold, 12s.

Price of Hay and Straw, July 25.

St. James's—Hay	5l 3s 0d to 6l 16s	Average	5l 19s 9d
Straw	2l 14s 0d to 3l 3s	——	2l 18s 6d
Whitechap.—Hay	4l 12s 0d to 6l 8s	——	5l 10s 0d
Clover	6l 10s 0d to 7l 5s	——	6l 17s 6d
Straw	2l 10s 0d to 3l 3s	——	2l 16s 6d

AVERAGE PRICES OF CORN, by the quarter of eight Winchester bushels And of OATMEAL, per boll, of 140 pounds avoirdupois.

From the Returns received in the Week, ending JULY 18, 1801.

COUNTIES INLAND.

COUNTIES.	Wheat.		Rye.		Barley.		Oats.		Beans.		Peaſe.		Oatmeal.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
Middleſex	147	2	58	0	43	3	36	2	50	2	53	4		
Surry	150	8			53	0	38	0	55	0	56	0		
Hertford	129	4			51	0	35	4	59	6	60	10		
Bedford	127	5	75	4	76	6	39	8	48	0	54	2		
Huntingdon	126	4			65	6	27	0	49	0				
Northampton	120	4			69	0	33	8	94	0				
Rutland	100	0			70	0	40	0	64	0			75	6
Leiceſter	119	2	99	9	69	7	35	1	63	1			71	7
Nottingham	127	10	82	0	75	0	30	6	56	0				
Derby	129	8					40	4	71	4			62	7
Stafford	149	1			58	8	45	7	72	1			64	4
Salop	147	4	94	2	84	1	41	8			80	0	103	1
Hereford	177	0	110	4	99	1	47	1	76	8	79	11	116	11
Worceſter	161	4	97	8	82	2	43	5	70	7				
Warwick	154	2			88	0	38	9	71	4	98	8	77	9
Wilts	145	4			68	4	38	4	68	4	60	0		
Berks	152	4			55	4	39	9	56	9	53	6		
Oxford	140	6			74	11	37	8	58	9				
Bucks	133	8			70	8	36	0	63	4	64	9		
Brecon	168	0	112	0	99	2	40	0					89	1
Montgomery	137	8			64	0	40	1					89	1
Radnor	139	9			96	0	35	4						

Maritime Counties.

Eſſex	137	4	50	9	53	9	33	4	47	6	40	0		
Kent	144	3			44	6	35	0	47	6	65	0		
Suſſex	153	0					35	8						
Suffolk	130	3			39	6	31	1	44	10	46	11	144	9
Cambridge	110	11			44	8	25	5	41	10				
Norfolk	120	4	78	0	41	3	28	8	42	6				
Lincoln	104	5	77	0	66	8	33	7						
York	116	3	95	8	60	1	31	8	59	10	96	0	76	3
Durham	140	8	63	2			50	5						
Northumberland	119	0	74	0	65	0	40	10			72	0		
Cumberland	139	2	90	10	85	3	53	1						
Weſtmorland	151	3	109	6	82	8	50	9					42	5
Lancaſter	128	6			61	9	47	2	56	0	44	11	36	8
Cheſter	121	11					42	10					36	1
Flint														
Denbigh	123	9			77	10	32	0					50	10
Angleſea														
Carnarvon	122	0			60	8	44	0					76	4
Merioneth	119	0			82	0	40	0					72	2
Cardigan	124	10			72	10								
Pembroke	116	4			76	4								
Carmarthen	148	0			86	0	32	0						
Glamorgan	154	8			92	0	50	11						
Glouceſter	163	10			80	3	37	8	66	8				
Somerſet	149	8					32	0	84	0				
Monmouth	173	6			109	4								
Devon	133	4			74	11	29	6						
Cornwall	126	2			81	2	27	9						
Dorſet	142	3			82	3								
Hants	151	2			65	6	36	2	65	7				

BANKRUPTCIES AND DIVIDENDS,

Announced between the 20th of June and the 20th of July 1801.

BANKRUPTCIES,

ARTAUD, S. jun. Pinner, ſhopkeeper. (Jones, Duke ſtreet, Lincoln's inn fields
Angus, J. Strand, carver, &c. [Pickering, Pudding lane
Allport, T. Lawrence Poultney hill, merchant. (Aſpinal, Quality court
Adcock, E. Birmingham, grocer. (Kinderley and Long, Symond's inn
Bird, W. B. Yarmouth, linen draper. [Charter, Printer ſtreet
Bezley, W. Briſtol, linen draper. (Blandford and Sweet, Temple
Bibby, T. Stockport, grocer. (Wright and Reynolds, Temple
Breton, W. March, millwright. (Miller, Carey ſtreet
Bridge, S. Sible Hedingham, plumber. [Holmes, Mark lane
Burchall, L. Southampton, draper. (Walker, Serjeant's inn
Corniſh, P. Taunton, cooper. [Kinglake, Taunton
Connard, J. Piccadilly, cutler. (Wright and Bovil, Chancery lane
Cutler, N. White's Grounds, Spaniſh-leather-dreſſer. [Fowler, Lambeth road
Cooke, N. Charles ſtreet, Weſtminſter, army broker. (Monkhouſe, Howland ſtreet
Chapman, W. Rugby, ſcrivener
Cole, B. Strand, innkeeper. [Benton, Swan yard, Blackman ſtreet
Cengoli, A. Sun ſtreet, floriſt. (Bloomfield and Foy, Manſel ſtreet
Cohen, J. Haydon ſquare, chair manufacturer. (Bloomfield and Foy, Manſel ſtreet
Chigiven, W. Weſt lane, merchant. [Iſaacs, Bury ſtreet
Campbell, J. Mortimer ſtreet, painter. (Wood, Bartholomew's Hoſpital
Cother, B. Wootton-under-Edge, clothier. (Price and Williams, Lincoln's inn
Collins, J. St. Paul's Church yard, confectioner. [Wild, Warwick ſquare
Cockayne, N. Derby, baker. [Bromley and Bell, Gray's inn
Deacon, J. E. New Bond ſtreet, linen draper. (Sherwood and Parrell, Canterbury ſquare
Daſh, E. Walcot, riding-maſter. [Edmunds, Lincoln's inn
Dearlove, J. Walworth, corn dealer. (Smith, Hatton garden
Dawſon, J. Hyde ſtreet, ſteel manufacturer. [Warrand, Arundel ſtreet
Evans, J. Mansfield Woodhouſe, hoſier. [Macdougal and Hunter, Lincoln's inn
Evans, T. Worceſter, merchant. (Platt, Bridge court
Earle, R. Chicheſter, ſpirit merchant. [Daliy, Chicheſter
Emmens, J. Abingdon, carrier. (Blagrave, Saliſbury ſtreet
Fearon, J. Birmingham, tin-plate-worker. (Dolphin, Birmingham
Farquhar, C. Madox ſtreet, builder. [Buxton, Great Marlbro'
French, H. Broad ſtreet, St. Giles's, card-maker. (Bennett, Dean's court, St. Paul's
Gadd, E. Taunton, druggiſt. (Tarrant, Chancery lane
Girling, D. Beccles, ſhopkeeper. (Loxley, Cheapſide
Gale, J. Bradford, clothier. (Debary and Cope, Temple
Gilman, J. Great Yarmouth, linen draper. (Swain and Stevens, Old Jewry
Howard, S. Bradford, carpenter. (Shephard and Adlington, Gray's inn
Hawkins, R. Kingſton, Hull, cabinet maker. [Sandwith, Hull
Hawkins, J. Newbury, dealer. (Bexwell, George ſtreet, Minories
Hillhead, R. Horſham, victualler. [Smith, Funival's inn
Hill, J. Maidſtone, glaſs ſeller. [Willington, Temple
Harding, W. and F. Mellor, Derby, mercers. (Barber and Brown, Fetter lane
Jones, S. J. Milſom, and S. Howard, Bradford, clothiers. [Debary and Cope, Temple
Lacey, S. Tooley ſtreet, oilman. (Gregory and Brookes, Wax chandler's hall
Marſh, T. Old Compton ſtreet, taylor. (Barber, Thanet place
Myers, J. Sunderland, hardwareman. (Sanſum, Ely place
Nicklin, E. and J. Tipton, mealmen. (Johnſton, Temple
Olivant, A. Stamford, miller. (Redfer, Stamford
Occarſen, A. Fenchurch ſtreet. (King and Setree, Cutler's hall
Perry J. and G. Rigge, Bread ſtreet, warehouſemen, (Jopſon, Lincoln's inn
Pugh, W. Worceſter, merchant. (Platt, Bridge court
Peacock, J. and C. Gill, London, merchants. [Baxters and Martin, Furnival's inn
Phillips, C. Halifax, merchant. (Wiggleſworth, Gray's inn
Riſk, J. Drury lane, currier. (Bousfield, Bouverie ſtreet
Robinſon, E. Dudley, carrier. (Fellows Dudley
Richardſon, P. Portſea, bookſeller. (Conſtable, Symond's inn
Ruddock, N. Monkwearmouth-ſhore, butcher. (Raiſbeck, Stockton
Rawſon, J. Leiceſter, hatter. [Egerton, Gray's inn
Smith, R. Bradford, victualler. (Williams, Caſtle ſtreet, Holborn
Stewart, J. Watford, mariner. (Dann and Teaſdale, Threadneedle ſtreet
Symons, E. P. and P. W. Crapp, Plaiſtow green, woolſtaplers, [Tilbury and Badford, Ely place
Wilſon, R. Bread ſtreet, merchant. [Darley, Ely place
Weller, W. W. Depford, miller. (Lambert, Hatton garden
Woolley, D. Carrhill, clothier. (Coulthurſt, Bedford row
Wood, J. Wedneſbury, gunlock maker. (Bourne, Dudley

DIVIDENDS ANNOUNCED.

Anderſon, A. and D. Robertſon, Coleman ſtreet, merchants, July 25
Armitage, M. Newport, miller, Aug. 4
Atkinſon, R. Kingſton, Hull, merchant, Aug. 10
Bourn, S. Spalding, grocer, July 17
Baker, J. Staines coach-maſter, Aug. 1
Banner, E. Liverpool, brewer July 22
Barrett, J. Worſley, fuſtain-manufacturer, July 28
Bradbury, S. Baſinghall ſtreet, broker July 20
Baker, C. jun. Prefcott, tanner, Aug. 3
Buddicom, R. J. Liverpool, merchant, Aug. 7
Bamber, W. Chorley, muſlin manufacturer, Aug. 13
Bentley, W. and W. Britain, Aſhton, lamp manufacturers, Aug. 14
Barrs, W. and S. Birmingham, linen drapers, Aug. 10 [final]
Cooper, J. Wild court, printer, July 14
Cooper, T. jun. Liverpool, horſe dealer, July 22
Cook, J. Leeds, builder, July 31
Duffin, J. and E. Chipping Norton, and F. Duffin, Thame, drapers, July 28
Davis, O Vine ſtreet, brewer, July 28
Dinividdie, J. Pendlebury, W. Dinividdie, Collythurſt, L. Dinividdie, Manchester, and H. Bewicke, Lawrence lane, merchants, Sept. 15
Doxon, J. Manchester, merchant, Aug. 12
Eldridge, C. Cheltenham, victualler, July 20
Edwards, T. New Bond ſtreet, haberdaſher, Sept. 5
Fiſher, S. Sheffield, ſcrivener, Aug. 1
Foxcroft, M. and E. Nottingham, milliners, July 31
Fearon, H. St. Mary Axe, factor Aug. 11
Graſlbrook, T. Wigan, ſhopkeeper, July 25
Grim-ditch, W. Liverpool, blackſmith, July 21
Greaves, J. ſenior, Walworth, inſurance-broker, July 25
Gowan, G. Great Ormond ſtreet, merchant, Aug. 11
Graham, W. P. Bread ſtreet, merchant, July 28
Grimſhaw, R. Gorton, and J. Grimſhaw, Manchester, merchants, July 30
Green, J. ſenior, Chorley, calico manufacturer, Aug. 12 [final]
Holroyd, H. Greenwich, hoop-bender, July 18
Harriſon, T. Lancaſter, merchant, July 22
Heap, W. and T. Burton, Manchester, dealers, July 28
Harris, S. and J. Clarke, Wormwood ſtreet, ironmongers July 18
Hair, J. Spur ſtreet, merchant, July 25
Hall, J. Weſt Bromwick, buckle-chape-maker. Aug. 21 [final]
Higgins, T. Throgmorton ſtreet, merchant, Aug. 18
James, J. Old Burlington ſtreet, taylor, Aug. 8
Kirk, G. and J. Ford, Grocer's Hall court, merchants, July 25
Lawſon, S. Rotherhithe, carver, Aug. 11
Morton, G. Long Acre, coach maker, July 14
Morrell, N. Newton on Ouſe, dealer, July 22
Mawbey, J. Long Buckley, cordwainer, July 20
Maclean, W. Goſport, ſhopkeeper, July 20
Mardon, J. Moreton, Hampſtead, ſerge-maker, July 24
Mure, H. R. and W. Mure, Fenchurch ſtreet, merchants, July 25
Mills, T. Maybank, potter, Aug. 4
Milne, A. Hatton garden, merchant, July 21
Maillard, J. J. Lime ſtreet, merchant, Aug. 1
Marriott, S. Paul's Head Tavern, vintner, Sep. 12
Pretyman, W. Great Tower ſtreet, cooper, July 14
Perkins, T. and J. Lazarus, Marybone ſtreet, mercers, July 18
Power, J. Nuneaton, maſter, Aug. 13
Page, C. Croydon, taylor, Aug. 4
Parry, S. Malmesbury, linen draper, Aug. 12
Richardſon, R. Corporation row, merchant, July 21
Roberts, R. and W. William, Great Diſtaff lane, warehouſemen, July 25
Rogers, E. and J. Rodd, Bread ſtreet, woollen-factors, Aug. 11
Robſon, J. Berwick, grocer, Aug. 13. [final]
Scudamore, C. and A. W. Collard, Manchester, manufacturers, July 18
Sheldrick, W. Witham, coach-maſter, July 21
Sedgewick, M. Darlington, grocer, July 25
Sweatman, W. Briſtol, linen-draper, Aug. 4
Shaw, J. Tongewith-Haulgh, and W. Shaw, and J. Boyes, Manchester, fuſtain-manufacturers, July 29
Smith, T. Tunſtall, potter, Aug. 4
Smither, J. Bath, hatter, Aug. 4
Stocken, O. F. jun. Parſon's Green, coal-merchant, Aug. 8
Thompſon, J. Craven ſtreet, victualler, July 14
Thorns, J. Broadway, Weſtminſter, cordwainer, Aug. 4
Terry, J. and W. Richards, Birmingham, button makers, Aug. 18
Towſey, G. Letcomb Regis, miller, Aug. 11
Wilkinſon, E. and W. Dudley, Charing Croſs, vintners, July 14
Weſt, J. Drury lane, taylor, Aug. 1
Watſon, T. Oxford ſtreet, dealer, Aug. 8
Woodward, T. Barnard Caſtle, ſpirit merchant, July 25
Wilkinſon, J. Kingſton, Hull, block maker, July 31
Wyberg, J. Manchester, ſhoemaker, Aug. 3
Wilkinſon, E. and W. Dudley, Charing Croſs, vintners, Aug. 11. (final)
Waldo, J. J. Francis, and J. J. Waldo, Birmingham, Briſtol, and Boſton, in America, merchants, Aug. 8
Young, G. and G. Gilbank, Budge row, merchants, July 25

A TABLE of the Prices of STOCKS in *July* 1801.

Days	Bank Stock.	3perCt. Red.	3perCt. Consols.	4per Ct. Consol.	5perCt. Navy.	5perCt. Loyalty	Long Ann.	Short Ann.	Imp. 3 per Ct.	Imperial Ann.	Omn.	India Stock	Eng. Tick.	Irish Tick	Consols Acct.
27	——	60 7/8 3/4	shut	79 5/8	shut	95 5/8 3/4	18 5-16 3/8		59 3/4	11 5/8	10 9 3/4		15 12	8 8	62 1/8 62
30	——	60 7/8 3/4	shut	79 5/8 3/4	shut	95 3/4 1/4	18 5-16 3/8				10 9 3/4		15 12	8 8	62 1/8 62
1	——	3/4	shut	79 5/8 3/4	shut	96 1/8	18 3/8 7-16		59 3/4 7/8		9 3/4		15 12	8 8	62 1/8 62
2	168	60 3/4 61	shut	79 5/8 7/8	shut	96 1/4	18 3/8 7-16		59 7/8 60	11 9-16 5/8	10		15 12	8 8	62 1/8
3	168 167 1/2	60 3/4	shut	79 3/4 7/8	shut	96 95 3/4	18 5-16 3/8		59 7/8 3/4		10		15 12	8 8	62 1/8 62
4	168	6 7/8 61	shut	79 3/4 7/8	shut										
6	168 1/4	60 7/8 61	60 3/8 5/8	76 3/4 7/8	95 1/4 1/2	95 7/8 96	18 3/8 7-16		59 7/8 60		10 1/4		15 15	8 8	62 1/4 5
7	168 1/4 167 3/4	61 1/8 60 7/8	60 1/2 1/4	79 7/8 80 1/8	95 1/4 3/8	95 7/8 96	18 3/8 7-16	5 3-16	60		10 1/4		15 15	8 8	62 3/4 1/8
8	——	61 60 7/8	60 1/2 1/4	80 1/2 80	95 3/8 1/2	96 3/8 1/2	18 7-16 3/8	5 3-16	60		10		15 15	8 8	62 1/8 62
9	167 1/2	60 7/8 61	60 3/8 1/2	80 1/4	95 3/8 1/2	95 7/8 96 1/8	18 7-16	5 3-16	59 7/8 60		10 1/4		15 15	8 8	62 1/8
10	168 1/2	61 1/8 1/4	60 5/8	80 1/4 5/8	95 3/4 3/8 dx	96 1/8 3/8	18 7-16 1/2	5 3-16 1/4	60 1/4 3/8	11 9-16	10 1/2	194 1/4 195	15 15	8 8	
11	—— ——	61 1/8 3/8	60 3/4 7/8	80 3/4 5/8	95 7/8 96	96 3/8 1/2	18 1/2 9-16	5 3-16 1/4		11 9-16 5/8	10 1/2		15 15	8 8	62 1/2
13	——	61 1/8 1/4	60 7/8 3/4	80 5/8 3/4	96 7/8	96 1/2 5/8	18 1/2 9-16	5 3-16 1/4	60 1/4 3/8	11 5/8	10 3/8 1/2		15 15	8 8	
14	——	61 1/4 1/8	60 3/4 1/2	80 5/8 3/4	96 3/4	96 3/4 1/2	18 1/2 9-16		60 1/4 1/8	11 5/8 9-16	10 1/2 1/4		15 15	8 8	
15	——	61 7/8 61	60 3/4 1/2	80 3/8 1/2	95 3/8 1/2	96 1/4 1/2	18 1/2 9-16	5 3-16 1/4	60 1/4 1/8	11 9-16	10 1/4		15 15	8 8	
16	168 1/2 3/4	61 1/8	60 7/8 1/2	80 1/2 3/4	95 1/2 5/8	96 3/8	18 1/2 9-16	5 1/4		11 1/2 9-16	10 1/4		15 15	8 8	
17	168 1/2	61 60 7/8	60 3/8	80 3/4 1/8	95 1/2 5/8	96 1/4 5/8	18 1/2	5 3-16			10 1/4		15 15	8 8	
18	——	61 60 7/8	60 3/8 1/4	80 1/2 7/8	95 1/8	96	18 7-16 1/2		60 1/4	11 1/2 7-16 1/4	9 3/4		15 15	8 8	
20	——	60 3/8 3/4	60 3/8 7/8	80 1/2	94 7/8 95	96	18 3/8		60	11 1/2	9 3/4 1/2		15 15	8 8	
21	——	60 3/4 5/8	60 1/8 3/4	80 3/8	94 5/8 5/8	95 7/8 1/2	18 5-16 3/8	5 3-16	60 59 3/4	11 7-16	9 1/2	194 3/4	15 15	8 8	
22	—— ——	60 1/4	58 1/2 5/8	80 1/4 1/8	94 5/8 1/2	95 3/4 5/8	18 5-16	5/8 3-16	59 5/8 7/8	11 3/8	9 1/2 3/4		15 15	8 8	
23	—— ——	60 1/4	59 3/8 1/2	80 1/4 1/2	94 1/2 3/8	95 1/2 3/8	18 5-16		59 1/2		8 3/4 1/4		15 15	8 8	59 7/8
24	—— ——	59 7/8	59 1/4 59	79 1/2	94 1/4	94 3/4 7/8	18 5-16	5 3-16 1/8	58 3/4		7 3/4 1/4		15 15	8 8	
27	—— ——	59 1/8	58 1/2 5/8		92 7/8	94 1/4	18 5-16 7/8		58 1/4 3/8		6 3/4		15 15	8 8	58 1/4

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