

shutter, which is of wood, in the hole at the top; and that prevents them from going into the upper hive. I then invert it in a bucket, and strike it with a rod till I think they are all out, after which they go into the under hive.

Another gentleman recommends the following: remove the hive into a darkened room, that it may appear to the bees as if it was late in the evening; then gently invert the hive, and place it between the frames of a chair, or any other steady support, and cover it with an empty hive, raised a little towards the window, to give the bees sufficient light to guide their ascent; hold the empty hive, steadily supported on the edge of the full hive, between the left side and arm, and continue striking with the right hand round the full hive, from the bottom upwards; and the bees, being frightened by the noise, will ascend into the other. Repeat the strokes, rather quick than strong, round the hive, till all the bees are gone out of it, which will be in about five minutes. As soon as a number of bees have got into the empty hive, it should be raised a little from the full one, that they may not return, but continue to ascend: when they are all out of the full hive, that in which they are must be placed on the stand, to receive the absent bees as they return from the fields.

Toddington, Bedfordshire, J. P.  
Sept. 24, 1811.

To the Editor of the Monthly Magazine.  
SIR,

AS the public in general seem to be of opinion that there is a distinction between the animals called crocodiles and the alligators, which seems very doubtful; I took an opportunity, lately, of very carefully both examining and drawing one of the latter, lately brought by the ship Elizabeth, to this port, from the Black River, in the island of Jamaica; having been caught when very young by her carpenter.

This alligator is not above two feet long, and, as far as I can observe, exactly resembles those animals which have been frequently exhibited in London, (both dried and living) as crocodiles of the Nile. Inhabiting swamps and rivers, it is an animal difficult to catch, as at the least noise, being amphibious, it drops under water like a frog or water-newt; and, being generally in company with the parents, whose size renders them for-

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midable enemies to man or beast, and who seem to prefer negro flesh to white, few persons are willing to undertake the business of ensnaring them.

This female, in warm weather, prefers being out of water for a long time; and one of its habits has shewn me, why it moves the upper and not the under jaw; for, when out of water, it reposes the head on the table, lifting up the upper mandible, and thus it remains till the mouth has flies in it, on which it instantly drops the jaw, like a trap-door, over the imprisoned sufferers. And thus, no doubt, it reposes it at the bottom of rivers to take in eels or other fishes; its temper seems gentle when not irritated, and, young as it is, it already knows its feeder; but when provoked by a cat or dog, it has already seized them. The manner in which its teeth are set, seems particularly calculated for taking and holding eels, as there are two waves in each jaw that enable it to press the prey out of a right line; the sharpness of its teeth, which are like fangs, and longest at each extremity of these waving indentures, also greatly aid its hold. In closing, there is reason to think they cross each other, but this I could not exactly ascertain. In the fossil ones I found that always the case, and observable in that of Mr. P. Hawker, of Stroud, which, like this, is a sharp-nosed alligator. The rows of teeth above and below, consist almost generally of thirty-six in each jaw, and are white as ivory, curved a little, long, and pointed. At the extremity of the nose on the upper side is a circular membrane, darker than the rest of the skin, and having two valves in the form of two small crescents, both of which it opens for air at the same time, though but rarely; above the eyes, which have nictating membranes, are two strong plates of bone; next comes the hinge of the upper-jaw, with four studs or scales, and behind them two plates, like shields; then the neck, after which four plates make the commencement of a process that extends to the point of the tail. The whole of what may be properly termed the tail (commencing below the anus, which is a ring of scales) consists of thirty-six joints, eighteen double-finned, and eighteen single-finned above; and this rule held good with two dried animals, called crocodiles, now in Mr. Bullock's Museum.

The arms before resemble the lizard's,  
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and have, like him, five fingers terminated with sharp claws; like him also, the division is of three inwardly and two outwards, the thumb and little finger being of the same magnitude. The hind legs are webbed strongly, and the claws strongest; in other respects the body resembles the coats of a turtle, but the arms are scaled and well defended.

Like the turtle, its belly is pale straw-colour, inclining to green, quite flat, the scales polished and squared, and each scale has a mark as if it had been pinned like a tile. The hinder legs in construction are much like those of a frog, and he goes very fast by their aid. In general, when out of water, it sits with the head elevated a great deal; in the water, with it supine. It eats the guts of chickens, or any offal; its smell is rather fishy, but not very disagreeably so.

What variety there is of this tribe, I believe we are but little acquainted with; neither has it been as yet well ascertained, what is the distinction between the Gangetic, that of the Nile, and these of the West Indies. Should any of your correspondents have observed the habits of either of them, I hope they will second my endeavours, by sending their remarks to accompany these, in order that thereby we may know how to distinguish the Greek, or Asiatic, crocodile, from the American, when repositied in museums. How far this alligator of the West Indies agrees with that at the British Museum, or in what respect it accords with the fossil of Mr. C. Hawker, I shall be glad to know, as in that fossil, I have observed a process of bony rings resembling those that surround the eyes of turkies; but, as I have never seen an alligator skinned, it is impossible to decide as to that peculiar defence against the pressure of air or water; and, as this annular bony ring has not, I believe, been as yet described minutely, I shall conclude this paper with the particulars of its construction. It consists of seventeen scale-like bones that, when united, form a circular iris, broader on one side than the other, four of which have double cavities, two sides of each separate scale form circular projections, while the other two sides are segments of a circle that, when united, compleat the annular boundery, whose projecting force is curved towards the light, each of about the thickness of a sheet of cartridge paper.

G. CUMBERLAND.

Bristol, Aug. 25, 1811.

To the Editor of the Monthly Magazine.

SIR,

I ADMIRE the eloquence of your correspondent's observation on Christianus. But he did not observe that the 15th chapter of John is written wholly in metaphor. And what about the quotation from the 10th chapter of Hebrews? To understand aright verse 28, 29, we need only read them in the context, verse 27, 28, 29, and 30. SENTIVA.

To the Editor of the Monthly Magazine.

SIR,

*Ex fumo dare Lucem.*

HIGHLY delighted as I profess to be with the prospect held forth in your last number, by your correspondent "Common Sense," of this country becoming independent of the "northern barbarians," for the supply of tallow, by the introduction of a more wholesome and economical artificial light from vegetable wax; I cannot refrain from setting that gentleman right, in respect to some errors he appears to be in concerning the scheme of Mr. Winsor, (copied from the late M. Le Bon, of Paris; himself again a copyist from Van Helmont, Lavoisier, Bishop Watson, Dr. Priestley, and others,) for the introduction of gas-lights. In the first place, your correspondent seems at a loss to comprehend how, after the beautiful demonstrations he, Mr. W. afforded the public in Pall-Mall, his excellent system miscarried.

Mr. Winsor's system, if so it may be called, has not miscarried. It is founded on the ever-beautiful, undeviating, operations of nature, or, I would rather say, on the eternal chemical operations of the divine cause, and consequently cannot miscarry or fail. Like the latent heat of Dr. Black it slumbers, and that from causes it would be difficult, and perhaps improper, if possible, to explain in a miscellaneous publication; but it will assuredly, under the benign influence of an enlightened prince, shortly emerge from the obscurity under which, owing to the prejudices of ignorance, and the causes above alluded to, it has hitherto been clouded.

As to the calculations of Mr. Winsor, generally supposed to be greatly exaggerated, (but by means of which, and the assistance of that two-edged sword, ridicule, they being unfairly taken without their context, a worthy member for a large northern county, caused the bill to be thrown out of the honourable

House



336 *Inefficacy of the Act for regulating Stage-Coaches.* [Nov. 1,

To the Editor of the Monthly Magazine.

SIR,

IT is with pleasure I see a disposition in your Magazine to correct all abuses that are injurious to the public; such objects steadily pursued must recommend it universally; and, as there are none more deeply to be deplored than those which arise out of the insolence and injustice of stage coachmen, I must beg of you to state a very bad, but very common, case, and my idea of an effectual remedy.

I lately took my place in a stage going to London, under the profession, by public advertisement, that it was safer than usual, being a Milton patent, calculated to be loaded only in a luggage-box below, with safety wheels, &c. but before we had got ten miles the passengers found it had become the most dangerous to travel in of any in the island, for the coachman not only had thirteen passengers at the top, but, in addition to the luggage-box-ful, he added as much as the coach could carry above, till the springs descended to play no more, and the body struck the axle-tree every gully it ran over. He next left the horses to the care of a passenger who had a child on his knee, and went to fetch parcels, and, to crown all, insulted all who found fault with him. Thus situated, three of his passengers demanded a chaise of the landlord of an inn where he stopped, who regretted he had none, as he publicly declared he believed the coach would break down before it got to London. All considered their lives as in danger, and one left the coach at last under that impression. To compleat all, the coachman refused to set down his luggage, and afterwards detained a part and overcharged the rest at the inn, compelling him to pay the overcharge before he would deliver it, notwithstanding the gentleman had come at his own expence to town. Yet for all this there was only one remedy, and that a very troublesome one. He complained, and was recommended to inform, in order to enforce a penalty by the court. The coachman not appearing to the first summons but sending his attorney. Then at next appearance came his attorney, counsel, learned in the law, &c. and by a mere quibble, founded on the place not being taken in the name of the passenger, but of the house he was to be called for at; by concealing the way-bill and keeping the book-keeper out of the way; in short, by using every evasion, he succeeded in

avoiding the fine pointed out by the acts, and only refunded and paid costs in the end, employing a reporter to misrepresent the results, as if he had come off with flying colours.

For the other offences the remedy was to return to two distinct counties, there wait till the magistrates met, and the coachman could be found there, sending a summons ten miles to meet him, and all this while neglecting your business, and living at an inn, or bringing an action, and staying in London two months to meet the trial.

Thus, Sir, you will see that the remedy, as the law stands, is worse than the evil; and it is well known that under the late act they load more than ever; and penalties, if levied, which few will be at the trouble of soliciting, they take care to recover by overloading again.

My idea of a remedy, therefore, for these crying evils is, to bring in a new act of parliament, declaring that every stage coachman, who lets a place in any stage for a journey, shall only take half the price before-hand, and shall at the time give a policy or contract, signed, stating to whom the numbered place actually belongs, what luggage is allowed, the terms on which they are to be conveyed, the time he will set out and arrive, barring accidents of road or weather, the places at which only he will stop; that he will not leave his horses but under the care of a regular horsekeeper, that he will not load a patent-coach except beneath, or take more than a fixed number of passengers inside or out; that he warrants against drunkenness in his driver, or starting into a gallop, &c. That let the act express what shall be the penalty for each breach of contract, to be proved by the oath of the passengers, on his arrival at the end of the journey, before any sitting-magistrate, and I trust we shall soon travel in peace and security.

G. CUMBERLAND.

Oct. 10, 1811.

P.S. Is there any reason why a person having engaged a place should not be at liberty to transfer it?

To the Editor of the Monthly Magazine.

SIR,

THERE is a peculiar archness about some people which makes it difficult to ascertain at all times whether they are in earnest or joke. If you are acquainted with your Hackney correspondent, who signs himself F. (page 23, of this volume) you may perhaps inform

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the Septuagint; and these differ considerably from each other. I have exhibited the variations of the three copies in the following table, with the addition of the dates in Josephus, which may have been equally vitiated by transcribers.

*Ages at their sons' birth.*

	Heb.	Sam.	Sept.	Jos.
Adam	130	130	230	130
Seth	105	105	205	105
Enos	90	90	190	90
Cainan	70	70	170	70
Mahalaleel	65	65	165	65
Jared	162	62	162	62
Enoch	65	65	165	65
Methuselah	187	67	167	187
Lamech	182	53	188	182
Noah, at the flood,	600	600	600	600
	1656	1307	2262	1556

*Years they lived after their sons' birth.*

	Heb.	Sam.	Sept.
Adam	800	800	700
Seth	807	807	707
Enos	815	815	715
Cainan	840	840	740
Mahalaleel	830	830	730
Jared	800	785	800
Enoch	300	300	200
Methuselah	782	673	802
Lamech	595	600	565

These variations in several respects justify the reasonings, and at any rate they justify the position, that none of them are to be depended upon according to their present reading. Their variation, as well as their coincidence, prove some error in principle and conception of the early transcribers, and demonstrate that our only mode of correcting them is by correcting the false reasonings of those transcribers.

The want of uniformity in disposing of the numbers in English translations of the Bible, and in the several copies of the ancient originals, whence it was translated, alone sufficiently demonstrates that the numbers, as they now stand, are altogether erroneous. There can be no doubt that the first value of each number is unity, though the denomination hundreds is given, yet it is contrary to the analogy that unity should follow over and over again in the same summation. Nor is it likely that the constant repetition of *nine* is correct, or that a single hundred should so generally precede the age at which the Patriarchs had their first children.

These, and many other points require to be accurately examined, by collating ancient copies of the Hebrew originals, for this special purpose; and by a careful investigation of the modes of notation used among the Jews at various periods,



Whenever this shall be done, I have no doubt it will appear that the errors are analogous in their general principle; consequently, the general principle on which I have corrected them will be found to average the errors, and to have produced a result, not very remote from what may appear after a learned and laborious investigation.

It may perhaps be received as an indirect confirmation of this hypothesis, that the preternatural ages of the antediluvian patriarchs are no-where referred to in subsequent parts either of the Old or New Testament; and, although many deductions are made in various parts of the writings of the Apostles, from remarkable facts contained in the Old Testament, yet they have in no instance made any allusion to these wonderful instances of longevity. I infer, therefore, that in that age the text did not stand as it does at present.

If theologians can tolerate the meddling of mere reason, they will at least view with candour this attempt to explain a great difficulty, and will, I hope, cheerfully lend their peculiar resources of study and books to its perfect solution.

Jan. 3, 1812. COMMON SENSE.

*To the Editor of the Monthly Magazine.*

SIR,

THE account Mr. Richardson has given of Abraham Taylor, the musical boy, appears to be very correct, except as to his having made himself master of several instruments, as he may rather be said to have made himself acquainted with the practice of them, in a manner that is very surprising, when we consider that, two years ago, he received, as a present, the first instrument he ever possessed, and that he now practises on for four.

When he called on me, the first and only time I have ever seen him, he brought his flute in his pocket, and played instantly, at sight, four airs that I am sure he could never have seen before. The first was one of Rousseau's, "*J'avois pris mes pantouffettes.*" The second, an air from Carolans Irish melodies: the third, *The Old Jew*, a very irregular Scotch air; and, lastly, one of the Venetian airs, published by P. Urbani: all of which he played at first sight very accurately, and then performed his own melodies; afterwards, at my desire, copying some music with a rapidity and correctness that would have been creditable to a well-practised hand.

The reason he gave me for first thinking

ing of composing airs, was, that they wanted a hymn tune, at the church of Iron Acton, for the children, and that he wanted tunes for himself, to practise on, and had none, or any money to buy them with. That he composed the *Soldier's Dream*, to satisfy Mr. Richardson, who was very kind to him, and that he showed him what expression meant, first of all. In this and every other question put to him, I thought he answered with candor, truth, and proper confidence. Mr. Ashe allowed him to go into the gallery at the last concert here, and the next day, his remarks proved his feeling, for the art he has selected, to be founded on a good ear.

I have spared no pains to introduce his name where I thought it might be serviceable to him; and we trust, he will somewhere find a teacher of talents and humanity, who will assist him in his outset in life, by taking him apprentice without a fee. Should he not meet with this fostering hand, instead of becoming, by culture, eminent like a Crotch, he may, and, most probably will, go on learning instruments without any fixed principles, and ultimately end as a popular performer at wakes and country-fairs.

For these strong propensities are marks of healthy seeds in the mind, that, under proper culture, will grow and be very productive, but neglected to be planted in due time, either desiccate or rot.

G. CUMBERLAND.

Bristol, Jan. 10, 1811.

To the Editor of the Monthly Magazine.

SIR,

CONVERSING with my friend, Mr. John Mander, (an eminent Chymist of Wolverhampton,) on the subject of the insect which has of late years been so destructive to the apple-trees; he informed me, that he had made experiments on a variety of substances, in the hope of finding one which would readily and effectually destroy this dangerous enemy of our gardens and orchards; and that, as far as the uniformly successful experience of two or three years could warrant the opinion, he believed he had succeeded. He also permitted me to make it known, if I wished it, through any medium I might think proper, and I know of none so well calculated to give it a general currency as your very valuable miscellany.

This useful remedy is the spirit of tar. The mode of using it is exceedingly simple and easy. Wherever the insects or

white efflorescence appear, the spirit is to be applied with a camel's-hair brush, when it immediately and effectually destroys them; and, as it is of a thin and penetrating nature, it more completely follows them through any crevices in the bark, into which they may have insinuated themselves, than any of those more viscid applications which have hitherto been in use. It may be applied at any time of the day, or at any season of the year, when the insect may appear. The slightest injury to the bark of the tree has never been discovered from the use of it. Spirit of turpentine appeared to be the substance next in effect, in killing this destructive insect; but the spirit of tar has not only the merit of being still more effectual, but that also of being as cheap again as spirit of turpentine. Where an orchard is much affected by this disease, if I may so term it, perhaps, this mode of removing it, by touching every diseased part, may appear rather an Herculean task, but still it is propable, that a good-sized brush would enable a person to pass over a greater surface, with this thin fluid, in a short time, than might readily be imagined. At any rate, however, this is an objection that cannot apply to its use in gardens, or other places where the surface to be touched is not excessively large.

CHRISTOPHER HEBB.

Worcester, May 18, 1811.

To the Editor of the Monthly Magazine.

SIR,

READING, in your valuable Magazine of last month, page 221, on the subject of a substitute recommended for oil and tallow-chandlers, I am induced to express my opinion, that I should conceive some better general mode of lighting the streets of this great metropolis might be adopted. I observe that either the lamps give too little or too great a light; some plan between the two extremes might surely be hit upon by the ingenious, whereby the public benefit intended would be enjoyed; for, according to the present neglected state of these luminaries, my observation is, that they are either too dim and dull to afford light sufficiently to be of use, or else they blind you by their glare at different intervals as you walk along the streets.

I shall also take this opportunity of noticing my surprise, that several of the turnpike roads, very near the stones, have no lamps at all.

T. T. R.

Kennington, Oct. 22, 1811.

To

predecessors? These are questions which we hear occasionally agitated, and which, in the minds of Englishmen at least, must excite the most lively interest. If the fate of those nations is not likely to be also the fate of England, there must then exist some essential difference between England and them: but does any such difference exist? Certainly there does; and it consists in this, that those nations have all fallen by means of an attack which, from the local situation of England, never can be made upon her; I mean an attack on the land-side. If we look to the History of the nations which have preceded her in naval dominion, we shall see that the ocean has been the source of their grandeur, and that the land has been the cause of their fall: we shall see that the same commerce that made them great and powerful at sea, made them weak and feeble on land, by exhausting their energies upon their fleets and naval armaments, which were necessary for the protection of their commerce, and which offered more inducements to the daring and adventurous, than the land service: we shall see that such has been their local situation, that their fleets, in which their chief strength has consisted, have never been able to form a line of protection around them; that they have all been accessible on the land-side; and that by attacks from that quarter, where maritime strength could avail them nothing, they have all successively fallen. Tyre, the father of commercial nations, occupied a situation which rendered it less accessible than most of the nations which have in turn inherited its maritime greatness; yet, however, though its peculiar situation enabled it to bring its powerful fleets to its defence, the facility of approach, which its junction with the land gave to the victorious arms of Alexander, led to its ruin; and it fell, like its children, (if I may so term its successors in naval dominion) by an attack on the land-side. Carthage, its immediate offspring, fell in like manner: had it been content to struggle with its great rival on its proper element—the sea, it might have held its naval empire during a much longer period than it did. In modern times, we have beheld Venice, in the midst of her splendor, and whilst her galies still covered the seas, fall from her exalted station, to a level with the other Italian states, by a single blow on the land-side, inflicted by the league of Cambray. The Hollanders, too, have

fallen in the midst of their prosperity by a similar attack; by an attack on the land-side.

The commerce of France, likewise, and her navy, have been neglected and ruined by the same cause. The sanguinary wars which the revolution drew upon her, required her utmost efforts; and the necessity she was under of defending herself upon the land-side, left her neither leisure nor means to attend to her fleets. Now England, as an island, is incapable of falling by the same means, and therefore the fate of other commercial nations ought not to alarm us; seeing, however, that the weakness of their land-forces has invariably been the cause of their fall, it behoves us to attend to ours; and, though our navy should ever be the first object of our care, yet our land-forces, as they may one day or other be necessary for our protection, should always be preserved upon a footing of respectability.

*Kentish-Town, Dec. 10, 1811. II.*

*To the Editor of the Monthly Magazine.*

SIR,

HAVING always found your pages open to any observations that had a tendency to benefit either the public or individuals of merit, especially when in obscurity through neglect; I must now press you a little farther on the same score; although the objects I wish to plead for, I must confess, are incapable of feeling for their own wretched situation, the injuries they are receiving, and have for years received, and are so far from complaining of neglect and obscurity, that they can only excite pity by their silent solitary abandonment.

There are two bodies of men in this country, who I know can, and I trust will, relieve them when their present condition is sufficiently displayed, and the causes of their slow destruction; when their enemies are pointed out; and the neglect of those, who ought to be their guardians, exposed: and, although I cannot assert that I have a commission to plead for them, except from my injured feelings, yet I hope, when I assure you that they cannot plead for themselves, I may be allowed to dictate for them at least a *Petition*, and that you will on my part present the following with due humility.

*Jan. 10, 1812.*

G. CUMBERLAND.

[The humble *Petition* of nearly all the *Ancient Monuments*, in this kingdom, of burgesses,



burgesses, squirees, knights, cross-legged and others, heroes, nobles, princes, queens, and kings; also that of abbots, bishops, &c. &c. To which is added that of screens, choirs, sacristies, private-chapels, and cathedrals.]

To the Venerable Society of Antiquaries, the Honorable Society of Arts, and the Royal Academy.

Sheweth,

That your Petitioners are the best remains of the works of the most eminent artists of their times, executed by the commands of exalted and virtuous characters, without any regard to expense, and from the most pious motives; that in them exist still the best resemblances of the clergy, warriors, and nobility, of these realms, although cruelly dismembered, fractured, and insolently mutilated. But that which your petitioners have most cause to complain of, is, that, through the negligence of the clergy, the ignorance of corporations, and the disregard of the present race of nobility and gentry, they are delivered over in general to the greatest enemies they have ever had since they were first created out of stone and marble by artists deserving immortality though now forgot, and whose names have perished before their beautiful works were quite obliterated by the infernal hosts of sordid *Whitewashers*, whose annual dawblings have already in many places half extinguished their beauties, and now bid fair, if not speedily opposed, to compleatly envelope them in artificial stalagmites, a fag of mortar, and a shell of mud.

Your Petitioners, therefore, humbly hope, that, as it seems impossible to give taste to the clergy, or liberality to corporations, and as none now but artists and antiquarians seem to care about them, the *Antiquarians* will be pleased to reflect on their duty, and solicit Parliament for an act to punish with slitting of noses, and cutting off of ears, &c. &c. any person whatever who shall presume hereafter, to *whitewash* monuments, either Gothic or Saxon, under pretence of embellishing them, but in reality with a tendency to their slow demolition, many fine foliagees being now become, by this infamous invention, solid amorphous masses, jewels obliterated from crowns, robes of fur converted into dabs of plaister, chains of honour to leathern straps, swords to walking sticks, eyes blinded, mouths gagged, ears plugged up, noses stopped, and hair reduced to the thrums of old mops, while coats of arms are now coats of plaister, and coats of mail are no longer visible.

They next hope that the Society of Arts will offer a handsome premium to the person who shall discover, by any chemical process, a mode of dissolving the long laborious dressings of these accursed *Whitewashers*, so as to deliver them from the incubus of malice that now, in

fifty folds, envelopes some of the most ill-used of them; and then they hope and trust that, without a miracle, the eyes of the members of the *Royal Academy* will be opened, and seeing, what they will then be enabled very easily to see, the purest and most venerable forms; ornaments necessary to be studied by those who would wish to excel in historical painting; proportions, the result of the deepest geometrical studies, united with the most exquisite taste; and elevations that lift up the minds of the very stupidest of mankind. They will not fail to send a column of their best students through the kingdom, with the younger *Statbard* at their head, to actively arrest the hand of Time, by scrupulously delineating all that his slow but persevering hand has spared; and, these ends accomplished, as they ought to be, no one can doubt that the *Regent* will collect their drawings for the national benefit, and ultimately place them in the archives of the *British Museum*, there to remain as helps to art, and the immortal monuments of national grandeur.

And your humble Petitioners, &c.

THE WHITEWASHED MONUMENTS.

To the Editor of the Monthly Magazine.

SIR,

I HAVE observed with much satisfaction that you frequently allude to the rapid increase of libraries and literary societies throughout the empire. The establishment of these institutions has had a powerful tendency to hasten the advancement of knowledge, and perhaps has contributed more than any other circumstance to obtain for the times in which we live, the title of "the Age of Liberal Inquiry."

In hours of relaxation from business, men will have amusement. The efforts of moralists have, therefore, properly been directed to persuade them to adopt those, which are not only innocent in themselves, but ultimately lead to mental and moral improvement. Sentiments, somewhat similar to these, have lately been diffused, with uncommon rapidity, among the thinking part of the people of Scotland; and various societies have arisen for the purpose of promoting the dissemination of knowledge. Views, something analogous to them, must have actuated a few individuals in this city; for they last year\* formed a society, to which they gave the name of "the Edinburgh Institute." The principal object this in-

\* In September 1810.

declining to the eastward from the zenith.

It was not quite so uniform and even as a rainbow, which it so greatly in form resembled, and so vastly exceeded in its span.

I hardly ever remember so serene and clear a night, wholly cloudless, except for some few minutes at first towards sunrise, the moist vapours precluded, and there was a haze. Thermometer: from 38 to 40, in a room with the window open.

The moon, when obscured totally, did not appear copper-colored, the eastern sides at 5h. 13'. When I first observed, it appeared of a greyish black, the other side of the total obscuration thinner and fainter.

#### A NEW POEM.

I cannot help noticing to you, *The Orphan*, a poem, by Mr. C. Turner. It has a modest and delicate, yet manly, dedication to the public. It has incorrections, which more leisure and freedom from anxiety would have removed; but there is a meekness, dignity, and pathos, in the numbers, diction, imagery, and sentiment, highly interesting. I should wish to see, in your Magazine, extracts either from his Remarks on the Abolition of the Slave Trade, or his Descriptive Character of the Author of the Farmer's Boy.

ANNE MOORE.

I find, in the *Journal Encyclopedique* for 1781,\* an instance of life supported without sleep, food, or even drink, which exceeds that lately noticed in Staffordshire.

Nov. 1, 1780.

"There is living, in the village of Derningen, in the territory of the town of Rothweil, a woman named Mary Mutschler, of the age of 50, married, and a Catholic, who, for more than seven years, has neither drank, nor eaten, nor slept. She lies in bed; her body doubled; she has her reason entire; and employs herself, night and day, in the reading of books of piety; and continues often for hours together in contemplation or meditation on what she has read.

COINCIDENCE between MILTON and SHAKESPEARE.

"Omittance is no quittance."

*As you Like it.*

This proverbial expression raised to the

\* Page 513.

Epic pitch, by a slight alteration, is thus in our other glory of English poetry,

"——— but soon shall find

Forbearance no acquittance." P. L.

As you Like it, is one of those plays which was probably a favorite with Milton; as the "wood-notes wild of sweetest Shakespeare" very characteristically distinguish it. In few of his plays is he more evidently or so pleasingly "Fancy's Child."

#### CELESTIAL COINCIDENCE.

The occultation of a fixed star, at the time of an eclipse of the earth by the moon's shadow commencing, will deserve observation on the 2d of September, 9h. 22' 22", being 1' 10" before the commencement of the eclipse at Greenwich. The emersion will be more striking, being, at the height of the eclipse, nearly at 10h. 4'. Both take place at 12' south of the moon's centre. The star is the 11th of Aquarius. The commencement of the two phenomena being rare, I have extracted it from Freund.

CAPEL LOFFT.

To the Editor of the Monthly Magazine.

SIR,

I HAVE for a great number of years been in a disinterested correspondence with your voluminous Magazine, signing my name to my productions, from a principle that I have long held, which is, that no man ought ever to write anonymously, and that the freedom of the press\* is best upheld by those who sign their names to all they print.

You will therefore not be surprised, if an author of my way of thinking, should be unwilling to have his original compositions

\* Mr. Cumberland might have explained, that the freedom of the press depends on its morality, and that this is best secured by the public having the personal guarantee of writers for their opinions. The want of this personal responsibility is a chief cause of the dishonesty of reviewers, and is the only juridical pretence for curbing the liberty of the press. The chief objection is the liability of the writer to anonymous animadversion, in which malignity and impertinence lie under no restraint; and known writers, so attacked, have no security but in the discrimination of sensible readers, who ought seldom to read, or credit anonymous attacks, on known personages. Our correspondents have this security in our pages, as we never allow any of our anonymous correspondents to assail with rudeness those who honor us with their real signatures. EDITOR.

sitions attributed to others, particularly when of the same family, while his Christian name, *George*, stands conspicuous on all his title-pages, except one, and that was always sold by the publisher as his.

You will not, therefore, I am sure, refuse me the justice of correcting the London Catalogue, printed by Mr. Bent, in August last, but which chance only brought before me this day, where I find two of my works, viz. My "*Thoughts on Outline Sculpture, &c.*" a quarto, with twenty-five plates; and my "*Life of Julio Bonasoni*," the engraver, contemporary with Mark-Antonio Raimondi; are both attributed to the pen of a very distant relation of the same name, the late Mr. Richard Cumberland, a man with whom I had little acquaintance, and no approximation, I hope, with his hollow character; who chose, in our rare interviews, to daub me with that nauseous flattery, that he thought it his interest to bestow indiscriminately on all authors; while behind their backs, he loaded them with invectives, and who ended with laying claim to as his own, even the trifles I sent to your publication; and among others, the *Life of Charles Grignon*; of which I received a disgusting proof when only last in town.

What I have published, all *with my name*, are several letters and essays in your Magazine; several others in Mr. Nicholson's Philosophical Journal.—A Poem, on the Landscapes of Great Britain.—Lewina, a poem.—The Life of Julio Bonasoni.—An Attempt to describe *Hajod*, the seat of Colonel Johnes, M.P.—A Sketch of Bromley, in Kent, the seat of the Right Honourable Charles Long, M.P.—Two volumes of Original Tales, in prose.—And a Sermon without any signature.

Bristol, GEORGE CUMBERLAND.  
Jan. 10, 1812.

To the Editor of the Monthly Magazine.  
SIR,

A LONG time ago I forwarded to you, a plan for the abolition of poor's-rates, by means of an extension of the principle of Benefit Clubs. I could not have supposed that an idea, manifestly benevolent, and expressed with plainness and temper, could have met with personal attacks, of the most virulent kind. Such however was the event, and when the authors know that I have been intimately acquainted with all the numerous assaults of this same gen-

tlemanly character, upon my illustrious friend, Dr. Jenner, they may be assured, that I esteem them matters of course. The numerous and learned works which I have had the honour to publish, give me, I presume, a just title to decline noticing anonymous writers.

In the Gloucester Journal of Monday, February 3, 1812, a writer (unknown to me, and anonymous,) has the following passage, "The writer of this paper learnt, from the proprietor of a great work, carried on in different parts of the kingdom, in which they constantly employed near three thousand hands, that they regularly deducted, I think, six-pence per week from the wages of all their people, which amply supported them, when it became necessary, and none ever applied to the parish to which they belonged for parochial relief." The same writer adds, that he suggested something of the same kind years ago, to Mr. Colquhoun, who approved of the plan. All I can say upon this latter head is, that the ideas suggested are the same as my own, viz. Benefit Clubs, aided by subscriptions, and the support of the great. The approbation of such an experienced man as Mr. Colquhoun, is more than sufficient to bias a thinking man, let anonymous writers deal in hypothesis as much as they may.

I have attended parish-meetings, and lived in parishes where every thing prudent has been done. I solemnly think, that the system of poor's-rates, as it now stands, is a disgrace to the policy of a civilized nation. I also believe, that relief, in another form, would be more efficient, and have the best effect upon the morals of the poor: and that it will be found in a few years, impossible to unite the payment of such a rate with our taxes. I am told, however, that to compel the poor to belong to a benefit club, is an infringement of the liberty of the subject. It is needless to notice such absolute nonsense, farther than to say, that it is the principle of all legislation for all parties to contribute to the necessities of the state. No poor man buys sugar or tea, but pays a part of the duty imposed upon the articles; but if he was taxed to aid the support of himself and family, instead of government, it is a grievous infringement of the liberty of the subject! The fact is, that parents find it necessary to controul this liberty of the subject in their children; the rich in their dependants, and so forth. If the doctrines of Mr. Malthus are

He riches disdain'd, and all honors and pleasures;

And to him, as nothing, seem'd all the world's treasures;

The noble desires of his heart of high worth,  
Had but God in the heavens, and the church upon earth.

For an Abbé truly disinterested indeed! The French were fond of hyperbole one hundred and fifty years ago; nor do they seem less so at the present day: witness the fulsome panegyrics on their emperor. By the way, who was the Abbé S. Cyan?—I suspect some worthy limb of the Romish church.

J. JENNINGS.

*Huntspill, March 23, 1812.*

*To the Editor of the Monthly Magazine.*

SIR,

IT will give pleasure to those who wish well to the improvement of the human mind, to be informed that the Bristol school, on Lancaster's plan, has already admitted 1096 poor boys; that 816 have gone away educated, and 280 are now educating.

They have also procured a subscription of near 600*l.* towards building a school room, which is much wanted, as in their present school they can only admit 230, and with the same expence they could give education to 600. The difficulties they had at first to struggle with were inconceivable; being discountenanced by the bishops, opposed by the corporation, and neglected by the members of parliament;—the whole originating in mistaken zeal, gross prejudice, and political influence; so that even the first promoters of it were very unpopular. At length, however, by God's blessing, the utility of educating the helpless, has made its way to the bosoms of all classes, and the church and dissenters go hand in hand in promoting the same object.

This school has also been very useful in spreading the plan through the West of England, by allowing others to learn the system there, and several institutions have originated from it,—particularly one, almost wholly established by the exertions of a Mis. Grace, of Pill, supported by the countenance of the worthy resident there, Mr. Bright, where boys and girls are taught, and a place that has hitherto been the most remarkable for its morals, (owing to its connexion with the marine,) is now becoming evidently more orderly among the younger people. Several other villages are following the

good example of this patient and valuable female, and we hope very soon to see its good effects in every direction.

G CUMBERLAND.

*Bristol, April 4, 1812.*

*To the Editor of the Monthly Magazine.*

SIR,

HAVING perused, with much satisfaction and improvement, a discourse on the Quadrature of the Circle, which was lately given in, by my friend Mr. Glenie, to the Royal Society, and in the course of its investigation, having hit upon some analogies and methods of proof, which removed the difficulties I had met with, and added much to my satisfaction in giving a clear and comprehensive view of the practical part of that discourse, although less connected with, or adapted to, the attainment of its main object, which is to prove the infinite incommensurability of the circumference with the diameter, and the consequent impracticability of a perfect geometrical quadrature of the circle; I beg leave to offer the result of my pleasing labours, for the amusement of your mathematical readers; who will here find a plain demonstration of the most perfect rule that has been yet discovered, for approximating *geometrically* to the resolution of this important problem.

The facility with which the circular area may be computed *arithmetically*, by means of infinite series derived from, or improved by, the method of fluxions, has of late years drawn off the attention of mathematicians from the more elegant and practical methods of approximating thereto by geometry; and the attempt of quadrating the circle, or exhibiting a straight line equal in length to its circumference, has neither been shewn impracticable, nor has any improvement been made to the imperfect mode of approximating it, since the time of Archimedes, until now undertaken and brought to the utmost possible degree of accuracy, by Mr. Glenie.

The method of Archimedes, consisted only in ascertaining and gradually narrowing the limits within which the true circular area must ever be found; that is, the space contained within and between the inscribed and circumscribed equilateral polygons, without any regard to the proportion of the intermediate spaces occupied by the small equal segments cut off by the sides of the inner polygon.

li



Suppose a wild coxcomb had spent one half of a large and valuable patrimony in extravagance, gaming, riot, and debauchery; and that, at the end of twenty years, he found what remained to him of his income, after paying interest to the mortgagee and other expences, would not conveniently support his accumulating family, whose welfare he had all along a good deal neglected, and by frequently quarrelling with his neighbours he had made himself many enemies, so that his children were almost starving, and he could hardly tell what to do with them. Now will your correspondent R. S. T. maintain that to shoot or hang the young and least useful part of them is not only expedient but just, to save the remainder from starving?—Will he not rather bid him retrace his steps, amerce himself of many comforts, and as soon as possible, consistent with his own safety and well-being, make peace with his neighbours; and, until all these means have been tried, and every other possible expedient, surely he can have no justifiable plea for the subduction of human life in any way whatever.

If this reasoning apply to the individual, why not to communities? It is, I am afraid, a lamentable truth, that our population is now too great for our present policy, but let us only consider by what means it has become so, and the remedy is as obvious as just, and capable of being applied.—“No,” says *Pride*, “I will not consent to that;” “Away with the babler!” cries *Honour*; and *Glory* exclaims, “Behold my heroes.” Thus, between the trio, reason and common sense are put to silence; but *Magna est Veritas, et prævalibet*.

Huntskill, JAMES JENNINGS.  
April 14, 1812.

To the Editor of the Monthly Magazine.

SIR,  
BEING convinced, from long experience, that nearly all our benevolent institutions originate in a few crude reflections, thrown out by enthusiastic individuals, who seem intended by nature to think rather than to act, the close observers, the attentive spectators, of the community; I shall use little ceremony in requesting a place in your Magazine for some suggestions on a subject of the greatest national importance, no less than it concerns the interests of humanity, our duty as moral agents, and our justification as a religious people. In England we find a considerable disposition to em-

brace whatever is right, as a public body, much private virtue, and much patriotism; we have Samaritan and strangers, friend's societies, benevolent ones, of almost as many sorts as there are misfortunes in the world. Charity seems with us really to stand on an eminence, and looks round for objects the most distant, and doubtless, were not it impossible to organize human institutions so as to prevent abuses, there would be but little suffering humanity in this island. The injuries even of our climate are industriously obviated by those who do not “feel what wretches feel,” and our moral disorders are as generously pardoned and assisted as our physical ones; even that error, which an excess of virtue has doomed to too severe reprobation, from the delicacy of the female mind, has its asylums; and the *Lock* and the *Magdalen's* walls do not disdain the cry of the repentant prostitute.

They know that these errors originated in the assault of the passions on ignorance, backed by the dark seductive measures of bad men, local associations, mutual irregularities, constitutional propensities, too early employment in manufactories, bad or no education, the neglect of instruction from the clergy of their different sects, the abandonment of their natural protectors, want of food, want of raiment, even sickness has often its share in those assaults that bring females to ruin, by the very means intended for their benefit, and that of the whole world.

Yet this great evil is but partially provided against, and is suffered, I may almost say, to present not the least seductive part of its example before the eyes of virtue in the open streets. And, while the capital of the Roman pontiffs has been for ages purged of this infamy, the public ways of the metropolis of protestant Europe exhibit meretriciousness in all its forms, under the eyes of the magistracy; while a theatre, licensed by the sovereign of a reformed religion, has a lobby built expressly to be inhabited like an upper hell, through which our sons and daughters are destined to pass before the allurements of unblushing impudence, and our wives of every rank to be elbowed as they go and return from theatrical amusements, by beings who, under the mask of beauty and elegance, are, for any thing they know, destined to rival their charms, and spread infection over the inconsiderate part of their families.

To

To correct such national abuses, I fear we must wait until we find a minister who cares a little more for the morals of the subject, and less for the revenue, (that infinite source of evil both moral and political,) than we have hitherto seen. And, until that day arrives, Portsmouth and Plymouth must continue to exhibit scenes that would disgrace *Otaheite*, and every heathen port on this globe. We may, however, do much towards repairing these evils, and much towards loosening their foundations. Laws protecting our infant manufacturers would be very useful towards checking the first buds of impurity; restrictions on improper public conduct should diminish the spread of example; withdrawing licences from houses of evil resort still more; but most of all we should lessen the excess of the injury to society, by giving a guarding education to females in our public schools, and offering rewards to industry, which would promote competence, and lessen greatly thereby the temptation to criminal modes of support.—These are all palliatives, and many more might be suggested and promoted by medical men, some of which *Dr. Beddoes* did not overlook, and others in foreign convents have been found to be of considerable utility.

But there is one remedy for the disorders which these disordinate beings (the dupes of their own ignorance and mis-regulated passions) have ever found to be an infallible remedy, which some modern governments have espied and put in practice with considerable success, of the benefit of which I have been witness in Italy and England; but which, strange to tell, has, from want of insight into the human character, or through the influence of popular prejudice, been hitherto entirely overlooked by societies expressly formed for the purpose of reforming female prostitutes; and at this hour I do not believe a penitentiary establishment has yet thought of putting the key-stone to the great work of reformation of manners, by the ceremony of legal matrimony.

A plan so novel here will naturally strike many of your readers with astonishment, as it has always surprised every one at first to whom I have communicated an account of the success of it abroad; but a little reflection will shew us that there is nothing impracticable in it, nor any thing so very injudicious, where there is real penitence; for Christ himself taught his disciples not to despise

a female under these circumstances. Not to go, however, so far back for examples, let us consider the nature of mankind, and what they daily do, even in cases where there is not always so much certainty of repentance: is it not notorious, that numbers of women, who have led lives very incorrect, are continually provided for in this manner, even among the most polished ranks of life; that many go off as a contingency with a place, or pension, and sometimes even with the livings of the church! Men are men, in every rank the same; and men of little delicacy, or strong philosophy, call it what you will, are perhaps as likely to be found in the lower classes of life as the higher. Where the interests and happiness of society are to be served, we must not too nicely scrutinize the motives of action; and, if the attractions of beauty and innocence are allowed to be honourable ones in forming the most allowed alliances, let us not too severely censure those who are led, by repentant youth and beauty in tears, to less approved but equally legal connections.

In foreign establishments, of the sort I allude to, they receive into the penitentiary houses such as are young, attractive, and friendless, in preference to females more advanced in life, or less interesting; for their motives are, first to subtract the least criminal, and of course less incorrigible, subjects; next to diminish the number of those who offer the greatest temptations to heated young people; and, lastly, to encrease the benefits society is likely to reap from the institution, by multiplying the numbers rapidly of those who are most likely to receive the benefit of procuring an honest establishment, through the medium of personal charms, united with real contrition and a restored character.

They have also another reason for selecting those which are the most attractive, as they consider them as in some degree less criminal, having been more exposed to the arts of seduction; but they never refuse any one who asks their protection, and out of those advanced in life they find often useful servants and active coadjutors.

The method, as I was informed, of procuring husbands for the penitents in Italy is very simple; they are seen during service on fixed days, and any proper-aged man, wanting a wife, may be introduced to whichever he chuses in the presence of the matron, from whom he first receives her character, and the amount

amount of the *dota* or portion allotted her by the camera, which is seldom more than a few sequins, perhaps at most ten pounds sterling. With these small portions they find the means of marrying off a great many every year; in a country where a wife in general does little or nothing towards the maintenance of a family. Surely then in this country, where the women of the lower classes contribute by their labour so much, there could be little doubt of superior success.

Among the labouring and lower classes, the object in marriage generally is next to pleasing the eye, (which seems with them to be easily satisfied;) the finding a companion at home, who will prepare their frugal meals with cleanliness, repair their habiliments, and bring up the children with care; and these objects they often intrust to women, who are by no means free from immoral habits, from mere necessity; and were there an assembly, such as we have described, open at all times to their view, where all the subjects were, in consequence of proper discipline and religious advice, considered as *effectually cured of their former evil habits*, and convinced of the impossibility of a life of licentiousness procuring any thing but misery; many would gladly apply for partners in their labours in such a quarter, particularly from that class of men who marry from necessity, as many do, and cannot be long in chusing, having nothing but bread to offer.

That women thus restored to society make very good wives, experience has long proved, being usually not only uncommonly circumspect with regard to their own conduct, lest they should fall under the reproaches of those who know their origin, but many times actively engaged in preventing young women from gliding into the unhappy situations, from which a penitentiary like that I am recommending alone could have recovered her reputation and secured her repose.

That such has been the fact I know from the mouth of a female who married from our Magdalen Hospital, and kept a shop for the sale of oysters near the Royal Exchange, bringing up her children with strict attention to their morals, and warning every female, that her business brought there, to avoid habits that had been the cause of her early mistakes in life. To adduce many other instances that have been related to me

would take up too much room in a paper like this, which is only meant to *break ground* in a cause worthy of the utmost efforts of society, a cause that many would gladly promote, but every one does not like to be the first in proposing; lest, encountering the grossest and vilest of prejudices, it should seem, in the eyes of the unfeeling and *iron-hearted*, to have the air of encouraging, nay rewarding, vice; let us not, however, be so cold to the interests of our species from motives thus timid and selfish, we who have so short a life-interest in the passing scene, let us rather meet the suggestions of the *spirit* half way; and, casting away the fears of the world, in which we have so little a time to do good, start boldly any project that is likely to make this passage less painful to those who are to follow us, especially when it tends to lighten the load of human sufferings through the medium of Christian benevolence.

Thus far it appears to me that a plan, founded on the principles here laid down, under *patient and wise management*, would be the only one likely to attain the end in view, viz. a thorough reformation of manners, occasionally, among a deluded and wretched class of women, whose errors, as things now are, are punished but too severely. But it may be asked, from whence are to spring the funds destined to attain the end, especially if success attend the experiment: to this I shall only reply, that the object is well worthy the attention of an enlightened legislature, and a virtuous magistracy, in every point of view, inasmuch, that, if on investigation it should be found to be plausible enough to attract general attention, I cannot doubt that every aid would be afforded by the state. But, should that fail, and some serious individuals be induced to engraft this improvement on the original designs of penitentiary houses, I cannot have a doubt of its receiving a great support, not only from the impartial kindness of gentle minds, but also from the consolation such a distribution of their wealth would import to breasts filled with remorse at having, in pursuing the gratification of their passions, been the means of inflicting those cruel wounds on individuals of a sex too credulous, that, but for their enticements, might have lived in honour and in happiness.

Bristol, GEORGE CUMBERLAND.  
May 1, 1812.

To

of the company of the West, to the number of 200,000 subscribed for in state billets, at the rate of 500 livres per action.

1719, Jan. 1. The bank taken from Law, and vested in the king. At this time the number of bank notes coined, amounted to 59 millions of livres.

— April 22. A new coinage of 51 millions of notes; in which the tenure of the note was changed, and the paper declared *monnoic fixe*.

— May. Law's company of the West incorporated with the company of the East Indies; after which it was called the Company of the Indies.

— June. Created 50,000 new actions of the incorporated company; sold for coin at 550 livres per action.

The mint made over to the company for 50 millions.

Coined of bank notes for 50 millions of livres.

Created 50,000 actions as above; sold for notes, at 1000 livres per action.

Coined of bank notes for 240 millions.

The company obtains the general farms; promises a dividend upon every action of 200 livres; agrees to lend the king sixteen hundred millions at 3 per cent. and have transferred to them 48 millions per annum for the interest of that sum.

Sept. Coined of bank notes for 120 millions.

— 13. Created no less than 100,000 actions; price fixed at 5000 livres per action.

— 28. Created 100,000 more actions; price as the former, fixed at 5000 livres each.

Oct. 2. Created 100,000 more ac-

tions; price as the former, fixed at 5000 livres each.

— 4. Coined by the regent's private order, not delivered to the company, 24,000 more actions, which completed the number of 624,000 actions; beyond which, they never extended.

— 24. Coined of bank notes for 120 millions.

Dec. 29. Coined of bank notes for 129 millions.

1720, Jan. Coined of bank notes for 21 millions.

Feb. Coined of bank notes for 273 millions.

— 22. Incorporation of the Bank, with the Company of the Indies.

— 27. A prohibition by which no one was to have in his custody more than 500 livres of coin.

March 5. The coin raised to 80 livres per marc.

— 11. The coin brought down to 65 livres per marc; and gold *forbidden to be coined at the mint, or used in commerce*.

— Coined of bank notes for 191,803,060 livres.

April. Coined of bank notes for 792,474,720 livres.

May 1. Coined of bank notes for 624,395,130 livres.

— 21. The denomination of the paper diminished by *arrêt* of council, which, in an instant, put an end to all credit, and made the bubble burst.

At this period had been coined of bank notes to the immense sum of

Livres 2 696,400,000

Of which had been issued 2,235,083,500

Remained in the bank 461,316,414

## ORIGINAL POETRY.

PLACED UNDER MR. BANKS'S FINE BUST  
OF JOHN HORNE TOOKE, ESQ.

ON HIS BIRTH DAY IN MDCCCX.

By Mr. G. CUMBERLAND.

ARISE! portray THE PATRIOTIC MAN,  
With intellectual arch of broadest span;  
Who, nursed in Wisdom, early took his stand

Near the palladium of his native land,  
Her laws, and constitution, made his own,  
Nor fear'd in their defence to stand alone.

Up, Truth immortal!—tell the earth and  
skies,

That was the man that carry'd Virtue's prize:

1

Scarce, like the fruitful bud, perceiv'd at first,  
Admir'd when his unblighted blossoms burst;  
Nourish'd by Learning's deep delicious  
streams,

Matur'd through Freedom's sun-like partial  
beams;

Gentle as love,—indulgent as desire,  
Candid as patience,—bold as native fire;

Intuitive sagacity,—inborn  
Acumen,—noble rectitude,—just scorn

Are His;—foe only to the brood  
Of heart-corrupted statesmen lost to good;

Him, all-consistent, oft his country saw,  
Inflexible to every pow'r but Law,

England's Leonidas, first of the band  
Faithful to death to serve their native land.

Loyal



Loyal in every bearing of the word  
 To law, to right, the people, and their Lord:  
 Reason's mild son, legitimate and just,  
 Who never took a single truth on trust;  
 Tried all things by a rigid manly sense,  
 And prov'd his principles at life's expense:—  
 Yet still He lives, belov'd, admir'd, obey'd,  
 Gay, in his garden's ever-grateful shade,  
 With mercy launching shafts of keenest wit,  
 While Flora and Pomona near him sit,  
 And Mercury the winged-words supplies,  
 That wait our mortal thoughts beyond the  
 skies.

O! well-pois'd steady virtue, heaven's delight,  
 Thousands admire, yet few attain, thy height!  
 Of life the honour, liberty the throne,  
 Possessing thee, the world is all our own;  
 Onward we march, despising Fortune's frown,  
 Through thee partaking, glory, health, re-  
 nown,  
 The splendor that illumines Psyche's cave,  
 And everlasting joys beyond the grave!

## SERENADE.

By GEORGE FREDERIC BUSBY.

BREATHE soft, my lyre, in lowly-mur-  
 mur'd strains

Recount my throbbing bosom's anxious  
 fears;

Ed Hope's elysian whispers soothe my pains,  
 And tell Gonzalvo his Victoria hears:

And with what fond excess he loves her, tell;  
 How brightly, chastely, burns the flame  
 divine;

Let not that gentle heart from love rebel,  
 But all its thrilling pulses answer mine.

How oft by Guadalquivir's vine-bower'd  
 shores,

When purple vesper slept in western skies,  
 I watch'd the steps of her my soul adores,  
 Tears my oblation, and my incense sighs!

While every glance from those celestial eyes,  
 And every radiant charm that met my  
 sight,

Was cloth'd in such a soft, angelic, guise,  
 That love was mute and wrapt in dumb  
 delight.

And sure the heart, that tenants that soft  
 breast,

Must be as soft, as white; and those dear  
 eyes,

Whose azure lightnings murder'd all my rest,  
 The stars of love, will bid their vassal rise.

Those ruby lips impress'd by Cupid's seal,  
 Shall breathe the am'rous language of the  
 heart,

And virgin blushes, virgin sighs, reveal  
 The melting joys love only can impart.

Then, folding in these blest, these rapt'rous,  
 arms,

My soul's enchantress and my bosom's  
 queen,

That glowing paradise of heav'nly charms,  
 Shall fling its rich delights o'er ev'ry scene.

Whether to those inhospitable climes,  
 Where nature sleeps in hyperborean chains,  
 Or where his tropic throne Apollo climbs,  
 And pours his scorching fires o'er eastern  
 plains,

I go—Delight shall wave his wings around me,  
 Victoria's eyes shall melt the yielding frost,  
 Victoria's breath dispense refreshment round  
 me,  
 And all the rigors of the clime be lost.

Nature's vicissitudes were nought to me;  
 With thee, my amulet, my shield from  
 harm,

My every thought should concentrate in thee,  
 And every hour reveal some secret charm.

Sleep loveliest daughter of my native Spain,  
 Ethereal visions gild thy balmy rest!  
 And when Gonzalvo meets thy glance again,  
 Receive his vows and make thy lover blest.

Breeze of the night, on silent pinion fleeting,  
 Fan thou the couch where virgin beauty  
 slumbers;

Still'd be my throbbing heart's tumultuous  
 beating,

And cease, my faithful lyre, thy plaintive  
 numbers.

## MISTAKES OF MAN.

INSATIATE man! can nothing yet restrain  
 Thy lust of pow'r, th' unhappy cause of  
 pain;

Cannot the voice of Horror make thee pause,  
 Or lift thy arm to aid a better cause?

No! fell Ambition most despotic rules,  
 And thousands feel the cruelty of fools;  
 The cry of havoc and the shout of war,  
 Rages relentless from a tyrant's car;  
 No soft emotion strikes his ruthless heart,  
 He never feels kind pity's gentler smart.  
 The helpless orphan shrieks beneath his  
 frown,

Nor dares to call his property his own;  
 All is his tyrant's, and, with low-bent knee,  
 He humbly thanks a master's charity;

For what, because the monster deigns to give  
 A kind permission for a wretch to live;  
 And thus does Europe sport her dreaded sway,  
 And seize the Indian as her lawful prey.

As Luxury's wants each moment would in-  
 crease,

A bold advent'rer spoil'd the new world's  
 peace;

First simple traffic spread a luring bait,  
 And then the pomp of European state.  
 Th' untutor'd men with admiration saw,  
 And, trembling, felt an universal awe;  
 They thought that gods were come to bless  
 their race,

Far from the realms of vast unmeasur'd  
 space.

Ill-fated men, how direful was the thought,  
 For late experience was too dearly bought;  
 Like

1813.]

*Mr. Cumberland, on Mr. Lancaster's School.*

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*By the Almanack.*

February	Rises.	Sets.	Clock fast.
1	7:27	4:33	13 <sup>m</sup> .
2	26	34	} 14
3	24	36	
4	22	38	
5	20	40	
6	7:18	4:42	} 14
7	17	43	
8	15	45	
9	13	47	
10	11	49	
11	7: 9	4:51	} 14
12	8	52	
13	6	54	
14	4	56	
15	2	58	
16	7: 0	5: 0	} 14
17	6:58	2	
18	56	4	
19	55	5	
20	53	7	
21	6:51	5: 9	} 13
22	49	11	
23	47	13	
24	45	15	
25	43	17	
26	6:41	5:19	} 13
27	39	21	
28	37	23	

*Real Times of Rising and Setting.*

February	Rises.	Sets.
1	7:40	4:46
2	40	48
3	38	50
4	36	52
5	34	54
6	7:32	4:56
7	31	57
8	29	59
9	27	5 1
10	25	3
11	7:23	5: 5
12	22	6
13	20	8
14	18	10
15	16	12
16	7:14	5:14
17	12	16
18	10	18
19	9	19
20	7	21
21	7: 4	5:22
22	2	24
23	7: 0	26
24	6:58	28
25	56	30
26	6:54	5:32
27	52	34
28	49	35

In the article before alluded to, in your Magazine of August, 1809, I have explained the reasons why the mornings are darker, and the evenings lighter, after the shortest day, than they are at the same number of days before it.

*Clitchester,*

Jan. 15, 1813.

J. J. MARSH.

*To the Editor of the Monthly Magazine.*

SIR,

A PAMPHLET of 210 pages has lately been put into my hands entitled, "The Origin, Nature, and Object of the New System of Education," which is said to be the production of the author of the "Curse of Kehama:" the object of which, I was told, was the claiming for Dr. Bell all the merits of Mr. Lancaster's mode of education, as having been the first who invented the principle, who taught it to Lancaster, and who therefore has the sole merit not only of Lancaster's schools, but of all the schools now establishing by the church of England.

This pamphlet I have perused through-

out, notes and all; and the result was, that it appeared to be using a great deal of violence about nothing, unless it could prove, which it cannot, that we have not had Lancastrian schools for the last twelve years back; and that those called Dr. Bell's are now on very similar principles as far as education goes. I wish also it could have proved that the clergy of our own church were not at first inimical to them, on the score of their teaching too much, in going beyond reading. But what shall we say when it confesses that Mr. Lancaster opened his schools in 1793, and that, except in two or three private instances, those under the direction of Dr. Bell, were only parish schools improved;—when it owns, as at page 119, that, "it is impossible to disguise or conceal the fact that the government and clergy have long neglected the important duty of educating the poor;" and again, at page 42, "That, although Dr. Bell had called upon the ministers and clergy, by sending copies of his pamphlet to Lambeth, to Mr. Pitt, and Lord Grenville, yet

yet the clergy, as a body, were not active, and the administration cold;"—when he asserts that the public mind was not prepared to see this great discovery, and hence the cause of Dr. Bell's plans not being advanced.—Yet, after all, we see a simple quaker, without, as the author says, talents or modesty; whom he accuses of malignity, falsehood, cruelty; who is, in short, a fool, a knave, and I know not what; whose friends are all knaves, and liars, and quacks, according to the author's belief.—Yet we see this man find the means to move the sovereign and his family to forward a scheme ruinous, as the author wishes it to appear, to the church and state—to stir that public, so cold to these plans that Dr. B. could not move them, even to go so far as teaching reading—and, ultimately, to found extensive schools all over the king's dominions, still enjoying his patronage and that of people of the first distinction;—when we see all this effected, we must be apt to think that those schools (first claimed as originating with Dr. Bell, and then reprobated for their "*Newgate practices*,") owe something to the man who has kept, and so universally established, them, even something more than to him whose observations contributed to their perfection, inasmuch as deeds surpass words.

The object of this pamphlet, which is continually "kicking against the pricks," seems throughout intended to try the force of ridicule against an unlettered, but useful man, who has passed the greater part of his life in promoting the best interests of both church and state, for no one will dare to deny, not even the author of this violent invective, that, in Lancaster's schools, the majority of the boys educated were children of the church establishment; and even this angry writer is forced to own that, to Lancaster's schools, we owe that the friends of the establishment have been roused (see page 195) to exertions of the same beneficial nature. He may "paint an inch thick, but to this complexion he must come at last;" and time and history will only add to Lancaster's fame, as having, by this good action, moved those, whom nothing beside could move, to do their duty.

That men are only "children of a larger growth," the consequences of Mr. Lancaster's procedures have proved,—for jealousy, pure jealousy, has, by God's blessing, put at once an end to his opponents' objections to education, and

excited them to further his generous object by erecting schools of their own. This is all perfect gain to the cause which interests the poor and needy; and, while his schools exist, they have no reason to fear that their advantages will be lessened; for, if writing and arithmetic should not be adopted in the others, they may always go to his to finish their education.

The author of the *Curse of Kehama* might have been angry, very justly, with Joseph Lancaster for writing at all, when he ought only to have been active; he might have found his plans vulgar without any sin; he might have thought him ungrateful to Dr. Bell for his advice. We could excuse this from one, who, in the simplicity of his heart, declares that, Dr. Bell, "of all men since the creation of the world, has done most to render education general—who has discovered the north-west passage in education," &c. &c. (see page 169); but, if he is not quite so patient a quaker as he ought to be, it belongs to his society to reprove him. If his punishments are vulgar, we must not forget that it is with the vulgar he has most to deal, and ought to understand them better than our most eloquent poet, or a man who dashes down his book on the table by way of answer to it; and perhaps with as little effect as Mr. Burke produced in the House with his dagger.

Had Lancaster attempted such a stage-trick, we should soon have heard him called mountebank, and fifty other such epithets added very properly. All this, however, we may pass by, as the Italians say, *per sfogarci*, and as the effect of *poetic furor*; but we must not suffer a plain assertion, of a plain speaking man, to be misrepresented in the compass of six pages—for, at page 128, our author says, "Mr. Lancaster did arrogate to himself the merit to which Dr. Bell is entitled, by advertising, 'Joseph Lancaster, of the Free School, Borough Road, London, having invented, under the blessing of Divine Providence, a new and mechanical system of education, for the use of schools,' &c.; and, at page 134 only, he changes the expression and says, "He now proclaims himself, the Inventor of the system of self-education." This either proves that the author has a bad memory, or that he thinks his readers have—for his own book and Lancaster's both give proofs that every becoming acknowledgment was and is made, both by him and his patrons, to Dr.  
Bell,

Bell, for all the assistance his plans have afforded in the prosecution of this arduous and noble enterprize, now, through their exertions, so practically beneficial to mankind.

The great object has been attained, the convincing the world that education ought and must be given, if we wish to live among men rather than half-brutes; and that rational religion must follow we see, whenever we turn to educated societies.—Why then make so bad a use of a very complete one, as to impede the march of union, by calling the methodists' *Legion* (page 114), the inuendo of which any one may see; ridiculing the whole body of quakers because Mr. L. happens to be one; and treating all dissenters from the church as enemies to the state, by other inuendoes;—when it is notorious that, contributing their full proportion to the support of the government, and more than their full proportion to the church establishment, being in general industrious, and consequently wealthy, they ought by all to be respected? To go after all the profound sophisms of this legal pleader in the cause of Dr. Bell, would be to hunt a Will-of-the-wisp through bog and marsh, and find him at last among the logical monsters\*, of whose acquaintance he boasts, at page 168, to frighten the simple quaker, and whose best answer will be, after all, that speech which a poor sweep made to Dean Swift, when threatened by him: "Get you gone raw-head and bloody bones, Here's a little boy that don't fear you!"

For there appears to me, that there is now not any use in this violence about nothing: we have and shall have schools every where, and I trust, as this author wisely recommends, parochial schools also, on the Bell or Lancastrian principles, or a better, if better can be found out; but I hope we shall hear no more about their *inventors*, unless we mean to erect a monument to *Peter Della Valle*: rather let us think that our old sovereign was quite as good a politician as the author of this pamphlet, and saw clearly, when he patronised Mr. Lancaster, what would be the result of his encouragement; and, how sure opposition would become the means of promoting general education among all classes of his subjects.

\* He talks of Dabitis, dariis, fesisoms, fespames, baralipfons, &c.!—the Quaker must think them incantations.

I take no notice of the author's expenditure of gall against his natural enemies the Edinburgh Reviewers, or his jests upon Mr. Fox's profession; they are both unworthy of him; but they serve clearly to show that he came not to this contest with clean hands, and operate in making all cautious readers careful how they admit his naked assertions.

G. CUMBERLAND.

Bristol, Dec. 20, 1812.

To the Editor of the *Monthly Magazine*.

SIR,

I WAS much gratified with the matter, though not the spirit, of Amator's answer to my inquiries concerning the term *Gambit*, used, but not explained, in a number of chess-books which I had then read. My own conjectures about the terms, \**gambit* and *fou*, which have appeared in your interesting Magazine, were sent, but I find not delivered, to you, previous to the appearance of Amator's explanation. The books in which I had in vain searched for the meaning of *gambit*, were, a French copy of Philidor on Chess; some French treatises, without their authors' names; and a great number of Dictionaries. In a French book, with the date 1638, now open before me, the term *fou* is spelled *four*, which is the French for *oven*. I extract the sentence containing it.

"*S'il estoit question de faire paroistre quelque traict d'Arithmetique sur le jeu des dames: J'aymeroie mieux monstrier comme la multiplication et division s'y peuvent faire, tant es nombres entiers qu'es rompus, à l'ayde de deux regles disposées en équierre dessus les petits quarrceaux du jeu, ou bien selon l'invention que Neperus a inséré dans sa Rabdologie, enseignant à pratiquer les operations des nombres par le mouvement de la tour et du four sur le plan des eschets.*"

Napier's *Rabdologia* was printed at Edinburgh in 1617. In this quotation, the letter *u* is employed for *v*, as in other old books.—For what reason do the editors of Dictionaries, at the present time, class together (most inconveniently) the letters *I J*, and *U V*? In but few Dictionaries have I seen them separated.

A. BODORGAN.

Nov. 26, 1812.

\* Amator did not explain which is the *gambit pawn*. It is, I believe, the pawn which is first moved, in beginning the Gambit.



314.] *Mr. Cumberland on the Arts and Artists of Bristol.* 25

Having repeatedly experienced the inconveniences arising from this practice, I have been induced to prepare models. These models I construct in a manner as new as explicit, and by a resource, so much more luminous and satisfactory than that of any drawings, I am enabled, before a brick is laid, to exhibit every part of the intended edifice, as distinctly as if it were already in existence.

The advantages of this method to those who propose to build, are too obvious to require to be dwelt upon. It is sufficient to observe that, while architectural drawings mislead, or evade, the judgment, a model, on the plan I adopt, is so intelligible as to enable every observer to form as correct an opinion upon the merits of the proposed structure as even the author of the design.

Though by this improvement upon the professional custom, I have imposed upon myself much extra trouble and expence, yet the concomitant facilities of substantial exhibition have been found so superior to those offered by drawings, that I have been encouraged to extend my system to almost every necessary variety; not omitting the models of several public and domestic structures, which have been raised under my direction in different parts of the united kingdom.

33, *Berner's Street*, C. A. BUSBY.  
January 12, 1814.

To the Editor of the Monthly Magazine.

SIR,  
WE have set up a new steam-engine here, that promises wonders. A Mr. ONION is the inventor. I have seen it, and like it much. The principle is a hollow wheel whose interior is half filled with a fluid metal; in fact, the fly wheel loaded and charged with steam by means of two tubes that enter at the nave, and two valves that act alternately as the wheel revolves. The steam is supplied by means of a common boiler; it makes no noise whatever, and saves half the coals. We shall grind corn with it shortly;—the saving will be very great every way.

Mr. BURGE, of this place, has also introduced a stove in the form of an urn, which has a pot introduced into it, for the fire, and is supplied with air from above, so that you may enjoy the fire and the stove at once; they sell for about 50s. and are very useful, as they give much heat, and can be placed anywhere.

Mr. BIRD has finished and will send up next week his *Job*, a noble picture, superior to any he has yet executed. Also, a brilliant scene in an alehouse

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of a Fray. The Job has been painted for the Institute.

Mr. EAGLES, a new artist, has also sent up four landscapes of great excellence. They are grand and well coloured, being founded on a long study of nature.

G. CUMBERLAND.

Bristol, Dec. 25.

For the Monthly Magazine.

ACCOUNT of the LANSDOWNE MSS. lately deposited in the BRITISH MUSEUM; compiled for the RECORD COMMISSION, by H. ELLIS, ESQ.

THE Burleigh papers form the first division of the Lansdowne MSS. One volume of these papers contains copies of charters and other documents of an early period; but the remainder, amounting to one hundred and twenty-one volumes in folio, consist of state papers, interspersed with miscellaneous correspondence, during the long reign of Queen Elizabeth; and among these is the private memorandum book of Lord Burleigh.

The second division of the Lansdowne MSS. comprises the papers and correspondence of Sir Julius Cæsar, judge of the Admiralty in Queen Elizabeth's time, and Chancellor of the Exchequer, and Master of the Rolls, in the time of James I. and Charles I. Of fifty-four volumes in this series, thirty one relate directly or in part to Admiralty concerns; ten to Court of Requests, Chancery, Treasury, and Exchequer business; three to Ecclesiastical matters; one contains treaties; two are catalogues of the Cæsar papers; and seven are historical, parliamentary, &c.

The third and last division of these MSS. is the largest, and comprehends many valuable works upon various subjects. Amongst these are, a fair transcript of Andrew of Wyntown, and a most beautifully illuminated copy of Hardyng's Chronicle, as it was presented to King Henry the Sixth; and two volumes of Letters, &c. written by royal, noble, and eminent persons of Great Britain, from the time of King Henry the Sixth to the reign of his present Majesty; the greater part originals. Here are also eleven volumes of the Papers of Dr. John Peel, Envoy from Oliver Cromwell to the Protestant Cantons of Switzerland, between 1654 and 1683, and five volumes of Sir Paul Rycout's Papers. These latter volumes contain not only letters, &c. of a public nature while Sir Paul Rycout was Secretary to the Earl of Clarendon in

E. Ireland,

396 *Mr. Cumberland on Vandenburg's Musical Cylinder.* [Dec. 1,

native SEAPOY, paying their united tribute of veneration at the tomb of the deceased governor-general.

This Groupe has been executed at the expence of the British inhabitants of BOMBAY, who raised a subscription for the purpose of thus commemorating the talents and virtues of this justly-celebrated nobleman.

*To the Editor of the Monthly Magazine.*

SIR,  
I EXPECTED last month that your usual industry would have discovered and impartially disclosed the ingenious invention of an able foreigner, who selected this country to make its first exhibition in. I allude to Mr. Vandenburg's musical cylinder, which was for a short time offered to view in Bond-street, and which I afterwards found at his lodgings in Piccadilly, whither he had removed it with an intention of going back to Holland, being disgusted, as he well might be, by the neglect on one hand, and opposition on the other, from the public and instrument-makers. When I called, he, with perfect liberality, after shewing me its powers, disclosed the whole interior, which consisted of a long white metal cylinder, divided into five parts, each being an octave, and gradually encreasing in size; turned by a foot-wheel judiciously concealed, and acted on by metal keys armed with felt, that were brought into contact with the cylinder by the same means as the hammers of piano-fortes. By a single motion the key of the instrument could be changed, and by the pressure of the fingers (as in the ingenious invention of my worthy friend Mr. Walker, of Hayes, in his Celestino stop), the notes could be swelled or diminished to any degree at pleasure, so that from the lowest piano tone they could be raised to a forte that made the floor tremble and vibrate. This instrument was sweet in all its notes, and imitated wind-instruments in a wonderful manner; so that there is no doubt, if it should ever have fair play, it will rival the organ, for it takes up no more room than one of our common small piano-fortes, and can never be put out of tune by change of place or climate; the whole being solid metal, without pipes or wires.—The secret I find consists in the composition of the metal, and it gratified me to find that Mr. Vandenburg ran no risk of its being pirated by the rogues who came to see it with that view. This gentleman's speaking no English had been a great hindrance to his success; and his having demanded 3s. each person, for the

exhibition, operated against him with the public—who, although they willingly part with that sum to see a woman drink melted lead, or lick a poker, are always cautious in matters of art or science. I learned from him that the art he had long practised had been cannon-founding, from the action of the tools on which, I suppose he must first have caught the idea of a musical cylinder; but he had been years in perfecting it, and his expectations were very reasonable, demanding only 2000*l.* for the invention, and offering a half of the profits, on the executing them, to any person advancing that sum.

When I saw him I found many obliging people had offered to become his partners, but none liked to lay down anything for his labour, and all I could do was to recommend him to invite Sir Jos. Banks, and our leading patrons of the arts, to visit him; which I believe he did, and probably by this means did not go out of the country without being known, and his invention better appreciated, which I think for the honour of England ought to be the case, first as the invention is very new, useful, and ingenious; and next as he is a foreigner, full of intelligence, and on that account intitled to be received with urbanity.

How many subscribers he got I cannot tell, but I learned from him that they were not sufficiently numerous to enable him to acquire much profit by executing them. I believe his price was 200*l.* but I understand that, if the number had been such as he had a right to expect, and which they would have been had it been generally known, they could be made for much less money.

For myself, I feel it a sort of duty to promote the general knowledge of any useful discovery, especially where a helpless stranger is concerned; and I accordingly draw on your pages, as usual, being confident, from long experience, that you will answer my demand.

Bristol; G. CUMBERLAND.  
October 15, 1814.

*To the Editor of the Monthly Magazine.*

SIR,  
THE following notice of a singular literary and bibliographical curiosity, may perhaps be acceptable to some of your readers, and at the same time afford your correspondent "Scrutinizer" some information, though no direct answer to his query.

Among the rarest books in the English language may be reckoned "*The Metemorphosis*"

1815.]

*of the Landed and Commercial Interests.*

99

paper money of account represents no such original labour, and, being created at pleasure and circulated by artifice, is not only no public standard, but destructive of all standard in countries in which its circulation is forced.

XVI.

No measure, therefore, can restore the true relations, and fix the actual obligations, of the various classes of the people of England, but, *by repealing the Bank Restriction Bill*, and compelling the Bank of England to find Specie for its notes. This would bring back the standard of the currency and of commodities in Great Britain to that of all other nations, and the standard of gold would then be found to agree universally with the standard of corn in Britain, as well as in France, Poland, and other countries. It is consequently a mistake of the question to ascribe the present dilemma of the country to any question about corn, the true question being one in regard to the currency, and the continuance of the Bank Restriction Bill, of which the difficulty about corn is but one effect.

XVII.

Having lost our Standard of value, the confusion of our finances, property, and commerce, is a consequence. The short, simple, and sweeping remedy would be to restore it: but, if in the hope of curing the evil, we measure our present departure from the standard by higher duties on foreign corn, we shall but depart still further from the standard, and augment the disease, which will require Corn Bill after Corn Bill as palliatives, till our paper currency is depreciated like French *assignats*, and all the industrious population are driven into the poor houses, or foreign lands.

XVIII.

If a permanent Corn Bill be passed, the proprietors of land, fundholders, speculators, and bank-note and accommodation-bill makers, will thereby be protected from the burthen of taxes till the continued operation of the same causes renders another such Bill necessary. On the other hand, if no alteration take place in the Corn Laws, it may then be practicable to restore to Britain the STANDARD of all civilized countries, and to allow the necessaries of life to find their own level, that farmers may not be destroyed by high rents and wages, and that landlords may be able to live on reduced rentals.

XIX.

All the difficulties of the country being created by taxes, and exasperated by the means taken by the opulent and powerful, to elude or evade the payment of

them, it would be wise to adopt specific measures to extinguish them. If the sinking fund were abandoned, the net interest of the mortgage might be commuted into a redeemable rent charge of 6s. 8d. per acre on the 48 millions of acres of land, and by 20 per cent. on houses and the public funds. The evil would then have known limits; and what is now a public calamity would become the ascertained price of the gratification afforded to large portions of the community by twenty years war.

XX.

The alternatives are portentous, and the choice of evils calls for no common wisdom, great self-denial, and much genuine patriotism. If our affairs are guided by prudence or wisdom, the accumulating evils will be arrested in their course, by restoring the standard of the currency, by taking off the taxes raised to sustain that sinking fund which serves but to increase the entire burthen, and by stimulating proprietors to pay off their respective shares of the mortgage by bringing it into immediate contact with their property. Some measure may also be necessary for the immediate relief of the oppressed landed interest; but it ought to be a temporary provision, serving as a warning to undue speculation, and preparing the way for the restoration of the genuine standard of wealth, in place of that factitious wealth, which now exists by virtue only of an Act of parliament! COMMON SENSE.

*London; Feb. 5.**To the Editor of the Monthly Magazine.*

SIR,

A PAMPHLET has lately been published, entitled, "*What a Gaol ought to be,*" by some virtuous citizen of this county, wherein our disgraceful Newgate, that I had the pleasure some time back of drawing up a presentment of at the sessions, is contrasted with such a prison as we ought to, and I trust at last shall, have; and the author having in that plan very judiciously brought forward a description of Bentham's Panopticon, too little understood, and too long neglected, considering its infinite value; I thought by circulating the annexed plate to assist that object, by affording a clearer idea of the principle than mere words can give, and I now send you one in hopes that you will, by a wood block, or pewter plate, afford the thought still farther notoriety. For I am clearly of opinion, with the author of the pamphlet, that, until prisons are made houses of industry, and schools of reform, under close inspection, and all strong liquors banished

Q 2

iron

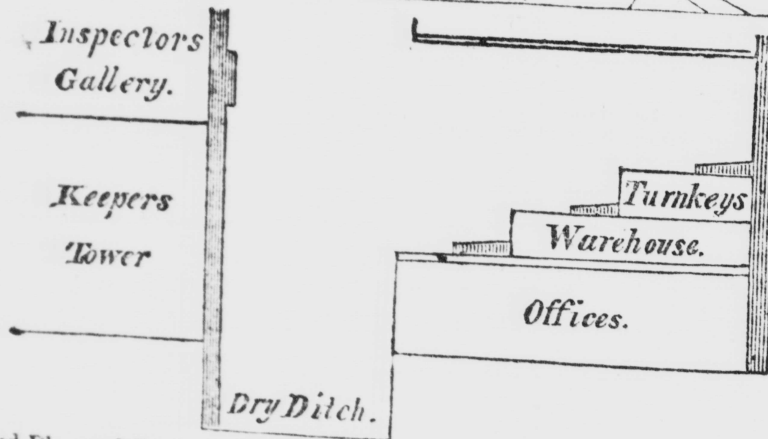
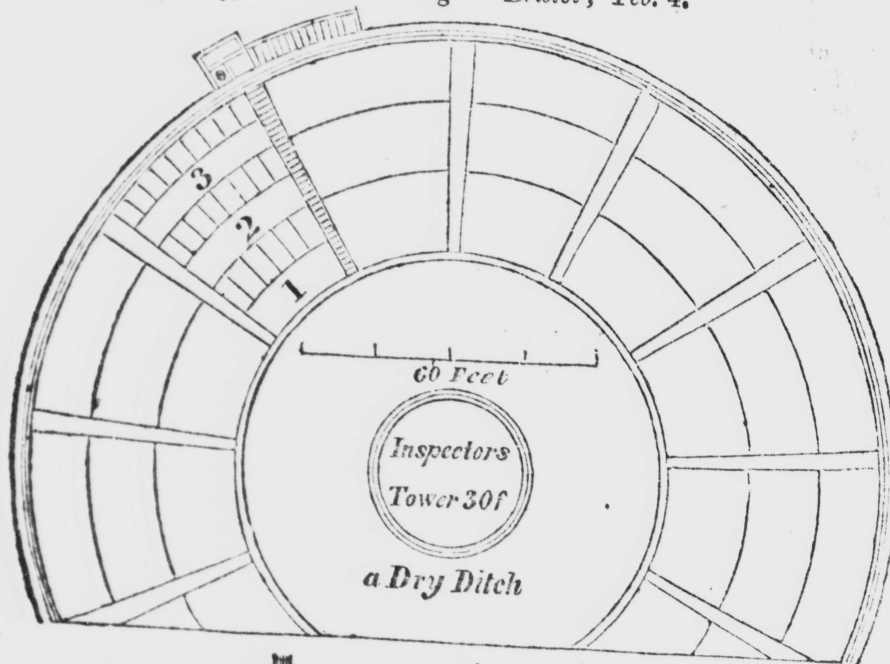
from them, except in cases of necessity, as medicines, we shall never do any good by our sentences of the laws. I go still farther: let us unite to this style of building the Philadelphia system of employ; the solitary cell only as a means of bringing the refractory to obey the rules of the house; and *dict* as recommended from experience by Mr. John Frank Newton, in his tract entitled, *Return to Nature*; (by which means all the objects of a paternal government as to reform of manners would be greatly facilitated,) and we shall soon find that there is no farther occasion for extending our colonies in Botany Bay, and maintaining

hulks, as warrens of villainy; and all this good might be effected, after a few years, with a considerable saving of expense.

Heaven, in pity of our sufferings, has granted us at length repose from the scourge of war, let us now therefore employ the time of peace in reforming our old vile prisons, and the ancient infernal system of making them places of purgatory, instead of houses of reform. For we certainly ought, as Christians, to consider every criminal as a misled child of the country, and repair the evils of neglect by the counsels and attention of humanity.

G. CUMBERLAND.

Bristol; Feb. 4.



Ground-Plan and Elevation of a Panopticon Prison, each floor of which will contain 276 prisoners, their beds, workshops, turnkeys' rooms, and warehouses. The whole building, except the outer wall, a frame of cast iron. 1, 2, 3, stages, rising progressively. with 23 barrack beds.

To the Editor of the Monthly Magazine.

SIR,  
I HAD before observed that there seem to be strong grounds of conjec-

ture that the Comet of 1652 reappeared in 1811-12; before the disappearance of the beautiful and so long conspicuous comet of those years.



1815.]

*Neglect of Foot-paths.*

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at the conclusion, by introducing the presence of Jehovah, discovering the reason why the sea fled, and Jordan was driven back. This circumstance is imitated in the lines of Crashaw. There is this difference, however, between the sacred original and the Latin imitation, that, in the former, not only the waters, but the "mountains," and "the little hills," acknowledge the present Deity; and the whole "earth," universal nature, is called upon to "tremble at the presence of Jehovah, at the presence of the God of Jacob, which *turned*," on another occasion, not water into wine, but "the rock into a standing water; the flint into a fountain of waters."

Crashaw's lines, beautiful as they are, come far short of the beauty and grandeur of the Psalm. This is one, among a thousand instances, in which the justice of Sir William Jones's remark is verified, that "the Holy Scriptures, independently of their divine origin, contain, among other excellencies, more sublimity and beauty, and finer strains of poetry and eloquence, than can be collected from all other books, in whatever age or country they may have been composed."

Basingstoke; March 7.

J. J.

To the Editor of the Monthly Magazine.

SIR,

WE hear nothing so often boasted of in conversation, as that we are a wise, thinking, and prudent people; and yet it is all *sheer nonsense*, unless wisdom consists in suffering ourselves to be universally imposed upon; thinking, to be so void of thought, as not to perceive that we should think for ourselves, our comforts, our interests, our security; and prudence were characteristic of carelessness of our lives, and all that is valuable to us.

Let us take only one instance out of a thousand that are obvious to every one, for little things shew the real character of a nation. One would naturally think, that men linked together by the social compact, and having a representative government, would value at any rate their own conveniences and accommodations beyond those of the brute creation; and that, before they made good roads for their horses, they would take care to have good paths made for themselves; nay, smooth and clean pavements, fountains of clear water, and resting places under shelter, with guards for security, and all assistances which, (if only considered as bipeds,) are necessary to their

migration from place to place, whether of the masculine or more delicate sex; and that he who calls the country his, would at least contrive to have the power and the liberty to walk over it without any inconvenience. But no, it is the last thing he thinks of, even though he should belong to that class of men who know for what purpose their legs were made; and, except in great cities, (and not in all of them,) civilization is so far from producing a respect for ourselves, or our species, that we are content, for eight or nine months in the year, to be debarred the possibility of going ten miles from the town or city we were born in, and inhabit, without wading through deep mud, among horses, asses, and cows, and with less power of overcoming its difficulties, even when of the strongest and hardiest of its population.

We hear of county calls for petitions in favour of Blacks, Germans, or Catholics; of remonstrances against shackling the freedom of the press; for the nomination of some popular candidate for parliament; &c. &c. but none for petitions in favour of men who are condemned to walk, of those who prefer it to any other mode of travelling, or of delicate women and children, whose health requires nice conveniences, to enable them to practise it as God intended they should do.

Neither do we hear of remonstrances against the government for neglecting to put it in the power of the subjects to walk upon and over the land they live in, pay taxes for, and fight for, with as much convenience at least as the beasts of the earth.

This may seem an odd way of stating things to men who have never considered government as contrived for the convenience, as well as the protection, of the people; but I do in my conscience believe, that a government who thought of these things for a people too stupid to think for themselves, would soon become the strongest on earth, both internally and externally; and that such a government might, without exciting a murmur, raise any sum in taxes within the power of the country to pay.

But, to return to my subject:—Take only one other instance of the excessive folly and abandonment of our countrymen at large. Finding he has no accommodation for walking with any degree of comfort, except during a few fine days in the summer, he (when he has any) parts with his money to be conveyed in a box, (first paying a tax for leave to

U10

use it,) at the mercy of the owner, and at what price and pace he pleases to go; who, knowing the folly of his customer, charges him high in proportion to the danger of the operation, and the ease with which it is accomplished, (for the swifter the cheaper to the conductor;) and, being placed in this gilded dangerous toy, full of misery within, and extortion without, the idiot sits doubled up for a hundred miles, with as little use of his ankles as a felon in irons; and chuckles to think how nicely he is contriving to get to town, while other people are sleeping; totally forgetting that he who is spending money, while others are reposing in their beds, and thus gets rid of perhaps two days income in one night, must fast two days for it, or be *minus* at the year's end, on the like proportion. As to the expenditure of constitution, that or the risk of a broken neck is not to be expected to be thought of, by a being, who imagines he exalts himself in the world's opinion, by suffering a drunken driver to extort money from him at every stage, under the penalty of being insulted with foul language, (yet knows the fellow is amply remunerated for his services by the coach-owner;) and as often repels the travelling vagrant on foot with that harshness and unfeeling pride, that brings the blush of indignation from the wounded heart.

Seriously, I think, a remedy for all those evils might be found, by only supposing parliament to bring in a bill—that all stage-coaches in England should be of one construction, after a fixed period; and that of a form as decided by a committee of coach-makers, to be the most comfortable and fitting for a human being to ride in, as well as the most secure from oversetting; where the horses could be detached from the carriage, if running away; and where no places should be allowed that were not guarded from the weather, (a precaution absolutely necessary in a climate like this, when people in ill health are often compelled to travel by their employers;) where the price should include the coach-fare and driver, as expressed in a receipt, and where every place should be numbered in the succession they were taken; with a penalty for galloping, getting drunk, leaving horses, &c. to be recovered by a summary process at the end of the journey, before a justice of the peace. These, and a few other obvious regulations, would make even the necessity of travelling in stage-coaches endurable; and, if perfectly well-paved foot-paths

were bestowed on only the great high-roads, and kept in constant repair by a general rate throughout the kingdom, we should not only walk like civilized men on earth, with decency and humanity becoming intelligent human beings, but we should reap advantages that are incalculable; by saving lives, lessening the number of horses kept, avoiding the cruelty used towards them by the villains that kill them for gain, diminishing the price of many articles at markets, rendering the highways more safe by general intercourse, employing all our now idle hands, and affording the poor man advantages of removal to his parish, and the soldier relief on his march, by enabling him to perform it with ease and expedition.

That such accommodation is desired by all the crowds that frequent the well-paved street will prove; and it would not be difficult to explain in what degree the pavement of London contributes to the health of the inhabitants. That it is equally desired in the country to have smooth and dry roads, the multitudes seen abroad during frosty weather will convince us, if any one wants conviction. A volume might well be written by a pamphlet-maker on this copious subject; and I hope some of the trade will take it up, for that is the only way to treat with *Johnny Bull*, who will at any time give half-a-crown to know what he wants, rather than be at the trouble to think for himself; and always wants a great many reasons for his money.

The broad way of thinking is, to first consider the subject's life as of value, and the respect due to a human being; next, to reflect that we are a very wealthy nation, capable of paying, as we see, enormous taxes, for very many useless, or worse than useless, purposes; and then to apply, through the medium of our representatives, to our parliament, to have a sum raised for the purpose of rendering travelling as easy under our climate as it is to the nations of southern Europe, whilst it is at the same time safer than in any nation in the world. For such are the ties, let statesmen say what they will, that bind people to their country, and induce them to labour to support it—not wars and victories, which now, God be thanked, seem to be nearly all over; so that, if we would consent to pay another year's war-taxes, to be applied to our own conveniences, we should soon become justly the admiration of a respectful world.

G. CUMBERLAND.

Bristol; October 18, 1814.

stretch to devise the means of living; old principles of morality are shaken, and there is a bias formed in the inclination of an embarrassed man, to escape from his difficulties by wronging his creditors.

This is strikingly exemplified in the operation of the Insolvent Debtors' Act, which is as different from its *theory* as darkness is from light. Never was an act founded upon purer principles, or more likely to promote justice during an era of peace, when men are not made dishonest by excessive taxation, nor desperate by commercial embarrassments. But the number of insolvent debtors is greater than has heretofore been known. There is less reluctance at incurring debt, and greater necessity for giving credit, than ever; and this act turns the balance of temptation on the side of dishonesty, leaving the creditor, who has been defrauded of his property, to the derision of his debtors; and tempting him, in the season of embarrassment, to pursue the same familiar career of dishonesty and deliverance.

And, what is truly the cause of the colulus of the Gazette being filled with bankruptcies, our gaols with debtors, and the minds of traders with discontent? It is to be found in the prevalence of a war spirit and a war system; in that jealousy and quickness of quarrel, which support the government in every act of hostility, for which they can find the shadow of an excuse. The majority of the people blindly uphold this sanguinary system, and none more earnestly than many of the most strenuous advocates of the Bible Society, who praise with their lips the blessed Gospel of Peace, yet violate its most holy precepts, in hesitating not to spread death and misery over the beautiful earth!

Taxes are the deadly, but inevitable, fruit of the poison-tree of war. A paper circulation is become an essential part of our commercial system; and nothing can correct the numerous disorders of the state, but a perseverance in peace, and a change in the dispositions of the people and government towards neighbouring nations.

Birmingham; P. M. JAMES.  
April 10, 1815.

To the Editor of the *Monthly Magazine*.

SIR,  
I LATELY by chance met with a letter from Colonel Mauby, publicly addressed to the Humane Society, on the subject of his own inventions, where

he says, speaking of a method of saving people from a wreck:—"The ladder might be also made buoyant, by means of the excellent invention of Mr. Eschauer, the life-preserving cork mattress, a subject which has already engaged the attention of this benevolent society." And then follows this note:—

"I feel a desire to give publicity and commendation to the ingenuity of every person who employs his talents for the public good.

"Last winter, I also learned, that Mr. Constantine Jennings, who has been patronized by Lord Stanhope, has procured a patent for stuffing hammocks with raspings of cork, and that he has refused a considerable sum for it.

"Also, that the parliament have rewarded several inventors of various means of saving seamen's lives."

Now, permit me to claim a place for a short extract from Nicholson's *Philosophical Journal* of October, 1810, p. 134, 7th article, entitled, "*A Scheme for Preserving the Lives of Persons Shipwrecked*;" by G. Cumberland."

"I take the liberty to propose the publication of some crude reflections on a subject of very great national importance; and, although once presented to the admiralty, without producing even an acknowledgment, I feel that you will not think such an idea fit to be totally rejected; as, if not immediately put into practice, it may, by being recorded, be the means of ultimately producing, from better heads, some improved provisions that shall render naval services less dangerous to those who are the support, the defence, and the bulwark of the nation.

"The grandson of the man who first invented the bending of ship-timber, by means of hot sand, in the very cases which are now filled with boiling water; who ruined himself by expending £16,000 to enrich his country, was rewarded with a delusive patent, and left his children in want; may be allowed to be disinterested, in any proposal he makes for the benefit of a navy, that, as individuals, has only been to them productive of disappointment and irretrievable loss.

"About six years past, a solitary inhabitant of a promontory projecting into the Severn-Sea, called Weston-super-Mare, I amused myself much among the rocks there, and spent many hours studying the action and forms of water when impelled in the figure of a wave; it being my opinion, at that time, as it still is, that the forms water takes from motion are so determined, that, even in sculpture, they

\* My letter was addressed to Lord Melville, when first lord.

may be represented with correctness; and that nothing would better teach us the art of representing motion by fixed lines than these images, so often repeated with exactness.

"On these occasions, I frequently observed extensive masses of the sea-weed, called tang, on that coast, (and which the farmers burn for manure,) floating into the hollow coves below me, on the surface of the most tremendous waves, and forming, if I may so express myself, a green carpet, that, undulating on the broken wave, was never submerged, although continually varying its surface; and on which, as on a resting place, birds frequently alighted, or sat to repose themselves, as if it were a verdant down.

"On a coast so remarkably dangerous, where no boat could land, even in comparatively tranquil weather, these *safe-rafts* became very interesting, and led naturally to the thought, whether such a sort of raft might not be constructed of other materials, fit, *instead of birds, to carry men*: the result of which was, it appeared to me, that, if each sailor in a man-of-war had a cork mattress, and these mattresses were all linked together by cords, such a float, capable of landing safely even on breakers, above low-water mark, would be produced.

"Pleased with the thought, I went directly to Bristol, and consulted a cork-cutter there as to the quantity of cork necessary to support a man; and soon found that a very moderate weight would do, and that cork shavings were then worth only eight-pence per bushel, and chiefly sold for firing, or to make guards to privateers to fill the nettings.

"It therefore struck me, that, as mattresses are necessary in the navy for the hammocks, and nothing dryer than cork, or easier to shove into a thin elastic body, it might answer the above end, to fill these mattresses with this substance, in a proportion equal to the support of a single man; and then a mass of them thrown overboard, linked together by ties at each corner, where cords should be always attached, would form an extensive raft, capable of sustaining, out of the water, as many men as there were of these mattresses united, and thus conveying them on the tops of the waves, and depositing them safely on shore, or even on the surface of rocks, when the sea retired with its tide.

"To contemplate such a thought in imagination is truly delightful; but, to believe, as I do, that the thing is practicable with ease, and not communicate it to others, is impossible; I have therefore done all in my power to extend the idea from my own bosom to the mind of the public at large, having first addressed my wishes and plan to that quarter where the power of putting

it extensively in execution alone exists. As your Journal must ultimately reach all countries, I therefore wish to deposit these reflections in it, in the hope that they may thus be extended to some practical benefit, if not to ourselves, to our neighbours, or some distant clime where the coasts are equally dangerous; for all other rafts that I have either seen or contemplated, have this great defect—that they come on shore with too much force, and that the blows they receive either disjoint them, or throw off the people; that their wrecks are more dangerous than the rocks they strand on, and that, every time they pitch, those on them are covered, and some are never able to regain their hold, or rise again above water."

Now, my reason for desiring you to re-publish this paper is, that every one may see, that there is no occasion for a patent to make these mattresses, as I, who sent the plan to the Admiralty before 1806, have not taken out one; also, to extend the plan more generally, by means of your useful Magazine, ever attentive to public good. Whether Mr. Eschauer or Mr. Jennings ever saw my paper in Nicholson's Journal, I cannot tell; but I think it is probable the idea came from thence, and, if so, I have a greater right to the merit of it than any one; and, although I never asked any reward for my invention, am as much entitled to it as those who did for other inventions to save seamen. Why I never received any answer from Lord Melville, I have lately learned from a speech in parliament, viz.—That these mattresses would enable every sailor who wanted to desert to quit the ships, especially in a river that had a strong stream, or on a coast where a strong tide flowed in; but, as that can be no objection in merchantmen, we cannot give the idea too great extension.

G. CUMBERLAND,  
Bristol; Apr. 29.

To the Editor of the Monthly Magazine.

SIR,

BEING perfectly ignorant of agriculture, and the arts connected with it, I have often been tempted to doubt whether I ought to believe the evidence of my own senses, and the suggestions of my own reason, or allow myself to imagine that some things, obvious to me, could be overlooked by the many great men whose names adorn Agricultural Reports, and who are ardent in the cause of improvement, or whether such things are not overlooked, but that ignorance and obstinacy oppose their leading barriers to the efforts of those who know



water, which appeared to me improbable, as the animal was not of the aquatic kind.

I removed, by means of a feather, the small spider from the middle of its web; and, to be sure that no floating thread adhered to it, I moved another feather several times around that on which the spider was placed. I then gave it a gentle shake, which made the insect descend seven or eight inches, extending its legs and spinning. It then remained stationary, in a horizontal situation, having all its legs folded up on its belly, where it had applied its thread; so that it seemed to be suspended by the middle of its body. I saw it, from time to time, make half a turn, very speedily, sometimes to the right and sometimes to the left, and this movement was perfectly spontaneous; for there was no agitation in the air or the feather, which I had fixed to the back of a chair. After being suspended in this manner half an hour, the small spider made a sudden spring towards my breast, raising itself rapidly by an oblique line, which made an angle of 40 or 50° with the perpendicular. I repeated this experiment several times; and I always observed that the spider, after having remained a few moments suspended, constantly rose in an oblique direction, in order to reach some neighbouring object.

My attention being diverted by something else, I did not then carry my observations any farther; but, in the month of Thermidor last, having found under my shrubs one of these spiders, about the size of a grain of hemp-seed, I resumed my former experiments; and, being furnished with a magnifying glass, I attentively examined every thing that passed at the moment when the spider was in suspension. It was not long before I saw, very distinctly, a pretty large thread issue in a jet from its anus, and rise diagonally, making with the thread of suspension an angle of about 45°. This thread was lengthened about seven or eight inches, at least, per second. When the thread reached a neighbouring body, it remained there attached; and the insect then making half a turn, darted out another on the opposite side, and proceeded thus alternately five or six times. The spider then mounted with rapidity, and traversed these different threads, which became stretched horizontally, by I know not what operation, though at first they would have formed an angle of 90°, the summit of which

was occupied by the suspended animal. Soon after I saw a multitude of other threads established between these principal ones; and the work was carried on with so much rapidity, that it was impossible for me to follow it minutely. The net-work seemed as if formed by magic; but no doubt remained to me respecting the principal fact, which is the emission of the large transversal threads, an operation not performed by chance, but design, and which might be compared perhaps to the extension of the long tentacula of certain marine animals."

Have these observations been extended since that time, and may not some of your correspondents gratify your readers by further observations?

J. S. JAMES.

*To the Editor of the Monthly Magazine.*

SIR,

AT a period when geological studies are extending with a rapidity unequalled, and mineralogy, including a scrutinizing search after extraneous fossil bodies, has become a fashionable employment, it may not perhaps be amiss to dedicate a few hours of leisure to the investigation of the utility and probable hopes of discoveries, from those unsettled enquirers, who enlist for the support of contradictory systems, without allowing themselves that licence of free investigation so liberally assumed by the generality of the professors of the present day both at home and abroad. Many there are not left who believe in the old doctrine of the universal solvent, and the chemical amalgam once so much admired; but a great many still are *Huttonians*, a great many *Neptunists*, multitudes join their whole faith on *Werner* as infallible; and not a few are alarmed lest, in following these guides, they should lose sight of the stable foundation of tradition and revelation, *the veracity of Moses*. For my own part, as I see no account more probable than his, and as I find no difficulty in accounting for the present state of the globe, on the simple principle of its destruction by the flood, I would wish the unprejudiced beginners to take the subject at first into consideration in that light; and, instead of either inverting the poles, or causing the bottom of the ancient ocean to rise with all its shells and madripores to make a new earth,—just for a moment to suppose what would be the consequences if a *new submergement were now to take place;*

and

and see if from thence they cannot easily account for the present appearance of our terra-firma; and, although in this manner they may not be able to discover any means of placing the secondary rocks, &c. to allow that they and their position, as well as the primary, as we call them, might have been the product of the first creation; for there is nothing in the word *chaos* to imply that its component parts were not made up of fragments of a former creation, where vegetables, fish, reptiles, and certain large quadrupeds, might be the natural inhabitants; whose destruction might have laid the foundation of that chaotic mass on which the Spirit of the Deity, or fire, by chemical operations, to us unrevealed, because unnecessary to be known, might have constituted those formations about which we are so inquisitive, and of whose positions and superpositions, we, after all, (from the confusion occasioned by their fractures, textures, transitions, and subsidences,) know so little about.

Let us, therefore, examine carefully what the Mosaic history records, and then, giving full credit to the events related, see whether the natural consequences must not be the present appearance of our earth.

First, then, we are told, that the Almighty first created the atmosphere and the earth, without form, void, and covered with darkness, on which the Spirit brooded.

Next light, producing day and night.

Next *expansion*, a firmament, (our atmosphere,) to divide the waters (or clouds) from the waters of the earth, (our sea.) This probably was the effect of the first rays from the sun acting on the globe.

Next the sea was shut up with doors, and the waters gathered together into *one place*, that the dry land might appear.

Next were vegetables produced, and the planets; next volatiles, next fishes, next animals and reptiles, and lastly man.

At this period there was no rain, but a *mist*, which visited the whole face of the earth; and at last we are told, (probably when the rains commenced,) *Eden*, and the four rivers that took their source from it, appeared.

Now, in all this description, we see a picture of a world exactly conformable to our own in figure and effects; and we may, I think, fairly conclude, that being intended for the habitation of men, it possessed within its bowels minerals for man's use; such as metals, coals, &c. (the result of the first shock of the ele-

ments when the chaos was fermented by the Spirit of the Creator.

And now let us consider the mode of its destruction by immersion in the aqueous fluid—and suppose that Noah entered the ark, which he had been so long constructing, (and the construction of which alone will prove that mankind had already availed themselves of the art of mining and working metals, and had arrived at a high pitch of skill in the mechanic sciences,) about the 17th of February, after which rain fell for forty days and nights, the “fountains of the deep and the floodgates of Heaven being broken up;” (strong metaphors!) At the end of the forty days, we are told, the waters were advanced on the earth so as to float the ark, so that it went or sailed on the face of the waters thus collected, which ultimately rose 15 cubits, or about 33 feet above the *highest hills*, and all living creatures on the earth *died*.

It then remained at this height 150 days; and at the conclusion of the 150 days (“going and returning,” by which I understand tides,) they were abated; and at the end of five months they had so far subsided, that the ark rested on Mount Ararat.

They then continued subsiding, towards their original bed, till the tenth month, on the first day of the month, that is, *eight months* after their commencement; and, on the commencement of the next year, the waters were dried up from the face of the earth; and, on the 27th of February in the next year, 2348 years from the creation, the earth was totally dry. And, observe, here is nothing to lead us to the conclusion of any convulsion, such as a changing of the poles, a protrusion of the sea, volcanic explosions, or even very violent subsidences, or the slightest disturbance, except that of a *wind* ruffling the face of the waters, (chap. viii. ver. 1.) when the waters began to retire, and which should seem the natural consequence of such an abatement of that element. Now, say 12 months they were coming and going, or - - - - - 365 days.

Deduct 150 days stationary }  
above the highest land, } 150

which leaves - - - 215.

Suppose 190 days before they retreated, and you have 175 days and nights for their retreat. Next take the supposed elevation of the highest mountain we know of, to which add 30 cubits, (the height of the highest elevation of the waters; or, according to my ancestor

the bishop of Peterborough's calculation, 33 feet; and, dividing it into 175 parts, we shall have the number of feet they fell each day, as well as the number of feet of the earth's surface disclosed in a slowly exhibited shore, covered with such pebbles, shells, and clays, as are usually deposited by the retreating of our salt-water waves; not pure sands probably, except on certain plains of great extent, but mud and soil, where there was any horizontal or little inclined surface to receive it, together with floating wood and rotten vegetables, fit to create bogs in proper receptacles; and, taking into consideration the action of the water, as it rose, with this more violent action, on its retreat, because of the wind and tides uniting in the work of destruction; and we shall, I think, clearly see what has caused the present varied appearance of the earth's surface.

But, I mean, in your next, to go more at large into this consideration, and shall proceed to consider what is and what ought to be the grand object of the study of geology, as far as relates to useful purposes, laying aside philosophical speculations and metaphysical enquiries.

GEO. CUMBERLAND.

Bristol; June 1.

To the Editor of the Monthly Magazine.

SIR,

I WOULD request two errata to be corrected, as they disguise the sense:—in my letter on *War*, read, "the nation is engaged in war-treaties by *ministry*," instead of reading "by *necessity*,"—On *Electricity*,—read "mark" on the wall.

It may not be uninteresting to observe that the glorious, though eventually fatal, struggle of France and Bonaparte against the armies of the *Confederacy*, was made nearly on the same spot on which Cæsar nearly lost his army and his life, when attacked by the Nervii, occupying the surrounding wood and eminence near the *Sabis*, now the *Sambre*. The panic of the Roman army was restored by the presence-of-mind of Cæsar: for that was by day. Had the panic of the French army not been by night, all that Cæsar effected would have been alike open to the genius of Bonaparte, and might have added one most important resemblance more to the many and striking, which will go down to an admiring posterity, of the various brilliant and great qualities of Napoleon. But Bonaparte has proved a devotedness to the public interests infinitely beyond

what Cæsar appears ever to have practised. Regretting in the extreme his second *abdication* as unavailing, I see every thing venerable and estimable which can be manifested by man in its principle and motives; as being made with a total disregard to all personal considerations to remove the only pretence of war, to preserve the *independance of France*, and the lives of her brave defenders.

It is evident, that, but for this *panic*, the advantage was on the side of Bonaparte; and greatly so, as appears by the success of Marshal Grouchy and of Vandamme the next day; their position, which took the Prussian corps in rear, being of the last importance, had the main body of the French stood its ground.

Neither the panic, therefore, nor its dreadful result, is in the least degree imputable to Bonaparte. And the two commanders-in-chief, as far as military glory is concerned, Bonaparte and Wellington, have consummated that by their maintaining such a competition against each other, and exerting in the field, through that amazing day, all the functions of the General and of the Soldier. Neither would have been known to be so great had they not been thus opposed to the other.

But, of Bonaparte, as a legislator, and a friend of science and of the arts, of liberty, and of human improvement, just posterity will speak with a praise to which all military glory is far inferior; and, in remembering his faults and his errors (none of which, however, appear imputable to him since his return from *Elba*), will not forget his various transcendent habitual excellence. But in these the eulogium of his great rival, in the letters which have been quoted, supersedes all other praise. When, with an ingenuousness still nobler than his success, he expresses himself as "never having taken so much pains for victory, and never having been so near being beaten." And says, that "Bonaparte fought throughout with infinite skill and bravery," but that the physical strength of his own army was superior; and gives its full effect to the assistance of Marshal Prince Blucher and General Bulow, in the close of the action with their fresh troops.

What, on the other hand, can be said of those Frenchmen who, following the eagles of Bonaparte on that decisive day, could cry—"Vivent les Bourbons," in order to produce confusion, rout, and massacre, of the army of which they composed a part, in the very crisis of his fate, and of that of France?—Let their own hearts

account in introducing the English process at Paris, where the consumption of ruled paper would necessarily be very large.

MERCATOR.

*To the Editor of the Monthly Magazine.*

SIR,

A CORRESPONDENT in your Magazine for June wishes for some information upon Lithography. I have no access to the *Annales de Chemie*, but the following extracts from a small pamphlet printed at Bath by Messrs. Wood and Co. upon this curious art, may not prove uninteresting. "It is required that the stone be calcareous, of a compact smooth texture, susceptible of polish, and absorbent of water; the original drawing should be first done on paper with red chalk, and then transferred by laying it on the stone, and rubbing the back with a burnisher; it will by this means be properly reversed for being impressed. The tracings of the drawing are required to be made with an ink oleaginous, or with a crayon of analogous qualities, so as to be capable of resisting the action of water. The ink is a combination of wax (to which a small quantity of tallow should be previously added), shell-lac, and lamp-black, in aqueous solution, by means of soda. The crayon is formed of the same materials, leaving out the water and soda; a crow-quill pen, with the slit long, and the nib of a breadth proportioned to the drawing required, is the best that can be used; where very fine strokes are required a Chinese hair pencil may be used with advantage. To take an impression from the drawing made on the stone, it is first washed over with water; this runs off the tracings, and only remains on such parts of the stone left uncovered. It is then dabbed with ink covered extempore, by well grinding lamp-black with linseed-oil, as prepared for copper-plate printing; this ink, being also greasy, is resisted by the watered parts, and received by the tracings: damp paper is laid over the stone; the pressure of a screw or rolling press employed, and an impression taken. The process of watering, dabbing, &c. is then repeated for another impression."

To those who wish to pursue this art, I recommend the perusal of the above pamphlet, which contains several useful hints and observations. The utility and merits of this singular art will be duly appreciated when it is known that it multiplies the drawing from the hand of the master, and that the productions of

the lithographic press will be fac-similes of what is excellent; multiplied originals, instead of spiritless copies: and I understand the more impressions are taken the more perfect they are. I have two by me that has every appearance of a highly-finished chalk drawing.

I should be obliged by some of your correspondents informing me if the common variegated land snake is amphibious. About a fortnight since, in crossing our harbour, I picked up one of this species, swimming with his head erect about two inches above the water: it was at least a mile from land. Is it a common occurrence their being found in salt water? or is it to be attributed to accident in its being washed off the bank? It continues very lively, and lives principally upon milk, which it sucks with great avidity.

J. DECK.

*Harwich; July 10, 1815.*

*To the Editor of the Monthly Magazine.*

SIR,

I ENCLOSE a copy of the inscription on a monument recently erected in Chelsea church-yard to the memory of Philip Miller; the insertion of which in your Magazine will further the wishes of the promoters of the work, by more generally diffusing their acknowledgments for the many and great benefits they and the public have derived from his labours.

J. S.

*July 22, 1815.*

PHILIP MILLER,  
sometime Curator of the Botanic Garden,  
Chelsea,

and author of the *Gardener's Dictionary*,  
died December 18, 1771, aged 81,  
and was buried on the north side of  
this church-yard,

in a spot now covered by  
a stone inscribed with his name.

The Fellows of  
the Linnean and Horticultural Societies  
of London,

in grateful recollection of  
the eminent services rendered to  
the sciences of Botany and Horticulture  
by his industry and writings,  
have caused this monument to be  
erected to his memory.

A.D. 1815.

*To the Editor of the Monthly Magazine.*

SIR,

IF the object of geology be to attain the age of the earth as a planet, it seems indeed an idle proceeding; first, because, if attained, it would apparently be useless; next, because it can never be



be attained by the present mode of enquiry; and, like the riddle of the Sphinx, would destroy the life of all those who failed in solving it, by wearing out the only valuable property they have, viz. *their intellects, and their time of existence here*, which was given them for better uses.

If, again, the object is to discover universally the positions of strata, so as to make the discovery useful to us by coming the more readily to springs, clays, metals, and manures; it is by no means clear, that even that object will be easy of attainment, considering the great irregularity of the subsidences that have evidently at some time taken place, and the fracture, texture, and removal of bodies, as yet, even with respect to granite masses, unexplained.

We may, however, by this pursuit, doubtlessly aid the miner, agriculturist, and mechanic; and, by a careful examination of all the substances the earth produces, and a chemical analysis of them, come at many useful products serviceable in promoting the arts, without calling in the assistance of commerce with foreign countries. Further than this, I fear our researches will not easily carry us: and here, perhaps, we wisely ought to rest. But, as there always will be men who consider it as the highest degree of wisdom to seek after first causes, as far as they can be traced; so it is not to be wondered at that other men should be restless for the discovery of the mode of its first formation, and of all the changes this our planet has undergone; and hence, be for ever building up new systems and theories for others to tumble down again, as children erect card-houses, till the lofty summit crushes the foundation, or some envious spectator levels them at a blow.

One thing seems, however, to be of much importance to us, and that is the knowledge of the mode by which the form of this globe has been destroyed by the flood, in order that we may know where to find the valuable materials that the waters robbed the old continents of, such as mould, clays, marls, sand, peat, gravel, and the *debris* of ores, &c.; for, as to the chalk, limestone, sand-stone, schist, coals, and other useful compact bodies, they are made visible to our eyes, in many parts of the world, by means of that very process which undoubtedly robbed the upper parts of the earth of much of its fertilizing soils.

That it was accomplished by means of water, we are informed by Revelation

and tradition, and the truth is witnessed by every eye daily, the highest mountains and lowest vallies uniting in one undeviating cry to proclaim the fact; and we want no better guide than Moses to lead us to the probable mode of operation, with its consequent effects before our eyes; and the age of the world, as to us, and our time of existence, is all that we have, or ought, to enquire into, if the object of enquiry is utility; and that satisfaction which the mind receives from the belief in the existence of a governing Providence, and a Great First Cause, full of love to the objects of its creation. It is reasonable to suppose that this globe, together with its atmosphere, is a machine constructed on the principles best suited to its existence; and that, when the fountains of waters contained in its great depths were broken up, vacuums, if I may be allowed the term, must have been formed in the cavities they had left, such as we see in every common vessel we empty, whether of water or air. The force of gravity must likewise necessarily attempt to fill these vacuums, and succeed; the consequence of which would be, that, during the one hundred and fifty days that the earth remained submerged, it must have become a much more dense, and consequently smaller, body than it was before the flood of water from its own bowels overwhelmed it. In fact, universal subsidences must have taken place, except where entangled gas impeded; though, no doubt, much must have been exploded by the very operation, and much fire also probably given out by the enormous attrition produced by the sliding of large masses of rocks on each other's faces. How far this attrition might have (by its heat) accelerated the formation of metals in the joints, by converting their materials, or attracting them, I shall leave to chemists to consider; and proceed to observe, that, when the period arrived that by some contracting force the waters were impelled to resume their former positions within the body of their globe, and above it, then a necessary expansion must have ensued, and the earth might, in a true sense, be said to rise out of the waters gradually, till it could absorb no more. And here again, as the operation must have been pretty rapid, immense concussions of strata must have taken place, and extensive fractures of continuity, which fractures would necessarily have been filled up with the *debris* of the broken

surface, nearly as fast as they were formed, and which, acting as wedges, must ultimately have consolidated the whole surface. Again, the overplus of this *debris* must necessarily have been rolled to the lower countries, when they met with inclined planes, or found no cavities to receive them of sufficient size, being assisted by the action of the tides as they retreated from the surface of the earth; of which the scattered masses of granite, &c. the Cairns of Redruth, and the rocking-stones in Cornwall, exhibit these effects very decidedly, being left bare from the wash both ways, and in every direction; whilst the sides of the hills shew, like the coasts of the ocean, protruding masses, filled up with clays or sands, as the waters left them to descend to a lower level. And this, I think, explains what has so much occupied our best geologists: the alluvial strata deposited in the basins, as they are well called, of the earth, viz. those of Paris, London, and the Isle of Wight, &c. For, as the waters subsided, the agitation of that part which touched the declining shores of the soil, (or those parts which were emerging by the operation of this action of the retiring waves,) must necessarily have been saturated with the lighter parts of that soil, whether it were clayey, sandy, marly, or boggy, for a considerable distance from the receding surface of the earth, which, having been long divested of its vegetable covering, must be slimy and bare of texture; and this muddied wave would naturally deposit on the bottom of these basins, or pans, their various contents in alternate layers as they received them; and, passing below their brims to other parts of the earth, and over other basins, they must have been left undisturbed, as was the surface of all plains, (except what impression was made by bodies rolling into them afterwards from subsidences and convulsions, which doubtless must, for a long time, have been going on above); during the time that these subsidences remained unsettled, from wanting stability beneath the surface, which the introduction of the waters into their newly-forming caverns must for a long time have occasioned. Neither is it at all surprising, that these various deposits should have been imbued with either marine, or fresh-water, or land shells, or have been covered at their surfaces with them, or with rounded pebbles; for, as, during

the ascending of the waters, multitudes of them must have been rolled together, (as new beaches were formed to the summit of the hills,) so, in subsiding, numbers must have been carried off to lower parts of the earth; and such as met with these basins or pans, would naturally be deposited in strata; while those that met with no such beds, or pans, above, would roll lower, till they found hollows to receive them, or ultimately regained their original beds in the ocean. That such was the case, we can see very plainly in the neighbourhood of Porlock, in North Devonshire, and elsewhere, where smaller basins of sandstone are often found, filled with nodules of aggregates of limestone, forming a breccia with ferruginous clay, which the agriculturist excavates, like mines, to burn for lime; and which he frequently exhausts in a few seasons, and then seeks another of these cavities, which, like traps, have caught these rolled lime-stones in their way to the ocean, from distant parts; and many of which still lie in holes on the schistose bottom of the neighbouring channel, having reached probably their ultimate destination. Thus, it seems, we have no occasion to go back to extended or anterior formations, to account for the numerous strata found either vertical or horizontal in the Isle of Wight, or elsewhere; and, as to their vertical position, nothing is more likely to have produced it than the undermining or breaking down of the edge of this pan, or crater, by the sea, being placed in the immediate vicinity of the last formed shore; while those of Paris and London could only be diminished at their sides and centre by the action of land waters and floods, which drained them and gave them solidity to support the accretions of gravel and sand, which some violent retrograde action of the sea might very likely have rolled over them, in its last efforts to gain its present bed; being unable further to retreat into the depths of the earth, all its reservoirs being at length completely filled, for the purpose of sustaining the weight of the earth's surface, (if I may be allowed such an expression, for the sake of plainness). And that such is the case, we may, I think, be permitted to conjecture, from the effects of earthquakes,—when we behold the sea rising in high tides and flooding the land, where those commotions are observed near the sea-shores, as at Lisbon; the water, probably being expelled from  
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some of these sustaining reservoirs by air bursting in, created by internal fermentation, from fire or pyritic matters, to heave the solid stratum beneath, with the force of gunpowder or inflammable gas.

G. CUMBERLAND.

[To be concluded in our next.]

To the Editor of the Monthly Magazine.

SIR,

READING a volume of parliamentary debates; one of the speakers attempted to make it appear that the larger the National Debt, the more secure it made the government; which appears to me very erroneous, because I believe that, in proportion to the increase of the national debt there has been as great, if not greater, increase of pauperism. According to the papers laid before the House of Commons, every seventh person received parochial assistance. Now, if any of your readers can furnish your Magazine with the number of freeholders, it will enable us to judge how far this maxim, which is by no means singular, is founded on sound principles of political economy: if the paupers are numerically larger than the freeholders, the above conclusion will, I think, fall to the ground.

W. GOODMAN.

To the Editor of the Monthly Magazine.

SIR,

IN questions of difficulty, an opinion founded on mere authority has little weight. On the subject of my letter, Hermes has offered nothing which is to any classical reader new, or to me satisfactory. He has merely quoted the opinions of three critics, the correctness of which, he appears not to have examined. Had I not previously taken the pains to consult the authorities which he quotes, respecting the verbs *invenire* and *reperire*, I should not have presumed to address your classical readers on the subject. The question is not to be answered by reference to any authorities, but to the usage of the best Latin writers. Had your correspondent, Hermes, considered the distinctions offered by his three critics, he must have perceived, that they are not perfectly reconcileable one with another; and, had he consulted Hill and Crombie, he must have been convinced, that they are erroneous.

His first distinction, *invenimus quasi-ta; reperimus ulro occurrentia*, is, I believe, universally abandoned as incorrect. When it is said, *Dum eam vitastis vituperationem, eam invenistis, ut timidi puta-*

*remini*, (Auct. ad Heren.) it will not be supposed, as Hill truly observes, that the object was either sought, desired, or expected. Nor, in the following passage, can *reperire* be supposed to denote any thing accidental, but the reverse: *per-scrutabor fanum; si inveniam uspiam aurum; sed, si reperero; O fides!* (Plaut. Aul. 4, 2, 13.)

The second distinction, *invenire consilii est; reperire fortunæ*, is resolvable into the first, and may be dismissed as equally incorrect.

*Reperimus nostra; invenimus aliena*, is the third distinction. To prove the inaccuracy of this distinction, a volume of examples might be adduced. The few following will suffice, which the reader may consult at his leisure:

*Querit quoque (namq. reperta Fistula nuper erat) qua sit ratione reperta.* (Ov. Met. 1. 687.)

*Apollinem consulit, an equam invenire posset, cum omnino nullam habuisset.* (Val. Max. 1. 8. 8. Ext.) *Cum sepulchra disjicerent, id que eo studiosius facerent, quod aliquantum vasculorum operis antiqui scrutantes, reperiebant.* (Suet. in Vit. Jul. Cæs.)

*Qui princeps vitæ rationem invenit eam, quæ Nunc appellatur sapientia.* (Lucr. 5. 9.)

The opinion of Hill comes certainly nearer to the truth, than any of those quoted by Hermes. He says, that *invenire* is "to find," either by search or accidentally; either that which is known to exist, or that which is not known to exist: and that *reperire*, is "to find" by search; that which is known to exist. This explanation, however, Crombie, in his "Gymnasium," shews to be incorrect. To the numerous examples adduced by the learned and ingenious critic, to prove its inaccuracy, the following may be added. *Nec multo post in Cantabria lacum fulmen decidit, repertæque sunt duodecim secures.* (Suet. in Vit. Galbæ.) Nobody can suppose that the axes were previously known to exist. *Plurimum frumenti repertum.* (Curt. 10. 4.) *Magnitudinis inusitata reperere serpentes.* (Curt. 9. 1.) Many more might be added. The opinion of Dr. Hill, then, being incorrect, I am desirous to see a clear and accurate explanation of the specific difference between the verbs in question. This the author of the "Gymnasium" has, in my judgment, not given. He has merely shewn, that *invenire* is the generic term. The distinctions, offered by Hermes, are unquestionably false.

PHILOLOGOS.

Winchester; March 8, 1815.

ORIGINAL.



1815.]

## Orthoëpy.—Mr. Cumberland on the Deluge.

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And this engine, more dangerous to the community and to freedom than if it struck the life of the individual, *this very engine, ministers*, after having prorogued parliament when they expected an opportunity, by *capture*, to use it, (for they knew *themselves* too well, and HIM too little, to have much hope that Bonaparte would voluntarily put himself in their power)—this engine, ministers, unless they will face the Act of *Habeas Corpus*, and all its sanctions and all its terrors, without any shelter whatever, *must* be obliged to ask parliament to indemnify them for *having* used, and to enable them to *continue* to use. *Will* parliament do this? *Ought* parliament to do this? *Can* parliament do this without the highest breach of the constitution; without violating those rights and securities which it is their especial duty to maintain and fortify?

And let it be remembered, that this would be to be done, not against a *subject*, not against a person who, being *resistant* among us, had offended any of *our* laws; but against a person who came with *honor* and *veneration* to those laws, who has incorporated their best principles into his own *immortal* Code, who has established a *penal* system of unrivalled mildness, precision, and clearness; under which the securities now violated against himself are completely established; who came to honor those laws, and to pass his life under their protection; but whom ministers refused to receive with even the momentary courtesy of permitting him to set his foot on our hospitable shore; and over whom, therefore, disclaiming all relation of benefit to him, they were *bound* to have disclaimed all *penal* relation, all afflictive coercive power; which yet, for exercising unboundedly against him, it is considered by some as a thing of course that they should ask for *parliamentary* ratification *against* him, and *indemnity* to *themselves*!

ENGLISHMEN!—it is utterly without foundation, without all precedent, and without the shadow of principle—this deed of your ministers. And any suffering, any loss, which the power of man, or the *visitation* of *Heaven*, might inflict, would be better than that, by silent acquiescence, we should fix such an evil as this on the *English* name and constitution, and on our posterity for ever.

Troston Hall;

CAPEL LÖFFT.

August 18, 1815.

MONTHLY MAG. NO. 274.

To the Editor of the Monthly Magazine.  
SIR,

**O**BSERVING in the Monthly Magazine an abstract of Mr. Pytches' intended Dictionary, founded on the principle of admitting no more letters in words than they sound, in many of which I highly approve his alterations, and in which he is supported by some orthoëpists;—I beg to submit the word *deteriorate*, which I have always spelt *deteriorate*, as falling in more with our enunciation, and the tone more agreeable to the ear. The great object of the Greeks was to make their language as musical as possible; and I see no reason that we should not adopt their maxim; as, from the strength and copiousness of our own, we are justified in the attempt. B. W.

Hackney; Aug. 10, 1815.

To the Editor of the Monthly Magazine.  
SIR,

**T**HAT the world has been considerably injured by its submergiment, I think we must be convinced of from the general barrenness of its hills at this day, the necessary consequences of expansion being likely to have produced that protrusion of the sides of its granitic nucleus, so evident on the surface and tops of the highest hills, (a chaotic mass, the produce apparently of water, air, and fire, in combination;) and, but for the angular forms of the schistous, and sandstone and limestone formations, (the *debris*, as I conceive, of a former worn-out earthly globe,) it is probable little soil would have been found, except in the vallies and great plains upheld by these secondary mountains, as we call them, whose subsidences are the buttresses of the kingdoms of the world, and the channels of fertilising floods; affording barriers sufficiently strong to detain them from too rapid a waste; and lasting dams, to deliver them into multitudes of courses in every necessary direction: for, supposing the subsidence of the waters of the flood to have been at the rate of, say fifty feet each day, and imagining ever so little action from the winds on the surface, there must have been a heavy break on that surface, from the tops of the *Andes* to the present level of the sea; and we are told in *Genesis*, that there was a *great wind*, when the waters began to subside. The swell, therefore, and run of the waves, must have been immense against the first land that appeared; and we may thus, I think, fairly account for the

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the havoc and spoil the highest mountains now exhibit, no less indeed visible on the insulated tops of all of any magnitude, where crags inaccessible are their general characteristic.

What became of the vegetable products of the earth's surface—loosened as they must all have been and deraigned, so as to rise and float, until, fully saturated by moisture, they must have sunk in large masses—our bogs and recent coal-strata, such as Bovey, fully explains; and, with respect to land animals, the greater part, whose bodies were not devoured by the aquatic creation, and dragged to the depths of the sea, must necessarily have been overwhelmed by the retiring soil, and consumed by it in a short time; nothing remaining but those large bones of the largest animals, and teeth, which we so continually find in the great depositions of alluvial clays, gravels, &c. In fine, it seems, and always did seem to me, that the tradition of *Moses*, or the book of *Genesis*, whosoever it was, (whether Revelation or Tradition,) is an history both probable, and accounting for all the present appearances of the earth; and that, if again this earth were submerged in water, the subsidence of it would present nearly the same appearance—without imagining sand, or limestone, or schist, to be created by the operation;—but I can easily conceive that the jaws of these disrupted strata might receive great masses of the putrid vegetable matter; and, in their subsidences and engulfments, carry down and enclose, with violent pressure, *them* as well as clays, gravel, and sand, or other bodies, such as we find compressed in the divisions of their strata, of which marls and iron are a part. As to the soft sandstones, they probably may be alluvial, with the marls, gypsum, selenite, and strontian they contain; but that the masses of limestone, with their contents, were formed out of the debris of a former world, I see no reason to doubt, as the objects they contain are never *really* found in all their parts *exactly* to correspond with our recent productions of the same genus, as far as my observations have gone in the examination of thousands of specimens.

That limestone and the oolite owe their compactness to the calcareous matter they contain, is evident in many species; in others, we see siliceous and iron has had a large share, and in some of the sandstones it has been the principal ingredient; and there is nothing unreason-

able in supposing that they were created for that purpose, as a natural means; and that they composed a part of the *chaos* before the word went forth that chemically combined them into a stratified state, and placed them as coverings to the less homogeneous materials to the earth, the granites; ready (as our experience proves to be probable,) to be by fire converted into fertilizing quicklime, that, mixed with other igneous ingredients, shall create the world anew, glorious like the fabled Phoenix, arising in splendour from its own ashes and lava, acted on by the elements of water and air, in combination.

In considering things in the light I have taken them up in this essay, it appears to me there can be no blame, as it may guide us to find alluvial deposits in the highest plains of considerable value, from the necessity it supposes of the effects being regular in these pans of the earth: yet we are not to suppose the deposits to be so numerous in the higher as in the lower; and, when we find these strata in vertical positions on the sides of these basins, we must conclude that their edges had given way for want of stability, as being newly formed, from the incumbent weight of the central depositions; or from the action of the swell of the waves of the gradually-retiring waters.

At any rate, in this slight sketch, I have only taken a liberty which we are all alike entitled to, in forming theories on a subject, of which all are (speaking correctly) alike ignorant. Although many of our brother builders of these modern *towers of Babel*, (whose *neology*, like the old ones, is a little diversified, while their hopes are perhaps not less extravagant, though more praiseworthy,) are shy of acknowledging it; at any rate, I hope it will not breed any ill-will between us; and they may rest assured, that I am so far from being pertinacious in the system I have hinted at, that whoever raises his shoulder to upset it, with good humour, I shall consider, (as a worthy quaker of my acquaintance did a brother who was caricatured sitting his back against a church,) he may (said he) be pushing it down or giving it support; he may be acting as a battering-ram or a buttress.

G. CUMBERLAND.

To the Editor of the Monthly Magazine.

SIR,

THE writer of this article purposes to lay before your readers many particulars

THE  
**MONTHLY MAGAZINE.**

No. 275.] NOVEMBER 1, 1815. [4 of Vol. 40.

When the Monthly Magazine was first planned, two leading ideas occupied the minds of those who undertook to conduct it. The first was, that of laying before the Public various objects of information and discussion, both amusing and instructive; the second was that of lending aid to the propagation of those liberal principles respecting some of the most important concerns of mankind, which have been either deserted or violently opposed by other Periodical Miscellanies; but upon the manly and rational support of which the Fame and Fate of the age must ultimately depend.—*Preface to Monthly Mag. Vol. I.*

As long as those who write are ambitious of making Converts, and of giving their Opinions a Maximum of Influence and Celebrity, the most extensively circulated Miscellany will repay, with the greatest Effect, the Curiosity of those who read, whether it be for Amusement or for Instruction.—**JOHNSON.**

**ORIGINAL COMMUNICATIONS.**

*To the Editor of the Monthly Magazine.*

SIR,  
**N**OTHING is more common than to hear our forefathers censured for their bad roads, slow travelling, heavy carriages, clumsy cattle; and those times are held up to ridicule, when so great was the danger of the road, that men made their wills previous to setting out on a journey of fifty miles: and yet, after all, judging impartially, it does not appear that at present we have much occasion to boast of our great improvements in the art of travelling, with all our wisdom and experience. As far as public conveyances go, we have not lessened the dangers, or got much by abridging the time, if we take into consideration the infinite increase of expense; and, if they were a little more jolted, it got them a better appetite, I suppose, to a wholesome and reasonable meal; whereas, we are crammed into a case like poultry for the market, and delivered over regularly three or four times a day by our driver and tyrant, to bad provisions, insolence, and impositions of all sorts. Then, again, if they did take any outside passengers, (which I much doubt,) they were probably servants or civil poor people, and ready to oblige those within; whereas, now, none are dependent but the gentry inside, commonly called live-lumber, each outside-passenger making it a point to be as abusive as the coachman; either swearing, talking obscenely, drumming above head, or kicking his dirty shoes in at the window; roaring, drinking at every ale-house, sending you down his whiffs of tobacco-spittle, or what not; or, if he happens to get wet, finds room, and can tip the coachman a shilling, coming down with a dripping jacket and stinking breath, to sot and keep you company, and make himself agreeable, as he calls it.

Once you crawled, and were overset gently; now you gallop and are dashed

to atoms: and, on either extreme, you should make your will, and take leave of your relations.

But to be serious on a subject now become so very serious as stage-coach travelling is, when his Majesty's subjects are daily slaughtered, or have their bones broken, without the least remorse, to gratify the avarice of some, and the folly of others.

There is not a doubt, that folly, ignorance, and false courage, have united with the cupidity of the owners of stage-coaches, in greatly promoting this enormous evil in society: youthful folly is naturally delighted with rapid motion, for it never reflects on any thing but present pleasure; and all parties are carefully kept ignorant of the risk, by stifling Newspaper reports of accidents both by pay and the influence obtained through advertising in their pages: even coachmen's fines, for dangerously driving, are seldom reported; and I have known a city where not one Paper would insert a fine, levied with a view to apprise the public of their danger, because all were employed to give notice of this fast travelling. Nothing ever brings these frequent disasters to light but an action at law resisted, which it is not one time in twenty the coach-owners have the stupidity to meet, or the absolute destruction of life on the spot; in which case, the coroner's jury discloses the melancholy tale. Numbers of people, after all, perish from the consequences of inward bruises, the effect of which they cannot at the moment ascertain, and of course cannot prosecute others. By far the greater number put up with the injury, ashamed of their own folly, in thus abandoning the common care of life.

Again, supposing men were at liberty to cast away their existence in sport, are horses, whom, the laws says, we are not to use cruelly, to be murdered in this shocking open manner? The greater

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part of those we see in opposition coaches, are purchased to be killed by over-exertion; numbers drop dead on the roads continually, and wretches are employed day and night to excite them, by every stimulation of food, to attempts beyond the powers of nature. Their fall is looked on with indifference, if not attended with the oversetting the vehicle, by the greater brute who goads them with his lash; and a miserable animal dripping sweat and tears, under the agonies of inflamed lungs, for miles together, is called in jest—a roarer! How false courage supports this infamous system, may be observed by the common remark, that they all risk alike, and that the coachman hazards his life as well as the others, forgetting always that he has an habitual disregard of consequences, is generally a dissolute fellow, and is himself hired to encounter all accidents at a high premium; nay, frequently, when the opposition is in the fever of madness, tempted by a small share of the great profits that are to arise from the scandalous victory. What the present laws, under active and humane magistrates, can do, has been tried in vain. The owners set the profits got by violating the laws, in overloading, against fines: the coachmen, in defrauding the owners by taking parcels for themselves, and by taking passengers on their own account, at low rates, whom they set down short, or make to get down and walk through towns where they change horses, to be taken up on the other side. On many great roads there is a continual warfare between the owners and their servants; and spies are set and regularly paid for counting the passengers, to check the way-bills: in short, no Act hitherto made has been of much effect to cure abuses, for either the passenger has passed the county where conviction must take place, or his more important personal concerns call him away from his public duty; and this they know, and calculate upon, procrastinating and employing counsel to deter the traveller from attempting a redress under Acts of Parliament. We must, therefore, if we would effectually protect the King's subjects, frame an entire new Act of Parliament, containing a complete set of regulations for stage-coaches, of which the following, it appears to me, should be the outline.

That all stage-coaches should be built on the model of the present mail-coaches, or safer if possible.

That their roofs should be formed

barge-wise, so that no person should be able to sit on them.

That this barge part should be appropriated chiefly to the luggage of the passengers, being a triangular imperial opening at the side, and locked up.

Nothing to be put into the seats but the luggage of the passengers, and those under lock and key, which should be always in the care of the coachman.

No passenger to be allowed to put into the seats either game, fish, or gunpowder, or any thing of an offensive smell, or any way dangerous.

No loose parcels whatever inside, or sticks or umbrellas; a box to be made near the coach-box, solely for their conveyance, and so inscribed.

No coach, on any pretence, to carry more than four inside passengers; one on the box, and two behind, on a seat over the hinder boot, placed fifteen inches lower than the roof of the coach inside, with its knee-leather.

Each place, both inside and out, to be numbered on the seat; the first comer to chuse, and so on; and a receipt to be given him on taking his place, for the amount of the money paid for the journey, on a card; on the back of which should be printed the regulations and penalties under which the coach starts. This receipt to be transferable by indorsement, for the whole or any part of the journey; and no person to occupy the place for the whole or any part of the journey, without shewing this receipt, under a heavy penalty from the proprietors.

A certain sum to be charged for the coachman at paying for the fare, who shall see to the loading and unloading the luggage of the passengers, and be answerable for their general safety.—The coachman to maintain himself.

Each inside passenger to have a pocket on his own side, appropriated solely to his use, and numbered with his number.

Each passenger to have a roomy elbow hole, and a squab, with sufficient room for his feet, as well as legs.

The rate of going not to exceed six miles per hour; the houses of call to be specified, but liable to be changed by agreement of the inside passengers, to prevent imposition. The arrivals to be regulated by time, as well as the times of stopping for meals; and, on coming to the journey's end, each inside passenger to be allowed to be set down at the inn he chuses.

In stating six miles, I calculate on the



the preservation of horses, as well as men.

Penalties for driving with blind or broken-winded horses, or those usually called *gibe*, who often are so galled that they cannot bear the pain of a second starting; with all usual penalties for galloping, not holding, letting others drive, &c. &c.

Such are the general outlines I wish to recommend, which, if adopted, would, I am persuaded, render stage-coach travelling safe and agreeable, and much more useful. As to the poorer orders, caravans, on a safe principle, might, by the same Act, be regulated for their accommodation, with tilts to put over in case of foul weather, or during the night, and not allowed to travel more than five miles per hour. Such a plan would insure their safety, save their expences, and preserve their healths: as many poor people perish annually for want of such a conveyance, being compelled to travel all night on the outside, frequently on the top of a stage, at an expence that ruins them, stopping at inns ill calculated for their circumstances; and, when females, with children, suffering severely from cold, fear, and want of refreshment.

G. CUMBERLAND.

*Bristol; August 10, 1815.*

P.S. At Leicester, I lately fined the coach, that was afterwards destroyed, five pounds, which I gave the schools, and received the thanks of the magistrates. The Tewksbury coach I also fined the same, and desired it might be given our own schools; both were in the same month, and both for furiously driving, to endanger the passengers. I therefore write from a full conviction of the necessity of an Act, to restrain *in toto* our stage-coach owners; the country has a right to such a law, having but too long groaned under the present state of travelling. They may make their own prices, but we have a right to decide how we will travel, and in what sort of conveyances; we have also a good right to the transfer of the place we have paid for, and do not use ourselves, to the amount of the money paid, or less, as we can dispose of it; it is our decided property.

*To the Editor of the Monthly Magazine,*

SIR,

I DIFFER so much from the opinions of some political writers, on the effect which public funds have on the welfare of society, as to think them a very important part of national wealth. The holders of 3 per cent. consols, and other stock of that kind, may be deno-

minated, a Joint Stock Company; and it seems to be incontrovertible, that the shares of this stock yield an income more certain than any that can arise from manufactures, commerce, professions, or trade. And it is much less liable to loss than any income, from the rents of houses or land. This property suffers no diminution, by either bad or insolvent tenants; nor by the repairs and insurance of buildings; nor by such draining and fencing as are incident to almost every farm.

In these several respects, the public funds are more to be depended on for the support of a family, than any of the property just mentioned. And, as they regard the state, the British funds are a leading feature of national wealth; available like the most permanent estates, for the purpose of revenue, by means of taxation, as we for several years have experienced by the Property-tax.

JOHN MIDDLETON.

*Lambeth; Sept. 1815.*

*To the Editor of the Monthly Magazine,*

SIR,

CONCEIVING it would be desirable to publish a description of the sceptre which was found by me in this office, I beg leave to inform you, that it was discovered last year behind a massy oak press, which is apparently several hundred years old. It was in a case, covered with crimson velvet, extremely decayed; many of the jewels had dropped out of their settings, but none were lost out of the case. The sceptre is of gold, richly ornamented with diamonds and other gems; but in a style of workmanship extremely antique: the jewels, some of which are very large, amount considerably beyond the number of two hundred. On the top, is a white onyx dove, with the wings expanded, and its feet resting on a cross.

I have examined the records of our several coronations, and find in none any record of this fifth sceptre. In fact, it seems wholly supernumerary. There are two with a cross for the King and Queen, and two with a dove. At certain parts of the ceremony, they hold a sceptre in each hand; but in no part are they required to change these sceptres, and they cannot of course hold three. My own opinion is, which I offer with much deference, that, when the ancient regalia were ordered by the parliament, in the time of Charles I. to be broken up and sold, this sceptre was concealed from their ravages, and

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that



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to the genius of your pupils, you gain their attention to a subject which would not have suggested itself to them, but in which they feel the highest interest, and by which they acquire a decided character, before they have been supposed, by the common observer, to have formed even its basis. But it is not the occasional exhibition of a favourite character, that will mould your pupils into a resemblance; it must be often presented to them, and many of them must be charged to make it their own in its spirit and principle. When they act unworthy the character you propose for their imitation, admonish them, but do not pass off the offence by a stern look or an angry blow, but continue to notice it till it is corrected: suppose idleness to be the offence, let your pupil write essays on its nature; its effects; the spirit from which it originates; the consequences to which it tends; the means by which the disposition may be overcome. When he has pointed these out, he can have no objection to your enforcing them; indeed, he will be desirous of amending his conduct, that he may get rid of the subject. Such is the principle on which observation has taught me, that personal character may be greatly improved. In my next, I shall notice what is generally, but improperly considered, as the chief part of education—Instruction.

Manchester,  
Sept. 10, 1815.

T. JARROLD.

*To the Editor of the Monthly Magazine.*

SIR,

**T**HE construction of the glasses of lamps for lighting towns, appearing to me susceptible of a considerable improvement by a very simple addition, I wish, through the medium of thy valuable miscellany, to remind those concerned, that in a still night, for want of a circulation of air in the lamp-glasses, the light frequently expires before the oil is expended, and which is occasioned by the accumulation of carbonic acid gas, which it is obvious, being specifically heavier than common air, will consequently be detained in the lower part of the glass, till it gradually extinguishes the flame. This might be effectual remedied by a small aperture pierced in the lower part of the glass, through which the continued production of carbonic acid-gas would escape by its gravity, or be carried away upward by the influx of cold air from beneath.

Bewdly; October 9, 1815. H. F. C.

*To the Editor of the Monthly Magazine.*  
SIR,

**B**E so kind as to correct a few errors of the press in my late geological conjectures:—

Page 19, of August, line 33—for “2348,” read “1657” years from the creation.

Page 130, of September, add at commencement—“Continued from last month,” or you lose the whole connection.

Page 131, Sept. line 43, for “faces,” read “surfaces.”

Ibid. line 53, for “their globe,” read “the globe.”

Page 210, Oct. Mag. line 7 from the bottom of the page,—for “oolite,” read “oolite.”

It seems probable, that when expansion (our firmament) was created, it was produced by the effect of the sun's rays acting on the humid mass (the chaos of Genesis, the *mot* or *mucilage* of Sancho-niatho,) which would produce, by evaporation, an atmosphere of steam, whose pressure would contract the humid globe, and force it to give out its waters, creating a sea and land; vegetables then found their elements, as well as fishes; and we are told there was *no rain*, but a mist, or vapour; which corresponds with probability, for the earth at first could not have supported rain without great deterioration.

Note also that we find in the alluvial deposits, clays, marle, chalk, madre-pores, silicious fragments of alcyonia, vegetables converted, bitumen, flints with shells, and madre-pores in them; ivory decomposing, pyrites, limestone, and fragments of all sorts of granite, remains of unknown fish, teeth, palates, fossil wood, petro-silex, sandstones, &c.; and such, according to the tradition of Genesis, should be their contents.

While we are on this subject, give me leave also to announce, that the ingenious Dr. Wilkinson, of Bath, (whose new pump-room is just what a pump-room ought to be, a rational exhibition of natural productions,) has lately made some remarks on *Septaria*, that bid fair to lead to a system explanatory of the mode of formation of metallic veins; and which are drawn from actual observation at Harwich, on the pyritic clays there.

We have also found out the head of a new zoophite, a species of the *Bottle encrinus*, chiefly by the industrious researches of Mr. Millar, who first conjectured that the calcareous spots in our black rock were occasioned by infiltration through these heads; and a  
Mr.

Mr. Benton, actually meeting with one, nearly intire, in a decomposing mass of limestone, gave us the true key to those observations, and explained the use of the many plates and fragments of mammilla, which we have been long discovering on the crevices of that rock. Mr. Miliar will soon give this history to the public. I have many fragments, and we have reason to think there are three or four new sorts, as there are as many varieties of stems enclosed in the black mass, which is a mere irregular deposit of fragments of the zoophite tribe, shells and palates of fish, with some madrepores; it has an elaborate and elegant form. G. CUMBERLAND.

*Bristol; October 4, 1815.*

P.S. : have nearly terminated my collection of all the parts of the *Bradford Encrinure*, and made very correct drawings of them. When I see an opportunity, I mean to publish them, as it will give a key to the system of nearly all of the species.

*To the Editor of the Monthly Magazine.*

SIR,

AS the case of the unhappy persons, throughout the country, who are afflicted with insanity, has at length, though late, attracted that universal commiseration which was always due to it; it will hardly be necessary for me to offer an apology for obtruding on your notice an account of some proceedings in the West Riding of the county of York, otherwise of a local nature.

In consequence of great abuses found and proved to exist in the management of the Lunatic Asylum at York, the magistrates of this Riding thought it expedient to avail themselves of the powers vested in them by act of parliament, to provide a suitable place for the reception of their own lunatic poor.

A motion to this effect was made at the Pontefract general sessions, in the spring of 1814, by Col. Cooke, of Ows-ton, and seconded by myself. To obviate the possibility of any objection to the measure, I had prepared a short statement of the abuses above alluded to, which I would have verified, if required, on oath. It was not, however, necessary, for the expediency of the measure was immediately and unanimoously admitted, two gentlemen only out of twenty entertaining some difference of opinion with respect to the best mode of proceeding.

At the Leeds sessions, held in October 1814, visiting justices were appointed,

who have held meetings from time to time to carry the project into execution.

The neighbourhood of Wakefield was considered the most eligible situation in the Riding, and a piece of land has been purchased contiguous to the Aberford turnpike road, about twenty minutes walk from the old church in that town, containing about twenty-three acres. The building will stand on a gentle declivity, nearly in the centre of this plot of ground, and will command extensive views to the east, south, and west, over the town of Wakefield; and its principal elevation will face to the south.

A small spring of excellent water, which the late very droughty season never totally exhausted, entering the ground at the west corner, crosses it diagonally, and will pass under the building.

As it is intended to face the whole of this edifice with a species of brick of a good stone colour, procured from Waling Fen, its appearance at the distance from which it must necessarily be viewed by passengers, across the extensive airing grounds, and the gardens for the use and occupation of the patients, will have all the beauty of stone. And from the nature of its situation, it will survey the whole of the neighbouring country, without the disadvantage of being itself overlooked.

The greatest care has been taken in the selection of the plan. Previous to the adoption of one out of a great number offered to us, the old and new Bethlem, St. Luke's and Guy's Hospitals, the Leicester and Nottingham Asylums, and the inimitable infirmary at Derby, had been carefully inspected by myself, and most of them by the successful candidates. (Messrs. Watson and Pritchett, of York,) who had also visited the institutions at Glasgow, Edinburgh, Newcastle, and the Quakers' Retreat.

The ground plan of the building which it is intended to erect will resemble the letter H, it being found that this form, in addition to many other advantages, admits of facility of inspection in an equal degree with the panopticon plans. One side will be appropriated to the men, the other to the women: their separation being so thoroughly provided for, that, neither in the several parts of the building, nor in the airing courts, will they be able to see or hear each other.

The staircases occupy the two points of intersection, and, by an ingenious contrivance, the apothecary and matron will