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# THE BIBLE VINDICATED,

IN A

## LETTER

ADDRESSED TO

SAMPSON ARNOLD MACKEY:

BEING A REPLY

TO HIS

MYTHOLOGICAL ASTRONOMY;

OR,

KEY TO URANIA.

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BY T. BRIDGMAN. *K*

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*Dt cæptis aspirate meis.*—OVID.

Sometimes he angers me  
With telling me of the mold-warp and the ant,  
Of the *dreaming Hindoos* and *their prophecies*,  
And of a dragon, and a finless fish,  
A clip-wing'd griffin, and a moulted raven,  
A crouching lion, and a ramping cat,  
And such a deal of skumble-skamble stuff  
As puts me from my faith.——SHAKESPEARE.

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## THE BIBLE VINDICATED,

&c.

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SIR,

I HAVE lately had a volume presented to me, published by you, containing "An History of the Mythology and a Vindication of the astronomical Calculations of the Hindoos;" also "A new Theory of the Formation of the Earth, &c." I promised the friend, through whom I first became acquainted with your performance, that I would attentively peruse it, and then return him my candid and unreserved opinion of its merits, he having at the time informed me, that he had been rendered unsettled and uneasy by its perusal; that his religious opinions and prejudices had been greatly shocked by it; and that much of what he had long regarded with awe and reverence, began to assume the semblance of hypocrisy and fraud.

Having, according to my promise, perused your work as attentively as I was able, I communicated to him my opinions concerning it; and I am sincerely happy to inform you, that my view of the subject has, in no small degree, assisted to remove the erroneous impressions your arguments had

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produced, and has enabled him to return to the principles of that faith, in which he has been educated from infancy.

Upon his representing that many others would be in danger of being misled, who, like himself, implicitly believe the printed assertions of others, which are suffered to remain uncontradicted, unless a refutation of your work were publicly attempted, I have been induced to offer the public these my opinions in the form of a letter to you—and if I should be fortunate enough to succeed in strengthening only one person in the profession of the doctrines of Christianity, I shall be more than amply rewarded.

It will at first sight, perhaps, be thought extraordinary that any, save the most illiterate and foolish, could be led away by doctrines so conflicting, and absurdities so palpable as those which you have put forth in the work now under consideration; yet, when we reflect upon the fact, paradoxical as it may seem to be, but which experience has nevertheless proved to be incontrovertibly true—namely, that mankind are always, in the mass, more prone to follow and rely on the assertions of others, than to be at the pains of thinking for themselves; our wonder will subside into feelings of pity and commiseration, mingled, perhaps, with something approaching to disgust, at the apathy and indolent insensibility of man in



the exercise of that most divine of all his prerogatives—reason! Does not our every-day experience shew us in the instances of all governments and every minor assumption and species of authority, which now does or ever did exist, that the few are invariably able to control, and where they will, with very few exceptions, to tyrannise over the many? Do we not see the weak and, comparatively, powerless, dictating laws and awarding punishments to the strong and refractory, and eventually forcing them to be subject to their authority?—and not less frequently do we see the ignorant and presumptuous taking on themselves the task of instructing the lazy and unreflecting multitude? One proof of this is as good as a thousand, and I appeal to your own book to establish my assertion.

It is by no means my intention to proceed regularly through your work to reply to all the absurdities you have advanced, because it would be impolitic and unnecessary so to do; it would be impolitic, for it would swell these remarks to a much greater length than I am inclined to adopt; as well from the trouble it would occasion myself, as from the many chances it would afford of causing what I might write to remain unread. I know too well from experience, the sort of feelings a thick, close-printed volume is almost always certain to occasion: and it is unnecessary, because

your system and opinions in themselves naturally involve an absurdity ; one proof of which, and I have such proof to offer, will be of more value than the most powerful sallies of wit or eloquence; as it must immediately carry along with it absolute and irresistible conviction.

Ancient astronomy, and the fables therewith connected, appear to be exclusively your hobby—all the transactions and occurrences of antiquity are made by you to spring from or refer to that heavenly study in such a manner, that I shall not be surprised if in some future publication you should be found to deny the bodily existence of such personages as Charlemagne or William the Conqueror, providing it would in any way suit your purpose ; while you ingeniously endeavour to prove, notwithstanding the assertions of ancient, or even cotemporary historians, who, of course, could know nothing at all about the matter, that they were only a personification of some of the constellations; and their histories, the fabled operation of contending elements, occasioned by the lately-discovered slow motion of the Poles!—for, according to your doctrine, the following celebrated characters of antiquity, *viz.*, “ Hercules, or Her-Cali the hero of heat ;” Adonis, Adam, Samson, David, Joshua, and the sacred and venerated name of Jesus Christ himself, are merely to be considered as mythological representations of the

sun during what you call the age of Cali or horror; when the pole of the earth, instead of, as in our time, being nearly parallel with the sun's axis, was vertical to his equator during the enormous space of 432,000 years, "when the tremendous power of his summer rays would justify all the extraordinary epithets applied to him by the venerable sages of antiquity, in describing the overwhelming majesty of his presence."

We shall by-and-by come to a consideration of the effects, which the rays of this Her-Cali, or hero of heat, would produce, during the continuance of your age of horror; previously, however, to which, I will afford my reader a specimen of the arguments you adopt, to prove that the names I have just quoted from the Bible do not refer to human beings, who really and bodily existed in the world, as we have always been taught to believe; but that they are, in the words of Volney, which you adopt in describing them, "from Adam to Abraham only pretended personages, mythological beings, stars, constellations, and countries,"—in proof of which you inform us, that Adam, is compounded of Ad, a Syriac word for father; and Am, life; "which appellation would be foremost among the many hundred names given to that glorious luminary (the sun) in quality of his being the Father of life." Now, admitting that Adam would have been an appro-

prate title for the Sun, had he ever been so named; I think it would puzzle your learning to point out any ancient nation by which he was *actually* known by that title, in the same way as he was by the names of Apollo, Phœbus, Titan &c.; while no one can deny, admitting this derivation to be undeniably true, that it is even more appropriate as the name of the first created and only unborn man, such as the Jewish historian asserts Adam really was; who would assuredly be most strictly and literally entitled to the distinctive title of Father of life, in his capacity of sole progenitor and father of the human race; and this derivation seems plainly referred to in the 2nd chapter of Genesis, ver. 20, where we are told that Adam "the Father of life" called his wife's name Eve, "because she was the Mother of all living."

Proceeding to mention his descendants you say, "in the list of *ten*, Seth is the second in order; which is *Iseth* badly disguised, and *Iseth* is an Egyptian name for the moon! and the moon, being the second in order among mythological beings, has given name to the second day of the week (Monday) in the same manner as the Sun, being first in the mythological order, has given name to the first day (Sunday);" and this you think proves Seth to have been the moon! I have often heard of the man in the moon, but I never suspected that he was Seth before; but it is a great

pity you could not discover a language in which the moon was known by a name, something similar in sound to Eve, for that would have, indeed, afforded a glorious opportunity of proving our first mother, instead of Seth, to have been the moon; for as the sun and moon are so much larger than any other planets, they might have reasonably been designated as the father and mother of the stars, the progeny of heaven, fabulously represented as the progenitors of the sons of man; but you entirely forgot to favour us, among your various etymologies, with the Hebrew meaning of the word Seth, because it appears to make very much against the hypothesis you have constructed upon it. I will, however, kindly supply it for you; in Hebrew then, Seth is said to mean "settled or fixed," and therefore surely a very inappropriate title for the inconstant, ever-changing moon. Was this omission on your part accidental?

The third in descent, you tell us, means in Hebrew, mortal man; and as the Enys of the Greeks is "the Goddess of War, the Hebrew Enos, being masculine, must mean the God of War, *i. e.*, Mars!" whence it comes that the third day was dedicated to Mars, which in France is still called Mardi, *i. e.*, the day of Mars! And are we really to forsake our Bible, for reasons such as these? Is it possible that you can have seriously expected proselytes to your opinions from such miserable

arguments? Good God! to what extraordinary lengths will a theorist allow himself to be carried, in support of a favourite and newly-discovered theory: because, forsooth, the Bible asserts, that the first man created by Jehovah, was called by an Hebrew name, signifying “Father of Life,” must we from thence believe that Adam, the man so called, was the sun and not a human being? And as the third son of Adam was named in *Hebrew* Seth, must he therefore be the moon, because the *Egyptian* Iseth, which is nearly similar in sound, was among that people one of the appellations of the Silvery Queen of Night? And, moreover, because the son of Seth was named Enos, which in Hebrew means mortal man, must he have been Mars, the heathen God of War, because the word Enys in *Greek*, supposing that to be the fact, which is somewhat similar in sound to Enos, is the Goddess of War? This conclusion is not certainly in the highest degree logical; it is, however, false to say that the word Enys in Greek is the Goddess of War—the Greek Goddess was called Enyo (*Ἔνυω*), which is much more unlike Enos than your word Enys. This mistake must have arisen either from wilfulness or ignorance; in either case it plainly shews how little dependence ought to be given to your assertions relative to etymological derivations. But as you frequently assert, that, in etymologies, we must be guided both by

the sound and the sense ; and that, when an hypothesis is made to fit tolerably cleverly in these particulars, we are at liberty to adopt it as undoubtedly true, the sense and sound of a word being the only criterion on such occasions—Do pray tell me, if you ever happened to read Dean Swift's etymological deductions, wherein he proves that the heathen gods and heroes of antiquity were undoubtedly of English extraction, and, consequently, that the antiquity of the English language and the British nation, must have been anterior to the era of the author of the Iliad ? As a specimen, he declares that the beautiful and chaste wife of Hector, was the daughter of a Scotch pedlar, from whose name of Andrew Mackey (he may probably have been your ancestor) they derived the fair matron's surname Andromache. I scarcely dare give you the exact etymology of Enos, whom you call Mars, but which ought to be written M'ars, because, like many of the Dean's stories, it rather presses on the boundaries of decency ; suffice it to say, that the original of this deity, was in his mortal shape a very swaggering, blustering fellow, who, when offended, was wont to reply with the very coarse expression of my——; which the Ancients more delicately softened into the above-mentioned monosyllable ; by which name he continued to be designated even after his deification.

In treating of the sons and descendants of Adam, you endeavour to confound the sons of Cain in the fourth, with the descendants of Seth in the fifth, chapter of Genesis, by shewing that in several instances they are exactly the same names: yet what do you prove by this? I allow that the names are, as you say, generally the same, or nearly so, in both genealogies. What then? Are they not distinct and different personages? Surely you cannot pretend to assert that it is impossible for two brothers to have sons and descendants who bear the same name in common with each other, without the identity of the different individuals being necessarily confounded, yet your words must imply this if they have any meaning at all. Cannot, for instance, a son of mine, as well as one of my brother's children, be christened by the common name of John, without any necessity arising from that cause of there being only one child between us? And if so, why might not Enoch, a son of Cain, and Enoch, a son of Seth, be two distinct and separate individuals? I cannot see any reason why this may not be the fact in the one instance as well as in the other; but you palpably misquote the Scripture, when you say that both these genealogies place the name Enos—on which you found your argument that Enos is Mars—the *third* in descent, for the son of Cain is called in the



Bible *Enoch*—it is the son of Seth who alone is called Enos! You may assert that these names are synonymous—this I deny. To prove that I am right, on referring to the list of Seth's descendants, you will find among them one bearing the name of Enoch, who was the son of Jared; if, then, these names are exactly the same, how happens it that the son of Jared is invariably called Enoch and never Enos, while Enos the son of Seth is never called Enoch!

But, having clearly established this to your satisfaction, you say, "Thus we find how easy it is to compose a list of progenitors; Sunday begat Monday—Monday begat Tuesday, and so on till we come to Saturday the seventh day, which was a day of rest, and behold *they worshipped Saturn* on the seventh day; and, as the planet Saturn is a very slow-paced gentleman, the Jews have, in the most accommodating way imaginable, made his day a day of rest." Here let me observe, that, till now I was entirely ignorant that the Jews ever called the days of the week Adam's day, Seth's day, Enos's day, &c., or that they ever worshipped Saturn on a Saturday, or any planet, or thing, on any day whatsoever. I have hitherto *foolishly* thought that the leading article of faith among the Jews has been, since they have existed as a people, and which has distinguished them from the whole world in all ages as it does now

the adoration and worship of one only God, the ever-blessed Jehovah, the King of kings, and Lord of lords. But as you declare that the first three days of the week were named after the descendants of Adam, pray how happens it that Adam's genealogy, or the portion you refer to, contains ten names or stages, while the number of days in a week is only seven?

As you lay particular stress on the history of Abraham, I shall transcribe your account of him exactly as I find it at page 177 of the *Mythological Astronomy*, in order that I may not be accused of misrepresenting your meaning.

“ The story of Abraham, notwithstanding all the endeavours of Theologians to give it the appearance of the history of human beings, has preserved its mythological features with an outline easily to be recognised by every son of Urania! We have seen that the Egyptians have their harvest about the time which the sun passes over the equator; and if we go back to the time of Abraham, we shall find that the equator was in Taurus; the Egyptians must then have had their harvest while the sun was in the Bull: the bull was, therefore, in their figurative way of speaking, the father of harvest, not only because he ploughed the ground, but because the sun was there when they got in their harvest—thus the bull was doubly distinguished as their benefactor;

he was now more than ever become the bull of life, *i. e.*, he was not only Abir, the Bull, but Abir-am or Ab'rah'am, the Bull of life, the father of harvest; and as their harvest was formerly under the direction of Iseth or Isis, whatever belonged to harvest was Isiac; but the Bull, Abiram, was the father of Isiac: and to give this the appearance of a human descent, they added to Abir the masculine affix *ah*;" (it was not likely they would give a feminine one to a bull!) "then it became Ab'rah'am, who was the father of Isiac, and we actually find this equivocal in the Hebrew history of Abram, whom the Lord afterwards called Abraham, who was the father of Isaac, whose seed was to be as countless as the sand on the sea-shore for multitude—even this is truly applicable to Isiac the offspring of Ab'rah'am, for countless, indeed, are the offspring of the sythe\*, and syckle†. But if we allow Isiac to be a real son of Ab'rah'am, we must inquire after his mother. During the time that the equator is passing through the constellation of the Bull in the spring, the bull would rise in the East every morning in the harvest-time in Egypt; but in the poetical language of the Ancients, it would be said that, when Abir-am consorts with Aurora, he will produce Isiac. But Aurora is well known to be the 'golden splendour of the East,' and the

\* Scythe.      † Sickle.

brightness of the East is called Zara, and the morning star is called Serah in the eastern languages; and we find a similar change of sound in the name of Isaac's mother, whom the Lord would no longer call Sarai, but Sarah! These are remarkable coincidences."

So then because Abir and am mean a Bull and life, in the *Egyptian* language, Abraham the Hebrew patriarch must have been an Egyptian Bull (pray is the Mac in your name Scotch or Irish? I should imagine the latter, for surely none but an Irishman could so well have made a bull of Abraham). But you tell us in another place that the Jews, ancient and modern, hated and continue to hate, astronomy and everything belonging to it; would they then have made their great ancestor, to whom they looked up with the utmost veneration, to date his existence merely from an imaginary Egyptian constellation? The high veneration of the Jews for this patriarch is universally known among his descendants even at the present day; and we are informed by the Testament, that in the days of Christ, they endeavoured to convey to him the high indignation they conceived at his supposed blasphemy and arrogance, in assuming that he was the Son of God, by addressing him in these words, "Dost thou then make thyself to be greater than our father Abraham?"

Having proved the patriarch a bull, you declare that Isaac his son was the golden produce of

harvest, because the harvest in Egypt was supposed to be under the direction of Iseth (a little while ago asserted to be Seth the son of Adam), while Sarah his mother, was the gray-eyed nymph Aurora, because in the Eastern languages Aurora is called Zara, and these are such very remarkable coincidences ! Why then, according to this logic, the great desert in Africa, commonly known by the name of Zara or Zaara, but surely not in quality of its being the glorious splendour of the East, might quite as properly be thought the wife of the Bull Abir'am, since it exactly resembles Sarah in sterility, who we are told could bring forth only one Isaac, or production of harvest, after having been unsuccessfully tilled by the Bull, for upwards of sixty years, and had reproachfully been termed barren in consequence. But you say that the sneers of ridicule are no argument, even though the sneers be Cicero's ; I, on the other hand affirm, that ridicule is the most proper and efficacious argument against absurdity and nonsense, and therefore ought we to—

Let ridicule be used in truth's defence,  
And try to laugh the foolish into sense.

You declare that David also is not the name of a real personage, but is only another title belonging to the sun; and to prove his mythological origin, you cite the manner in which his mighty men are arranged into twelve companies of three

in the 23d Chapter of the 2nd Book of Samuel, their names, functions, and arrangement, very closely assimilating with those of the Decans or powerful gods of the zodiacal circle. These Decans, it appears, are certain personages, who oppose the force of the more powerful Cabirim, which is a deified name awarded to the poles or axis of the earth ; and you further inform us that the first of these heroes, in each of the twelve companies, is called the powerful leader of three powerful beings. Now what a famous opportunity does this afford the future mythologist of making the celebrated Catherine, empress of Russia, a most notable Decan ; inasmuch as, assisted by and leading on the powers of Prussia and Austria, she became in name and in reality a powerful leader of three, in causing the division of the ancient kingdom of Poland, and the consequent destruction of the power of the Poles ! This being a well-authenticated and notoriously-known occurrence ; may not the future sceptic, doubting the bodily existence of that ambitious woman, with great propriety and apparent reason, exclaim ? These are surely remarkable coincidences !!

In several parts of your work you speak of yourself by the dignified name of a Son of Science, and apply to yourself a quotation from Volney, wherein he says—" If at some future period some one endowed with talent unites to

astronomical science the erudition of antiquity too much separated from it, that man will instruct his age in many things, which the vanity of ours has no notion of." And you add—"I shall take the shortest road to the delightful object of my eyes, and prop her throne (*i. e.* of truth) with *learning's proud remains*."

Now it is assuredly desirable, nay indispensable, that learning and science should be possessed, in an eminent degree, by any man professing himself capable to instruct and open the eyes in his wisdom, of "all sorts and conditions of men," to overthrow the dogmas of that faith, which, for nearly two thousand years, has been professed by the great majority of the civilized world; and to teach deluded millions how to think on those subjects which are most vitally important to their happiness in this life; and in that life of eternity to come, "when we shall have shuffled off this mortal coil," which we are assured is hereafter to be our portion; but you may, perhaps, among other whims and fancies, deny that we have any reasonable assurance for believing that a life of happiness or misery is in another world awarded for us; yet, without envying you the satisfaction arising from such an opinion, or staying to combat the folly, the madness, of this description of infidelity, will you allow me to ask, if you, really, imagine you possess the learning and science

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referred to by Volney in the above quotation? For I should be happy to be able to trace your opinions, up to the source of mental aberration, with which, under such circumstances, I should no longer hesitate to believe you are, at times, afflicted; for the perusal of a very small portion of your writings, will immediately shew, from the grammatical agreement of your sentences, how exquisitely your *erudition* has fitted you for the task which you have imposed on your modesty. But as proof is always infinitely better than assertion, I will just take, as an example, the commencement of the second sentence of your *Mythological Astronomy*, and leave the reader to form his own conclusion—it is as follows: “Christian Theologians think it their duty to write against the long periods of Hindoo Chronology, and in them it may be pardonable; but when a man of learning *crucify* the names and the numbers of the Ancients, and *wring* and *twist* them into a form,” &c.—after this, another word is unnecessary. But although I am of course aware that truth does not depend upon the agreement of the words by which it is conveyed to our understanding, with the arbitrary rules of Syntax, (for if such were necessarily the case, an illiterate person would never be able, in spite of his best endeavours, to speak the truth,) yet we certainly have a right to expect in a philosophical work, professing to illumi-



nate a misled and ignorant public, upon the complicated and intricate science of astronomy, and the superstitious opinions of the learned nations of antiquity, that there would be, at least, an absence of any thing like a solecism, in the most simple and generally-understood rules of syntax and orthography.

I will, however, own that you have, with considerable sagacity, through the assistance of Encyclopedias and such sources, coupled with infinite pains, explained the allegorical histories and hidden meaning of some of the fables of antiquity; and have rendered intelligible much of what was formerly a senseless and unmeaning jargon, figurative expressions having been universally received and accepted according to their literal sense. For I have not the smallest hesitation to admit, that some of the ancient fables probably contain an hidden history descriptive of real events, the clew to which has been lost through a long lapse of ages, and the frequency of their translation into foreign languages; but that many, on the other hand, were the productions of priest-craft, to impose on the credulous superstition of those, over whose minds it would have been otherwise impossible to exercise an arbitrary and unlimited control, few persons will, I think, be inclined to dispute; notwithstanding your assurances, that they all, without exception, relate to the history

of the stars, the contention of the elements, and the slow motion of the Poles. I will here instance your explanation of the fable of Niobe, where, although you appear to have some glimmerings as to the true meaning of the story, yet you cannot help straining to bend it to agree with your hypothesis, in such a manner, as to render your solution as improbable and ridiculous as the fable itself literally understood. The story of Niobe, you declare, whose fourteen children were destroyed by the arrows of Apollo, merely represents the fact that the waters of the Nile, having overflowed their banks to the height of fourteen cubits, were afterwards dried up or destroyed by the powerful rays or arrows of the sun. The solution is so far probable, and serves to show, that the fable was in the original highly poetical. You proceed to establish your assertion by shewing that Ny-obe, in the Egyptian language, means a low country; and if so, as Egypt, through which the Nile flows, is a low country, it seems clear that the fabled Niobe is intended to represent Egypt suffering under the influence of the sun, mourning the absorption of her fertilizing waters; and let me ask if we do not know, even in our times, that the earth, in different parts, is frequently visited with unusual quantities and continuance of rain, as well as severe and destructive droughts? And we perceive by the fable, that at

some former period the land of Egypt was exposed to such a succession of rain; &c., as to be sufficient to raise the waters to the height of fourteen cubits, which was followed by a drought so oppressive and of such continuance, as to cause, perhaps, the almost entire absorption of its waves. A calamity so signal, and followed by consequences as disastrous as unexpected, would sufficiently authorize the Egyptian poets to hand the circumstance down to posterity in the garb of a real mother, lamenting the destruction of a real family. I may not, it is true, be able to explain how, under the present constitution of things, the sun should, at one particular time, be furnished with sufficient heat to dry up so great a river as the Nile, never having, perhaps, at least as far as we know of, done so before or since. But what then? Are we to disbelieve the reality of all the operations, or, if I may be allowed so to term it, the eccentricities of nature, for which we are unable to account? I believe no one can give a satisfactory reason, why the needle points, invariably, to the north; but who will be found to dispute that it does so? We must admit the fact, how incapable soever we be to assign a sufficient cause. During the spring of 1826 we had a very long continuance of hot weather, with an arid atmosphere and sultry breezes, while the wind was all the time in the north-east: now you would

probably be puzzled to assign a reason for even this, though you would be compelled, from the notoriety of the fact, to own its existence; and, therefore, I cannot discover why I should not credit the story of Niobe as it has been delivered to us, without perceiving any necessity of going into a remote antiquity of several hundred thousand years for the era of the event, when the circumstances related in the fable would be repeated year by year through a long series of successive ages; a period which generally-received opinion, founded on the best and highest authority, teaches us to believe, is far anterior to creation itself. But you are certainly by no means sparing of time in the elucidation of your theory; for you talk as familiarly of millions and myriads of ages, "as maids of thirteen do of puppy dogs."

After giving us a fanciful and plausible account of the history of the zodiacal signs, which may or may not be true, and which is briefly this: that the ancient Egyptians called a certain cluster of stars the Bull, because that constellation was visible at the time when the Bull was of the greatest use in ploughing the land; that the constellation, named the Balance, was seen when day and night were of equal length; that the Virgin made her appearance during the time of harvest; and the Fishes at that season, when the land was overflowed, &c., you proceed to tell us,

that in course of time it was discovered that the signs were not stationary in the heavens, and, therefore, did not continue to preside over those months from which they had originally been named; but that, moving in a backward course, they were seen slowly to proceed to and occupy each other's situations, traversing by measured and regular degrees the whole round of the zodiac.

You further declare, that, this changing of the signs, is caused by the pole of the ecliptic passing round the pole of the earth, in a direction contrary to the course of the sun; that only one such revolution is completed in the space of 24,000 thousand years; and that having completed one such revolution, the pole does not return to exactly the same point that it originally occupied in the heavens, but that it appears to have sunk in an angle of about  $4^{\circ}$ . Therefore, supposing that in the beginning, the axis or poles of the earth were parallel to the axis of the sun, in  $22\frac{1}{2}$  of these revolutions of the ecliptic, the pole of the earth would be depressed into the plane of the equator, there being  $90^{\circ}$  from the equator to the pole; and in forty-five of these circles, the pole of the earth would entirely pass from one pole of heaven to the other; to complete which, however, would require the enormous space of 1,080,000 years; yet you declare, that this antiquity has not only been regis-

tered in the frail and perishable memorials of man; but that it has been four times repeated since the commencement of his astronomical observations; besides 8 or 9,000 years of a new reckoning, making the records of human existence to penetrate into time, 4,329,000 years.

The 1,080,000 years before mentioned, which you call the Mahayuga or great age, you divide into four unequal portions, in the following manner, *viz* :—

|                                  |                  |
|----------------------------------|------------------|
| 1st Age . . . . .                | 108,000 Years.   |
| 2nd ditto . . . . .              | 216,000 ditto.   |
| 3rd ditto . . . . .              | 324,000 ditto.   |
| 4th ditto or Cali-yug . . . . .  | 432,000 ditto.   |
| Mahayuga, or great age . . . . . | 1,080,000 ditto. |

And you then proceed, with “considerations on the fourth age, or Cali-yug, because that is the most celebrated;” in which I will follow your example, for it is on this very Cali-age that I mainly depend to establish the proposition I set out to prove, namely, that your system naturally involves an absurdity. You begin with “the setting in of the Cali-age, in the latitude of  $36^{\circ}$ ; at which time, from the depression of the pole, the tropics would be at  $54^{\circ}$  from the equator, the summer tropic would coincide with the north horizon and extend up to the 72nd degree of north altitude, and the winter tropic would coincide with the south horizon, and describe a circle round the south pole to the 72nd degree below the south

horizon ; and as the tropics, at this time, are receding from the equator, we know that in 24,000 years, according to the testimony of very ancient observers, the summer tropic would be  $4^{\circ}$  nearer the north pole ; and as there are nine such steps for the tropic to ascend before it would coincide with the north pole, there would be nine times 24,000 years before the middle of their Cali-yug, and of course there would be nine more such periods before the end of their Cali-yug." In other words, at the commencement of the fourth age, the pole of the earth would have approached within  $36^{\circ}$  of the plane of the sun's equator, and consequently this age would continue till the pole of the earth was depressed  $36^{\circ}$  below the plane of the sun's equator, including a space, for the duration of the fourth age, of 432,000 years. Now, therefore, let us consider the effects which this situation of the pole would produce during the continuance of this immense period of time.

Such being, then, the situation of the poles at the commencement of the Cali-age, no vestige of the sun's body would be seen above the horizon during the 25th day of December by the inhabitants of those regions, which are in latitude  $36^{\circ}$ , and consequently, on the 24th day of June, the whole of the sun would be seen by them during both day and night, visibly describing in his course a complete circle in the heavens, descending just

low enough to touch the horizon at midnight, without any part being hidden; but the appearance of the sun in summer would continue to increase in duration, as also his disappearance in winter, by slow and regular degrees until the middle of the Cali-age, including, of course, a space of 216,000 years; when he would, in winter, be lost to sight during the space of seventy-two days and nights; while in summer he would not go down for a like number of seventy-two days, "melting the hills like wax with the majesty of his presence!" which extreme state of things would continue with unabated violence during two revolutions of the zodiac; or, in round numbers, for 50,000 years!

In this age, you tell us, (and, of course, at or about the commencement of it) those wonderful specimens of the labours of antiquity, the tower and walls of Babylon, and the Pyramids of Egypt, were erected; for such was the fury of the elements during the winters of this forlorn age, that the construction of such mighty and stupendous bulwarks became necessary to prevent the inhabitants being overwhelmed, amid the wild havoc of the contending elements. So dreadfully severe were these annual visitations, that to defend themselves from their fury, the people were compelled to erect these walls of the most solid and substantial masonry, three hundred feet high and



eighty feet thick ; this immense height (nearly as high as the weathercock on Norwich Cathedral) being necessary to prevent their being drowned in the suddenly accumulated flood ; the thickness to prevent the impetuosity of the inundation from washing them away. You further inform us, that the inhabitants of the earth, during the period of the age of horror, were called " Noachidæ, or children of the boats," from their being compelled, those at least who inhabited extensive plains, to live in boats during these terrible winters ; and you declare, that " the story of Noah in the Bible relates entirely to these Noachidæ, the fragments of whose history the Jews may have blended in with some tracts of their own ;" and you " have therefore, no objection to call the whole age of horror, the age of Noah. The word Noah being derived from *No*, a boat, and *ah* a masculine termination, similar to the *os* of the Greeks."

Having proceeded thus far with your description, I should like to ask you a few plain and simple questions, but which appear to me to be precisely of that kind, so often described as " more easily asked than answered."

Admitting then, for argument's sake, your theory to be true, concerning the ravages of the elements during the winters of the Cali-age, when the floods would be annually and suddenly raised

to the height of nearly three hundred feet, mixed with vast bodies of ice, and snow, and hail, or more properly composed, as they must have been almost entirely, of these; and withal driven with such amazing violence, as to require the opposing walls to be eighty feet thick; do pray tell me, what kind of boats you imagine those were, which would be sufficient to defend their inhabitants, these unfortunate Noachidæ, during one only of these inclement seasons; when the land must have been involved in total darkness during the period of ten long weeks. I know it is very usual with historians and commentators, in the case of partial and unexpected floods, to pop the inhabitants, during their continuance, into boats, with but apparently little ceremony or trouble, though it must be an affair of no inconsiderable difficulty, even to these temporary Noachidæ; but to oppose your terrible floods, which would require elevations as solid as the walls of Babylon to resist their violence, I confess I can form no idea of the description of boats which would be serviceable; but even supposing, though the supposition is little better than downright absurdity, that the Ancients were so much more cunning, or that, rendered so by dreadful necessity, the parent of all knowledge, they were so much more skilful than the Moderns in the craft of boat-making, as to be able to build such very

extraordinary boats; they must at least have had the necessary article of timber wherewith to construct them! But to produce timber sufficient as to quantity and size for the saving a world of Noachidæ during the 400,000 winters of the fourth age, would have been by far a greater wonder than even that of building the boats; for we must constantly bear in mind, that your floods did not, only occasionally take place, while long intervals of prosperous seasons intervened, but that they annually raged during the incredible space of 432,000 years; in addition also to which, the forests, as well as the people, would be exposed to the furious heat of the seventy-two nightless days in summer, when "the very mountains would melt like wax with the majesty of the sun's presence." And who will pretend to assert that the human constitution could for ages endure the sudden transitions of climate, from cold infinitely more severe than the earth now undergoes at the very pole, to heat, beyond comparison more intense than what is at present felt even in the West Indies. Would not the whole population of the earth have been swept away during the intolerable extremes of one such change?

Again, if the Pyramids were of any service during the continuance of the Cali-age, they must at least have been built in the commencement of that most desolating era; as likewise the stu-

pendous walls of Babylon, which you bring as auxiliaries to prove the great truth asserted by Berosus their historian, who informed Callisthenes, a Grecian philosopher who was in Babylon when Alexander the Great was there, that 403,000 years before his time, the axis of the earth was parallel to the plane of the equator. According to which account the middle of the Cali-yug happened 406,000 years before the present time; and if we date from the commencement of the age of Cali, 216,000 years previous, it will discover the enormous period of 622,000 years for the age of the right venerable walls of Babylon, and the no less right venerable Pyramids of Egypt.

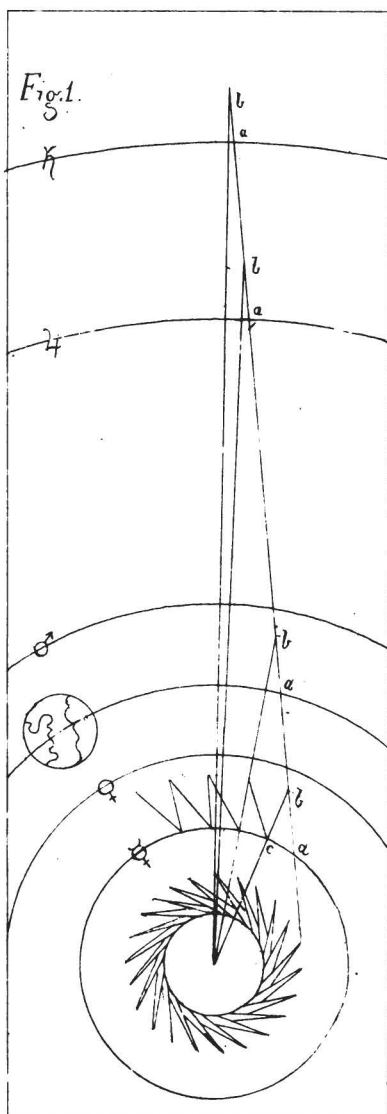
But will any man, yourself excepted, of common sense or common veracity, pretend to affirm, that any masonry, however huge the mass or solid the construction, would be sufficiently durable to last 600,000 years? The very materials themselves, the stones and mortar with which they were composed, would have crumbled into atoms, and their component parts have become blended with, or once more dissolved into, their original elements, ages and ages since. If we turn our eyes to the most ancient specimens of antiquity in our own neighbourhood, the castle and cathedral of Norwich, we immediately perceive how extensively the stone, of which they are constructed, is undergoing the process of de-

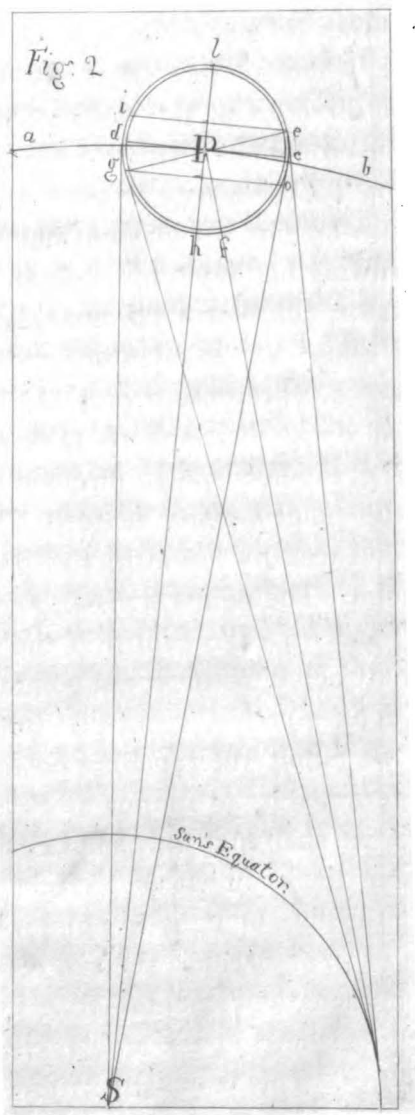
composition, from the destroying hand of time and the usual operation of the elements, yet neither of these edifices is yet one thousand years old. It may I know be argued, that in Egypt, and the plains of Babylon, the stone does not so quickly suffer decomposition, as in our own humid and changeable atmosphere. But this argument will avail you nothing, nay it will rather make against you; for, according to your theory, the climates of the above places, must have undergone, since the erection of those wonderful monuments of antiquity, every possible extreme, as to the change of seasons, with which the world is visited, and, furthermore, must have encountered the shock of ages and ages, in which one year would be nearly equal in destructiveness, to an age of years in even our own destructively humid climate.

These then are the proofs, the convincing proofs, which I professed myself able to produce in opposition to your theory, and which I think are quite sufficient to convince any intelligent and impartial mind that I merely assert what is strictly and indisputably true; when I declare that your system naturally leads to an absurdity—*quod erat demonstrandum*. And as all mathematicians, from Euclid downwards, have used the *ducent ad absurdum* as unquestionable and legitimate proof; your system must inevitably fall to the ground.

But to prevent even scepticism itself, from doubting that I have established my point, I proceed to follow you to that part of your work, which is entitled, "A New Theory of the Earth, &c." In order to point out another convincing proof of the manifest absurdity your *theory* involves.

In accounting for the causes of the rotatory or diurnal motion of the earth, described by you as arising from the influence of attraction, and the repulsive power of the rays of light, you proceed thus:—"Let fig. 1 represent part of the solar system with the sun in the centre, throwing off his rays into tangents from the plane of his equator; let there be balls to represent the planets in the several concentric circles, marked Mercury, Terra, Jupiter, and Saturn; and let rays of light impinge upon the body marked *a* in the orbit of Mercury. These would drive the body at *a* to *b*, in a given time, were there no other force to prevent it; but as we know that the planets do not recede from the sun in right lines from the sun's circumference, and as we know that the inherent property called attraction acts from centre to centre, we shall have a very correct understanding of the effect produced by their simultaneous action or acting together, if we first consider them as acting simultaneously and alternately. We have seen the effects of light alone driving the body from *a* to *b*, where, if light be suspended, attraction







would bring it from *b* towards the centre of the sun to *c*, where another effort of light would drive it in the direction of the tangent, from whence it would be brought by attraction towards the centre, and so on like the zigzag figure *a, b, c*, Mercury."

"Now let fig. 2 represent the sun revolving and throwing his rays into space as tangents to his equator, till they strike the planet *P*, let the line *SP* shew the direction of gravitation, and let the curve *a, b*, represent part of the orbit of *P*, and *c, h, d*, the hemisphere turned to the sun; and *e, f, g*, the hemisphere directed to the rays of light; the point *h* being nearer the sun, must be more influenced by his attractive power than any other point. The points *o, g* being equally distant from *P*, and from the centre of the sun, must be equally attracted, so must the points *c* and *d*, and *e* and *i*, for the arch *o, e*, is equal to the arch *i, g*. Now if we admit the repelling power of light to be counteracted by attraction at *P*, and along the line *PS*, we shall find the planet *P*, moving round the sun in the segment of a circle from *a* to *b*, because the flux of light is obliquely thrown to the side of *a*, or because the sun revolves in that direction, then their counteracting powers would be nearly balanced at the arch *o, e*, but not so on the arch *i, g*. This is equally attracted by that at *e, o*, but as light cannot act upon the arch *i, g*, it must yield to attraction in the direction of *i, g* *S*.

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And as there is a small balance in the opposite side  $c, e$ , in favour of light, which repels  $c$  to  $e$ , there must arise a rotatory motion of the whole."

Now I confess myself too little acquainted with the powers of light and gravitation, to be able to determine whether this theory of attraction and repulsion, satisfactorily demonstrates the cause and necessity of the earth's diurnal revolution on its axis; nor is it even necessary to my present purpose, that I should be able to do so; my business being, merely to shew, that this theory is totally inconsistent with the *Mythological Astronomy*; and to prove, from your own arguments, that your speculations are untrue, with regard to the pole of the earth ever having been in the plane of the ecliptic; thereby disproving the superstitious and fabulous notions of Hindoo antiquity, and annihilating with one blow the rhapsodies that you have indulged in, relative to the use of the before-mentioned right venerable walls of Babylon and Pyramids of Egypt: for it does not appear more certain to me, that the whole is greater than its part; that the radii of a circle are equal to each other, or, that an equilateral triangle is equi-angular; than that your systems cannot co-exist with truth for their mutual basis. I proceed to shew the inconsistency of the two systems.

We have seen it proved, by referring to fig. 2, that the attractive power of the sun, acting on the

arch  $i, g$ , where it is not affected by the repulsive power of the rays of light, inclines it to move towards the sun at  $S$ , in the direction  $i, d, g$ , while the repulsive force of light, acting on the arch  $a, e$ , would cause the latter to be driven from the point  $S$ , in the direction  $o, c, e$ ; and that hence the two powers acting in opposition to each other, by retaining the planet  $P$  in its orbit, produce a rotatory or diurnal motion in the direction  $i, g, f, o, e$ .

Now let us, again referring to fig. 2, consider the circle, of which  $P$  is the centre, to represent the earth, during the middle of the age of horror. Let the line  $S, h$ , be produced through the point  $P$  to  $l$ , and let the points  $h, l$ , represent the poles of the earth, during the seventy-two nightless days in summer, before mentioned; and we shall immediately perceive that the line  $h, l$ , must have ceased to be the pivot on which the planet  $P$  at that time revolved: for the repulsive force of light, as was before proved, acting on the arch  $o, e$ , would impel the point  $o$  to  $e$ , and consequently the point  $h$  would be forced round in the direction  $h, o, e$ ; while attraction acting on the arch  $i, g$ , would, as before proved, attract the point  $i$  to  $g$ , and consequently the point  $l$ , would be forced by attraction from its place, in the direction  $l, i, g$ , and thus there must arise a rotatory motion of the whole in the direction  $i, g, h, o, e, l, l$  revolving on its axis at the point  $P$ , which point must

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necessarily be somewhere on the present equator, But you over and over again assert that the axis of the earth never moves from its situation with regard to the earth itself, but only with regard to its position among the heavenly bodies. The following passage from *The Companion to the Mythological Astronomy* is direct evidence of your recognition of the immutability of the poles of the earth, with reference to their situation on the globe; these are your own words—"I have been informed that some monthly critics have misunderstood this nice point, and have asserted that no such motions (*of the poles*) exist. Excellent critics! They have supposed the polar point of the earth to travel in a spiral manner towards the earth's equator; and that the present equinoctial parts of the earth will become the polar points—*Pride and ignorance make bad critics!*"

After this, is it necessary to add another word to shew that the present poles could never have been vertical to the course of the sun, while they continued to be the pivots of the earth's diurnal motion? Assuredly pride and ignorance *do* make bad critics!

I trust, however, that I shall not be considered, because I have entered earnestly into this controversy, either an enthusiast or a bigot, or be looked upon as a votary of the haggard fiend Superstition, from whom true religion will ever remain utterly distinct; for, in my opinion, superstition

is to religion exactly what your mythology is to astronomy,—“the most foolish child of a most wise parent.”

But I cannot dismiss the subject of this letter without noticing what appears to me to be a complete—I hope not a wilful—misrepresentation. The instance I allude to occurs in the before-quoted mythological companion; where, in describing a marriage festival, you say, “When the village throng that guarded the door of the bridegroom saw the happy train, they rent the air with Humanah!—Humanah is, behold the train, or behold the festive regulation. In the 25th chapter of Matthew, you will find part of a description of a marriage feast, where the Humanah is translated, ‘Behold the bridegroom.’”

*“But the Greek writers not having a Vau in their alphabet, supplied its place with their Ypsilon, and Humanah was written Hymena Hymen, O Hymena Hymen.”*

The passage you have quoted, “Behold the bridegroom,” occurs as you have stated in the 25th chapter of Matthew, at the 6th verse; but I find nothing like Hymena in the *Greek text*: the words, which in Greek, stand for “Behold the bridegroom,” are Ἰδοὺ ὁ νυμφίος. The following is the verse exactly as it stands in Greek and English:—“Μέσης δὲ νυκτὸς κραυγὴ γέγονεν Ἰδοὺ, ὁ νυμφίος ἔρχεται, ἐξέλθετε εἰς ἀπάντησιν αὐτοῦ.”—

“ And at midnight there was a cry made, Behold the bridegroom cometh, go ye out to meet him.” What has induced you to declare that in the Greek text, Behold the bridegroom is written Hymena, I am at a loss to conjecture, unless, indeed, which I am really unwilling to suspect, for the unfair purpose of imposing on those who have not the means of detecting the imposition, by referring to the Greek original.

Having now, I think, clearly established what I set out to prove, namely, that your system involves an absurdity, I might here very politely take leave of you ; but I cannot resist the opportunity this letter affords me of making one or two observations on a geological Treatise lately published in this city by Mr. Roberds, jun. ; a work, which, if it gain credence in the theory it foolishly inculcates, would mainly assist, as far as it goes, to bring discredit on that part of the Bible which relates to the days of Noah.

It was, in fact, in consequence of information I received, that this work greatly strengthened your opinions in the minds of several individuals relative to the antiquity of the world and its existence for ages before the supposed creation according to Moses, that finally resolved me to offer these remarks in public opposition to you.

Now, as it appears to me inevitable, that the truth or falsehood of the divine origin of the Chris-

tian revelation must in reality stand or fall, according as the book of Genesis is proved to be true or false, any attempt, either open or indirect, avowed or insinuated, to bring discredit on the fact of an impiously-sinful world having been destroyed, as it stands recorded in the Bible, ought to be watched with the most anxious attention, and repelled by the most powerful and irresistible arguments. Yet I have heard many intelligent persons, and very good Christians, declare that in their opinion it mattered little or nothing with reference to Christianity, whether the accounts recorded in Genesis are the narrations of real facts and actual occurrences, or merely allegorical fables, the result of a powerful and brilliant imagination, inasmuch as the morality and religion of Jesus Christ bear sufficient proofs of a divine original, to be indifferent to the support of the inspired writers of the Old Testament.

This, I conceive, to be a very pregnant source of error, for I candidly admit, that if the Old Testament is to be disbelieved and rejected, Christianity as a revelation from God to man, through the person of his only begotten Son the Redeemer of the world, must instantly fall to the ground; the morality which it inculcates naturally tending, from the constitution of things, to the comfort and happiness of mankind, would be still regarded by the orderly and wise, and would remain uninjured

in their estimation and observance by the rejection of those doctrines now inseparably amalgamated with it. But it must be obvious to every capacity, that if the original sinfulness and fall of man from the state of innocence in which he was placed by his Creator, previous to the irresistible temptation which betrayed him into sinfulness and misery, is to be regarded merely as a poetical fiction, the necessity for the expiatory blood of an innocent and benignant being, would have been wholly uncalled for to appease the anger of an offended God, by offering an atonement for that guilt whose very existence was altogether purely allegorical. But the opponents of the Bible, under what name soever they have appeared, whether as Geologists, or Mythologists, or Fabulists, or Moralists, never have had the temerity to deny, *in toto*, the declarations of the inspired writers concerning the events which they declare have taken place in former ages of the world, because they know that the earth itself would rise up in evidence against them: they, therefore, under the cover of extending the boundaries of science, and of penetrating into the most hidden secrets of natural philosophy, endeavour to disprove the authenticity of the facts recorded in the sacred volume, by assigning for their existence a different time, and for their occasion a different cause, than those assigned by the inspired authors.



The Bible chronologists affirm, that the whole world was drowned by a deluge of waters, something less than four thousand years before the current age, at which time those tremendous convulsions of nature, which we see have so powerfully affected the surface of the earth, are generally understood to have taken place. But this gentleman, in the work above referred to, asserts, that since the occurrence of any such phenomenon as an universal deluge, the waters of the German Ocean must have been *stationary*; at an elevation of forty feet above the line of their present level; for he declares, that in most of the valleys of Norfolk, at about forty feet above the present surface of the river, he has found, in numerous places, quantities of sea-shells and sand, betokening the former residence of the sea; and furthermore, that the land of the marshes on the banks of the Wensum, &c., is composed of alluvial deposits, decayed marine vegetable productions; and he has attempted to prove, from the evidence afforded by Burgh Castle, that this sinking has been gradual and constant, at the rate of about eight or nine inches in a century, by which he endeavours to shew that upwards of six thousand years must have elapsed since the waters of the ocean were stationary at this assumed elevation. But this period, however, according to Genesis, carries us into time somewhat anterior to the creation of the

world: here then is, what I call, a sly hit at the Bible authority. Mr. R. assumes, in support of his theory, that the foundations of Burgh Castle, now about twelve feet above the water, were at the time of their construction by the Romans (admitting that the Romans did actually construct them) level with its surface; for he tells us that these works were erected by that people as a defence for their fleets and vessels visiting the eastern parts of the empire; and as they only extend round three sides of a square, leaving that side which is opposite to the river undefended, he appears sure that the waves must have formerly flowed up to the very foot of the building, in order, I suppose, the better to defend their own and annoy the enemy's shipping.

It is certainly almost impossible to treat an argument like this with seriousness; for, though I do not profess to have any knowledge about the means most proper to be used in constructing a fortification in order to render it capable of affording the greatest possible resistance; yet, unskilled as I am in this science, I should never think of elevating one on such a plan as would leave that point most liable to encounter an assault, totally undefended; and, moreover, had I been employed to erect a fortress to be used as a point of defence against a maritime enemy, previous to the discovery of gunpowder and the use of canons, I

certainly should not have built it, where I had the power to choose, close upon, and level with the water's edge; and I think that Mr. Roberds would be puzzled to point out any, among even the ancient *Gothic* Towers, which are placed in a like unprofitable situation; yet it is upon this assumption alone, that this gentleman expects us to give up the Bible era of the flood, for his hypothesis of six thousand years! In all human reasoning, there must be certain assumed and admitted points, on which the future superstructure is to be afterwards erected; but these points are frequently passed over at the time as nearly unimportant, with almost a single dash of the pen; from whence it arises that the world is overburdened with so many thick octavo and folio volumes, although in reality they are, before all others, the very parts which ought to be investigated with the most careful attention; for the most foolish hypothesis may be defended by unanswerable arguments, if a few apparently trivial propositions be imprudently assented to without examination. I have somewhere heard of a man, who fancied a certain part of him was made of glass; and so strongly had this fancy possessed him, that he was afraid to sit down lest it should break. The idea was foolish enough to be sure; but admitting that the certain part was made of

this brittle material, no one will deny but that the reasoning on it was unexceptionable; and in like manner, if Mr. Roberd's theory be granted, that Burgh Castle has been built about seventeen hundred years—that *when* it was built the waters of the German Sea *flowed at its base*; that now they have deserted its vicinity to the depth of twelve feet in perpendicular measurement, and that those waters have been forty feet above their present level, since the occurrence of the deluge recorded by Moses—then it might not be difficult to shew, though it would be very difficult indeed to disprove, that the deluge recorded by Moses could not have happened at a less period than six thousand years since!

But what is most deserving our attention is the public promise that this author has made to produce, in a sequel to his present work, a variety of conclusive proofs, sufficient in themselves to demonstrate that the waters of the whole northern hemisphere are sinking below, while those in the southern hemisphere are rising above, their accustomed level, with their “probable causes,” &c., by which, I suppose, it is intended to insinuate, if he be not bold enough to assert, that the Mosaic deluge, whenever it took place, arose from a natural operation of the elements, instead of springing from the just vengeance of an offended Deity.

Now as to the fact, if it be a fact, with respect to the waters of the German Ocean, there are sufficient assignable causes to be found for their diminution, without any necessity accruing to increase the floods in the southern hemisphere; among others, continual absorption by the earth, constant exhalation by the heat of the sun, and the original bottom of the sea being deepened by the violence of the wind and tides, which continually throw up huge shoals, and sometimes even islands of sand, would, in a succession of ages, considerably tend to lower the surface of the water; not to mention that immense and terrible vortex of the sea on the coast of Norway, usually denominated by geographers "the Maelstrom," into which the sea unremittingly continues to pour, with such violence and in such prodigious quantities, as to be heard at a distance of forty miles.

And now, Sir, fearful lest I may have already trespassed too much on the time and patience of the public, I beg to bid farewell to you and to them; with the fond hope that what has been said, if it fail to convince, will induce you, at least, to reflect seriously on the theories you have published to the world in the character of a disciple of Urania; and that such reflection may lead you back into the class of rational beings, from

which, I fear, you have some time wandered, is  
the anxious hope of your well-wisher here and  
hereafter,

T. BRIDGMAN.

*Magdalen-street, Norwich,  
May, 1827.*

THE END.

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