

Let us see, now, wherein lies the difficulty. Take the hands of a watch as indicating the motion of the stars. The watch we naturally look at from above downwards; the stars from below, upwards. And a deal of difference is made by this; the description being useless without qualification. Again, if we describe the motion by pointing with the hands and following it, when looking to the heavens, the motion of the circle is a "left-hand" motion. But, if we take the watch, as it lies on the table, the circle described would be a "right hand" circle. So that a true description of the motion of the stars north of the equator is that of a left-hand motion as we gaze upwards at them, and a right-hand motion if we imagine them to be reflected into the watch glass.

Now, in gaining information from the Southern parts of the earth the difficulty is intensified. It has to come by written description, and great care is necessary. If it is so easy to get "mixed up" here, at home, with so simple a matter, it will never do to jump at a description from New Zealand unless we be sure that the folks there are exempt from such difficulties as we ourselves have. A New Zealand correspondent says: "I am an eye-witness every clear night to the various groups of Stars making a circle in our Southern heavens in the same way as your Northern Stars circle in your Northern heavens." It is a very simple matter to write this, but "the same way" requires a little more, to be said about it, since astronomers tell us they go the *reverse* way. And if we are not clear in describing one way here, in the north, it would be quite un-zetetic to accept without a searching investigation the meaning of "the same way" or the "reverse" way from New Zealand. And the difficulty spoken of is not diminished by the making of a diagram, but rather increased. Here is a plain piece of paper. I put the letter O upon a straight line to represent an observer. Above that, at any distance I place the letter S to represent the North Star. But both the observer and the star are upon the same piece of flat paper, and imagination is necessary. A line from O to S would be a perpendicular from the ground line, but we have to *suppose* it to represent a *vertical* line. (In the same way, the picture of a plane is upwards on the sheet of paper; that of a view up-hill, is the same; and a view down-hill could not be told from either of the others, so far as the plane of the paper goes!) Now to represent Stars circling around S. in the North, the "arrow" would point to the left *between* O and S., and to the right *beyond* S. That would be as the watch hands go. Now turn to the heavens. The "arrows" would point similarly, but the motion is "left-hand" instead of right-hand as in the watch; and the whole scene is reversed from its position on the paper! In other word, a right-hand motion upon the paper is a left-hand motion when we face the sky; and the stars appearing in the diagram *above* the North Star are *below* it. Therefore in accepting information from our Zetetic friends in the far south, we must get them to state, definitively, which of these two modes of looking at the question it is of which they speak; for if anything founded upon misunderstanding come over the waters to us, it certainly will not fit into the Zetetic philosophy of of "PARALLAX."

Baltimore, Maryland.

WM. CARPENTER.

This caution is very opportune. Our New Zealand friends should also state in describing their phenomena whether their faces are towards the North or the South; and whether the sun rises and sets due east and west of them, and when? or in a north-easterly and north-westerly directly, when he has his greatest south declination? *Ed. E.R.*

THE EARTH - NOT A GLOBE - REVIEW,

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 4.

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SHIPS AT SEA.

WE have already given proofs that the earth we live on is an extended plane; and one good practical proof of this is quite sufficient to discredit all the so-called proofs of the earth's sphericity. The practical surveying of the surface of water proves that it is level; and if the surface of canals, rivers, and seas, is level then the earth must be a plane. We begin with practical proofs; but, on the other hand, our opponents begin by first assuming the earth is a globe, and then looking about for some phenomena to support that assumption. This is not scientific; yet it is the way of our best astronomers. They first assume, and then try to support their assumptions.

That which is most relied on by the Newtonians to prove the earth and sea to be globular is the phenomenon of the disappearance of ships at sea. The hull of a vessel generally disappears first, and when it does so it is quietly assumed that the hull has gone down behind a hill of water. That this is a fallacy may often be proved by applying a good telescope, when, in clear or calm weather the hull may be brought again into view. This shews that other causes than the one imagined operate to cause the disappearance of the lower part of a vessel before the sails &c., in the upper part are lost to view. We will mention some of these causes; and first and foremost we shall offer some remarks under the heading of

PERSPECTIVE LAWS.

It is a well known law of perspective that parallel lines when produced far enough appear to meet. This may frequently be seen on our railways. Now if the earth be a plane with the heavens outstretched above it, they ought in the distance to appear to meet. They do so appear to meet, everywhere in the horizon however distant; therefore the earth and sea form a vast extended and circular plane. The

disappearance of ships at sea can be explained, and can only be explained, in harmony with these facts, and the laws of true perspective.

A second perspective law may be stated thus ;—All straight lines, or objects moving in straight lines, which are *above* the eye of the spectator, seem, as they recede, to come down to the level of the eye ; and all objects or straight lines *below* the eye as they recede seem to rise until they appear on a level with the spectator's eye, or line of sight.

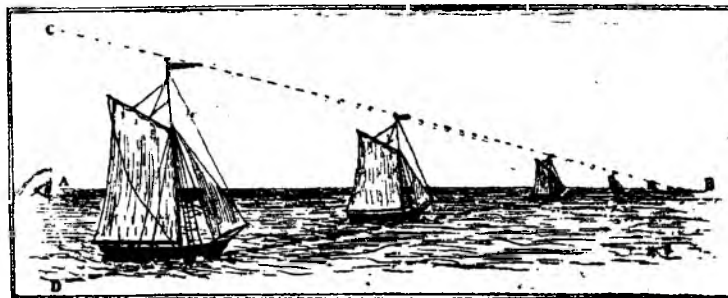
And, thirdly, all objects ultimately vanish in this line of sight, which appears to be on a level with the eye, in what is called the vanishing point ; and those objects which are *above* the eye never fall below the line of sight, and those objects which are *below* the eye never seem to rise above it.

Now let us apply these laws of perspective by referring to the following diagram, illustrating the disappearance of a vessel at sea.

Let A B represent the line of sight, or the height of the horizon, which is always on a level with the eye of the spectator, in whatsoever position or altitude he may place himself.

Let D E represent the line made by the hull of a vessel in sailing away straight out to sea ; and C B the straight line made by the flag of the vessel at the top of the mast.

VESSELS AT SEA, HULL-UP !



In this position it will be noticed that the eye of the spectator is nearer to the level of the hull than it is to the height of the ships flag. This is a common position. Then according to the laws of perspective, the line C B being above the eye will seem to descend to a level with the line of sight A B, and the line D E will appear to rise up to it, both getting lost somewhere in it in the distance. But here we must point out a very common error. It is generally supposed that all such lines vanish at the same point ; but they do not. It depends upon their position. If a man were to place his eye eight inches above the ground

he would expect to see nothing lying on the ground beyond one mile ; but if a large balloon were floating one mile high it would be visible many miles distant. A wheel eight inches high running on the ground would vanish much earlier than a balloon a mile high ; yet both would vanish on, or before, reaching the same horizon, or line of sight. The higher an object is the longer it will remain in sight, as the distance increases between it and us ; and the lower or smaller an object is and the sooner it will reach its proper vanishing point. The same rule applies to objects receding *below* the eye, or line of sight. Now if the angle A E D be less than the angle A B C, as in this case it is, it is evident that this angle A E D, *with all that is contained in it*, must be lost to view, or reach the vanishing point, before the larger angle A B C and that which it contains. In other words the line D E meets the line A B, in the vanishing point E, before the line C B which vanishes further off in the point B, its point of contact with the line of sight A B. So that the hull of a vessel in this position would naturally be lost to view before the upper part of the sails or the flag of the ship had disappeared. In calm weather, on the application of a powerful telescope, this angle would be magnified, and so the hull of the vessel would reappear, which it could not possibly do if it had gone down behind a hill of water. The vessel would be found hull-up rather than "hull-down." Thus perspective alone would account for a vessel appearing what has been mistakenly called "hull-down."

Other causes often operate to hide the hull of a vessel before the ship's flag and masts are hidden from view. When the weather is clear the sails and the flag can be seen more easily because they are against a background of clear sky ; whilst the hull of the vessel is down, and generally below the eye, in a darker and thicker element surrounded by the spray and splash consequent upon sailing. All this has a tendency to hide the lower parts of a vessel first and to display the upper parts last ; yet no note is taken of these things in astronomical works. No ! Their theory requires the vessel to have gone down behind a hill of water, and other possible causes of the hull's disappearance are never so much as hinted at. If the whole vessel were much below the spectator's horizon, then the whole of the ship would vanish before reaching up to the line of sight. Under such circumstances it could not possibly be "hull-down."

Astronomical Violations of Perspective.

In astronomical works we have frequently seen the laws of perspective grossly violated. For instance, a spectator is placed on high, sometimes two or three hundred miles ; and, instead of his line of sight being a tangent to the sphere at the point of observation, he is made to look *down* to his horizon. Such a view is never found necessary in

Nature ; nor is it possible on a plane. The ship is placed a little way from the *top* of the illustrated globe ; then the hull is brought up from below the spectator's horizon to the top of the globe and *above* his horizon, and afterwards it is made to sink down behind the supposed hill of water or curve. This is simply an outrage upon Nature, and upon all true science and perspective ; as might be shewn by making another vessel sail away in the opposite direction. This vessel would have to begin to descend at once !

Let us refer again to our diagram. Objects below the line of the horizon A B *never rise above it* ; so that if a ship's hull be below the eye as starting out it will, though seeming to rise higher and higher, for ever remain below, as long as the spectator occupies the same position, until the hull is lost on or before reaching the line A B. This can be tested by anyone with the requisite amount of patience to watch. But if the earth were a globe according to the diagrams of the astronomers, the hull of a vessel though below the eye line would first rise above it on the horizon and be seen against a clear sky in the distance ; and then *afterwards* the hull would go down beyond the horizon. But it does not behave so ; therefore the earth is not a globe. If below the line of sight the hull disappears *before*, or vanishes on, reaching the eye-line, and never gets above that line at all. This, according to the laws of perspective, is just what ought to happen on a plane ; it does so happen, therefore the earth and sea form a plane, and the sea is really level. Thus the phenomena of the disappearance of ships at sea when carefully examined prove the very opposite of what they are generally supposed to prove.

Before concluding this article we would like to ask our astronomical friends a few questions on this subject. In the diagrams of ships at sea, given in astronomical works, Why are the ships placed near the top and not under ? Why is the first ship not placed *on the top* ? Why *near* the top, and always having to go *up* first and then to go *down* afterwards ? Has any object in Nature, ever been seen to rise perspective as it recedes, and then while remaining at the same altitude, to *descend* ? By whom ? Where ? and When ? Is not the observer always on the *top* of the earth ? If not, why not ? If the earth were a globe would not the horizon be a tangent to the sphere at the point of observation ? If so, ought not a ship to begin to *descend* at once as soon as it leaves the observer ? Why does a vessel not suit its behaviour to the globular theory ? Is it because it is only a theory ? Why do the astronomers violate the laws of perspective when they make diagrams of ships at sea ? And now when these tricks of so-called astronomical "science" are exposed, why should not all our readers believe the plain truth that the earth and sea form one vast outstretched and circular plane ?

ZETETES.

SCIENTIFIC CREDULITY

versus

RELIGIOUS BELIEFS.

(BY LADY BLOUNT).

" To give a true and unprejudiced account of any religious system, a man must once have believed in it, or he will give a superficial view of it ; and he must have ceased to believe in it, or he will be prejudiced."

In quoting the above from M. Renan, I can use the words of H. M. Prior, who was twenty years a minister of one of the seven Catholic Apostolic Churches in London, on opening the account of his experience therein. He said ;—" I am in this position." Yet in my case not in regard to sectarian or denominational churches alone, but also with respect to orthodox Astronomy. I formerly believed in theoretical Astronomy, but now I renounce it as being contrary both to facts and reason and the Holy Scriptures.

" The Earth is the Lord's, and the fulness thereof ; For he hath founded it upon the Seas, and established it upon the floods " Psa. 24, 2. These words give strength to the argument of the sceptics, against the authority of the Bible, so long as the popular teaching is upheld, both by themselves and Christians.

I remember a conversation I had some years ago with a man who I judged to be an Atheist ; or a Deist. He had been listening with others to a Mr. Walter Skinner of Brighton who was preaching on the obtaining of the future Life alone through Jesus Christ. We were on the Level at Brighton, and the Sceptic told me that his principal or sole reason for doubting Mr. Skinner's statements, "was grounded upon the fact (?) that the Book from which he took them was in direct opposition to Science." He further said that he was a student of science, and the opinions and discoveries of great and learned men, and therefore the gospel would not do for him, as the two, Science and the Bible, did not fit agreeably together. This shews how lamentable it is for a Christian blindly to yield the claims of "Science."

In regard to Christianity, the Sceptic said that the masses believed in it, for the reason that they either had no power of thinking themselves, or they did not exercise this power ; for they accept as truth without enquiry just whatever any preacher tells them who is under the impression that he is above his fellows in knowledge, or who desires some little notoriety. But, I replied, is not this the case to a large extent in science as well as in religion ? Sceptics profess to believe in science,

and astronomy, although they possess no practical knowledge thereon, just because some great man teaches these things, and the masses about them are brought up to believe them.

So that "Science" in all its branches, has its unthinking votaries as well as religion. I soon perceived that this man's faith was blindly fixed in the accepted or orthodox doctrines of what is termed "Science," especially Astronomy; and that everything in his mind was made to succumb to his prejudice and unreasoning faith in astronomical speculations. I asked him if God had not created the stars? He said, No! but that according to Laplace, the Sun had formed itself out of primitive nebulae, and that this was the case with myriads of other starry globes, including the Earth, all of which being huge sparks had been shot off the great fire-wheel of the Sun, like sparks from a grinding stone in rapid rotation! The Sun's immense distance accounting for its apparently small size, and its apparently small size being due to its supposed great distance! So they reason in a circle, and infidels as well as unthinking Christians believe them.

This sceptic said that he "believed" that the Sun was one million four hundred and nine thousand, seven hundred and twenty five times the size of the Earth; and that both these bodies in common with hundreds and millions of "other Globes" were formed by condensation from vapour as rain drops are formed in the clouds. He supposed they had done this of themselves, or by some mysterious process described as "the laws of Nature!"

The difference being that these rain drops required only a few seconds, whereas these supposed solid bodies and worlds required millions, and millions of years for their formation. Men talk glibly of these immense periods in the formation of the so-called "crust" of our earth, and they say that it must have taken millions of years for the crust of the "globe" to form and to cool. But what reason have the masses for believing this so-called scientific theory rather than the grand and simple account of Creation as given in the Bible? None! Christ by his miracles proved himself to be from God, and Christ endorsed the Mosaic account of the Universe. But sceptics are as blindly prejudiced in their unthinking scientific beliefs as the masses were in the dark ages in their unscriptural and theological faiths. Let us turn from all these teachings of men, whether they be of Newton, Herschel, Laplace, Arminius, Calvin or Luther, and let us turn afresh to Nature and the Word of God for our own information and instruction. Let us not turn away from the good old Book for the mere theories of a changing science. Let us have facts, not fancies, and let us read facts even in the light of a little common sense and criticism. Like others I once accepted these theories without exercising any thought and inquiry

thereon. But now I see it is impossible for one who really thinks to accept both the speculations of Astronomy and the Scriptures. I for one, therefore, prefer to stand by the Bible account of the Universe as it harmonises with all I have now learned of the real facts and appearances of Nature. As for all human fancies and astronomical speculations let them be discarded before we give up our trust in the Word of Him who made the World, and who promises Eternal Life to all who believe in His Son.

"THE SUN'S DISTANCE."

BY G. W. WINCKLER, ASSOC. M. I. C. E.

Mr. Proctor remarks that the determination of the Sun's distance, is not only an important problem of general astronomy but the foundation to a great extent of all research into its character and economy. Until we know the sun's distance (he continues) we can determine neither his build nor his weight; and our views on other of his conditions, will be found to depend in an important degree, on the estimate we form respecting those two elements. A trivial or apparently trivial error in the solution of the problems on which the determination of the sun's distance depends, would result in vast errors in the computation of the sun's volume, &c., &c.

We endorse these remarks with much satisfaction, and now let us inquire how Astronomers have proceeded to ascertain the sun's distance from the earth. The planet Venus first of all is assumed to be revolving round the sun at a minimum distance of 68,459,000 miles, the plane of its orbit is *supposed* to be nearly in the same plane as the supposed orbit of the Earth, and this Earth is further supposed to be a rapidly revolving Globe. It happens as a fact, from time to time, that Venus passes between the sun and the earth, two such transits occurring in an interval of 8 years, after which they do not occur again for more than a century. When such an epoch comes round the Astronomers think it is their opportunity to find out the sun's distance from the earth. This is how they try to do it. They proceed to note the time occupied by Venus across the sun's surface. Two independent observers at the widest possible intervals take note of the two points when the Planet, as seen by each, appears to project itself at the same moment on the solar disc—thus, they obtain the angle from each of their stations intersecting each other upon Venus at an opposite angle on the sun. This parallax forms their basis for an elaborate series of calculations utterly inexplicable—and from these calculations the following results have been obtained. According to Hanson in 1854, the sun's distance from the earth is 91,659,000 miles,—according to Leverrier 91,330,000 miles,—according to Mr. Newcombe 92,800,000 miles,—according to Foucault

91,400,000 miles, and now accepted, as in all schoolbooks, in round numbers as 92,500,000 miles. Previous to this it was "found" to be very much less.

"The observation of the transit of Venus is confessedly the best method of solving the problem," so the Astronomers say. But is this so? We will see. What are the data required to work out such a problem on this method? 1.—The distance of Venus from the sun at the time of transit. But are they sure it is 68,459,000 miles? Proof is wanted. 2.—The distance of Venus from the earth at time of transit,—are they quite sure it is 23,541,000 miles? Proof wanted again. 3.—The velocity of the Planet. 4.—The earth supposed to be scudding along at 17 miles per second in the meanwhile. But no proof is given of the earth's motion. Yet it is upon these wild assumptions that they proceed to work out the "best method of solving the problem." Let us illustrate the case. Let us suppose that an Engineer (who is also an Astronomer) was requested to find the height of the Eiffel tower. According to the above "method" he would station his assistant at one spot and he himself take up another at an unknown distance from the tower and at a given signal, both would note the flight of a pigeon across a fixed disc on the top of the tower, and from these data, this astronomer would proceed to calculate the height of the tower. First, he will assume the distance he and his assistant are from the disc, say as 200 and 150 miles respectively. He will further assume the distance the pigeon flew at a velocity of 30 miles an hour from the disc and from the two Engineers as 75 and 125 miles respectively. Then after his elaborate spherical Trigonometrical calculations are completed on these wild suppositions, he should, if not quite dead to shame, cashier his Assistant and drown himself with his elaborate calculations inside his left boot! This is no exaggerated illustration. It is just what the Astronomers, who seem to have gone mad, have done in the case of the Sun's distance.

Now let us describe "the best method of solving the problem," that is, of finding out the height of the Sun or the Tower; and the "method" which will give accurate results in the Tower case, should also give accurate results in the case of the Sun's distance if we only had the required measurements. The Engineer (who is not an Astronomer) will first measure a base line from the foot of the Tower at C to a point B, and then prolong the horizontal straight line to another point say twice the distance at A. (*Readers must make their own diagrams*). To obtain great accuracy, he may station himself at A with a theodolite and station his Assistant at B with another theodolite. Let the top of the tower be marked D. There at the same time both will read the included angles C A D, C B D, respectively. By *plane* trigonometry

with the aid of a table of Logarithms, the engineer would then calculate the height C D in a few lines of a simple but correct calculation, and he will find, (if his base line and his angles have been correctly established) by adding the height of his theodolite from the ground level, that his calculated height, was not many inches far off the true height of the tower.

This method has the advantage of absolute mathematical demonstration—and with a slight modification for refraction—might be adopted in the case of the Sun. We maintain in spite of what Astronomers say, that this is not only the best "method" but the only method of solving the problem of the distance or height the Sun is from the Earth. The Sun in the month of March crosses the Equatorial line on a certain date. At noon it is immediately overhead or in the Zenith at some point on the Equator. Let our Astronomers measure a base line say in Southern Africa or in S. America due North or due South from a given point, and let this base line be say 200 miles long (the longer the better). Let two observers at these two fixed points work simultaneously (by telegraph) and observe the Angles of Elevation of the Sun's lower or upper limb at the same time—this will give one set of observations with its calculated results. Let the operation be continued through a series of observations on another base line say measured on the Meridian of Paris, and from Paris to some spot in Scotland, and calculations from each of these several readings will surely give a very close average distance the Sun is from certain places on the Earth near the Equator. If Astronomers would only undertake these practical experiments, instead of rushing all over the world to observe an Eclipse, we should have the true distance of the Sun. But what confusion of faces there would be over their present wild guesses. Instead of the fabulous distance they assert the Sun is from the Earth, they would demonstrate to all true Zetetics, or Investigators, that the sun bears only such a proportion to the Earth, as a gas jet bears to a sitting room, and that it is only a few thousand miles above us. Then Mr. Proctor's remarks with which this article began, will be charmingly appreciated, although no doubt to the confusion of modern and merely speculative astronomy.

THE EARTH'S RHYTHMICAL BREATHING.

A SURPRISING SCIENTIFIC DISCOVERY.

The following paragraph was cut from *The Leicester Daily Post*, Aug. 25th, and sent us by a correspondent who asks;—Does not this support the view that the earth is a plane floating on the mighty ocean? The paragraph was headed as above, and reads;—

We all know that there are ocean tides, spring and neap, and they are due to the positions of the sun and moon relatively to the earth. "The full of the moon" strikingly affects the sea. It did not occur to us to think whether it also affected the atmosphere and the earth itself. All that was noticed about it, apart from its marine influence, was that persons of unstrung nerves underwent crises at the full of the moon. Then so-called scientific men laughed at this belief, as being in the nature of old wives' fables. But being founded on observation it was nothing of the sort. M. Bouquet de la Grye, an eminent hydrographical engineer, has, after long years of patient study, calculated the atmospheric expansions and depressions which coincide with spring and neap tides. There have been cases in which air was moved in waves of 133 yards high, and in places where the barometrical pressure was seven-tenths of an inch, of six and a half miles. Near the upper surface of the earth's atmosphere condensations and dilatations of this magnitude are frequent. The human nervous system may be said to register these air waves. We are only aware they do so by the discomfort which we feel. The earth also registers them, and to its very centre. The incandescent and fluid matter under the earth's crust acts in concert with the air and sea at the full of the moon. In 1889 a German scientist, Dr. Rebeur Pachwitz, thought he noticed at Wilhelmshaven and Potsdam earth oscillations corresponding with the course of the moon. He wrote to the Observatory of Teneriffe asking for observations to be made there in December, 1890, and April, 1891, which would be propitious times for them. From these observations, and others simultaneously made in the sandy plains round Berlin, it was established that the earth rises and falls like the ocean and the atmosphere. The movements, common to them all, may be likened to that of the chest in breathing.—Paris correspondent, "Weekly Despatch."

To the above question we reply, Yes! certainly. *Parallax*, in his excellent work, entitled *Earth not a Globe*, shows that the tides are caused by the rythmical rising and falling of the earth as it rests upon the sea, and not by any alteration in the absolute height of the water. This explanation was so simple that the scientists scoffed at it; but now after an acknowledged "scientist" has discovered what was already known to *Zetetics* it is called "A surprising Scientific Discovery." It is surprising!

SCRAPS AND REVIEWS.

We have received a leaflet from Nottingham, headed *Science Truth*. It gives a picture of the earth as a globe, with the sun and moon on opposite sides of it, and the moon at *new-moon*! It says that Professor Huxley confirms the Bible, word for word! If this is the kind of stuff on which to feed Y.M.C.A., no wonder that much of modern religion is as "flabby" as a good deal of modern "science."

The Christian World is ostensibly published in the interest of Christian doctrine, yet the issue for June 14th contains a paper headed "The Flood Myth." This of course is written, and preached, by a gentleman who dubs himself "Rev." But what reverence can Christians give to

men who, while they are found in sheep's clothing—and often the very best wool—are doing their utmost to undermine the authority of the Holy Scriptures? If space permit we hope to criticise more fully this so-called divine.

A MODERN PHILOSOPHER.

(A REVIEW).

We learn that MR. H. BERKELEY SCORE, F.R.G.S., F.R.Hist.S., Lathom Park, Ormskirk, Lancashire, is intending shortly to bring out by subscription an original work containing 160 New Fables in Prose, under the title of "Sparks of Light from a Fabulist's Diamond Mine." Some of the fables have already been published in *The Muses*, *The Weekly Irish Times*, *Asia*, *Chatterbox*, &c., and have become very popular. The subscription price is half-a-crown. Such a book ought to command a large sale, seeing that we are now a-days, like the Athenians of old, always on the look out for 'something new.' Anyone may become a subscriber, and a complete list of the names sent in to the author will be printed at the end of the volume.—Those of the "fables" we have read are really good; and they contain some telling strokes against modern shams and hypocrisy. *Zetetics* will be interested to learn that this clear and original writer has now the courage to examine into the merits of plane geography. We are to hear what he thinks about it in the Christmas number of *The Muses*, (9d) of which he is the editor.

MODERN "SCIENCE."

A friend sends us a remarkable book by Mr. Laing on "Modern Science and Modern Thought;" and he wants to know what we think about it. We are sorry we cannot speak in praise of this work. Briefly; if modern "science," and especially astronomy, were true this book would be the most telling attack on Bible Cosmogony we have ever read. But the writer *assumes* the earth is a globe, evolved as the scientists teach; and, as we know it is not, his premises being unsound, his conclusions are fallacious. But while Mr. Pember, Professor Drummond, or F. Hugh Capron, support the evolutionary and globular theory they will never be able to cope successfully with so-called science. Instead of vainly trying to reconcile a false "Science" with the Bible, we ought to *attack* the Science, or at least to call it into question; for as Mr. Laing well says; "The *two statements cannot both be true*." But he makes the illogical mistake, common to most writers who attack the Scriptures, of first assuming that "Science" is infallible, and then he innocently draws conclusions adverse to the Inspiration of the Holy Scriptures. But he should first prove the globular theory true. Let him try. ED. E.R.

AN "EDUCATIONAL" IDYLL.

Ram it in, cram it in—children's heads are hollow !
 Slam it in, jam it in, still there's more to follow ;
 The Schoolmen's Globe, sham-History and Gravitation's mystery,
 Evolution's-ology, Algebra and Conchology,
 Botany, Astronomy, Latin, Greek, Geometry,
 Ram it in, cram it in, children's heads are hollow !

Rap it in, tap it in—what are teachers paid for ?
 Bang it in, slap it in—what were children made for ?
 Ancient Archæology, Aryan Philology,
 Prosody, Zoology, Physics, Clinictology,
 Calculus, Mathematics, Rhetoric and Hydrostatics,
 Hoax it in, coax it in, children's heads are hollow !

Rub it in, club it in, *all that's known as Learning* ;
 Punch it in, crunch it in, quench their childish yearning
 For the field and grassy nook, ocean grand and rippling brook ;
 Drive each trivial thought afar ! teach the children that they are
 But machines to cram it in, and slam it in, for their heads are hollow !

Scold it in and mould it in, *Globe and all to swallow* ;
 Fold it in and hold it in, still there's more to follow !
 Faces pinched and sad and pale, tell the same unvarnished tale—
 Tell of hours robbed from sleep, teachers wearied, studies deep,
 Those who've passed the furnace through with despair can tell to you
 How the teacher crammed it in, rammed it in and jammed it in,
 Crunched it in, and punched it in, rubbed in in and dubbed it in,
 Pressed it in, caressed it in, rapped it in and slapped it in,
 When their heads were hollow !

From the "OHIO RAPIER."

"The weather of late has been very fine. It was a splendid sight, on Sunday evening, to see the land in Ayr, and Cumberland, so clear that houses could be seen with the naked eye ; and the smoke from Whitehaven, and other towns, could be seen very distinctly. Ramsey bay appeared as if it was enclosed by the surrounding land, from Black Coombe to the Point of Ayr, Welney light being seen distinctly, distance 45 miles."—*Extract from the "Manx Sun," July 24th, 1884.*

"I had been told so often that the Bible was no authority on scientific questions, that I was lulled almost into a state of lethargy."

"If it shall turn out that Joshua was superior to Laplace, that Moses knew more about geology than Humbolt, that Job as a scientist was the superior of Kepler, that Isaiah knew more than Copernicus . . . then I will admit that infidelity must become speechless for ever." Ingersoll's Tilt with Talmage.

CORRESPONDENCE.

Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Short pointed letters or articles preferred.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents ; nor can he enter into correspondence respecting articles, &c, held over or declined.

*Letters must be prepaid, and addressed "ZETETES,"
 Editor of The Earth-not-a-Globe Review, Plutus House,
 St. Saviour's Road, Leicester, England.*

NOTES.

Many articles are crowded out for lack of space.

A.E.L. Rellam asks, How do they calculate the supposed dip of the Earth ? The rule is, Square the distance (in miles) and multiply by 8 inches. Thus for six miles the dip would be 6×6 equals 36 x 8 equals 288 in. or 24 ft.

W. Lambert.—"Parallax," in his book, does not give the circle of light to which you refer any specified dimensions. He uses it merely to shew how the day is divided from the night by the motion of the sun round the earth.

J. Casse.—We have no more sympathy with spiritism, or what is commonly called "spiritualism," than you have. As *Zetetics*, or Truth Seekers, we cannot deny the facts which have come under our notice ; but these facts point to an agency which is from below rather than from above. You had better write to the author of the O.H.P.

E. Breach.—We are glad to see you and others are publicly defending the Plane truth in the columns of *Chat*, and elsewhere. Other friends are doing a like service for the truth at Lincoln, London, and other places. Go on, and prosper ; but whether men believe us or not, our testimony is becoming a remarkable witness for God's truth in these last days.

W. M. Herd, Battle Creek.—You must have written your letter before seeing the article in the July E.R. headed "Our Critics." As you say ; "Satan, the father of lies, has reduced the art of deception to a science, and he is at the bottom of the globular theory, which he has provided with hooks and eyes that fit in marvellously with some phenomena." Nevertheless, we reply, we must not yield to mere astronomical theories and coincidences as though they were facts. Our space forbids us printing for the Astronomers.

Letters to the Editor.

60, Bank road, Liverpool,
Dear "Zetetes,"

Can you or any of your many readers, and especially any of your opponents, inform me where all the water that forms the sea came from if this earth was shot out of the sun as a red-hot cinder some thousands or millions of years ago,—and how is it that there is more water than cinder?

Yours truly,

J. SMITH.

You ought to ask the Astronomers this question. ED.

30, Upper Coombe Street,
Croyden, Surrey,
22nd August, 1893.

Dear Sir,—I have been interested in the study of Plane Geography for some years, having had the pleasure of hearing "Parallax" lecture at Croydon, and was impressed forcibly with his statements.

I feel very glad that you have started a magazine call "The Earth Review," No. 2 April number was sent to me; but allow me to draw your attention to page 12 where you say, "If our correspondent thinks he can overthrow Dr. Birley's proofs, &c. alluding to Parallax, the author of the book called "Earth, not a Globe," a copy of which I have by me.

I would say that the name of the author was Dr. Samuel Rowbotham, not Dr. Birley, this I think ought to be corrected.

Some time ago, I visited his grave at the Crystal Palace District Cemetery, where there is a handsome memorial to him, and from which I copied the following lines;—

SAMUEL ROWBOTHAM, M.D. Ph.D.
(Parallax)

Founder of Zetetic Philosophy,
Died suddenly, Dec. the 23rd, 1884.
"The deepest truths with reason keen
Thy logic could uphold
Thy master mind with science fought,
Those truths but to unfold,
In ages yet to come Mankind
Will glorify thy name,
And none will shine with brighter rays
Upon the scroll of fame." WEST.

I wish you success in your important undertaking in these days of popular education. What a grand thing it would be to teach the young, the true system concerning the earth and sea in the various schools throughout the land.

With kind regards, I am, dear Sir,
Yours truly,

THOMAS WHITTLE.

P.S.—I like your pamphlet on the Midnight Sun.

Tuakau, Lower Waikato,
Auckland, N.Z.

Dear Sir,—I duly received your parcels all safely and am much pleased with their contents, also glad to hear the remittance arrived safely. Your "Satire" is a most remarkable production, and I think it ought to make people stop and think before they swallow down all that is being taught. It is most enjoyable reading. People are very shy at purchasing the literature, excepting the "Satires," so I have spread the pamphlets up and down at my own expense. As times are rather dull just now, I find it very hard to meet these extra expenses, much as I would like. I am sorry to hear that your health is not good. I hope you may be long spared to wield the pen in the cause of God and truth. I hope that the S.D.A. Church in England will make you some restitution, eventually, for what you have suffered for the truth of God's Creation.

I like your "Midnight Sun" pamphlet, and I thoroughly understand the arguments deduced from it. It seems a very clear case. I will now try to answer your queries respecting the stars. The Southern Cross and all other constellations do most certainly appear to revolve around a southern point or centre. I have proved this beyond a doubt by close observation, but there is no distinct star for the centre, but many very indistinct ones all about the centre. The Magellanic clouds (2) are both inside the Southern Cross orbit and revolve exactly the same direction and half revolution in the twelve hours. When I say the Cross does not set, I do not mean it does not rise, for when you face the S. you see it rising from the lower part of its apparent orbit and travelling from E. to W. as per diagram.

(Diagram omitted). We are now approaching the shortest day here, Sun rises to us E.N.E. sets W.N.W., longest day Sun rises E.S.E. setting W.S.W. The Sun is always seen to Northward at 12 o'clock Summer and Winter, rising to very low altitude at 12 o'clock, now June 17th, 1893, from E. to W. and Midsummer rising to very high altitude and throwing very little shadow.

(A later letter from the same writer).

July 11th, 1893.

Dear Sir,—I made up my mind shortly after writing my last letter, that I would try to get you a Shadow course on our shortest day, June 22nd, but we were having such cloudy and wet weather that it was impossible, but however by the 26th it broke a clear day comparatively speaking, so I erected a level stand about 4 ft. 6 in. above earth and spread my paper and fastened it flat and level. . . I have preserved a copy myself and sent you one on tracing paper so you can re-produce it, and if I am preserved in health I intend (D.V.) taking one on our longest day, or as near to it as possible, and compare the two. I took the bearings of sun rise and setting with a pocket compass a very small one, so I may not be very correct on that point. It rises in the E.N.E. quarter setting in the W.N.W. quarter. I am not speaking exactly now (but thereabouts) and I do not think it rises in the sky by noon to an elevation of *certainly not more* than 30° this 11th day of July. He makes very low arc in sky at midwinter, and an almost overhead arc by midsummer. An observer facing south now (midwinter) to see the sun rise would have to face half round to see it to N. side of E., while at midsummer the observer would, still facing S. see the sun rise without shifting his body by merely turning his eyes to the quarter, as it seems to rise then with the observer inside the circle, but by noon you can plainly see that it has got to the N of overhead point and that you are then outside the circle, and same at setting. For midsummer it appears to set considerably to S. of W. so when facing due S. by turning your eyes you may see it go down or out of vision. I also send you Moon's shadow record three days after I took Sun's, it being full moon. I might say I was rather disappointed with the curves, as I expected

them to be parts of a correct circle, but they are peculiar curves, but perhaps that is owing to light not travelling in straight lines, (yes, partly, Ed.) I was much interested in the correspondence of C.H. in April E.R. and Mr. Runci-man whom he quotes is perfectly correct, the Southern Cross does not set in N.Z., but is always to be seen for the entire circle, or orbit it makes, it is situated near the end of the Milky Way, and that strange belt of light seems like a convolute curve across the heavens with its commencement in the centre round which the Southern Cross revolves. The long end appears to swing round the sky from E. to W. but at the S. end it moves very slow. Orion's belt appears to me to keep a steady mean course in the sky as it moves along due E. and W., it never appears to get one side or other of E. or W.

I forgot to tell you when I took the moon's shadow it rose, I think, more to S. of E. than the sun does at midsummer and sets ditto of W.

I was gratified by your remarks on the letter of Caldwell Harpur, in April E.R. to see how lightly you treated motion of stars *versus* shape of the earth, for I have stood of a starlight evening and wondered why those different S. constellations do not travel around the great S. circumferences instead of revolving around an apparent centre or point. This point would, roughly speaking, be at about 45° to us.

I see some stars just outside the orbit of the Southern Cross which set on the W. side of the S. Cross and rise again after an interval of 3 or 4 hours on the E. side of S., having gone just below the line of hills that border my horizon.

The Cross never sets and is always in view Summer and Winter, rising to a very high altitude then dipping to about 8 deg. of the horizon at the other side of its orbit. Its circle seems to narrow in winter and expand in summer. I think our Government in the South here should undertake the task of proving the lengths of degrees of latitude to find whether they do increase as they move south.

I should like some explanation of the following:—If 15° of 45 miles long, North of E. equals 1 hour of time, why does 15° of 60 miles long South of E. equal the same hour of time? (Answer. Because the light of the sun travels

faster in some places than the sun itself. The sun goes round the earth once in a day, say at the equator, but its *light* has to travel around the whole southern circumference in the same time. ED.)

I have lent out copies of your "Midnight Sun," and it is well-liked here. It is very interesting and easy to understand.

Please thank Mr. Williams for half-a-dozen copies of the E. R. which I have distributed. If prospects brighten here, I hope shortly to become a member of the U.Z.S.

Yours in truth,
GEORGE REVELL.

[Thanks for tracings of Shadows. If our means allowed we would print them. But go on collecting *facts* carefully and record them accurately. ED.]

Portsmouth.

Dear Sir,—I just drop a line to inform you that I am profitably delighted with our "Quarterly Zetetic." I hope its propaganda will spread and enable you to produce it monthly. I wish I could afford to purchase copies for loaning and free distribution as I am sure it will ultimately break down the present assumptive stereotyped un-founded dogmas of Science (?) What was said by Sir Astley Cooper, after 50 years of the Science (?) of Medicine may be also said of Modern Astronomy that it—(Science of Medicine) was founded on conjecture! and improved by murder!!—killing by Doctors is of course no murder, so with Astronomy, it is founded on conjecture and improved by the destruction of faith and the loss of souls. I am enclosing a letter which I

should like to see in our next issue as I think it is a good point in favour of—

"Truth crushed to earth will rise again
"The eternal years of God are hers;
"While Error wounded writhes in pain
"And dies among her worshippers.

If you have any spare copies for *free distribution* of our Quarterly or other papers I shall be glad to help on the work of faith and labour of love you so ardently contend for.

Yours fraternally,
S. T. BOLT.

[Will any friend of Truth kindly help us to send literature for free distribution? ED.]

A COMPASS PROOF.

Sir,—One of a number of proofs that the Bible is the Word of God is the fact that no other book in the World can be translated into so many different languages, and lose so little of its native beauty and force. This fact indicates that it was written for *all* the human family in all places and throughout all time. So we may equally say that with regard to the truth of the World being a vast plane, and not a Globe, we have amongst numerous other proofs the fact that a ship sailing on every known sea the mariner's compass is not only an essential help, but it is a positive necessity. It points North and South, but if the world was a globe of what use would the compass be? None! for if a vessel was, say 50° degrees S. the compass could not possibly point to the North Pole! and where would it point to if the ship was "on the line"? Echo answers, where? Let your readers try it, Sir, on a pasteboard globe, and see for themselves.

JOHN WILLIAMS.

ENQUIRY ABROAD.

ASTRONOMY AND THE BIBLE AT VARIANCE—WHICH IS RIGHT?

A lecture on the above subject was delivered on Monday night, at Monk's road Chapel, by Mr. Albert Smith, of Leicester, an advocate of what is termed the modern Zetetic School of Philosophy. The lecture was well attended, and was delivered with great skill and energy, the arguments being set forth in a calm and dispassionate manner, the lecturer proving himself to be thoroughly acquainted with the subject in all its bearings. He appeared to be gifted with good debating power,

for his style of delivery was simple and unaffected, and at once placed him in sympathy with his audience. The lecturer commenced by referring to the great battle now being waged between religious and scientific men, the former advocating the truth of the Scriptures, the latter believing in a philosophy directly antagonistic to the plain statements and evidences contained in the same. He pointed out the marvellous fact that in every serious encounter between the two opposing forces it was the defenders of the Scriptures who generally gave way; and that it was to popular science biblical statements of facts were made to conform. Instead of scientific theories bending to bible records, these in every conceived form, were turned and twisted, or altogether denied (as in the case of the "Higher Criticism") to suit the exigencies of modern theories. He proposed to vary the situation, and carry the war into the enemy's camp. Accepting the Bible as true, he would question and test that "Science" which was so directly antagonistic to the Divine records. He contended that the Copernican and Newtonian system of philosophy was radically wrong; that at the best it was no more than what its founders claimed for it, a theoretical system based upon mere suppositions, and devoid of one single fact upon which the gigantic and elaborate superstructure was built. Referring then to his diagrams, of which he had a plentiful supply, the lecturer proceeded to explain the Zetetic process of reasoning, claiming that it was based solely upon experimental data, absolute fact, and undeniable proof. He then proceeded to demolish the globular theory of the earth's form and the orbital and axial motions involved. He claimed that by actual experiment it was proved beyond doubt that the earth is a flat, extended, circular plane, stretched out in all directions away from the central north, until bounded by the unexplored and unapproachable ice barriers of the Antarctic regions. The lecturer held that the land rests upon the waters, as the Scriptures assert, and that instead of the earth moving through space, the sun and the moon do actually travel as they appear to do, over the earth; that the heavenly bodies are small, compared with the earth, are but a short distance away from it, and were made subsequent to light itself, and solely to light this world; and that the common belief with its supposed infinity of inhabited worlds is a monstrous dogma, contrary to the Bible and Nature, and the great stronghold of the infidel. Various phenomena, as tides, eclipses, &c., were explained on very simple lines, and the whole argument appeared to be forcible and striking in the extreme, and of sufficient force to demand an answer from the advocates of the popular theory.—From the "Lincolnshire Chronicle," July, 8, 1893.

THE FLAT EARTH.

Mr. Ebenezer Breach, of Portsmouth, who is a warm advocate of the theory zealously propagated years ago by a lecturer who took the *pseudo-*

nym of "Parallax," has tackled the Astronomer-Royal on the subject. Addressing this high official some months ago in a letter covering four closely-written foolscap pages, Mr. Breach set forth the history of his conversion to the theory and the arguments which won him over, these latter, broadly summed up, having led him to the conclusion that the earth is flat and immovable, and is the centre of the universe. In conclusion the writer appealed "in the name of an Englishman, for a kind candid, and common-sense reply," in the interests of truth. No reply whatever having been received, Mr. Breach, by a very simple process of reasoning, has arrived at the conclusion that, inasmuch as his arguments have not been answered, they are unanswerable.—*From the "Evening News," Portsmouth, July, 15th.*

MR. SKELLAM we hear lately gave a lecture in London, from which good results are expected.

THE EDITOR also gave an address at Ashton-u-Lyne, on Modern Astronomy false, as proved by Nature, Facts, and the Bible. Discussion was challenged, and many questions were asked and answered. There is enquiry abroad, and thus the light of Truth is kept shining.

AN IMPORTANT SUGGESTION.

It has several times been proved by experiment that the surface of a canal six miles long is perfectly horizontal and that therefore, the earth is a plane. There is another experiment, however, as important as the above which has never been made. It is the measurement of a degree south of the equator.

If the earth is a globe the degrees of longitude south of the equator will be less and less as the south pole is approached; but, if the earth is a plane, the degrees of longitude south of the equator will increase in size as their distance from the equator increases.

Now "Parallax," in page 253, gives a very simple method for measuring a degree south of the equator. He says that if a space on the earth is measured over which the sun travels in four minutes, this will be the length of a degree; and as there are three hundred and sixty degrees in a circumference, three hundred and sixty times the length of this space will be the distance round the earth at the latitude where the experiment is made. This would, at once, tell us if the degrees lengthen or shorten south of the equator.

We say the degrees lengthen, and if the experiment should prove that we are right, then the difficulties respecting the duration of sunlight and other phenomena in those regions would be cleared up; or if the facts could not be explained, we should know that it was only because we were short of information, and we could patiently wait for more light.

Now, Sir, are any of your readers acquainted with someone who might be asked or employed to undertake the above experiment either in Australia or New Zealand? If no one could be found to take the trouble out of love for the truth, could a fund be raised for the purpose?

This is a very important matter. Opponents would be completely silenced if the result should be according to our expectations.

WILLIAM BATHGATE.

September 7th 1893.

"BRITISH BOGRAFY."

SIR ISAK NEWTON.

"This grate man were born at Woolsthorp in Linkonshire, on 1642. He were a grate nateral feloserfer I dont no wat nateral felsefy is, but he were the creater of it. He were also an astronmer. He were a cheerful and amerable dispershon, and wore is hare long. He is said to ave maid grate diskoverys in astronmermy an things. This was mostly by axerdent thow as will be seen later on. He used to spend a deal of time a studyin the stars an moon with a spy glass, stopin out on the roof hole nites to gether. I rekon he were mostly asleep thow. I have piktard im a serchin the evens on the tiles akordin to the bografys I ave red, a sweepin the stary speer with a long andled spy glass. (Cuts omitted). Isak mite a studied astronmermy till his teeth fel out only for an axerdent, which were as follers. He were one day sitin in the garden under a tree makein belief to study. This was a common abit of is, bein a good excuse to go sleep. He was in this knondishon on the day alluded to as ushal tho avin a book with im. It were at this moment that a appel fel on is ed. He was sitin on the gras with flours growin round im fast asleep. Of coarse this woke him up and he made out to wonder wat made the appel fall on is ed an not fly up in the air. He then pertended to diskover that all objekts was atraktet to the erth by gravertation and set up as a felosofer on the strength of is diskovery. That was jest like Ikes stile. *He jest said wat sooted is perpose* an never sed nothin about smoke and bubbles an steem an berloons witch goes up in the air every time. Also coten wool, thiseldoun, leeves an ceterer, witch does jest as it appens. People were so astonished at sleepy Ike findin out at appels fel down and didnt fly up that they rased more noise than were nesesity. Isak died in 1727 at the age of 85. That is neerly 300 yeers ago an people stil owls about is diskovery altho not one in a 100 nose wat it were as he pertended to ave diskovered. The reel reeson of all this fus is not ard to find out in my umble opinyon. It was owin to Ike beein a barrownite." From "*The Insect.*"

“ THAT WAGER ! ”

To the Editor of the “ Future.” (DECLINED).

Sir,—In your journal for April, I find the following demand from “ Enquirer,”—“ *I call again for the facts of that experiment,*” [Wallace’s Experiment on the Bedford Level]. Don’t you think, Sir, that Alfred Russel Wallace would be the man to ask for these facts? But the truth is, he does not dare to say a word about them, and never *has* dared to publish anything relating to them. And, like the man in the backwoods who never saw the deep blue sea in his life—nothing but sky and woods—“ Enquirer ” persistently cries—“ Show me the ocean ! It has been carefully kept back ” ! Well, we have printed for 23 years concerning the “ ocean ” which “ Enquirer ” is so anxious to see, let us bring it home to him ; and, if his cabin be swamped, he will have but himself to blame ! One thing, however, is strange ; that, while he calls for the “ Ocean,” in evidence, he knows *all about it* !—and has obtained his information from those of whom he demands it ! We did not fix the date of “ Enquirer’s ” birth, or we would have had it occur 20 years sooner, so that he might have been “ in the swim,” instead of out of it.

In 1871, the writer of this letter printed a pamphlet of 32 pages, with diagrams, “ Water Not Convex,” &c., “ demonstrated by Alfred Russell Wallace,” &c. These 32 pages give the whole particulars even to a verbatim report of the discussion with Dr. Coulcher, referee for Mr. Wallace. In 1875, “ Wallace’s Wonderful Water ” was published by the same author, 18 pages ; and, in the same year, “ Proctor’s Planet’ Earth,” in which were strong charges against Mr. Wallace ; and, to say nothing of extensive newspaper correspondence, we come to the “ One Hundred Proofs, in 1885 and subsequently, in which the *prime* facts will be found ! All this time, the supposed *winner* of the wager has been silent—yet we are charged with *carefully keeping back* evidence ; which simply means that we are playing the fraud !

Now, Sir, we have brought the “ Ocean ” to “ Enquirer’s ” very door, and ask him if he sees it *now* !

WILLIAM CARPENTER.

Baltimore, Maryland, U.S.A.
April 25th 1893.

P.S.—Would it be right, or wrong, to say that *Alfred Russel Wallace* has “ carefully kept back ” *everything* ? W.C.

PLANE GEOGRAPHY.

The sea level in all directions, extending to an unknown distance.

North, the centre, and south all around unexplored, therefore unknown regions beyond about 78° south of the equator where an

immense wall of ice, and an inhospitable climate render it unfit for man to inhabit, it being far away from the light and heat of the sun.

East, West and South are not fixed points but relative directions or terms, proved to be so by the magnetic needle which always points in one direction to the north or centre, but the direction of the south end is various all around the north centre.

The sun’s circuit is over the sea, and land called “ earth,” and its daily course is either northward or southward gradually decreasing in dimension of diameter until it reaches the tropic of Cancer 21st June, over the equator in the equinoctial circuit 21st March, and 23rd Sept., when the sun enters Aries and Libra ; and furthest away southward 22nd December, the winter solstice. This accounts for our short days and long nights in England in winter ; but in Australia and New Zealand, the seasons are the reverse of what they are to us. The winter there is in June, and the summer in December when the sun is in the sign of Capricorn.

The sun being far away from England in December, accounts for the altitude at noon to us, being so low as 15° above the horizon.

In my opinion there is much ignorance about the situation of the various signs in the Zodiac. I think the Zodiac extends 47°, equal to the Torrid Zone, and not merely 8° each side of what is called the “ ecliptic.”

THOMAS WHITTLE.

A PIONEER ZETETIC.

“ We think our fathers wrong so wise we grow,
No doubt our wiser sons will think us so.”

Perhaps after all we of this present day of enlightenment would do well to learn a few lessons from the teachers of the days of the far away past. With this in view we would call your attention to one of the early seekers after truth.

The name of this personage was Cosmos, surnamed “Indico pleustes” (Indian traveller) so called because of his many Indian voyages. He was a native of Egypt, and was born probably at Alexandria about the fifth century. In early life he was a merchant, but subsequently he settled down and adopted the more sedentary life of a monk. It was during his monastic life that he wrote his varied works on geography and astronomy. His geographical writings reveal to us his remarkable voyages and the familiarity he manifests with the various lands and seas throughout which he had travelled, gives to his writings an air of vivid reality. It is said of him that he was no retailer of traveller’s wonders, but that later researches have confirmed the veracity of his statements.

Strange to say that those who accept his geographical accounts as being credible, reject his astronomical writings as being fanciful and absurd. With the exception of one work ("Christian Topography") all his writings are lost. The work still extant consists of twelve books belonging to the Vatican M.S.S. The first six books are dedicated to his friend Pamphilus who had urged him to attempt the work, a task from which *he* shrank on account of his literary inability. The first book was written in 547 A.D., and the others during the following thirteen years.

The subjects of the twelve books are:—

- 1.—Against those who claim to be Christians and who assert with the pagans that the earth is spherical.
- 2.—The Christian hypothesis as to the position and figure of the Universe proved from the Scriptures.
- 3.—The agreement on these points of the Old and New Testament.
- 4.—A brief recapitulation and a description of the figure of the universe according to the Scriptures and a computation of the sphere.
- 5.—Agreements of prophets and apostles concerning the above.
- 6.—The magnitude of the Sun.
- 7.—Duration of the heavens.
- 8.—Hezekiah's song and the retrogression of the Sun.
- 9.—The course of the Heavens.
- 10.—Testimonies of the Fathers.
- 11.—Geographical account of the known world.
- 12.—Testimonies of heathen writers to the antiquity of the Scriptures.

The chief design of the writer is to confute the impious heresy of those who suggested that the earth is a globe and not a flat oblong table as represented in the Scriptures. We must be prepared to find a few discrepancies in his account, but at the same time we should remember the disadvantages under which this defender of the truth laboured. He says the whole area of the earth is surrounded by a kind of lofty walls, beyond which the Paradise of our first parents is situated. Here men lived until the Deluge; when Noah and his family crossed the intervening flood in the Ark and peopled the present world.

The changes of day and night were thought to be caused by a mountain of enormous bulk, rising at the extremity of the oblong area. Behind this the Sun was thought to pass in the evening and re-appear on the other side in the morning. The conical shape of the mountain produced the variations in the length of the night, as the sun rose higher above, or sank down towards the level of the earth. Eclipses were due to the same cause. The round shadow on the moon's disc being cast by the domical summit of this huge mountain. The views thus propounded by Cosmos were those generally entertained by the "Fathers" of the Church. Their chief argument was the Scriptures. Upon these they pinned their faith, deducing from them a system which had for

them the authority of divine revelation. Cosmos supports his theory with passages of Scripture, and the comments of the early Fathers. Other arguments are drawn from Reason and the nature of the case. For instance, the absurdity of the supposition of the antipodean regions, inasmuch as the beings on the other side of the world must drop off, and the rain must fall upwards instead of downwards. He ridiculed the supposed rotatory motion of the Universe, disproving it by saying that the repose of the blessed in Heaven would be disturbed by their being rolled through space. In some of his writings he is indignant with those professed Christians who had followed what he calls "the false lights of science."

"Men who assume the name of Christians and yet in contempt of the Holy Scriptures join with the Pagans in asserting that the heavens are spherical. Such assertions are among the weapons hurled at the Church. Inflamed by pride as if they were wiser than others, they profess to explain the movement of the heavens by geometrical and astronomical calculations."—*Communicated by Mr. Perry, Ashton.*

We should be glad to hear more on this subject of ancient astronomical beliefs.
ED.

"SCIENTIFIC" FALSEHOODS.

At school in our unsuspecting childhood we were taught three great falsehoods as truth, and to-day our children are taught the same. First falsehood, "the World is a globe; round like an orange." Second falsehood, "it rotates on its axis." Third falsehood, "it revolves in an orbit round the sun." Now it is not universally known that besides these two primary motions there are said to be five others, so that the globe of modern astronomy has *seven motions!* But we are told, "there are no sensible effects of any of these motions!" But we dare for the truth sake tell these Astronomers that when sentient beings are tossed and tumbled about in seven different directions at one and the same time, there must be "sensible effects" felt by them. No! say modern astronomers, you must throw your senses to the winds, for those motions "are only appreciable to astronomers." Happy innocency! What next? Let us look at these seven movements in detail. (1), "Rotary motion producing day and night." (2), "Orbicular motion round the sun annually." (3), "Fulcrum motion, by some *supposed* to account for the tides." (4), "Motion of the aphelion and perihelion points round the ecliptic." (5), "Progressive diminution of the angle of the earth." (6), "Precession of the equinoxes." (7), "Nutation to and fro of the earth's axis." How long is England going to pay men for these falsehoods? John Bull ought not to be ignorant that they are falsehoods, for his standing orders in the House of Lords and Commons proves incontestably that it is known. It is there declared that "a datum horizontal line, which shall be the same throughout the whole length of

the work, or any branch thereof," shall be used, both in cutting Canals and making Railways. What would have been the use of "a datum horizontal line" in the cutting of the Manchester Ship Canal? We affirm that it would not have been any use whatever, for if the World is a Globe, with a rate of curvature of 8 inches to the mile, multiplied by the square of the distance in miles, one end of that Canal should be, the Canal being over 35 miles long, *800 feet below the other end.* But a datum horizontal line was used and consequently the World is proved to be a vast irregular and motionless plane, and the waters by which it is surrounded horizontal also at their surface. Let those who believe that it is the custom of surveyors to make allowance for earth-curvature ponder over the following from:—

"*The Manchester Ship Canal Co.,*"

Engineer's Office, Manchester, February 19th, 1892.

Dear Sir,—It is customary in Railway and Canal constructions for all levels to be referred to a datum which is nominally horizontal, and which is so shewn on all sections. It is not the practice in laying out Public Works to make allowance for the curvature of the earth.—Yours faithfully, W.H.H.

Again, another authority writes;—"As an Engineer of many years experience, I say that this absurd allowance is only permitted in school books. No Engineer would dream of allowing anything of the kind. I have projected many miles of railways, and many more of canals, and the allowance has not even been thought of, much less allowed for. This allowance for curvature means this—that it is 8 inches for the first mile of a canal, and increasing at the ratio by the square of the distance in miles; thus a small navigable canal for boats, say 30 miles long, will have, by the above rule, an allowance for curvature of 600 feet! Think of that, and then please credit engineers as not being quite such fools. Nothing of the sort is allowed. I must, however, state that college astronomers have made the student engineer to think that in his method of levelling what is known as the 'backsight' cancels any curvature by his 'foresight' and so on. It is only a theory, and if astronomers declare that our method of levelling cancels the obligation of making this allowance, we shan't quarrel with them—it does no damage to our projects when we get into practice, but we no more think of allowing 600 feet for a length of 30 miles of railway or canal, than of wasting our time trying to square the circle."—W. WINCKLER, C.E. Here then we have *practical evidence* that falsehoods are taught through astronomical theories to our children at school. Here we have *practical* testimony that the World is not a Globe, and consequently has neither Rotary, Orbicular, or any other head-over-heels tumbling motion. Here we have *practical evidence* that the teaching of modern astronomy is mere theory and utterly false to Nature in every conceivable way possible. And yet the teaching of this so-called "most exact of the sciences," is one of the strongest evidences Secularism has to "prove the Bible a myth!" Ah! Ah!

HOTTENTOT

(To be continued).

THE EARTH—NOT A GLOBE—REVIEW,

'To Him that stretched out the Earth above the Waters; for His mercy endureth for ever.'—Psa. 136 : 6.

No. 5.

JANUARY, 1894.

PRICE 2D.

THE SUN STANDING STILL.

IF any proof were needed that the Bible teaches the doctrine of a stationary earth and a moving sun and moon, it is given in the tenth chapter of the book of Joshua. Here it is recounted how Joshua, the leader of the Israelites after the death of Moses, and the armies of Israel fought against the five kings of the Amorites and their armies, the LORD also casting great hailstones down from heaven upon the enemies of His chosen people. "Then spake Joshua to the LORD in the day when the LORD delivered up the Amorites before the children of Israel, and said in the sight of Israel;—

Sun, stand thou still upon Gibeon; and thou Moon, in the valley of Aijalon.

And the sun stood still, and the moon stayed, until the nation had avenged themselves of their enemies." *Rev. Ver.*

Now although this account is evidently quite as historical as the account of the rest of the Israel's doings and battles, yet because the teaching conflicts with the views of men and the theories of modern astronomers it is tortured and twisted by laboured "explanations" to mean anything and everything but what the words naturally mean on the face of them. And, as though to prove that all these fanciful "explanations" are off the track, no two expositors are perfectly agreed, or give exactly the same explanation of the passage. They are only alike in one laudable but misguided intent, and this is, to save the Scriptures from reproach and to "harmonize" the account with the theories of modern astronomy and the views of so-called "scientists." It never seems to enter the minds of these well-meaning expositors to question the truth of this modern "science," but only how most plausibly to "reconcile" with it ancient and Biblical Cosmogony. This is not as it ought to be. We shall make no such futile attempt, neither shall we pause to vindicate the character of Israel's God, who will, we believe, do this Himself perfectly when the day of final judgment arrives; but we shall proceed to shew the unsatisfactory nature of all attempts at reconciling

the Bible with modern astronomical theories, and boldly challenge any man, either scientist or sceptic, to give us one reasonable and practical proof that the earth has any of the awful motions attributed to it by them. If they cannot do this, and we have hitherto asked for the proof in vain, then we have both right and reason to believe that Joshua was correct in believing, with other Bible worthies, that the motion of the sun, and not of the earth, was and is, the cause of day and night.

The latest effort we have seen at impossible reconciliation calls forth these remarks. We give the writer credit for sincerity and devotion. As he has sent us a copy of his pamphlet we thank him for it, but he must excuse us pointing out clearly and conscientiously where his effort, like that of others has failed. His pamphlet is entitled "Joshua commanding the Sun to stand still. The miracle explained and defended. A lecture by the Rev. W. W. Howard, price 3d., to be obtained from the author, 47, Heman's street, Liverpool,"

We cordially agree with the opening paragraph ;—

"The subject we have to discuss to-night has engaged great attention for ages. Believers in revelation have explained and defended the wonderful occurrence with great learning, zeal, and ingenuity, and infidels have made it the favourite object of their scorn and raillery. Many theories have been advanced with a view to give satisfaction to faith and remove doubt; and the way in which the event is still regarded to-day, both among believers and unbelievers shews that not any of them have met with much success."

This is quite true, especially the closing sentence; and we think the present effort is doomed to like failure with former efforts. And for the same reason, viz; lack of faith, on the part of "believers in revelation" in not receiving the account as it stands, and ignorance of true science on the part of infidels, and others, who unreasonably revile what they do not understand, and who credulously believe any absurd theory if propounded in learned jargon and uttered in the name of "Science." Thus the "Christian" has generally much too little faith in the All-wise God and His Revelation to believe it, so he explains it away; and the infidel has a great deal too much faith in ever erring mortals and their philosophy, so he proudly scorns and rejects it. But, of the two, the infidel is the more consistent; for the Christian expositor, like himself, unquestionably accepts those astronomical theories which makes the Word of God of none effect, while the sceptic does not believe in a Divine Revelation. But Zetetics can boldly challenge the truth of those theories, yea, more, they can shew that even as theories they are false to Nature, as well as to the Scriptures; and so the infidel's raillery is checked—and in all reason it ought to be—until he becomes sufficiently instructed to offer some decent proof in support of his position.

Let him try, for instance, to give proof of the earth's supposed motion; as we have allowed some to try in public meetings, and the laugh is soon turned to the other side. See our So-called "Mistakes of Moses," under heading, *The Book Wrong*, which gives an instance which really occurred, in Blackburn, once when the writer was lecturing there. But we do not wish to satirize honest doubt, but rather to suggest reasons for thorough enquiry and christian belief.

FOUR LEADING THEORIES.

Referring to the printed lecture before us we find that Mr. Howard selects *four* as the leading theories by which this miracle has been explained, and which even he himself cannot accept. The first is called

"THE POETICAL THEORY."

Those who accept this theory, he says, suppose that the hours of sunlight did really appear to them to be lengthened? Someone afterwards expressed his feelings in poetry, "with the usual poetical license," whatever that is, and incorporated his poem in a book of military songs called "The Book of Jasher." We reject this exposition for the same reasons as the writer; because, "firstly, there is possibly a more reasonable view; and, secondly, the genius of Hebrew poetry lends no confirmation to its position." And we further cordially agree with him when he adds;

"I have sought all through the Bible and have not discovered one instance of a natural event being exalted into a miracle by any of its bards."
"This enquiry into the veracity of Hebrew poetry has amazed me—made me feel how, contrary to the general view, in all their highest inspirations, the Bible bards kept a clear eye upon the sober truth."

This, we think, is well and truthfully spoken. The second theory, he says, is called

"THE SPIRITUAL THEORY."

There are those who hold that God, at the command of Joshua, allowed the sun and moon to go on their journey as usual, but in their places "two other bodies of a spiritual kind were slipped in so stealthily that the Israelites were unaware of what was done." This theory, commonly held by Swedenborgians, the writer very properly rejects as charging God with decepton, and assuming an impossibility. He gives his reasons, which those who are interested to know can find by obtaining the pamphlet. Our space compels us to be brief. The next exegesis reviewed is, thirdly,

"THE OPTICAL THEORY."

Under this heading Mr. Howard says ;—

"It is true that light is refrangible, and also that we see, not as we think,

always straight and direct, but on lines of light. When light, in its flight, strikes a medium denser than that it has been travelling through, it is turned aside somewhat, and we are led to think that objects are not where they really are. If you thrust a stick into water it appears to bend at the surface of the water . . . We may also say that the stars are never where we seem to see them in the heavens, but where they were when the light we see them by left them."

So far we have been happy to agree with Mr. H., but from this he begins to flounder unconsciously in the meshes of absurd and extravagant philosophical theories. He re-affirms the popular fallacy that the sun is seen in the morning "eight minutes before he is above the horizon," that the light from some stars "would require thousands of years to cover the distance between us," and that

A "star or nebulae might be completely annihilated, and yet it would not seem to disappear from its position in the universe till its last beam of light had reached us, and that might be 20,000 years or even longer"!

He further affirms that "the axis of the earth is inclined to her orbit," that the "pole" dips so that "anyone living at the north pole would see the sun 12 or 13 days time before *he* actually rose above the horizon" (!) and moreover that "this would follow from the atmosphere bending the light beams, and the *north pole* rising by gentle graduation into the zone of day"! *Italics ours.* The writer innocently calls this contradiction "a fact," and says; "From this fact some have argued that the light rays of the sun and moon were bent, at Joshua's petition, to give him an extra 12 hours light to exterminate the enemy." And he quotes James Austin Bastow who supports this view in his Bible Dictionary. However, this theory, though "plausible" is rejected as "delusive," there being a vast difference "between the refraction of a few degrees on the one hand and that of half a circle on the other." We are then informed that

"THE FOURTH THEORY IS THE ASTRONOMICAL ONE."

Here of course, the tangle becomes greater than ever. We are told that

"The rotary motion of the *earth* was arrested, the arrested motion was prevented becoming heat, the water in the oceans, seas, lakes, and rivers was kept from obeying its natural laws, and the solar system was guarded against injury."

The writer, while agreeing, of course, with the "science" of the above paragraph, sympathises with men like Huxley and Tyndale, in their refusal to accept such an explanation, adding that Professor Tyndale, in *Fragments of Science*, remarks;

"There is a scientific imagination as well as an historic imagination; and when, by the exercise of the former, the stoppage of the *earth's rotation* is clearly realised, the event assumes proportions so vast in comparison with the

result to be obtained by it, that belief reels under the reflection. The energy here involved (in the "scientific imagination"?) is equal to that of six trillions of horses working for the whole of the time employed by Joshua in the destruction of his foes. The amount of power thus expended would be sufficient to supply every individual of an army a thousand times the strength of that of Joshua, with a thousand times the power of each of Joshua's soldiers, not for the few hours necessary to the extinction of a handful of Amorites, but for millions of years."

These calculations are all very pretty, but they are worse than useless as the Bible does not speak of "arresting the *earth's* motion," but of the *sun* standing still. Hence they are utterly beside the mark; but the above quotation serves to shew how men of "science" are led away from the Scriptures by unfaithful expositors and a false philosophy until, as Tyndale confesses, "Belief reels under the reflection." While christian men and so-called "Reverend Divines," who are paid to defend the Holy Writings, play into their hands by ignorantly, or cowardly, yielding the claims of unfounded astronomical theories so utterly subversive of Bible teaching and true Natural Science. However, it is only fair to the writer of the pamphlet under consideration to say that he rejects this "explanation" also; although, at the same time, he holds those astronomical theories by which it is supported. He also makes the same mistake of talking about the *earth's* motion being arrested instead of that of the sun, for he says;

"Why did not the ocean overflow the land? Run with a pail of water until you come in contact with a wall, and observe the effect upon the liquid, how it will dash over the side: and the sudden stoppage of the rotary motion of the *earth* (!) would naturally send the sea almost all over the dry land . . . You know the shaking you get with the violent stoppage of an express train going at sixty miles an hour, and we ask you, please, to *fancy* the result to us, and to all cattle, dwelling houses, monuments, and even trees, if the *earth*, which at the equator *moves nearly 1,100 miles an hour*, was brought quickly to a stand still."

Now that is altogether and utterly irrelevant. When will professed defenders of the Bible let it speak in its own terms? What infidel could wrest the Scriptures more from their plain literal and grammatical sense? The American infidel Ingersol writes just in the same strain respecting this miracle in his so-called "Mistakes of Moses." But is it not rather a mistake, and a grave mistake, of Ingersol, Tyndale, Howard & Co., to speak of the Bible arresting the *earth's* motion, when the account says nothing whatever of the kind; but distinctly tells us that it was the *sun* and moon which stood still? They may charge the Bible, if they like, with being contrary to modern science; but we should retort that it is both illogical and unscientific to condemn the Bible on such a charge until the "science" in question has first been shewn and proved to be true. Let them first prove the earth has any motion, be-

fore talking about the "arresting" of it. And we want something better than *Foucault's* pendulum experiment for this—especially as different pendulums will sometimes oscillate in opposite directions!—and more especially as practical experiments have already proved that the earth has no such motions as those attributed to it. The account of these experiments may be found in Parallax's great work, "Earth not a Globe." We have no space now to quote these experiments, as we are at present only engaged in shewing up the inconsistency of those who wrest the plain statements of the Holy Scriptures to suit the fanciful and absurd theories of modern "Science," falsely so-called. They may yet appear in the *Earth Review* in due course, if our friends will only come forward and sustain our hands in this unequal conflict. Some of them have already appeared.

(To be continued).

N.B.—On account of press of matter we are unavoidably compelled to leave over the completion of this article until March. But as it is already in type a complete edition has been printed in pamphlet form, price 2d. post free, to be had from the Editor. We hope our friends will help to give it a wide circulation.

STAR MOTIONS *versus* THE EARTH'S SHAPE.

It is acknowledged as an axiom by good thinkers everywhere that all truth is harmonious, and that no one fact in nature can contradict or subvert another fact. It is not so with error, or even with plausible theories; these, owing to our limited knowledge, may appear harmonious for a time, but if one fact in nature, or in history, be found out inconsistent with and contradictory to those theories, this fact alone would be sufficient to stamp the theories as false. So it has proved with the globular theory. As a correspondent lately wrote; "Satan the father of lies, has reduced the art of deception to a science, and he is at the bottom of the globular theory, which he has provided with hooks and eyes that fit in marvellously with some phenomena." But one fact has been found out which is inconsistent with, and contradictory to the globular theory, and this fact, that water is level, absolutely level, is quite sufficient once and for ever to overthrow the globular hypothesis however marvellously some of its "hooks and eyes" may fit. If the world were a globe the surface of all standing water would be convex; "Parallax" and others have proved that it is not convex; therefore the earth is not a globe. On the other hand, if the earth were a plane the surface of all standing water ought to be level; practical experiments have abundantly proved that it is level; therefore the earth is a plane. The accounts of these experiments can be obtained by those willing to go to the expense of buying the literature, so it is not our purpose to reproduce them here. What we wish now is to point out that until

these practical experiments respecting the shape of the earth are properly disposed of, no other theories, or facts, respecting star motions or even the motions of the sun and moon, will be allowed to shake our confidence in the fact that WATER IS LEVEL. This is one of our sheet anchors. The other is that the Word of Him who created the world, and who "cannot lie," is in harmony with it. So that our vessel has a strong anchor at both ends. Let friend or foe destroy these, *if they can and dare to*, and our barge will then be driven by the fierce winds about to blow over the earth, and will probably be wrecked on the sands of scepticism or the rocks of infidelity. But as long as either of these anchors will hold, and each alone is strong enough to hold, our position is unassailable and secure. Our only danger lies in the possibility of insensately slipping the anchors ourselves; but this may our chief Captain graciously forbid.

However, we write to warn at least one of our correspondents of this danger, and the lesson may be useful to others. If water has been proved to be level, and the earth therefore a plane, no manner of star motions, or sun's motion either, can prove it convex or globular. If you subsequently find out other facts you cannot explain you must wait until you can, or until someone can explain them for you, but no true Zetetic will run away from the previously ascertained fact that water is level. It is inconsistent and illogical so to act; and no reasonable man will be guilty of such folly. Settle one foundation truth and *stick to it*, at least until there is some fair attempt to overthrow it; and be assured that other "facts," if really facts, will ultimately be explicable in harmony with the foundation fact already established. This is clear and logical, yet our friend on a P.C. says;

"In the E.R. for Oct. there is one fact twice mentioned which furnishes conclusive evidence that the earth is not a plane. I allude to the statement of your New Zealand correspondent *re* the sun's position night and morning of Dec. 21st. You will see at once that this will never harmonize with the Zetetic theory; in fact it demolishes it, while it harmonises exactly with the globular theory."

So we are "demolished" again! Yes, in the same way as we have been "demolished" many times before. But will it be credited? the writer of this post-card note is the same person who wrote the previous extract given above. "Demolished" too by a penny post card! It is really too bad. But stop. We *may* perhaps find some comfort in the "hook and eye" theory, so we again pick up our pen. How do you know friend H. that the "fact" referred to is a *fact*? Has it been corroborated by careful and accurate observation? Our N.Z. correspondent owned he did not speak with absolute and critical accuracy, but only in general terms. And if his observations should prove correct, as

possibly they may, are you quite sure that they "will never harmonize with the Zetetic *theory*"? Have you ever seen the Zetetic "theory" respecting star notions, and the motions of the sun and moon? Zeteticism, you ought to know by this time, is not like modern astronomy founded on theory, but on fact; hence its name from *zeteo*, I seek or search out. We *seek* facts, hence we admitted the N.Z. letters for further corroboration or refutation; but we *search* these things out, if time and opportunity be given us, and like a beast of prey with a keen scent, we *trace them out* to their source or origin. But the work requires care and patience. Yet because there is again a seeming difficulty our friend Mr. H. rushes to post his "discovery" to the different friends who support the E.R. ! On a former occasion it was a question of "degrees" that troubled him; and if we could not immediately settle that question to his satisfaction we were in danger of losing his support, a copy presumably of the E.R. regularly posted to him once a quarter ! We therefore wrote and published our article on "Degrees," thinking it might help really honest minds enquiring after truth, and minds capable of retaining it when found. Though receiving no pecuniary benefit for our trouble it is some satisfaction to know, through the kindness of those who do pay the printer, that our services are helpful to real Zetetics, or searchers after truth. In that article on "Degrees" we uttered a word or two of advice—*Patience*; and *Perseverance*. We now repeat these words, with another word of counsel from a higher source; "Hold fast that which thou hast"; and again, "look to yourselves that we lose not those things which we have wrought."

Now, however, we are asked for no explanation, although we think we could give one, but we are simply expected to "see at once" the whole of Zeteticism quietly "demolished"! Not so fast, good friend, for we have a few questions to ask *you* first to explain before *we* give up. How is it that there are planists at present living (and even lecturing in favour of the Plane truth) in New Zealand? Can they not see the southern stars, and watch the motions of the sun and moon? Was not our correspondent a planist whose letters have so disturbed you? Yes, yes; but *he*, like a true Zetetic, does not turn his back on the fact that water is level when he looks up amongst the stars or at the sun. Take an illustration. Suppose the floor of a large hall has been carefully surveyed and found to be perfectly level. Afterwards suppose someone observes an electric light swinging around the ceiling in a way it ought not, according to *his* theory. Should we allow him to persuade us that the floor of the room had been altered, and that it was now convex? Not quite; Surely!

If the earth be a globe how is it that there is so great a difference between places of equal latitudes north and south? If the sun circle

round a south "pole," as it does around the north why should there be this difference, evidence of which we cull from our opponents even? Is the midnight sun regularly seen in extreme south latitudes? Do southern stars all circle round one southern point? Or, are there more magnetic star centres than one? Where are they? Careful observations ought to be made from different parts of the world at the same time. The sun, moon, and planets have somewhat different motions from the so-called "fixed" stars. The former are sometimes directly over the northern parts of the equator and sometimes far south of the equator, according to the signs of the zodiac they happen to be in; whilst the "fixed" stars have practically always the same declination, and remain in the same groups or constellations.

The motions of both these sets of heavenly bodies need carefully watching and accurately recording, especially at the times of rising, culminating, and setting; not however with the view of ascertaining what shape the *earth* is, but with the view of ascertaining the nature of the *motions of those bodies which are actually seen to be in motion*. Even then care will have to be exercised lest we confound the motions of *light* with the motions of *the bodies emitting the light*. We too, like our unstable friend, have made a "discovery"; and we have for sometime past been thinking of publishing it, but we have been waiting for further light on the subject. If our friends all over the world will help us by clearly and accurately recording the observed motions of the heavenly bodies it would be of service. Our discovery relates to the behaviour and motions of *light*, as it comes from above and passes downwards through the atmosphere, a medium of ever increasing density. Let observations be made at different recorded times and places, say, when the sun, or any of the heavenly bodies, is directly over the equator, or in its farthest north or south declination. When, and where, such body seems to rise, to culminate, and to set; what kind of a course it seems to follow; what altitude it appears to attain; and what are the supposed latitudes and longitudes of these places. We must remember too that all these latitudes and longitudes are calculated upon the supposition that the earth is a globe; and they depend upon observations, however accurately taken, which are affected by the question as to whether light travels in straight lines or not when coming down upon us from the "lights" in heaven above. If the moon be observed, let note be made of her apparent size, shape, and position. If a bright fixed star be selected, whether it always appear to rise and set in the same direction from the observer, or whether its position seems to be affected by atmospheric conditions. If the sun be observed, say next March when he is on the vernal equinox, whether he seems to rise due east and to set due west in all parts of the world? We should then discuss what the terms east and west mean, and so might have some useful evidence for determining the

motions of the heavenly bodies, or at least the eccentricities of the motions of light as it falls upon us from above. This will be no light task ; but it needs doing before our friend H. can prove the globular theory from the sun's apparent position in New Zealand, or before we can fully explain all *celestial* phenomena and star motions. But if our friends, or our foes, want to discover the shape of the earth, in different parts of the world, they must test it as it has been tested in England, by looking down upon the earth—not by gazing up into the sky!—and by practical and carefully repeated experiments in surveying the surface of still water. If this be too much for their means, or their abilities, then they ought to be satisfied with the honest evidence of those who have so tested it here at considerable sacrifice of time and money.

(To be continued).

GEOGRAPHICAL LONGITUDES.

“ Consider how infinitely small is the number of reliable longitudes which have been taken in the interior of countries other than Europe and North America. Take for instance Africa. Many scientific travellers have during the last century explored this continent in every direction, and the correct laying down of their route was the principal object with all of them. And how many correct longitudes are the result of their joint efforts? Dr. Lüddekke is of opinion that there are, up to the present time, hardly a dozen well-determined longitudes to be found of the interior of Africa. Many of our famous explorers, e.g. Barth, did not even try to make astronomical observations, and how unreliable the results of many others who made them are, becomes evident if we compare the longitudes which different travellers give of the same localities. Of course there are exceptions like O'Neill's determination of Blantyre, Dr. Vogel's route to Lake Tchad, and others ; but, generally speaking, as regards astronomically well-determined positions, the interior of Africa is to-day almost as much a *terra incognita* as it was a hundred years ago. The reason of this complete failure is evidently twofold—firstly that the reliable methods are too complicated or difficult for the majority of travellers, and secondly that several of the instruments as well as of the methods employed are not accurate enough.”—By *Henry G. Schlichter, D.Sc. in the Geographical Journal, Vol. 2, November 1893.*

LECTURES.

Since our last issue, lectures have been delivered by Mr. J. Smith, in London, Dewsbury, and Bradford. Mr. Isaac Smith has also lectured in Bradford ; Mr. Breach, twice at Portsmouth ; and Mr. Skellam, three times in London. Reports should be sent us even though they may be crowded out, as some of these have been.

THE “ WHY ” AND “ BECAUSE.”

A liberty great I beg leave to take
In a question or two I would humbly make,
Though scientists laugh they may have to quake,
For they cannot stand questions at all ;
That the Earth is a Globe all these learned folks say,
A tearing and spinning through space far away,
At hundreds and thousands of miles in a day,
Like a bright, and a big shining ball !

But pray will you tell me how aeronauts see
At high elevations, as high as can be,
A “ wide concave surface ” ? which proves Sir, to me
That the Earth is *not* like a ball :
Now scientists think it the greatest assumption
For any to have the audacity, bumpion,
With mere common sense, or ordinary gumption,
To question their “ science ” at all !

But tell us dear “ scientist ” if you are right,
How is it old sailors have got such clear sight ?
To pierce beyond your curvature, quite,
Some hundreds of feet, less or more ?
Should you ask for a proof of what I have said
You will find that “ Cape Hatteras,” so I have read,
“ At a distance of 40 miles off, far ahead,
Can be seen often times to the shore.”

Is the surface of water then flat Sir, all round ?
In practice it seems to be flat, but it's found
In theory curved, and all Nature is bound
To bow to the “ scientists ” laws !
And why points the compass, if you can divine ?
Both northward and southward—and at the same time,—
If the centre's not north of a plane all in line ?
Pray tell me the “ why ” and “ because.”

If the centre's the north then the “ pole ” is a myth,
And the north star is right in the centre's zenith,
So the Compass points level to centre forthwith,
While the south is the circle all round,
For a thousand miles flows the great Nile t'ward the sea
And falls but a foot, so betwixt you and me,
The rivers are level, as level as can be,
Disproving a spherical ground.

How is it, Sir, Science, “ exact Science,” so stated,
The sun's distance in miles has so differently rated,
From twenty-four millions to a hundred dilated !
And even from less to much more ?
Because this one distance, so very elastic,
Is reckoned the “ measuring rod ”—how bombastic !—
To measure star distances vast and fantastic,
Then why is it altered ? Wherefore ?

Pray how could the Ancients foretel all eclipses
 As well as the Moderns who say what the "dip" is,
 And even the Planist explain where the ship is,
 And bring it back (up?) with a glass?
 And how do folks live at the "Antipodes" station
 All hanging heads downward—Oh what a sensation!—
 And what's that stuff holding them fast, "Gravitation?"
 Is it solid, or liquid, or "gas"?

And why when canals and long tunnels are laid
 No allowance for curvature ever is made?
 Are builders, surveyors, and others afraid
 Of sliding right down the great ball?
 And why when a ship is seen leaving the shore
 Will she rise to the height of your eye, and no more,
 On mountain or plain *both behind and before*—?
 Perspectively proving no "fall."

However high o'er the sea level one tries
 Still higher and higher horizons will rise,
 And always quite level in line with the eyes,
 But nowhere the curve of a globe:
 Galileo afforded no proof in his mission,
 When punished, alas! by old Rome's Inquisition,
 But he suffered for teaching a quite false position,
 So he put on a penitent's robe.

The Law of the Lord is reliable, sure,
 The Creator's description is perfect and pure,
 And the Word of our God shall for ever endure,
 While the wisdom of worldlings shall fall:
 And heaven's "above," saith the Lord, the most High,
 The earth is "beneath" the grand dome of the sky,
 And "under the Earth" is the "water," then why
 Believe in the infidel's "ball"?

LADY BLOUNT.

"The astronomers arranged for a grand display of fireworks in the sky on Thursday night, 23rd. inst; but the ungrateful fireworks did not appear. The showman now take refuge in the clouds which shrouded the sky, and say that the fireworks were there, only they could not be seen. This is like the fireworks at Titipu, in honour of Nankipoo's execution. Nanki-poo would not see them, but they would be there all the same. It is believed that throughout the night we were careering through a storm of red-hot meteorites, the fragments of a comet smashed by a blundering planet some forty years ago. A shower of molten meteorites would have been a dramatic climax to the storms of the beginning of the week."—*The Birmingham Daily Mail, Nov. 25, 1893.*

We are glad to note that a vigorous press correspondence has been carried on by our Secretary, and other friends in the Portsmouth press, the *Wimbledon Gazette*, and other papers. Ed. E.R.

THE SECRETARY'S STATEMENT.

INCREASED PUBLICATION.

In presenting to our friends the financial position in which we stand at the expiration of twelve months, they will see at least that we have not been "making money." When, twelve months ago, some of us came together to consider the advisability of continuing our united public testimony, we hoped that every Zetetic would have come forward and joined the Society, and so helped on our God-given truth. But I regret to say this has not been the case. I, therefore, now ask every one who loves this truth to come forward and help to stem the tide of infidelity and error increasing everywhere around us. Let me ask every reader if he cannot join as a Member or as an Associate, at least to become a constant subscriber to and reader of our organ. The price will be one shilling and threepence for the next year's six numbers of the *Earth Review*, as we hope (D.V.) to issue it every two months instead of quarterly as heretofore. If you can, strengthen our hands also by joining the U.Z. Society, for "united we stand, but scattered we fall." Remember friends that it is no mere notion of our own that we are contending for, but God's own truth in Creation and His Word; and as this affects His glory and our blessing, present and future, let us see to it, that we hide not our "one talent" and so suffer loss. "Then come to the help of the Lord against the mighty." A half-penny per week is nearly the price of an Associate's subscription.

We are about to start a lending library for the use of Members and Associates. Any friend who has any books *on any of the so-called sciences* to spare, I should be glad to receive as a gift to our library. Our object in this is, that we may have standard works to refer to in our contentions for the truth. The list of books with rules can be had from me by enclosing 1d. stamp.

SOCIETY'S FUNDS.

Cash received to November 26th, 1893	£47 17 9
" Expended in printing, &c. "	£46 7 9
Balance in hand	£1 10 0

UNIVERSAL ZETETIC SOCIETY.

TREASURER AND SECRETARY.

JOHN WILLIAMS, 32, Bankside, London, S.E.

EDITOR OF "EARTH REVIEW."

"ZETETES" (MR. ALBERT SMITH), 164, St. Saviour's Road, Leicester.

COMMITTEE.

LADY BLOUNT, Bath.
 Mr. JOHN SMITH, Halifax.
 „ EDWARD D'ARCY ADAMS, LONDON.
 „ ISAAC SMITH, Halifax.
 „ AMOS PERRY, Ashton-u-Lyne.
 „ JAMES NAYLOR, Birmingham.
 „ A. E. SKELLAM, London.

OUR MOTTO.

For God and His Truth, as found in Nature and taught in His Word.

OUR OBJECT.

The propagation of knowledge relating to Natural Cosmogony in confirmation of the Holy Scriptures, based upon practical investigation.

RULES.

- 1—Everything extraneous to "Our Object" to be avoided.
- 2—The so-called "sciences," and especially Modern Astronomy, to be dealt with from practical data in connection with the Divine system of Cosmogony revealed by the Creator.
- 3—Every honest opponent to be treated with respect and consideration.
- 4—*Members* to subscribe not less than six shillings a year, which entitles them to two copies of *The Earth (not-a-globe) Review* each issue, and a copy of every paper issued by the Society. Such will be also eligible to be voted to serve on Committees, to vote on motions, to write articles (subject to editorial approval) for the *Earth Review*, and to propose (subject to Rule 8.) any alteration thought to be beneficial to the Society.
- 5—*Associates* to subscribe not less than two shillings and sixpence per year, which entitles them to a copy of every publication issued by the Society.
- 6—All subscriptions to the Society to be made in advance (quarterly if desired) and to the Secretary.
- 7—The financial year to commence on September 21st.
- 8—Three months notice to be given *in writing* to the Secretary, before any alterations, or additions to the Rules can be made. The Secretary to bring any suggested alteration or addition before the whole of the Committee, to vote on the final decision.
- 9—Every meeting of the Society to be opened with prayer and the reading of some portion of the Holy Scriptures.
- 10—The Society's meetings to be held (pro. tem.) at 32, Bankside, Southwark, London, S.E.

Signed on behalf of the Committee,

JOHN WILLIAMS, Secretary.

P.S.—Would friends whose subscriptions to the U.Z.S. are now due kindly forward the same to the Secretary, who will acknowledge them. Friends wishing to form local branches of the Society are requested to write to the Secretary.

CORRESPONDENCE.

All Letters intended for "THE EARTH (not-a-Globe) REVIEW," must be legibly written on one side only of the paper, and should have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. A stamped addressed envelope to be enclosed for a reply. Short pointed letters or articles preferred.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c., held over or declined.

Letters must be prepaid, and addressed "ZETETES,"

*Editor of The EARTH (not-a-Globe) REVIEW, Plutus House,
 St. Saviour's Road, Leicester, England.*

NOTES.

W. M. Runciman, New Zealand.—Thanks for copy of your Lecture on the *Zetetic Philosophy*. It is good and suggestive. Opponents have said that that if they were only in southern latitudes they could easily prove the earth to be a globe, but it seems that thoughtful friends living there are still satisfied that the earth is a plane. *New-Zealanders Forward!*

Dayswater.—Thanks for sight of the *Geographical Journal* and other help. Would be glad to see other Nos. of the G.J. occasionally, if they contain matter suitable for the E.R.

J.A., Belfast.—Thanks for cuttings, &c. Could you obtain for us the loan of the block for the drawing of the *Avenue of Palms*. It is a good illustration of perspective principles.

Auckland, N.Z.—Thanks for two pamphlets on the so-called "Higher Criticism." We hope to take up this subject ere long.

Southark, S.E.—We also have given copies of the E.R. and other pamphlets to the Monk "Ignatius," when he was in Leicester. He stands up to defend the Inspiration of the Holy Scriptures, so if he is consistent with his utterances on this question he must accept Bible teaching respecting the structure of the earth. Let us hope he will. We are glad to see the "*Times of Restitution*" (America) is taking up your challenge to discuss this important question. We will page the E.R. as you suggest so that the two years' *Reviews* may be bound together. The previous pages can be altered neatly with a pen.

"*Enquirer*."—We do not notice anonymous correspondence, and we very much doubt whether you are the enquirer after Truth you profess to be.

Hottentot.—We have been compelled to reserve your long letter with several others, for lack of space.

Wm. Carpenter.—Ditto. In our next?

Letters to the Editor.

Doncaster, Oct. 9th, 1893.

Dear Sir,—I saw the other evening a gentleman from New Zealand, who declared they had a considerable amount of twilight there, and further that the outward voyage was made round the Cape of Good Hope to the east, and the homeward voyage east to Cape Horn, and then to the west coast of Africa before turning north, to get the benefit of easterly currents, and thus the outward and homeward voyages circumnavigated the "globe" in S. latitudes in a time which would be impossible if the degrees of longitude were so much larger as they should be were the earth a plane. Have you any reliable information on this point, or can you refer me to any books that give it. Birley's book (Parallax) says p. 96, last line, the direct distance Valencia to Cape Town is 1,164 miles—this must be a mistake. The S. African Steamers from Southampton cannot do it under 15 days. I am sure that one of the most pressing matters that requires settlement in this controversy in the measurement of a degree of longitude at two different latitudes south of the equator: or some reliable information from a sea-captain who has sailed a degree there, and can give some reasonably good estimate of the distance.

Believe me, yours very truly,

H. C. BOWKER, M.A.

"Degrees" can only shew the sun's motions, or the motions of light. But reliable information is needed concerning distances and degrees in southern latitudes, and we have not yet got it. Whenever it comes, however, it cannot overthrow the fact already established that water is level, and the earth therefore a plane.

Ed. E.R.

Belfast, Oct. 28th, 1893.

Dear Sir,—May I introduce myself to you as a fellow truth seeker, and one who had the privilege of receiving her first lessons from the late Mr. John Hampden.

What a revelation it was, and has been ever since! . . . It was at Keswick that I learned the overwhelming fact that the Lord Jesus would one

day in the near future return to earth—to this very earth.—This made all about the earth very important to me. I earnestly prayed for God to shew me more and more clearly the truth of Christ's return, and the amazing glory of His purposes with regard to this Earth, which he comes to redeem from sin and sorrow and death.

It was this study which prepared me for the knowledge of the true form of the Earth when the first intimation of this "sunburst" of truth reached me. I had hung over the passages relating to this subject, but owing to my astronomical training I had given them up in despair. But gradually through Mr. Hampden's papers the light broke in and I quickly gave astronomy to the winds, although at one time I was very proud of my knowledge of that so-called "science."

And now, only last summer, has come to me a fresh "sunburst" of knowledge through reading *The Faith*; but I am sorry its precious pages are sometimes marred by allusions to this so-called "globe."

The "Earth Review" is a great boon, and the knowledge contained in it is making progress here, although we have, of course, much opposition. I have a valued copy of "Parallax" which is very seldom in its place on my bookshelf!

I have attempted to make a model of the floating earth according to the Scriptures, and hope to have it finished soon. The continents and islands are moulded on glass, a friend has made beautiful little miniature ships to show the voyage "round the world." It is surrounded with the great ice barrier, and we hope to have a main-spring above with a small electric light to represent the sun, so as to shew the cause of day and night, summer and winter, &c. . . .

I should apologise for saying so much about myself, but I thought you would be interested in hearing how God makes a true Zetetic. So thanking you in anticipation, I am,

Yours very sincerely,

J. B.

Lyndhurst, Oct. 10th, 1893.

Dear Sir,—“I lived for 20 years at Brighton (in Sussex). On several occasions I saw the Isle of Wight from Brighton, distance 40 miles. The newspapers tried to explain this strange fact by saying that it was only a mirage produced by refraction, but I knew better, for when the ships are seen so refracted they appear inverted in the air, which was not the case with the island, besides, I could see the sea on the other side of the island, beyond it shining in the solar rays, which proved that there was no refraction or mirage. The sea beyond looked as if above the island in perspective proper. When I stood on the cliffs near Kemp-town I saw three ships almost in a line with one another, one near, the second further off, the third on the horizon, the second ship appeared above the first, the third above the second, and I could see that the intervening water was level in perspective, the horizon rising to the level of the eye. If the earth were a globe, a man on the top of a mountain ought to see the horizon line below him, and the earth would slope down away from him on all sides, no matter how large the globe was. The altitude from which I viewed the island was about 200 feet above the sea level, so allowance must be made for that. 40 m. squared X 8 in. equals 1066 ft.—200 equals 866 ft. Now the highest part of the Isle of Wight does not exceed 500 feet, thus there would be a clear 300 feet at least above the highest point, below the visible horizon, and it should be noted that I saw not merely the top of the island, but the whole island from the top to the cliffs on the east end near the shore, so no amount of refraction or mirage can account for my seeing an island 800 feet higher than it ought to be if the earth were spherical. It is said that sometimes the coast of France is visible from Hastings, but I do not know the exact width of the channel at that point.

I am, Sir,

Yours in the Word,

C. R. COOKSON.

Darlington, Oct. 11th, 1893.

Dear Sir,—Many thanks for sending parcel.

I have had on my shelves for some time "Earth not a Globe," and appreciate it.

Isaac Smith's latest work is good; but he is decidedly in error when denying that the moon is related to the tides.

The Post-diluvians (possibly also the Anti-diluvians) call the moon, *Meni* or *Mene*, because she is the timepiece of Nature—measures the equinoxes—adjusts eclipses, and regulates the tidal rhythms.

On Shields bar (Tyne) it is always high water at 3 o'clock p.m. whenever the moon (*Mene*, the measurer) is at new and full—I connect the measuring power of the moon with Gen. 1.14—she is God's chronometer.

But there is another mysterious tidal movement, not at all easily measured, and the cause of which is unknown; *this* may be related in some way to some responsive throbbing between the earth and the deep.

It reminds me of the wonderfully and most regular ebb and flow of the barometrical column, twice every day—most mysterious.

I'm not prepared to accept all the lunar influence subscribed to by astronomers; but my observations on the sea-coast (east) for 40 years show a most regular relation between the tides and the phases of the moon.

Why do the tides not always ebb and flow at the same hour and time? but are later always by about three-quarters of an hour?

I think we want to know more how the moon, the atmosphere, the mercurial column, and the tides are related.

Yours faithfully,

(Dr.) EDWIN W. FOSTER.

ANTI-INFIDEL LECTURES.

Nov. 7th, 1893.

Dear Sir,—I write to inform you that Mr. Celestine Edwards, editor of *Lux*, has been to Ashton-under-Lyne, giving lectures professedly opposing Infidelity. But I find he is an infidel himself on many points of Scripture. He gave one lecture entitled *Bible Difficulties*. But he first makes the difficulties and then tries to "explain" them. He does not believe that Noah's Flood was

universal though Moses says it was; and he does not believe the Bible account of Creation, but believes the Earth to be a globe. He does not believe the sun and moon stood still at Joshua's command, although the Bible distinctly says they did so.

After his lecture I asked him if he could give a practical proof that the Earth was not a globe. He said a ship going out of sight at about six miles was a proof, but he did not shew how. So I went on the platform to discuss about ships going out of sight at sea, but he would not argue about this. He said he would discuss about Joshua and the Sun and moon. I then told the people that there was no difficulty about this miracle, the sun being a comparatively small body, and moving around the heavens every day, and that if the earth were a globe, this part of the Scripture could not be true. Then I said the very fact of the Ark being built was a proof that the Flood was universal. For we are told that all in the dry land died. I told Mr. Edwards that if the Earth was a globe there could be no absolute "up" and "down," and that if some one went "up" to heaven from England, and a friend went "up" to heaven from New-Zealand they would be going in two opposite directions. I asked him when they would meet? But at this point the chairman got on his feet and said he could not allow Mr. Perry to go on any longer as he had gone all round the "globe," so it was time to bring the meeting to a close!

As the Bible teaches that heaven is "above" us, why should a man lecture against infidels when he does not believe the Bible himself?

Yours faithfully,

Ashton-u-Lyne.

A. PERRY.

New Plymouth,

New Zealand,

Oct. 5th, 1893.

(Received Nov. 9th.)

My dear Friend,—I enclose you a cutting from our daily paper of Sept. 22nd, 1893, and a few pamphlets to shew you what I have been doing—my lecture was delivered before the Mutual Improvement Class of this town—and although it was the last night of the

session, it is admitted on all hands to have been the best; there was nearly 200 persons present.

I was not a member of the class; and was allowed 40 minutes for lecture—when the time had expired, a vote was taken and I was allowed another 40 minutes—when 9 o'clock was reached, a vote was put to adjourn the meeting for a fortnight, an amendment was put to allow Mr. Runciman another hour to hear and answer questions, which was carried unanimously, and only some 5 or 6 persons left the hall. You see that I spoke for 2½ hours, and can assure you it was the greatest feat in talking I ever did. My advertisement was put in the paper after the lecture, now two weeks since, and as yet no one has accepted my challenge to debate the question with me. I have had a very lively time since the lecture, hearing and answering questions, but none as yet seems to relish the position of defender of the greatest monstrosity ever palmed upon us in the name of "science"—however we are waiting with patience.

I shall let you know how the case proceeds; and hope to hear from you by first mail.

I shall be glad to answer your questions

We have had a dreadful season here for rain and wind—we hope however that now we shall have spring and summer of a very pleasant kind. Trade in N.Z. is fairly good—perhaps good enough to warrant some of our Zetetic friends coming this way to help us.

Yours very sincerely,

WM. M. RUNCIMAN.

N.B.—I have lately been appointed a Justice of the Peace in New Zealand.

[The Report of the Lecture will be found in another column. ED.]

Dear Sir,—A Mr. Caldwell Harper wrote to ask me, "Are not Mr. Revell's admissions somewhat of a bomb in the Zetetic Camp?" I replied, "O dear no! Why should they be! Every 'bomb' that falls into the 'Zetetic Camp' necessarily falls into six miles of standing water which is horizontal from end to end! and upon the flat banks which the 'Zetetic Camp' is founded. Consequent upon this, the fuse of the 'bomb' is instantly put

out. There is only one "bomb" that will ever have any effect in the "Zetetic Camp," and it is a "bomb" you have not yet been able to manufacture! Prove by a practical and a direct appeal to six miles of standing water, anywhere in the world, that curvature exists at the rate of eight inches per mile, multiplied by the square of the distance in miles." This, Sir, is the bomb our enemies need before they can hurt our camp, and until this is manufactured either in the heavens above, or on the earth beneath, or in Hades under the earth, we shall only laugh at every other missile. C.H. replied, "Even if certain particular pieces of water are flat, the southern stars show conclusively, that the earth at large is not." To this I made answer, we do not say that "certain particular pieces of water are flat," but the surface of all standing water EVERYWHERE is horizontal. This fact is confirmed by your own science text books! Lardner in his "Natural Philosophy," p. 16. says, "a liquid surface when at rest always assumes the form of a horizontal or level plane." The "southern stars" do not in any way shew that the earth is not a vast irregular plane. Their motions have no more to do with the shape of the earth or water than the colour of your eyes has to do with the shape of your feet; I can only look upon such a quibble as the confession of a defeated gladiator. If—and C.H. may refute this if he can—if the World be a rotating sea-earth globe, then it is an absolute necessity that the water on its surface must partake of its curvature EVERYWHERE, and consequently nowhere can its "surface when at rest assume the form of a horizontal, or level plane"! This is the *experimentum crucis*, and where is the man, except a Zetetic, who now dares to appeal to the surface of standing water anywhere in the World. But, Sir, my friend tried the "Lycopodium experiment" to prove the world's rotation, and finding it a disgusting failure he said, "I should like to find out who first suggested this

particular incantation"! Now why did not my friend put the basin of water containing the charcoal and lycopodium up among the "southern stars" to prove his globe's rotation? If the "southern stars" shew conclusively that the World is a rotating sea-earth globe my friend should have tried the "lycopodium experiment" not on the floor but upon the ceiling! That is the place of the southern stars. Our friend says the N.Z. evidence proves at any rate that the sky does not revolve round the North Pole as its only pivot," and therefore that Zetetic Astronomy is wrong.

I replied, In Airy's Popular Astronomy he says, "it is established as a general fact, that all the stars move accurately in circles round one centre, this is a fact of accurate observation . . . the stars move accurately . . . as if they turned uniformly round an imaginary axis." Professor R. S. Ball says, "We may suppose that the celestial sphere is revolving round the earth from east to west, while the earth is at rest." Does this prove that modern astronomy "is all wrong"? What is sauce for the goose is sauce for the gander you know.

C.H. confesses;—"I cannot account for the visibility of lighthouses, etc. at such great distances on the globular theory, without supposing a great deal of refraction." Yet—and the attention of an "Enquirer" is requested to this confession—we are told that "Zetetics often claim a most unlikely amount of refraction (see Parallax)." But now comes the final confession in favour of Zeteticism. He says; "No doubt water is horizontal." There! after about three years our friend at least confesses to the truth; but alas! he tries to turn its keen edge away from his own soul by saying, "but horizontal means parallel to the horizon and the horizon is obviously circular." As if a circle could not lie flat!

Yours truly, JOHN WILLIAMS.

A VOYAGE TOWARDS THE ANTARCTIC SEA.

(REPORT BY WM. S. BRUCE.)

"On January 12th, 1893, we saw what appeared to be high mountainous land and glaciers stretching from about 64° 10' W. to about 65° 30' S. 58° W.; this I believe may have been the eastern coast of

Graham's Land, which has never before been seen. But it would be unwise to be too certain, for *it must have been 60 miles distant.*"

"METEOROLOGY.—Periods of fine calm weather alternate with very severe gales, usually accompanied by fog and snow, the barometer never attained 30 inches. The records of air temperature are very remarkable: our lowest temperature was 20°.8 Fahr. our highest 37°.6 Fahr., only a difference of 16°.8 Fahr. in the total range for a period extending slightly over two months. Compare this with our climate; where in a single day and night you may get a variation of more than twice that amount. The average temperatures show a still more remarkable uniformity."

"December averaged 31°.14 Fahr. for one hundred and fifteen readings; January 31°.10 Fahr. for one hundred and ninety-eight readings; February 29°.65 for one hundred and sixteen, a range of less than 1½° Fahr.

This I consider to be very significant, and worthy of special attention to future Antarctic explorers, for may it not indicate a similar uniformity of temperature throughout the year. Antarctic cold has been much dreaded by some; the four hundred and twenty-nine readings I took during December, January and February show an average temperature of only 30°.76 Fahr; this being in the very height of summer in latitudes corresponding to the Faroe Islands in the north, but I believe the temperature of winter will not vary very much from that of summer. This uniformity of temperature partly accounts for the great accumulation of ice which is formed, not on account of the great severity of the winter, but because there is practically no summer to melt it."

"Mr. Seeböhm has vividly pictured the onrush of summer in the Arctic; *but how different in the Antarctic.* There, there is eternal winter, and snow never melts. As far north as a man has travelled he has found reindeer and hare basking in the sun, and country brilliant with rich flora; *within the Antarctic circle no plant is to be found.*"

"Long shall I remember the beauties of these ice-bound scenes, the grandeur and the silence. One's feelings cannot be expressed, one's thoughts cannot be fathomed as one stands alone during the night watches on the deserted deck while the sun skirts the horizon and paints the world with colour, and the white ice floats in the calm black waters."

REPORT BY C. W. DONALD, M.B., C.M.

On the passage out, we, on board the ACTIVE, touched at the beautiful Island of Maderia in October, and two more months landed us in the barren Falkland Islands. Sailing thence on December 11th, we crossed the stormy waters to the east of Cape Horn, and saw our first

iceberg on December 18th. On the same day we sighted Clarence Island—one of the South Shetlands. These are called after our own northern Shetlands, and the part sighted by us lies only some 60 miles nearer the pole. *But what a difference between the two places.* Our own Shetlands bright with ladies dresses in light summer garments, and carrying tennis racquets and parasols, the South Shetlands, even in the height of summer, clad in an almost complete covering of snow, only a steep cliff or bold rock standing out in deep contrast here and there, the only inhabitants being birds or seals; and even the bird life, with the exceptions of the penguins, is scanty. Sir James Ross on his third voyage entered the ice at nearly the same spot, and, fifty years before—all but a week—had sheltered from a westerly gale under the inhospitable shores of Clarence Island. Its highest point stands 4557 feet above sea-level."

"Taking the average snowfall as one inch a day, that is to say about thirty feet a year, the foundations of each of these bergs must have been laid down about sixty years before it becomes a separate entity, now the question naturally arises—*why should these bergs differ so much from the high pinnaled bergs of the north?* The latter, it is well known, are formed from deep glaciers, running in narrow ravines. But still this does not answer the question. I think the explanation must lie in the geological structure of the two lands."—*Geog. Jour. Vol. 2, Nov. 1893.*

[Query. Is not the explanation to be found rather in the fact that there is no summer there, like there is in the north? But there ought to be if the earth were a globe. But as there is not it proves the earth is not a globe. In the above quotations the italics of course are ours. ED. E.R.]

"TRUTH." (?)

"A formidable rival has appeared to the lunatics who persist in maintaining, in defiance of argument and demonstration, that the earth is flat. He hails from the town of Dumfries, and has embodied in a book a New Theory of the Universe. My acquaintance with this bold spirit is derived from a letter addressed by him to a Member of Parliament soliciting an order for one copy of his book, price 2/6, post free. The following extracts will show that the author does not under-rate the surprising nature of his discoveries:—

I can assure you it is the greatest discovery ever yet brought out in science, and will certainly bring immortal fame to Scotland. . . . It is the masterpiece of the nineteenth century, the crowning point of science, and no work has yet received higher praise.

No one, I think, will contradict this last assertion."—*From "Truth," Oct. 12, 1893.*

[We should naturally expect "Truth" to speak the truth at all times; but there are two libels against the Planists in the first two lines of

the above quotation. They are first-called "lunatics"; and then it is asserted they maintain that the earth is flat in "defiance of argument and demonstration." The pages of the *Earth Review* are evidence that these statements are libels; and if the editor of so-called "*Truth*" will open his pages for discussion on the shape of the earth we will give him further evidence of his departure from veracity.

With regard to our "rival" of Dumfries we may say that he is evidently on the side of "Truth" and the globularists, as regards the shape of the earth; and if this great boaster is one of our most formidable opponents, we need not fear much for our position as Planists. Our opponents are welcome to his assistance. Perhaps he would make a suitable companion to "Truth" of the above quality, whose joke is as stale, and as flat, as the surface water of our common canals! ED. E R.]

IS THE EARTH A GLOBE?

At the meeting of the Mutual Improvement Society, New Plymouth, N.Z., on Thursday evening Sept. 22nd, 1893, a lecture was delivered by Mr. W. M. Runciman on the above subject. There was a large attendance, and unusual interest was taken by the audience in the subject under discussion.

Mr. Runciman in his opening remarks, stated that in bringing what is known as the "Zetetic" philosophy under the notice of the members he was actuated chiefly by a desire to create interest in a matter of scientific importance, and which had not received much attention from the people generally. They had been told that the earth was a globe, and the majority of people had accepted that statement without question. He would endeavour to show them that the globe theory was an erroneous one, and would not work out when tested by facts. He briefly stated the Copernican system of astronomy which affirms that the earth is a globe, and then he proceeded to urge the reasons against that system. He stated that the believers of the Zetetic philosophy held that the earth was not a globe, and that it has neither diurnal nor annual motion, but on the contrary the earth is an immense plain, perfectly at rest, except the beautiful and gentle rising and falling on the mighty waters by which the tides are produced. First of all he would draw their attention to the fact that there is not a single sentence in the entire Bible that suggests the idea that the world is a globe in motion. No human being if they read the Bible from beginning to the end would have the least idea that the earth was a globe or planet, travelling through space at the rate of seventeen miles a second or travelling through space at all. He then referred to modern science and quoted from various authors. J. Glashier, F.R.S, in his work "Travels in the

Air," states: On looking over the top of the car, the horizon appeared to be on a level with the eye, and taking a grand view of the whole visible area beneath, I was struck with its great regularity; all was dwarfed to one plane; it seemed too flat, too even, apparently artificial." In his accounts of his ascents in the air M. Camilla Flammarion states:—The earth appeared as one immense plane richly decorated with ever-varied colours; hills and valleys are all passed over without being able to distinguish any undulation in the immense plane." He quoted an engineer of 30 years standing who wrote to the *Birmingham Weekly Mercury* in February, 1890 to the effect that all locomotives used on the railways are designed to run on what may be regarded as true levels or flats; there are of course, partial inclines or gradients here and there, but they are always accurately defined, and must be carefully traversed. But anything approaching to 8in. in the mile, increasing as the square of the distance "could not be worked by any engine that was ever constructed." The Rev. T. Milner, M.A., writes:— "Vast areas exhibit a perfectly dead level, scarcely a rise existing through 1500 miles from the Carpathians to the Urals." He produced a table giving the supposed curvature of the earth according to the Copernican theory. The table showed that in a distance of 164 miles there ought to be, if the earth be a globe, a curvature of 24,000 feet! He asked who could believe such a theory. He quoted from many of the leading scientists, thus showing considerable research on the subject. A number of members criticised the lecture.—*From the New Plymouth Daily Paper, N.Z.*

MORE ASTONISHING BIBLICAL FACTS.

"The Bible by Modern Light." Creation to the Patriarchs. By Cunningham Geikie, D.D., L.L.D. Edin., D.C.L. Illustrated. (London: J. Nisbet and Co.)

Chapter IV. of this book opens as follows: "The zeal to defend the Word of God from all hostile attacks is a noble one, but the history of the past is a continuous lesson of the supreme importance that it be a zeal according to knowledge." On the lines followed by Dr. Geikie, the history of the present seems likely to supply the same lesson. In his anxiety to square the statements in Genesis with the discoveries of science, he makes assertions which have the charm of novelty, but also the vice of inaccuracy. For example, "Moses affirms that the sun, as well as the moon, is only a light-holder. Astronomy declares that the sun is a non-luminous body, dependent for its light on a luminous atmosphere." It is to be regretted that the authority for this astounding statement is not given. The implication is that science confirms the "Mosaic" account of the existence of light before the sun, and denies the emission of radiation from the solar nucleus. Modern astronomy finds in the contraction of the sun's mass the probable cause of maintenance of his energy. Again, "Moses asserts that there is an

expanse extending from earth to the distant heights in which the heavenly bodies are placed. Recent discoveries lead to the supposition of some subtle fluid medium in which they move." If, as we presume, Dr. Geikie refers to the ethereal medium, which is supposed to fill space and also the spaces between the minute particles of all bodies, his ignorance of the several "states" of matter does indeed evidence a zeal not "according to knowledge." But surely he knows, or should know, that to the Hebrew of old, as to the Greek of Homer's time, and to the Polynesian of to-day, the firmament was a solid dome, and no ether-filled expanse in which the stars perform their movements. . . .

Dr. Geikie represents a class of fretful, uneasy-minded expositors, who tremble lest the theory of the inspiration of scripture should be upset by the non-confirmation of its scientific, historical, and topographical statements by modern research. Why this feverish anxiety to harmonise the nebular hypothesis with the first verse of the Book of Genesis, and the reference to Accad with the pre-Babylonian civilisation? He hastens to contend that "in any case the book as it stands is to us the very word of God, speaking as only He could, through His servants, to mankind." It seems well-nigh incredible that with "the latest translations of the Assyrian and Babylonian tablets" before him, and with the consensus of all competent scholars as to these recording the cosmical legends whence those of Genesis are derived (?) that a writer professing to illuminate the "Bible by modern light," can place himself in such an *impasse*. . . . But our chief complaint against this book is its lack of straightforwardness. It is an evasive commentary. Every crucial question is clouded in ink, after the manner of the retreating cuttle-fish. The chapters on Adam and Eve and their descendants, and on the Flood, are filled with a mass of interesting but irrelevant talk. . . . A few cheap rhetorical phrases about that "terrible and all-destructive visitation" which the "condition of things among mankind" drew "down as awful punishment," are followed by discussions on the size of the ark, and the volcanic commotion that might have brought about the "catastrophe." Nowhere does Dr. Geikie come to close quarters with the difficulty of reconciling the legend of man's special creation with the demonstration of biology as to his unbroken descent with modification from lower forms (!) or the legend of his paradisaical state with the evidence supplied from every habitable part of the *globe* (!) as to his primitive savagery; or the legend of a flood with the geological arguments there against, to say nothing of the grave ethical aspects of the question. Such methods as these, while confirming no man in the faith, and convincing no sceptic, moreover, do great injustice to the Bible. For they obscure its real value as a record of ancient speculations (Oh!) into the causes of things corresponding to those of other peoples than the Hebrews.—*From the Daily Chronicle, Oct. 17th, 1893.*

THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

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THE SUN STANDING STILL.

(Continued).

THE LATEST EXPOSITION.

But our readers will naturally be anxious to know what is the final "explanation" given by the writer in question, who acknowledges that he had previously been "utterly bewildered with every attempt either to explain the miracle, or to explain it away." We shall let him speak for himself. He says;—

"I have now a FIFTH VIEW to lay before you, which appears to be both rational and simple." . . . "My *belief* is this: Joshua and his men having walked all night, as the 9th verse tells us, would be tired next morning, but God caused a great trembling to spread itself amongst the foe, and there was an easy victory. When the war had pursued the Amorites some distance, hailstones fell upon them and did much damage. At the approach to Beth-horon the hailstorm increased in fury; and Joshua, seeing the devastation produced, and being cognisant of the fatigue of his men, *prayed Heaven to let the hurricane go on* till total and irreparable disaster was inflicted."

We refrain from saying all we think about this so-called "explanation," as the writer is evidently both sincere and devout; and he says that "it flashed across my mind many years ago, when I was on my knees." But we think it doomed to the same failure as the rest, and for similar reasons; it is not true to the sacred narrative. It reminds us of what the editor of the *Daily Chronicle* said of Dr. Geikie's book, *The Bible by Modern Light*. "He makes assertions which have the charm of novelty, but also the vice of inaccuracy." (See fuller remarks from the *D.C.* in another page). This is the case with the present attempt. We have no record that Joshua "prayed Heaven to let the hurricane go on." This is an assertion, not of the narrator, but of the "expositor." Joshua prayed for the *sun* to "stand still," not for the *hailstorm* to proceed, and we are told that "there was no *day* like that, before it or after it, that the LORD hearkened unto the voice of a man for the LORD fought for Israel." But to get rid of this fact our expositor says;