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**THE EARTH.**

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**THE ROTATION OF THE EARTH:  
HOW TO OBSERVE IT!**

*Extracts from an Address given by LADY BLOUNT, at  
Hampton Place, Brighton, on April 19th, 1903.*

An article with a similar heading to the above appears in the March number of *Past and Future*. This journal is described, on its title page, as "a monthly journal of the Second Advent, and investigations concerning Biblical Chronological, Astronomical, and Historical subjects."

With the hope of the Second Advent we entirely agree, and with the investigation of the other subjects mentioned we are also in harmony. But we want these subjects investigated in a reasonable and Scriptural manner. The editor of the paper professes to uphold Bible teaching, and for the greater part he does so on Chronology and historical subjects. But on astronomical subjects and Bible Cosmogony we believe he is entirely astray, and leading others astray in helping to support the infidel science of the day. He upholds the doctrine of a whirling globe, flying through so-called "space" faster than a flash of lightning.

How the Lord will return to such a flying ball the editor does not trouble to explain, much less how the holy city—the New Jerusalem—will "come down from heaven" to rest upon any particular locality of such a madly whirling sphere! But these things he perhaps regards as trifles compared with the question of the time it takes this cannon-like ball to go through its various evolutions, flying now east and then, without any adequate cause, turning back in its so-called orbit, and shooting west.

It is not often that first-rate astronomers try to prove the earth's motions; but occasionally some of their disciples will try their hands at it. Mr. Dimpleby goes a point further and tells his readers "how to *observe* the rotation of the

earth"! This is a very desirable exercise, and it will be interesting to the readers of *The Earth*, as well as the readers of *Past and Future* to watch such an interesting proceeding.

He begins by saying:—

"Planetary motion has now become such an interesting part of astronomy for the purpose of measurement, that there need be no surprise that many persons study it diligently. One of these motions, and one by which Biblical history is so clearly proved, is the rotation of the earth in twenty-four hours. This may be witnessed by observing the following explanations."

From this paragraph it would appear that the readers of *Past and Future* are treated to a novel way of observing the earth's motions. They are invited to do so "by observing the following explanations"! Of course, Mr. D. should know the capacities of his readers better than we do; for our part we should be inclined to give them credit for a clearer perception than is implied in the above paragraph. We think they will be able to see at least some slight difference between watching "the rotation of the earth," and simply "observing the following explanations"! At all events we know that Zetetics are gifted with sufficient perception to see through this evasion, as I shall now proceed to show. But before doing so I wish to state that I am fully persuaded that Mr. Dimpleby does not uphold error wilfully.

The article begins by "explaining" that the "heavens around us are *regarded* as a circle, or meridian line of 360 degrees or portions." We are further informed that astronomers draw this line "above and around the earth in the centre." The heavens therefore are in a "line," and there is an "above" as well as "around" to the earth; but this "above" and this "around" which may be regarded as a "circle," is nevertheless "in the centre" of the earth. This is very deep science no doubt, as the centre of the earth is said to be 4,000 miles below the surface. But we must pass on to notice other equally scientific explanations.

A diagram is given of the constellation of the Great Bear in relation to the North Polar Star; and we are informed:

"The Polar star never moves. It is like a nail driven in the sky; but all the other stars revolve round it in circles according to their distance. The stars near it move round it in small circles, whilst those more distant travel in larger circles. Observing these facts, we notice that the Polar star is not in the Zenith overhead, but about 45 degrees

or half way on the line between the horizon in the North and the Zenith. Here we have a proof that the *axis* of the earth upon which it turns is not perpendicular, but oblique, because the reason why the stars travel in circles round the Polar star is that the northern or upper axis of the earth points to the Polar star."

This paragraph is in the editor's usual style. He is always giving "reasons" to his readers why certain appearances are seen in the heavens, and why they should not believe in the reality of these appearances. Perhaps his readers are docile enough to accept all these "explanations" in a becoming spirit of humility, since they are propounded with such assurance and authority. But we are afraid that our Zetetic readers are not so docile, and they would ask us some troublesome questions if we were to "reason" in this manner.

For instance we are told that the "Pole star never moves," but "all the other stars revolve round it in circles"; and that because the other stars revolve around the Polar star this is a "proof" that the Earth revolves upon its "axis"! So that the way to observe the "rotation of the Earth" according to Mr. D., is to watch the stars revolve about the pole star! This is a very pretty proof indeed.

It almost seems like an oversight on the part of the astronomers that they have not more vigorously taken up this simple proof; it would save them from going about with long pendulums, and watching them swing, and altering their planes of vibration. But the stars of the Great Bear have one advantage over the swinging of the pendulum, *i.e.*, they always go round in the same direction, while the pendulum is not so amenable to the exigencies of astronomical theories, for it has been known on more than one occasion to alter the plane of its vibration in the wrong direction! So that the editor of *Past and Future* scores one over orthodox astronomers in sticking to the tail of the Great Bear.

Again, we are gravely informed that "because the pole of the earth's equator revolves round the pole of the ecliptic this is a *proof* that the stars do not revolve round the earth, but that the circles in which *they* (!) move round the northern pole are formed by the rotation of the Earth on its axis. This is the same as saying that because the stars revolve around the Earth therefore they do not revolve but the Earth rotates on its axis! If such "reasoning" be

acceptable to the readers of *Past and Future* it must be because their eyes have been blinded, like the editor's, to its absurdity, to say nothing of the unscripturalness, of the globular theory. It is "reasoning" in a circle as it is called, and simply leaves you where you began.

However good a chronologer the writer may be he is evidently deficient in the logical faculty, but though a man may be deficient in this, one would think that he might at least be guided by the Bible. But if a man start unknowingly from defective premises he may be led to draw false conclusions, and it also appears that he may persist in advancing these false conclusions, as though they were the truth. We know no other way of accounting for the following assertions made by this writer; and we offer this as the most charitable "explanation" we can think of under the circumstances, believing that the writer means to be honest.

It is therefore from no personal motive we thus speak, but the truth requires of us plain speaking when the veracity of the Word of God is the question at issue. We are informed that:

"If we fix a telescope between two stone pillars so that it cannot deviate a hair's breadth to the right or left of the meridian line, although it may be moved upwards or downwards upon it, we shall soon find that any star which crosses the centre of the object glass at the same instant as the sun will cross it on the following day 3 minutes and 56 seconds before the sun. *This can only occur in consequence of the rotation of the earth being 23 hours, 56 minutes, and 4 seconds.*"

This looks like a deliberate statement, and any Zetetic knows it is not true. We can hardly believe that the editor is ignorant that there is another and more feasible explanation, namely, that it could occur by the stars moving round the earth in about four minutes less time than the sun goes his daily round. We believe that the stars do so move, but the question here is not whether the stars do so move or not, but whether there is any other explanation possible of the phenomenon referred to? We know there is another and a more plausible explanation, and we think Mr. D. ought to know; yet he says: "this can only occur in consequence of the rotation of the earth"! We leave it with our readers, and conclude with one more specimen of the unreliable nature of his repeated and dogmatic assertions.

He says: "We are assured that Scripture teaches us what

the Works of God also prove, that the earth rotates on its axis, and also travels in an annual orbit round the sun." In answer to this we need only quote one or two Scripture passages, such as the Creator's question to Job: "Where wast thou when I laid the foundations of the earth? Where-upon were the foundations (*margin*, sockets) thereof fastened? or who laid the corner stone thereof."—*Job xxxviii. 4-6.*

But Mr. D. denies that the Earth rests on foundations at all. Nevertheless, it has foundations, for "He hath *founded* the earth upon her bases that it should not be moved for ever."—*Ps. civ. 5.*

No unimpeachable proof has ever been offered to the world of the earth's supposed terrible motions. The astronomers would almost give their ears for a good proof of such motions, but they cannot find one. They have the sense, however, to let the Bible alone on this point. It is only, we think, the false friends of the Bible who attempt to make it harmonize with the doctrines of modern theoretical astronomy.

We know that practical investigation has proved the Earth to be as the Bible represents it, a vast plane, or series of planes. We can therefore quote with full approval Mr. D.'s closing paragraph, although of course we give it a different application: "When the first chapter of Genesis is read in the light of scientific observation, readers are obliged to admire its accuracy, but they cannot avoid smiling at the ignorance of men who assume to contradict both Scripture and science." We think that this is the only part of the article which is really true.

If Mr. Dimpleby has no proof of the rotation of the Earth better than these "explanations" it should open his eyes to the truth. If he can find a proof not vitiated by the usual underlying globular assumptions, we shall be glad to find space for it in our journal, for as we have said before we have no personal feeling in the matter; our sole object being the truth, and the glory of God as set forth in the perfect reliability of His Holy Word.



## MAN'S PLACE IN THE UNIVERSE.

*(continued from p. 190).*

From various expressions in the article under examination, it appears that the writer is an evolutionist as well as a spiritualist, or spiritist. I mention this from no want of respect to the writer; but that we may see the standpoint from which he views the universe.

For the "development" of what he conceives to be the imperishable human soul, he assumes "infinite space and infinite time"; yet in his article he has given us no reason for believing either in one or the other. We think that the idea of "infinite space" is a fiction of the astronomers; and we know that infinite time is another.

The date of Creation is clearly intimated to those who can read the great clock-work of the universe. In fact it has been calculated from the known rates of motion of the heavenly bodies themselves. The eclipse cycles, the metonic cycle, the known periods of the transits of Venus and Mercury, with the Sothic cycle, all point backwards to the prime date of Creation well within six thousand years.

Men, ignorant of these facts, may scoff at the idea; but they cannot dislodge the sun and the moon from the firmamental heavens. But until they are dislodged, or their various movements are arrested, it is really unscientific to talk of "infinite time."

But Mr. Wallace thinks that our position in the universe lends support to the view "that the supreme purpose of this vast universe was the production and development of the living soul in the perishable body of man." It does not seem to trouble the writer that this "view" of development opposes both the Bible doctrine of a special creation, and the teaching of our blessed Lord respecting the resurrection and immortalization of the Christian's material body.

His ideas in this respect seem to be the result of that "science" which, in the above paragraph, he appears to deplore; for if his "views" of the physical universe be wrong he cannot have rightly read the "supreme end and purpose" thereof.

This, again, shows the great importance of correct cos-

mological science, or knowledge. A true knowledge of the universe tends to give us a correct knowledge of the Creator; but false views of the universe may not only give us a wrong estimate of man's place in Nature, but may lead us to ignore or to deny the Creator, as such, altogether.

This is evident from the article under review. For instance, the writer incongruously speaks of those sceptics who, supposing the universe to consist of vast systems of suns *falling* (?) "endless space," find a difficulty in believing that the Creator (if ever He made such a conglomeration!) should have "any special interest in so degraded or imperfectly *developed* (!) inhabitant of one of the smaller planets attached to a second or third rate sun," such as ours is supposed to be; while in giving his own opinion, he speaks of "the *development* of man as a *spiritual* being with ALL HIS INTELLECTUAL POWERS and MORAL POSSIBILITIES. (*Italics, &c., mine.*)

The different descriptions given of man in two consecutive pages of the article is, to say the least, remarkable; and while we, as Zetetics, think neither description accurate, we believe the truth lies between them. Man by nature, as far as we have read the evidence both from the Bible and from Nature, is not "a spiritual being," but he is a material being with the possibility of spiritual aspirations and attainments. But if he would, through the knowledge of God, "attain to the divine nature," he must give heed to the Word of the Creator, and to the message He has sent to the World through His crucified, risen, and glorified Son (*2 Pet. i. 1-4.*)

But as Mr. Wallace has so ably shewn, in the lengthy paragraph I quoted above, the tendency of modern astronomy, and especially of the "New Astronomy," leads not only sceptics to treat the doctrine of the Atonement with scorn, but even theologians to renounce their faith in a personal Creator, and in "the idea of a special revelation." Either then the "science" which leads to these sad results is grievously at fault, or our faith needs a thorough revision; but the pity is that so many professing Christians, as well as unreasoning sceptics, quietly assume that the so-called "science" is infallible, while cravenly yielding up their faith in a glorious and divine revelation.

Wherein, therefore, Mr. Wallace has dared to question the hypotheses of the "New Astronomy," we, as true Zetetic-

ics, must say all honour to him; but as we believe he has not gone far enough nor questioned those hypotheses sufficiently, we must proceed to show wherein we think his reasoning and logic are defective.

#### STAR DISTRIBUTION "IN SPACE."

If we have erroneous ideas respecting the universe it follows that our ideas are also liable to be wrong about "man's place" in that universe. One error is naturally the result of the other. And our complaint against most, if not all, of the writers who treat on this subject is that they quietly assume a self-evolved universe, or even "universes," which are not true to nature nor to fact, but based merely on astronomical speculations and hypotheses. These assumptions ought to be acknowledged as such; if they are not so acknowledged it must either be because the writer is ignorant of the fact that they have been and can be called in question, or that he is not sufficiently candid to admit the hypothetical nature of the very foundation of his evolutionary system.

Some astronomers, giving the reins to their imaginations, have speculated that there are an infinite number of stars (all "suns" of course) filling what they are pleased to call "infinite space." But infinite space never could be "filled" with any thing! And however many "universes" of stars we might imagine in different parts of "infinite space," there would always be infinite blanks beyond, which would simply recede further off as more stars were added. But the writer under review gives us good reasons for believing in "the limited extent of the universe of luminous stars." He says:

"The total number of visible stars from the first to the ninth magnitude is about 200,000. Now if this rate of increase continued down to the seventeenth magnitude, the faintest visible in the best modern telescopes would be about 1,400 millions. But both telescopic observations and photographic charts show that there is nothing approaching this number."

This goes to prove that the number of stars is limited; for as astronomical instruments grow more powerful there is a comparative diminution in the number of fresh stars revealed. This fact has only lately been discovered by the astronomers; but the Psalmist knew it three thousand years

ago, when he wrote:—"He telleth the number of the stars; he calleth them all by their names."—*Ps.* cxlii. 4.

The fact that there are dark patches in the heavens where few, if any, stars can be seen, points to the same conclusion; and these blanks of blackness are found both north and south of the equator. We are, therefore, pleased to agree with the writer that the "stellar universe," if we may use such a contradictory term, is strictly of "limited extent." As Zetetics we go further, we believe that heaven above, the earth beneath, and the waters under the earth, with all that is in them, form only ONE UNIVERSE, the limitations of which are much greater than Mr. W. would allow with his astronomical ideas of immeasurable star distances.

The measurement of star distances is amongst the most delicate and delusive, and the most difficult of astronomical observations. However, perfect astronomical instruments may be, and however accurate the readings taken, we know that there are assumptions underlying the calculations made which vitiate the whole of the conclusions drawn therefrom. For no matter how carefully a base line be measured, if that base line is supposed to extend to the opposite sides of the earth's orbit (and this "orbit" exist only in the astronomer's imagination) how can reliance be placed upon the measurement of angles taken at the extremities of such a hypothetical base? This again shows that before we can approximately measure the distances of the stars we must first settle whether our base line is flat or spherical; and whether that base is fixed and immovable, or for ever shifting its position in an "orbit" which would be impossible to describe if subject to all the forces and all the various motions supposed to be connected therewith. Yet notwithstanding the importance of this fundamental question Mr. Wallace complacently remarks:—

"In the case of the stars the base line used is the diameter of the earth's orbit, more than one hundred and eighty millions of miles. Every six months we are at opposite ends of this base."

I think it would require six months and take a longer article than Mr. Wallace has yet written to prove the truth of the above statement. Yet if this assumption be untrue, as we contend it is, then the vast and unimaginable star

distances *calculated* on such assumptions fall to the ground like a house of cards! No wonder, as the writer incidentally remarks, that astronomers "for nearly two centuries" have failed to settle the question of these vast distances. His own conclusion is that we, the inhabitants of the earth, are living somewhere near the middle of the "Milky Way"; and that "our sun" is one of the central orbs of a great globular star cluster, and therefore "very near to, if not actually at the centre of the whole visible universe"!

This, certainly, is something better than the New Astronomy, with all its "unimaginable vastness of suns and systems"; but if Mr. Wallace would only start *de novo*, and examine in a logical and candid spirit his own "base line" we are persuaded that he would have still further to contract his ideas and bring them down to the universe of fact; a universe, limited indeed, yet grand; suitable for the abode of man whom God created in his own image, making all things in heaven and earth to subserve his welfare, that by the discipline and the trials of this life he might be led to seek after, and to attain to, that eternal life and immortality which God has promised to all them that love Him. But this brings us to the pith of the whole question, namely, "Man's Place in the Universe"; and our further remarks under this head must be reserved for part two.

(to be continued D.V.)

## MONSTROUS PICTURES.

A picture is reproduced in the *Weekly Dispatch* from the *Cunard Bulletin*, March 13th, 1903, the first daily newspaper edited, printed, and published in mid-ocean on board of the ss. *Campania*. (See article by "B" for the picture referred to). The comments on this "original title" in the *Dispatch* are made from an editorial standpoint, and assert that "it seems in a curious state of incompleteness, and no doubt in time will be considerably curtailed."

I suppose (fancy a Zetetic supposing!!) this uncurtailed monstrosity is of the class referred to by the late Richard A. Proctor, who says:—

"I am convinced that a large part of the perplexity which intelligent and thoughtful readers experience in the study of astronomical works is due to the *incorrect proportions of the figured objects*, orbits, globes and so on. I believe also that but for these *monstrous pictures* (italics mine) the charlatans who pretend they think the Earth a plane or the like would not find hearers, still less (as they do) believers. I know many worthy people far from wanting in abilities who only believe the theories of Copernicus, Kepler, and Newton on the score of authority; not because the evidence in astronomical treatises seems to them convincing or even *intelligible!*"—*The Sun the Ruler of the Planetary System*, p. 456.

"The curious state of incompleteness" being apparent to the "editorial staff," proves they *know* that it *is* an "abortion" or "contortion," and also that they know *the contour* to be absolutely false to Nature and fact, yet they dare not say so! We have not the slightest doubt but that it will very shortly be "considerably curtailed," indeed there is no doubt it will be so "curtailed" as to be absolutely invisible altogether, save it be on the "historian's shelf" in the British Museum.

That the "picture" is an *absolute monstrosity*; and that the teaching of modern astronomy and geography respecting it is false to fact and practical mechanics is unquestionably demonstrated; and "the charlatans who pretend they think the Earth a plane" are again proven beyond all question of doubt, to be those who "speak the truth, the whole truth and nothing but the truth," when they say the Earth *is* a vast irregular non-rotating plane.

And this very picture gives proof that the Earth *is* a plane! It gives one fact. Yes, it is there. Look! No wonder at the bewilderment poor Professor Proctor was in when alive. But the fact. Well, here it is! The receiving and transmitting stations are

## PARALLEL AND PERPENDICULAR!

What, on a globe? Have you forgotten that it is admitted that "in *practice* the plumb-line is perpendicular to the centre of the Earth," *i.e.*, the sea-earth globe on the outside of which we are supposed to live? But no, of course you have not forgotten; and no doubt you also remember that consequent on *this fact* follows another, namely, that on a globe there can be no such thing as TWO PERPENDICULARS PARALLEL TO EACH OTHER! Try and per-

form the trick on a school globe with two sticks and so practically learn the truth of the whole matter, and then decide for Truth. "The Truth shall make you free."

"MARCONI'S TRIUMPH.—The success of Signor Marconi in bridging the Atlantic by means of wireless telegraphy has been a matter of especial interest at Dover, as it was while he was carrying out his first cross-Channel demonstration between the South Foreland Lighthouse and Boulogne that Signor Marconi made his first intimation of the possibility of transatlantic success with his system. This was in 1899, when even cross-channel wireless telegraphy was considered marvellous, so that it will be seen what strides the invention has made in three years. At the time he was experimenting at the Foreland, Signor Marconi informed a Dover correspondent, in an interview, that his only doubt concerning transatlantic wireless telegraphy was the effect of the spheroid form of the earth, but he believed he would overcome this difficulty."—*The Nottingham Evening Post*.

We are pleased to know that Signor Marconi's *practical experiment* has proved beyond all question that the *conjectural assertion* of those who proclaim the "spheroidal form of the Earth," is only equalled by that other lie of Satan, who is the god of this present evil age,—“Ye shall *not* surely die.”

If the Earth be the globe it is taught to be, Signor Marconi could never have overcome the difficulty of "earth curvature," for he knows better than I do, that "the current would have *run to earth*, and been lost," and no messages could ever have been received or delivered. Punch spoke truth when he said: "Many a man with brains beneath his hat, Swears the earth is round but finds it flat!"

All workings on the Earth's surface demonstrate that the Earth is a Plane. The history of the Suez Canal proves that "the spherical form of the earth" (sea?) was the hindrance of that canal being cut before. But, as in the case of wireless telegraphy, a man arose to "overcome the difficulty," which existed only in the minds of scientists and not on the earth or sea either. M. de Lesseps worked to a datum HORIZONTAL LINE! and proved that what Liebnitz told Louis XIV., in connection with cutting a canal to "benefit the human race" and to "cripple Holland in its trade with the East," was absolutely true to fact and Nature. I quote it as given by Liebnitz in a *Memoire to the Grande Monarque*. "The statement that the level of the Red Sea is higher than that of the Mediterranean is a mere myth."

Every practical working, and experiment, either on the Earth's surface—such as was conducted by Professor Airey on the banks of Loch Foyle—or on water as conducted by Professor Alfred Russell Wallace, indubitably demonstrates the approximate horizontality of both Land and Sea.

In spite of these Facts sailors are taught that "in Plane Sailing the portion of the Earth traversed is considered to be a PLANE SURFACE, the meridians being represented as parallel to each other, and the parallels of latitude as straight lines crossing them at right angles." *Navigation*, by Rev. W. T. Read, M.A., Headmaster Thames Nautical Training College, para. 19. On page 51, under the heading, "Great Circle Sailing," we read "recourse is had to *approximate great circle sailing*." What is the result? Well—there, read it for yourself, and call it what you like—"the vessel may be said to sail upon the sides of a many sided *plane figure* (a polygon)." Yet our sailors are given a Mercator's chart to practically sail their ships by! and the same book, page 32, laying down "the principles" of the chart, crams the sailor with the following: "The equator has now become a straight line." This clearly shows that they are sailing their ships on a Flat, Level, Horizontal surface. When, we ask, will these men own the true shape of the World?

We pause here to ask if that is a true statement of natural phenomena? "The meridians have become straight lines at right angles to it, and parallel to each other." What! on a globe? No, my friends, the dishonesty of the thing is exposed by itself; for they have just had to unroll the chart "into a Plane surface"! Then it continues, "and the parallels of latitude also straight lines everywhere equal to the equator." Certainly they can put everything straight and yet curved. Could "learning," so-called, go to greater lengths in deceiving people? Is not the *source*, aim, and results of such "learning" apparent to everyone who loves to *practice truth*?

J. WILLIAMS.



## A DEFENCE OF PHILOSOPHIC DOUBT:

By "Rectangle."

(continued from p. 177.)

## V.—PHILOLOGY.

It was formerly supposed that, as the various nations had been "evolved" from lower forms and combinations, so their language had also been evolved from the chattering of the monkey to the speech of man. "Science," has had to surrender to Bible teaching in this important matter. Not to make the subject too long, I need only quote from the *Natal Advertiser*, of 8th May, 1899, to show that this has been the case. In that paper a report of a lecture by the late Right Hon. Harry Escombe, Q.C., is given, in which the learned gentleman is made to say that "Philological research confirms the statement of Scripture that once upon a time the earth was of one language and one speech."

J. Urquhart, in *What Are We to Believe*, says:

"THE UNITY OF THE HUMAN RACE PROVED BY  
LANGUAGE.

"We have seen how wonderfully modern discovery and research have supported the Book of Genesis in its statement about the threefold division of our race. From the three sons of Noah originated three families, which became in the course of ages three great centres from which the nations of the earth went forth to inhabit the broad lands of the continents and to possess the islands of the sea.

"But in the account of our origin, given in Genesis, something more is implied and plainly stated. These three families are closely allied. The old race of mankind we are told, sprang from one father and mother, Adam and Eve. The second race, that which re-peopled the earth after the Flood, were all alike the offspring of Noah and his wife.

"Now, here again the Scripture, more than 3,000 years ago, pledged itself to the truth of a statement,

## THE MOST PERILOUS

we should say, of any that could be made. It was a challenge to all ages to arise and disprove it if they could. It dared to speak the last word of observation and of science generations before observation began to consider the various races of mankind, and generations yet again before the sciences were born which teach us to-day what we are to recognize as facts in relation to these things. Genesis taught these things, too, though it stood utterly alone and was opposed by dense ignorance and stubborn prejudice. The wisest peoples of the earth had lost all knowledge of their origin, and had not the slightest suspicion of the ties which bound them so closely to the races which they oppressed and despised. The unity of the human race is a purely Bible doctrine. If it is true, what does that fact mean? Can we escape from the conviction that Genesis so forestalled science simply because it is

## A REVELATION?

"But I am anticipating. We must first hear what science has to say. It seems hard to believe that the Negro and the Caucasian, the Europeans and the Hottentot, have had the same origin. But if we discover that it is so, it will only make the statement of Genesis the more wonderful, and the question still more urgent as to whence that statement came. I shall begin with the testimony of language. We have seen that mankind is ranged in three great families. Have these families any signs of common origin?

"It has been said that the Aryan and Semitic languages have almost nothing in common. This any student of Hebrew knows to be a blunder. Let me point out a few links of connection. The word "call" is a common one in the Indo-European languages, but the Hebrew is *kol* or *col*. We find a close resemblance between many Greek and Hebrew words, which shows that the two languages belong to

## ONE COMMON STOCK.

*Agapao* is Greek for 'to love'; the Hebrew is *Agab*.



*Harao* is Greek for 'to see'; the Hebrew is *Ra'ah*. *Ageria* is Greek for 'to collect'; the Hebrew is *Agar*. *Nousos* and *Nosos* mean 'sickness' in Greek, a word from which we get our medical term 'nosology.' The Hebrew sheds some light on the origin of the word, as *Noosh* means 'to be sick.'

"Take another ancient member of the Indo-European family—the Sanscrit. The Hebrew for 'one' is *Ekhad*, the Sanscrit is *Eka*. *Ish* means 'man' in Hebrew. *Isha* in Sanscrit is 'master,' and *Ishi* 'mistress.' But there are words which connect themselves with many languages, and bring the relationship close to ourselves. Take the personal pronoun 'I,' for example; the Hebrew is *Ani*, or *Anoki*. The Egyptian is *Anok*, the Sanscrit *Aha*, the Chinese *ngo*, the Greek *Ego*, the German *Ich*. Take the Hebrew *Auak*, 'to strangle,' 'to be in anguish.' To show how language

#### BINDS US ALL TOGETHER,

I have only to mention the Greek *Anagki*, or *Ananki*, 'necessity,' or 'straitness,' the Latin *Augustus*, 'strait' or 'narrow,' the German *Angst*, having the sense of our own word 'anguish,' which belongs to the same family group. The Hebrew *Keren* answers to our own 'horn' and the Latin *Cornu*. The Hebrew *Makhar* is the German *Morgen*, and our own 'morrow.' *Khittah* in Hebrew and 'wheat' in English have the same meaning. *Parak* is evidently a near relative of the Latin *Frango* and our own 'break.' *Akar*, in Hebrew, means 'to dig,' and it throws light on the Greek *Agros* and the Latin *Ager* (both meaning 'field') and our own 'acre.' The *ager* and *agros* was the *digged* place, and our own 'acre' is a measure applied to cultivated land. This list does not by any means exhaust the number of words which I might produce to prove our old relationship to the Jew, the Arab, the Syrian, and the Assyrian.

(to be continued).



## BIBLICAL AND PRACTICAL ASTRONOMY.

INTRODUCTORY ADDRESS DELIVERED BY  
DR. E. HAUGHTON.

I have much pleasure in introducing Lady Blount as the Lecturer this evening, as I am confident that she will create unflagging interest, even for those who may happen to disagree with her views; and that she will also be able to make out a case for enquiry into that aspect of modern astronomy which appears to come into collision with revealed Truth. This is not an imaginary idea; but has unfortunately proved a stumbling block to many sincere and intelligent persons by its apparent incompatibility with the actual statements found both in the Old and New Testament writings.

When I was at college, I was of course obliged to study astronomy on the usually accepted lines, and afterwards took my degree in Trinity College as Moderator in Experimental and Natural Science; but it never occurred to me at that time that most of the principles involved were assumed without adequate proof, which I have since ascertained to be the actual fact. That these views are held by persons of great learning cannot be denied, but it must be recollected that Sir Isaac Newton's views were not accepted by any University for at least 30 years after their publication, although learned men were quite as plentiful then as they have been ever since. *What we want is logical induction, a faculty which many undoubtedly learned men are strangely deficient in. Without this foundation all the mathematics employed are really worse than useless.* The result is a series of abstruse calculations as to the number of thousand years which must have elapsed to enable the light of stars which have burned themselves out to reach this earth in accordance with the now adopted wave theory of the transmission of light, &c. I have even heard a serious discussion at the Royal Society as to the manner in which the sun was kept warm, with which I shall not trouble you because some of the *conjectures* are too absurd to repeat! It is not Newton and Copernicus that have dogmatized in the manner now customary, but very much smaller men, who think to snatch a little reputation by abusing persons much more logical than themselves.

What is most to be regretted is, that a sort of terrorism is now used to prevent so-called "science" from being criticized, as mere ridicule always frightens off most of those who are not pecuniarily interested, and an appeal to the breeches pocket does the rest. It is quite true that by the use of logarithms, co-sines, and cube roots, many an adversary has been silenced who really had much the best of the argument; but those who are fighting for the integrity and sufficiency of the Word of God are quite prepared to suffer for their convictions, as they know that those will have to do who are not willing to go with the stream.

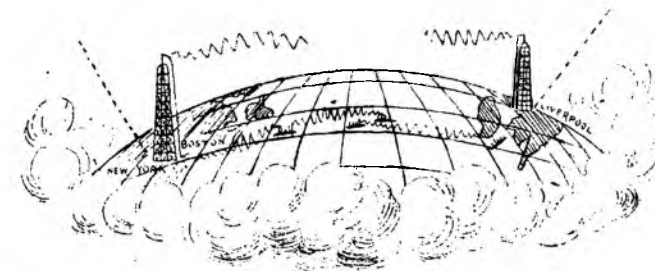
When a subject is really understood it can be brought within the compass of ordinary common sense; but those who know themselves to have a weak case naturally take refuge in mystery. Surely it is probable that the God of all truth would not make the most splendid phenomena of nature constant object lessons against believing the evidence of our own senses. Yet this has to be done continually if we would adopt modern astronomy as a really reliable science. That the most wonderful accuracy is daily shown in the calculation of tides, eclipses, and other natural phenomena, is quite true; but the inference that such forecasts cannot be made without Pythagorean or Copernican theories is not only false, but an impudent deception, and ought not for a moment to be accepted any more than the sort of diagrams which are constantly used to illustrate popular expositions of some of the aforesaid modern theories.

Lest it might be supposed that all great men have readily accepted a philosophy so antagonistic to Holy Scripture, I will only mention the names of Goethe and Baron Humboldt, the former of whom described the Newtonian system as "that universally diffused delirium of lunatics," and the latter said that he was only hindered by his age from undertaking such a thankless task as would be the exposure of a series of delusions which were already known to such in the scientific world (or words to that effect). He was, doubtless, aware that what Newton and Copernicus merely used as a working hypothesis to explain certain observed facts, has, since their time been exalted into the region of absolute truth, even when it leads to conclusions incompatible with the Christian religion in respect to things apparently endorsed by the most unimpeachable authority. I will now call, &c.

## THE CUNARD BULLETIN.

*The Daily Mail* of Monday, March 16th, contained a *fac simile* of the front page of the newspaper published in mid-ocean on one of the Cunard steamers, the *Etruria*.

It is illustrated by the diagram which we reproduce, as it so well exemplifies the lying pictures which are so commonly used to bolster up the globular hypothesis.



We are always told that perpendicular means a line drawn from the centre of the Earth. But look at those two towers. They are not thus drawn, or shown; because, if they were they would at once expose the fraud before the eyes of all. Our eyes, however, are opened and are able to detect it. We have drawn two dotted lines to show how the towers should have been represented to correspond with their own theory.

One of two things is true! Either the Earth is a globe and the picture is incorrectly drawn. Or it is a plane and the picture is a fraud! intended to deceive the public.

We know, of course, that the latter is the case; and it had to be so drawn to avoid exposure.

Then, again, the curve is not drawn to scale. We are told that we are "always at the top" of this curve. Whichever of these two towers is at the top, the other must be more than 378 miles below it. Seeing that light and electricity always travel in straight lines, and the ether in wireless telegraphy proceeds out in straight lines from the transmitter in every direction, as though it were placed in the centre of a hollow sphere. How is it, we ask, that these lines can go round a curve the radius of which is 4,000 miles,

and equivalent, in this case, to a mountain of water 189 miles high between the two towers?

It will be observed that, in the illustration, the lines are represented as going from the top of one tower to the other in a straight line, parallel to another straight line on the ocean.

It is clear that the picture and the hypothesis of a spherical Earth cannot both be right; and all our evidence goes to show that both are wrong; while a plane Earth accords with all the phenomena and agrees with all the facts.

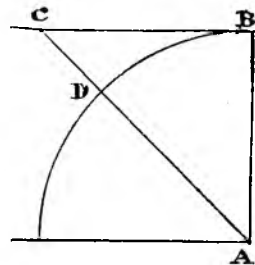
B.

“STRETCHED OUT UPON THE WATERS.”

By E. H. RICHES, LL.D., F.R.A.S.,  
Member of the “London Mathematical Society,”  
late Cantab, etc.

(continued from p. 85.)

“Let BD be a small portion of the earth’s circumference whose centre of curvature is A, and consequently all the parts of this arc will be on a level.



But a tangent BC meeting the vertical line AD in the point C will be the apparent level at the point B; and therefore DC is the difference between the apparent and true level at the point B.

“The distance CD must be deducted from the observed height to have the true difference of level;

or the differences between the distances of the two points from the surface of the earth or from the centre of curvature A. But we shall afterwards see how the correction may be avoided altogether in certain cases. To find an expression for CD we have Euclid, third book, 36th proposition, which proves that  $BC^2 = CD(2AD + CD)$ ; but since in all cases of levelling CD is exceedingly small compared with 2AD, we may safely neglect  $CD^2$  and then

$$BC^2 = 2AD \times CD, \text{ or } CD = \frac{BC^2}{2AD}$$

Hence the depression of the true level is equal to the square of the distance divided by twice the radius of the curvature of the earth.

“For example: taking a distance of 4 miles, the square of 4 = 16, and putting down twice the radius of the earth’s curvature as in round figures about 8,000 miles we make the depression on 4 miles equal

$$\frac{16}{8000} \text{ of a mile} = \frac{16 \times 1760}{8000} \text{ yards} = \frac{176}{50} \text{ yards} = \frac{528}{50} \text{ feet,}$$

or rather better than  $10\frac{1}{2}$  feet. Or, if we take the mean radius of the earth as the mean radius of its curvature, and consequently  $2AD = 7912$  miles, then 5,280 feet being one mile, we shall have CD the depression in inches equal

$$\frac{5280 \times 12 \times BC^2}{7912} = 8008 BC^2 \text{ inches.}$$

“The preceding remarks suppose the visual ray CB to be a straight line; whereas on the unequal densities of the air at different distances from the earth the rays of light are incurvated by refraction. The effect of this is to lessen the difference between the true and apparent levels but in such an extremely variable and uncertain manner, that if any constant or fixed allowance is made for it in formulæ or tables it will often lead to greater error than what it was intended to obviate. For though the refraction may at a mean compensate for about a seventh of the curvature of the earth, it sometimes exceeds a fifth, and at other times does not amount to a fifteenth. We have therefore made no allowance for refraction in the foregoing formulæ.”

It is thus seen that the degree of convexity per mile will be eight inches multiplied by the square of the distance. This must apply to the surface of the water equally with that of the land; but it must be remembered that with water at sea there is a constantly changing attitude; so it is possible that an objection might fairly be made to this method of

measurement of a distance of arc of the surface of the water. It *might* happen that if this mode of measurement were applied to a certain extent of standing water on the land, it might somewhat *fail*, inasmuch as the surface of the water might actually be a *plane* owing to the nature of the land on which it was. However, in the fen country of England there is a kind of canal known as the "Old Bedford," in length some 20 miles, on which an experiment was made in the following manner:—A distance of 6 miles was selected and from a point, A, a boat with a flag standing 3 feet above the water was directed to sail to the end of the distance (six miles), which we will call B. An observer with a telescope fixed at 8 inches from the surface of the water, sighted this boat, and pronounced *the whole of it to be clearly visible throughout the entire distance.*

From this fact a conclusion was at once arrived at (and justly so—Ed.), that the arc of convexity of the surface of the water was NIL; or, in other words, the surface of the water was a PLANE.

Now, according to what was said as to the degree of convexity of any arc being equal to 8 inches multiplied by the square of the distance,—in this case, at the distance of 3 miles from the observer, the boat would be floating on a surface of water exactly 6 feet lower than the line of sight from A to B which was said to exist; and consequently as the boat approached the distance of 6 miles when once past the distance of 3 miles, it would seem only reasonable to suppose that it would gradually have ceased to be wholly in view; or in fact to have been in view at all at the end of the distance.

This experiment may be found mentioned in a book entitled *Zetetic Astronomy*, published by Messrs. Simpkin, Marshall & Co., London, where it will be found illustrated by appropriate diagrams. To the same work I am indebted for some information concerning an observation made from the Isle of Man across the Irish Sea. The distance between Douglas Bay (Isle of Man) and the Great Orme's Head in North Wales is fully 60 miles. At an altitude of not more than 100 feet in Douglas Bay, the Great Orme's Head, can be seen distinctly in clear weather. Now taking into consideration the convexity of the earth's surface (the distance of arc between these two places is sixty miles), according

to the calculation which has already been explained the centre of this arc would be 1944 feet higher than the coast line at each end: thus it seems natural to suppose that if the Great Orme's Head is to be seen from Douglas Bay it would be necessary to be at an altitude of 1,944 feet at the latter place. How it might be asked, is this fact—namely, the possibility of seeing a something at one end of an arc of 60 miles from the other—to be accounted for, if the mode of measurement of the earth's convexity be correct? For, with an altitude of only 100 feet at the end of the arc (sixty miles) from which the observation is made, a something is seen at the other end of it. Many like observations to this have been made in different places, and similar results have been obtained which would support the theory of those who maintain that the surface of the earth is a plane.

(to be continued.)

#### RELIGION AND SCIENCE.

Under the above heading several articles have appeared in *The Clarion*,—the annexed extracts will speak for themselves—bearing unmistakeable evidence of their aggressive tendency and the atheistic trend of modern so-called astronomical science.

"Agnosticism" has been elaborated and supported by a class of individuals whose belief is fixed in their ability to judge all things; and a deep rooted faith in the infallibility of modern science in its every branch and line, and especially the globular theory.

"The fool has said in his heart there is no God." Thus saith the Scriptures. And though the agnostic does not say openly that there is no God, he says it in his heart that there is no such God as the God of the Bible; therefore he comes under the Psalmist's definition. The agnostic may even own that there is some sort of a god, but he disowns the God of the Scriptures, and he does not believe in the inspiration of those Scriptures as having come from God.

This only proves the truth of the apostle's statement that the carnal mind is enmity against God. It can take the

word of man for truth—any extravagances which the astronomer or scientist may utter,—but it has a special enmity against God's Holy Word and Will. Apart from Jesus Christ and the Bible no man can rightly believe in God, nor can he know the truth about God's character.

The agnostic spirit has another operating motive, which goes to uphold whatever is called "science"—especially as against Bible teaching, and those Christians who attempt to uphold the Scripture-contradicting globular theory are not in a position to answer the impeachments which are laid against the Bible in *The Clarion*. There was a notable instance of this in a letter forwarded to us, which appeared in *The Christian Commonwealth*, attempting to answer *The Clarion*. The writer's position was deplorable; he was indeed handicapped with "science, falsely so-called," which (although doubtless with good intention) he endeavoured to carry hand in hand together with the Bible! But, alas! it made him *feeble*, and his reply, which otherwise was good, was not only unreasonable but ridiculously so on those lines where he endorsed Scripture-contradicting science. Yet we repeat that it is "doubtless" that the writer's motive was charged with the good intention of upholding the truth of the Bible.

The noted infidel, Tom Paine, truly stated that the two beliefs, "modern astronomy and the Bible cannot be held together in the same mind, and he who thinks he believes both knows very little of either." The Ed. of *T. C.* perceives the truth of such reasoning in the above statement, and he therefore naturally ridicules the untenable position adopted by the majority of Christians in professing to believe in the Bible, which contradicts the whirling globe theory, while at the same time they profess to have faith in the latter. The Ed. of *The Clarion* is aiding us to establish the fact that the Bible and modern astronomy are at variance, and we thank him for so doing, even though it may be that he is unwittingly being *used* as an instrument to drive half-hearted believers into the enemy's camp.

Now it may be asked, What proofs have we of the trustworthiness, and authenticity of the Scriptures? The proofs of their historical and internal trustworthiness and authenticity are so numerous and unanswerable, that they could not be called into question, unless all historical evidence were

doubted and denied. They are also proved in themselves by their excellent and pure teaching; and that they are the production of inspired men from God seems evident from the following arguments:—(1) That no good man or men could have "*invented*" them, which would be wicked; (2) Nor could wicked men produce such perfect teaching. Neither is it *possible* that they are the production of Satan or his evil spirits, from the same reasons, viz.: wicked beings would not inculcate good. It is utterly impossible to believe, therefore, (from a humanly argumentative standpoint alone) that they were written by others than the authors ascribed to them.

The above is the 153rd question, from *Questions and Answers on the Bible and Nature*, by the Ed. of *The Earth*.

It is a fact that the Bible contains sufficient light in itself for men to accept it as truth if they will only search the Scriptures in an honest and candid spirit, and with at least as much diligence and reason as they would exercise over earthly things. The Bible bears evidence within itself, and "he that believeth" hath the witness within himself.

If we know its healing power and beauty we must acknowledge its potency. We pray that the Ed. of *The Clarion* may be brought to a knowledge of the truth, and to confess (as *we have had to confess*) that he is a sinner, and that he, even as others, has broken God's holy Law; and further to accept Jesus, the Son of God, with power as his Saviour.

For unto Him all power is given, both in heaven *above* "and in earth *beneath*." It hath pleased God that it should be so.

With respect to *The Clarion* the Ed. of *The Earth* has sent replies to the statements which have been made in the first named paper, but its editor has not inserted them. As space permits we will therefore reproduce our letters in *The Earth*, and we will give extracts from *The Clarion* showing how the false and so-called "science" of the day is leading men away from God and His truth to land them in foolishness, darkness, and death. As specimens take the following quotations:

Extracts from *The Clarion*.—"THE UNIVERSE AND ITS CREATION." By R. Blatchford.

"The theory of the early Christian Church was that the earth was flat, like a plate, and the sky was a solid dome above it, like an inverted blue ba. in. The sun revolved round the earth to give light by day, the moon

revolved round the earth to give light by night. The stars were auxiliary lights, and had all been specially, and at the same time, created for the good of man. God created the sun, moon, stars, and earth in six days. He created them by word, and He created them out of nothing. ....To-day our ideas are very different. Hardly any educated man or woman in the world believes that the world is flat, or that the sun revolves round the earth, or that what we call the sky is a solid substance like a domed ceiling"?—*The Clarion*, April 17, 1903.

"Last week I gave a brief and imperfect sketch of the known universe. My object was to suggest that the Creator of a universe of such scope and grandeur, a universe of 20 millions of suns, must be a Being of vast power and dignity. This week I shall try to compare the modern idea of the universe with the idea given in the Bible, and to show that the ancient Jewish God, Jehovah, was utterly incapable of conceiving a scheme of creation so magnificent as that which science has revealed. For it is to human labour, and to human science, and not to divine inspiration, that we are indebted for the expansion and elevation of our ideas of the universe and its Creator. The universe as revealed to us by man, contains 20 millions of living, moving, radiant suns, with all their wonderful revolving planets, comets, meteorites, and nebulae. The universe, as revealed in the Holy Scriptures, consists of a flat immovable earth, covered by a solid dome of sky, in which are set a small sun and moon, and a sprinkling of stars, all of which were created to give light to man. The difference between the human and the inspired conceptions of the universe is too glaring to need any comment of mine. The universe of the Bible bears about the same relation to the universe of fact as a candle to the sun. The scientific conception also is *true*, whilst the Bible conception is false."—*The Clarion*, April 24, 1903.

We should like to ask the editor of *The Clarion* whether he has examined into the truth, or otherwise, of the system of the universe as taught by modern astronomy? We think he has not; and that moreover he shows a marked bias and leaning towards whatever "science" teaches in opposition to the Bible. He accepts the unverified statements of so-called scientists with the same unreasoning gullibility as he accuses Christians of doing, regarding the Scriptures. But the dictates of *reason* should teach us to believe in the Bible motto of "proving" things, and holding fast that which is good.

*The Clarion* is right, we are sorry to think, in saying that many advanced "Christians" (we should call them recreant Christians) have gone over to science as against the Bible. All those who have thus unreasonably given up a part should in all consistency give up the rest, and join the camp of the infidels; for traitors in the camp do more harm to the truth than open and avowed infidels. Evidently the Ed. of *The Clarion* belongs to the latter class, and it is a pity that some

of the paid defenders of the Bible make such a poor show against him. But it is impossible for them to do better while they accept the infidel and God dishonouring system of evolution which is now so popular, and which has naturally sprung from the fabulous belief, of pagan origin, that we are living on a self-revolving and whirling globe.

*All communications and enquiries respecting this Magazine and the teaching it upholds, and all questions and matter for insertion, should be addressed to E.A.M.B., 11, Gloucester Road, Kingston Hill.*

### "THE EARTH'S" OBSERVATORY.

*The Ed. does not necessarily endorse statements made under the headings of "The Earth's Observatory," Letters, etc., unless signed Ed. The Earth.*

#### THE "EARTH QUESTION."

Professor Hathaway Expounds His Theory in Reply.

"To the Editor of the News.—Sir, I have before me a copy of your paper of the 2nd inst., in which I see an article in regard to the 'Earth Question.' As you have given space in your paper to the side of the globe believers I thought that the citizens of Waltham would be interested in reading something from the other side and by your courtesy I will submit the following:

On or about the 21st of March and 21st of September the sun travels in a circle called the 'Equator' and is thus at right angles to the earth and sea at all points on that circle. This fact constitutes the standard measuring rod for all observations for finding the ships position at sea. If, for example, we are in latitude 20 degrees N or S, the altitude of the sun centre at noon the time when the sun reaches its maximum altitude at our position, on, say the 21st of March will be 70 degrees. If in 70 degrees N or S the altitude will be 20 degrees. From March 21st the sun travels in a northerly direction until it attains its greatest northern declination about 21st of June so that on any day except that on which the sun is on the equator the declination has to be taken account of. On May 1, 1895, sun's declination was 22 degrees, 8 min. N altitude, sun's centre 25 degrees 14 min., bearing W, required latitude.

True altitude sun's centre.....	25'	14"
	90	—
	64'	46" S
Declination .....	22'	8" N
	—	—
Latitude .....	42'	38" S

In this case had the observations been taken when the sun was on the equator the latitude would have been 64 degrees, 8., but as the sun had gone 22 degrees

8 minutes farther north that amount must be deducted from the position the ship would have occupied had the sun been on the equator.

It will thus be seen that the right angle the sun makes with the surface of the ocean when on the equator is the basis of all navigation. Now who ever heard of a right angle on a rotund surface. Try if you will to obtain that angle on a ball or search the books of Euclid and geometry and your failure will be equally certain.

On a plane surface such as the ocean all is plain and simple; on a convex surface of a ball it is impossible.

Now let the wise men and those who believe the earth a globe, demonstrate a right angle on a convex surface taking that for the base of the angle.

One more thing I should like to add which is this. We are told by the astronomers that the north star is so far away that it took the light of it 50 years to reach the earth. Light travels 180,000 miles per second which would place the star trillions of miles away but when we take an observation of the sun at 45 degrees N or S we find the reading on the quadrant is 45 and an observation of the north star from the same place will read the same. Now there must be something wrong somewhere for two objects, one so much higher than the other, could not be seen on the same angle.

This is only one of the reasons why we believe the earth a plane and I stand ready to debate the subject with anyone, but they must hold to the theory that is accepted and taught in the schools and not insert a theory of their own as Mr. Davis has in regard to the curvature. When they cannot defend their own figures their cause is weak.—Yours for the truth, C. L. HATHAWAY, Watertown.—From the *Waltham Evening News*, Feb. 4, 1903.

J. MARRIOTT, (Sergt.-Maj.), Shorncliffe.—This correspondent complains that in the last issue of *The Earth*, p. 182, twelfth line, he is made to say "that the sun has progressed about 1 degree on its journey round the earth;" and that in his article the "apparent motion" of the stars becomes "actual motion."

It is necessary to explain to our readers that the writer of that article, or rather manuscript, is a globularist who believes in the Chronology of the Bible but not in its Cosmogony. The Bible teaches that the earth rests on "foundations" so that it "cannot be moved," and that the sun it is which moves round the earth, and not the earth round the sun. And as he, and we, wanted to uphold Bible teaching in one way or another, we took the liberty of altering those two words in his manuscript, which read: "the earth has progressed about one degree in its journey round the sun."

The M.S. was very long, and whilst we deleted paragraphs which we thought were not true to Bible Cosmogony, and are not aware that we altered anything except transposing the two words above referred to, namely "sun" and "earth," we thought the transposition necessary, and that it would not affect the writer's argument on Chronology, which was the main subject of the manuscript.

We cannot, therefore, say it was a printer's error. But if our correspondent can give us *one* unimpeachable proof that the *earth* has ever progressed "one degree," to say nothing of 360 degrees, we will admit that proof in the pages of *The Earth*, and if we cannot expose the fallacy of that "proof," we promise further to tender him our apologies. We cannot say anything fairer. We thought we had dealt with him, both in his letters and in his report of his lecture, in a generous spirit; but our good intentions too often are unappreciated. Would Mr. Dimpleby—Ed. of *Past and Future*—with whom he is in agreement,—would Mr. Dimpleby, we ask, allow him such a privilege. We think not; for it came to our knowledge a short time ago, that a correspondent

of ours offered to write an article, or a letter, to *Past and Future*, showing up some of Mr. Dimpleby's Chronological errors, to say nothing of his Cosmological errors. But the required permission was not granted.

We trust our Shorncliffe correspondent will thus see that we dealt with his communications in a more generous spirit than is shown by some editors, and if he likes to offer us a proof of the earth's motion, as suggested above, we shall be glad to print it; otherwise we think that this explanation of the matter must suffice.—Ed.

"SUNBURN AT THE POLE.—The New Zealand Shipping Company's steamer Papanoa, which was in Lyttleton Harbour when the relief ship Morning arrived from the Antarctic, anchored in Plymouth Sound at noon yesterday. She brought home the first member of the Discovery's crew to reach England, and also one of the crew of the relief ship, Morning.

The Morning's crew said that they often found the heat of the perpetual sun oppressive, and that they actually became sunburnt. It was a curious experience passing Christmas and the New Year in perpetual daylight and playing cards on deck at midnight with the sun beating down. Later on darkness began to assert itself and midnight was marked by faint shadows like twilight.

The only bit of green vegetable seen by the Morning's crew on her voyage was a crop of mustard and cress, grown by the officers on a wet blanket, with Antarctic soil.—*Daily Mail*, May 11, 1903.

[With reference to the above the Ed. would now draw the reader's attention to the following paragraph, which appeared on page 28, in No.s 13 & 14 of *The Earth*, under the heading, *New Map of the World*.

"N.B.—The Ed. has something to say about the Map, (*i.e.* the map which the Ed. reproduced by request), but this must be left till a future occasion."

The Ed. has received *important information* from the South, which will appear in the Work to be published (D.V.) in the course of a few months, by "Zetetes and the Ed.]"

## LETTERS.

### "LEVELLING AND THEODOLITE WORK."

13, Gwyther Street, Pembroke Dock. 16/4/03.

Dear Madam,—With further reference to the above; Mr. C. R. Evans, quotes Mr. W. Winckler, M.I.C.E., in support of the theory of a flat earth, but the quotation is not opposed to the "globular" view.

It is quite true that an engineer does not make any allowance for the curvature. The following quotation, from the only text book I have by me at the present moment, explains the point quite clearly to anyone engaged in building operations. The authors are R. E. Middleton and O. Chadwick, both members of the Institution of Civil Engineers, the former a fellow of the Surveyor's Institution and formerly Instructor in Surveying at the Central Institute of the City and Guilds of London; and the latter a Consulting Engineer to the Crown

Agents for the Colonies. I hope Mr. Evans will accept these as competent authorities—at least from the standpoint of engineering practice.

"It is however possible to eliminate completely all errors due to curvature. To this end it is only necessary to plant the level, not directly over one of the points whose difference of level is to be determined, but midway between the two. It is evident that by so doing, the error due to curvature will be equal in both directions, and that the difference between the two staff readings will be the true difference between the levels of the two points. The effects of curvature are thus *entirely* eliminated, and need no further consideration. The line of equal altitudes so determined may be treated as a truly level line, even in the most extensive levelling operations.

"The above is the usual practice in levelling operations, and involves no error as regards physical results. If a railway were set out in this manner, and accurately level, the top of the rails would be a curved line, concave to the centre of the earth. In a length of a few miles this curvature would be very perceptible, but nevertheless a railway carriage on the line would not tend to move in one direction or the other, for the rails would at all points be at right angles to the direction of the plumb-line, that is to say, to the direction of the force of gravity."

It almost seems to have been written in anticipation of Mr. Evans' letter.

I am, yours truly, H. J. YOUNG.

[It seems absurd to first assume the Earth's curvature and then talk of "eliminating the errors" due to curvature! The curvature should be proved.—Ed.]

41, Bintall Road, South Tottenham. March 28th, 1903.

Madam,—Wishing to know whether I have discovered a fresh proof that the Earth is not globular, and feeling convinced that you are fully acquainted with all known proofs in that direction, you will no doubt be able to inform me whether my little experiment, and its application to this subject has already been observed or not.

I have at home a large bowl which is slightly convex outside at the bottom, so that if placed on a smooth surface it is easily turned round. Seeing this bowl full of clean water one day recently, I happened casually to turn it round, and at the same time, whilst looking at the surface of the water, noticed that some specks of floating matter *did not go round with the rim of the bowl*. I then got a match and broke it into small pieces to represent, as it were, ships, and let them float in different parts of the water near the rim of the bowl; then waiting till the water was quite still, gently turned the bowl round, and found that *the water with the pieces of wood floating upon it was scarcely disturbed at all in spite of its weight* (or as the globularists would have it—gravity) *on the bottom, and lateral pressure on the sides of the bowl*, the same thing happening upon turning the bowl faster.

It at once occurred to me that this being a fact, viz., *That water does not travel round with a revolving body though resting upon it*. Therefore, if the Earth is a globe there must be immense tracts of ocean, particularly in the southern latitudes, not in any way land locked, which would remain practically stationary (excepting currents caused by wind, &c.) and all steamers afloat on such portions of the ocean could let their fires go down, and allow the earth to pass on à la mode panorama until the desired longitude was reached, then getting steam up again, proceed North or South, as required, to destination. This, of course, would be a most economical method of getting round the "globe," and that such would be possible were the Earth a globe I think is beyond dispute, because the coast and land being the firm and solid part of the Earth must

necessarily rotate with it during the diurnal motion, but water being mobile and comparatively free at the surface (and for a long distance down also) would be unaffected, except perhaps where in immediate contact with the land whether at the surface or lowest depth. I should very much like to try the experiment on a large scale, with miniature continents, &c., in correct proportions, for although a convex surface could not be used it would show that in spite of so-called gravitation, the adhesion of the mass of water would not be sufficient to permit of it being carried round with revolving solid portion.

Perhaps you will make some comments upon this matter in the next number of *The Earth*, and with which I am very pleased; and trusting the truths it upholds may gradually gain popular favour.

I remain, madam, sincerely yours, V. A. WRAIGHT.

To the Editor of *The Clarion*.

March 27th, 1902.

Dear Sir,—“Faith in the Crucified and Risen Lord saves”...is *not* a matter of Speculation. It is a fact that tens of thousands of men and women now living, also myriads that have lived in the past would have fully endorsed the above statement, which forms part of a letter, in *The Clarion*, Feb. 19th, 1903, signed “One whose religion has still bottom.” But speaking not only for myself personally, but also for *all* the members of the “Universal Zetetic Society,” which I represent as Official Editor of its Organ, *The Earth*, we cannot endorse the following statement made in the same letter:

“If you are going to tie us down to Genesis, then Christianity had the bottom knocked out of it 200 years ago, when it was first proved that the Earth was round, not flat, and that it moved round the sun, and not the sun over it.”

Now we maintain that the Bible is as scientifically accurate in its account of Creation as it is in setting forth Life Eternal, and Re-Creation, in and through Jesus Christ. Also, the words of our Blessed Redeemer condemn the position of the above writer. Our Lord said: “Had ye believed Moses, ye would have believed me, for he wrote of me. But if ye believe not his writings, how shall ye believe my words?”

What right have we to accept the offer of Salvation set forth in the Bible if we deny the teaching of the Saviour, and also the writings of Moses and the Prophets, who were the mouthpieces of the Deity, which the Christ endorsed? The Christian's acceptance of the globe theory is a fearful violation of his God-given reason! In fact it is an untenable position, that can only be described as building “upon the sands.” If the Bible could be proved false in one line it would then be unreliable in other lines.

But there is no “if” in this case; and that it could be proved unreliable is an impossibility. For “he that believeth hath witness within himself.”

We stand by the Cosmogony of the Bible as set forth by the Creator Himself, knowing assuredly that it is as reliable as His promise of redemption through the Redeemer, whom He has appointed for our salvation: “For God so loved the world (this only world) that He gave His only begotten Son, that whosoever believeth in Him should not *perish* but have everlasting life.”

The Whys and Wherefores of the purposes of God, regarding His plan of salvation and His secrets relative to His wonderful Creative Works and *Nature*, may be as inexplicable in some respects as is the growth of a blade of grass; but, nevertheless, God hath revealed unto us sufficient to prove to us that the Scriptures are Inspired Writ, and wholly reliable in every line. And, to quote my own words in an article entitled “The Romance of Science,” to appear (D.V.) in the next issue of *The Earth*—which magazine I edit—“*the veracity*



of the Bible may be tested by its Cosmogony"; for true Cosmogony is the foundation of all Revelation, and it confirms the evidences of our senses, which are God-given!

A plane and motionless Earth is taught in the Bible. And God made two great lights (although light was created first) to divide the light from the darkness, and to give light upon the Earth. But this is far too *simple* for the tastes of some! The globe theory has raised a taste in the minds of the people for Pythagorean fables, and at the same time a distaste for the *simple* truth. Alas! modern "scientists" and atheists discredit the Mosaic account of Creation, but they cannot disprove it—none of them could possibly do so!

I could write many volumes upon this subject (the Lord, in his mercy, having shown me the truth regarding Creation), in fact I am thus engaged, but must now conclude this letter with a few questions to the upholders of the whirling globe theory.

Where did your globe come from?

Who made it into a globe?

Who was the man that found out that the world was a globe?

In what year was this found out, and where can the proof be seen?

Could you tell us how he found it out?

And oblige, yours truly, E. A. M. BLOUNT (Lady).

San Francisco, Cal. April 17, 1903.

Dear Sr. Blount,—Enclosed, please find Money Order for thirty-seven cents, for *The Earth*, with which I am much pleased. I gave a lecture in this city, to a large audience, on the "Flat Earth." There was a very lively interest in the subject. Our Boston publishing house is changed to 160, Warren Street, Box A. Please direct accordingly.

Your Bro. in Christ,

MILES GRANT.

[We always value the kind approval of Miles Grant.—Ed.]

#### "THE RIDDLE OF THE GLOBE."

"Is the earth really round?"

"Lady Blount, at Chelmsford, the other week, attempted to prove before a large audience assembled in the Shire Hall, that the earth is not spheroidal, as astronomers are wont to teach, but, on the contrary, flat.

Her ladyship is a woman of considerable attainments, and her position in the academic world is recognised as an assured one by those who are in it; and it is there ore very surprising that she should support an idea regarding the shape of our earth which has always been looked upon by scientists and others as heretical in the extreme. And Lady Blount does not stand alone on her 'plane.'

We are not contending that the earth is flat; but from times most remote up to the present the theory that the earth is a plane has been observed by very many clever people, whose number, however, has in every generation been rather limited, for which we must be thankful.

When the First Intelligence was communicated to man, and our ancient ancestors began to peep into the arena of inquiry, that First Intelligence of theirs mapped out in their minds a flat disc of land, surrounded by a great river. That was the first idea of the shape of the earth.

As intelligence developed, and threw out its tentacle-like arms to grasp further knowledge of what the shape of the earth was, it cast aside the belief which had hitherto swayed those earlier minds, and adopted the newer teaching—viz., that the earth was not only surrounded by water, but that it also floated upon water. They still believed that the earth was flat.

Ages came and went by, and that teaching was firmly fixed in the minds of the people, till our nearer ancestors began to explore and to exploit regions beyond their own, and the more learned of them began to suspect that the earth-floating-on-water theory was incorrect. It was refuted as an optical illusion by the more venturesome of our semi-civilized forbears, who had in their rough-hewn boats sailed across the 'great river' and found land on the other side. It produced a 'riddle' which was not propounded for ages upon ages.

Doubt curiously mingled with desire, and until the advent of the old philosopher Pythagoras, of Samos, who lived in the reign of Tarquin, the last king of Rome, no advance was made. Pythagoras declared that the earth was a sphere, and the people who flourished in those days being wise and learned, the Pythagorean teaching was admitted into the inner circle of learning as being the most correct interpretation of the riddle of the earth's shape. From the Pythagorean time till now those who have declared the earth to be a 'plane' have been regarded more as faddists than teachers.

Ptolemy, with his Ptolemaic system, succeeded Pythagoras, with this difference—that whereas Pythagoras taught that the sun was a movable sphere situated in the centre—this is in effect the Copernican system—Ptolemy laid it down for law that the earth—a sphere—was fixed in the centre of the universe, and that theory was held for ages.

It is a difficult task to move the flat-earth theorists from their position. In spite of the well-known laws which govern the present-day sound teaching respecting the shape of the earth, the former call to their aid certain specific arguments which would seem to rebut those held by the learned and educated since the days of Newton.

Now, how come we to know that the earth is a ball? Because the field of view—the boundary line of which is a circle in all parts of the earth—becomes wider as the height of the observer increases.

Again, on a wide smooth surface, such as the sea, the upper part of a distant receding object remains in sight when the lower part has disappeared, proving that the earth must be a globe.

Thirdly—and this is the most convincing proof of all—the earth has been circumnavigated by vessels starting always in the same direction.

Now, your ancient ancestors did not jump from the 'flat' to the 'round' theory at a single spring. The idea developed gradually. They first of all judged the earth to be an 'oblong cylinder'—a very good idea of the earth's rotundity—and then from the oblong cylinder they thought—and all, or a great many, of the ancient scholastic academies taught the theory to their pupils—that the shape of the earth resembled a 'drum,' which was getting very near the recognised truth.

You will see, then, that we have arrived at the round-earth theory by easy stages, each of the stages named in this article remaining uppermost in the minds of the quasi-learned for ages.

The earth could not be anything else but a 'ball.' The position of the stars settles that, for the farther north or south you go from any place, the position of the stars, their daily path in the heavens, and the time of rising and setting are altered, and new stars altogether invisible come into view as the traveller proceeds.

Against all these laws the 'flat earthists,' and in this class must be included Lady Blount, say that we 'globists' are all at sea in declaring that because navigators have sailed round the world that therefore the earth must be globular. for the sailing round the British Isles would not make Great Britain 'globular.'

It is true, they continue that ships have sailed from east to west, and vice-versa, but never from north to south.

The disappearance from sight of the hull of a ship at sea before the masts is a freak of the laws of perspective.

The round shadow on the surface of the moon during a lunar eclipse is no proof that the earth is round, because it has not been proved that the shadow really is that of the earth.

Again, say they, if the earth were a 'globe,' the people in the Antipodes would be walking head downwards.

The preceding are the principal objections raised by the 'flat earthists,' which are more remarkable for their curiosity than their science."—From *Answers*, March 28th, 1903.

[In answer to the above the following letters were sent.]

To the Editor of *Answers*.—In the current issue of *Answers*, for March 28th, I notice an article with the above heading, and asking the question, "is the earth really round?" Perhaps you will kindly allow me to make a few remarks upon the same.

I am glad your correspondent refers to the subject as a "riddle," and not a demonstrated truth, for he is very near the mark here. A riddle is "an enigmatic proposition or puzzle; or anything ambiguous or puzzling." Both Planists and Globites alike find the riddle of the globe puzzling; the former are puzzled to find where the proofs come in, and the latter are puzzled to find them. An enigma is something "obscurely expressed," and sometimes, "a purposely absurd saying or question," and not all true. The so-called proofs of the earth's globularity are indeed particularly obscure. The writer of your article says one of the proofs of the "round earth theory" (he means the whirling *sea* and earth globe theory, for a penny is both round and flat) "is, the farther north or south you go from any place, the positions of the stars, their daily path in the heavens, and the time of rising and setting are altered, and new stars altogether invisible come into view as the traveller proceeds." A similar kind of phenomenon is observable in a line of street lamps also; along a level road or promenade. It may be noticed at most of our fashionable watering places if you start at one end of the line, and fresh lights come into view as you go along, and those you saw at the first appear to dip, and finally vanish. This is due to perspective, the same as the appearance and disappearance of stars, which no more proves the earth to be globular than the disappearance of the lamps on the promenade would prove the promenade to be globular. If people better understood the laws of perspective they would see the weakness of such a "proof" of the globular theory; but until they do they will puzzle their minds, or allow the astronomers to puzzle their minds with *The Riddle of the Globe*.

As for the question of circumnavigation, some scientific teachers are now candid enough to own that circumnavigation is *not* a proof of the earth's sphericity. Your reporter shows that this is not a proof, for, as he well puts it in quoting my words, "*Sailing round the British Isles would not make Great Britain globular.*"

I don't wish to make my letter too long, but I should like to quote an admission of this fact from a work called *Elementary Physiography*, by R.A. Gregory, author of *Physical Astronomical Geography*, Comptor of the Solar Physics Committee, South Kensington, and F.R.A.S., page 110. He says:

"We can journey round the globe, sometimes travelling on land and sometimes on sea, but eventually return to the starting point without at all turning back on our course. This would appear to be a certain proof that the earth's surface is curved, nevertheless it has been pointed out

that circumnavigation would be possible if the earth had a FLAT surface with the North Magnetic Pole at its centre. A compass needle would then of course point to the centre of the surface, and so a ship might sail due east or west and eventually return to the same point by describing a circle."

So that Mr. Gregory, as a Fellow of the Royal Astronomical Society, candidly admitted that circumnavigation is no proof that the Earth is a globe, for he further gives this as a "proof that circumnavigation would be possible if the earth were flat." We respect Mr. Gregory for his candour, but his confession only makes "the riddle of the globe" all the harder to solve. It is all plain to the planist that the "Riddle" is for the other side. We can say the same of the other so-called "proofs" which are offered us, but I fear that to do so would make my letter too lengthy.—E. A. M. BLOUNT.

The wording of the above title and the trend of the article in *Answers*, (with the impossible presentment of a man measuring the outside of the so-called globe) would naturally lead one to suppose that the writer had been reading *The Riddle of the Universe*, by Ernest Haeckel, Ph.D., and Professor at the University of Jena. That this work is brought out in England under the auspices of the Rationalist Press Association pre-supposes that the author postulates a world which has been self-evolved out of eternal self-existing matter. The *Answers'* writer must however be credited with a belief in God, for he refers to a period when the First Intelligence was communicated to man, and he says that our ancient ancestors mapped out in their minds a flat disc of land surrounded by a great river, and in process of time they thought that the earth floated upon water. In the progress of the ages the more learned began to think that this theory was incorrect, and it was eventually refuted as an "optical illusion;" but, as a matter of fact, the oldest account of the solving of the world-problem is in the Bible, wherein we are told that "in the beginning God created the heaven and the earth;.....And God made two great lights; the greater light to rule the day, and the lesser light to rule the night. He made the stars also, and set them in the firmament of heaven to give light upon the earth." The Chaldee version of Job xxvi. 7, reads: "He layeth the earth upon the waters nothing sustaining it." In 2 Peter iii. 5, we read: "By the word of God the heavens were of old, and the earth standing out of the water and in the water."

*Answers'* writer is mistaken in supposing that scientific knowledge of the earth and the heavenly orbs belong to modern times. Even Haeckel says: "The study of the heavens is the oldest, with regard to the starry heavens, the motions of the planets, and so on, man had acquired astonishing information 4,500 years ago. The Egyptians and Chaldeans in the distant East knew more of the science of the spheres than do the majority of educated people in this country 4,000 years after them. An eclipse of the sun was astronomically observed in China in the year 2697 B.C., and the plane of the eclipse was determined by a gnome 1,100 years B.C." But we can trace back still further; showing that

Regarding eclipses of the moon and the sun,  
Our "scientists" modern in false colours run,  
Decked with honours they've pilfered, or not fairly won;  
*But let it forever* be known—  
To Antediluvians this honour should stand,  
Through Adam, received from the Creator's own hand,  
And Josephus tells us that, by God's command,  
Seth wrote those eclipse tables on stone.

All these people acted upon their sense-perception that the *sun* (not the earth) *moves*.

The globular theory is not ancient. It is modern, and absolutely atheistic in its trend; making our God-given senses of no account; telling us that, although we see the sun move, yet it does not move, but the earth moves and is rushing through space, in addition to other fearful motions, at the rate of about 19 miles every second, and yet we perceive no motion. Again, the Scriptures tell us that the stars of heaven will fall upon the earth; but the globularists say that the stars are mighty worlds, nearly all of them larger than this earth. How can the earth, with a supposed diameter of 8,000 miles, receive the numerous suns of the firmament? Can a whale rush down the throat of a herring, or an elephant ride on the back of a mouse?

How the position of the stars settles the theory into a fact that the earth is a "ball," is a piece of non-sequential reasoning on the part of the *Answers'* writer, who says that the farther north or south one goes from any place the position of the stars, their daily path in the heavens, the time of their rising and setting, are altered, and new stars altogether invisible come into view as the traveller proceeds. As a matter of fact the stars visible from London rise and set in a way not compatible with the doctrine of rotundity. If we stand with our backs to the north on the high land known as Arthur's Seat, near Edinburgh, and note the stars in the zenith of our position, and watch for some hours, the zenith stars will gradually recede to the north-west. On Woodhouse Moor, near Leeds, and on the Yorkshire mountain tops, and Derbyshire, the same phenomena is observed; also from the top of Primrose Hill, Hampstead Heath, and Shooter's Hill. We shall observe the same stars rising towards our position from the north-east, showing that the path of all the stars between ourselves and the northern centre move round the north pole-star as a common centre of rotation—just as they must do over a plane, such as we know the earth is proved to be.

Upon a globe, zenith stars would rise, pass over head, and set in the plane of the observer's position; "rotundity" is also disproved in what actually takes place, and is not hypotheated.

The Editor of *Answers* kindly returned my letters, with the following note.

2, Carmelite House, Carmelite Street, London, E.C.

Madam,

April 4th, 1903.

I am in receipt of your ladyship's letter and literature on the subject of the Globe. I regret, however, that the columns of *Answers* are closed to correspondence entirely, and I am therefore compelled to return your letters. But I am keeping the literature you have sent me as it is interesting reading. Your ladyship may, perhaps, accord me an interview one day for publication in *Answers*.

I am, Madam,

Your ladyship's obedient servant,

Lady Blount.

THE EDITOR.

When sending a copy of *The Earth* to my son a few months since, I could not help writing under the Scripture statement—"Of old hast thou laid the foundations of the earth,"—the following. There is no mention in the Bible of the foundations of the sun, or of the moon or the stars. Why? Because they were made to be suspended, and to move, or revolve, in the heavens as attendants and ordinances for the earth; and therefore not necessitating the fixture by foundations.

Your journal becomes more and more interesting as the months pass on, and there is even a fresh beam of astronomical light radiating from its pages; the result, I presume, of research and the desire to direct the thoughts of the people on the lines of astronomical truth as declared in God's Word, and propounded by the surrounding facts of His creation; which are ever telling of the wonder of His works.

Yours faithfully,—J. L.

#### THE EARTH NOT A GLOBE.

To the Editor of the *District News*.

Dear Sir,—I have shown clearly what and where the horizon must be if the earth be a globe 24,000 miles in circumference; we do not find it as stated and therefore must look for some other law governing the phenomena of objects disappearing as we recede from them, the bottom parts first. What is the horizon? Let us clearly understand this first. It is where the sea and sky appear to meet in the distance, and this is always on a level with the eye, no matter how high the eye is above the surface of water the horizon can never be seen except on a level with the eye. If you get a carefully bored tube, say a gun barrel, and carefully level it, you will find on looking through it that the horizon is exactly in the centre of the tube; if you depress the tube the least whatever you will see nothing but water; if you elevate it the slightest you will see nothing but sky; it can only be seen on a level with the eye, and this will be so no matter what height the eye is above the surface of the water. Place the tube properly levelled on the shore, high enough above high water mark, somewhere on the coast where there is, say, 30 to 40 feet rise and fall of the tide, look through at low water and it will be level with the eye, look through at high water, it will be level with the eye. The same phenomena applies to objects horizontal as well as vertical. That is to say, long lines of rails that are parallel appear to come into a line central with the eyes both on the right and left and both appear to meet in the distance exactly in the centre of the eyes, forming as it were an horizontal horizon, corresponding with the vertical horizon as above described, and this always in a basin-like form. The experience of all aeronauts confirms this. Professor Glaisher, late Astronomer Royal, who died last week, ascended in a balloon with the late Mr. Coxwell to a height of 7 miles, the highest ever known to be accomplished by any man. I have a pamphlet written by Glaisher at the time. This perilous voyage was undertaken for scientific purposes, the principal one being to see the shape of the earth. During this trip Mr. Glaisher found his arms powerless, owing to the rarified atmosphere and cold through which the balloon was passing. He tried to shake himself but seemed to have no limbs. Looking at the barometer his head fell over on his shoulder; he got it upright by an effort of will and it fell again and he himself then fell down helpless in the car. Intense darkness then came over him, as though from some paralysis of the optic nerve, for the brain itself was working as clear as ever. Mr. Coxwell's hands were benumbed and he had to tear the valve open with his teeth. As the balloon rapidly fell Glaisher revived, as one waking from sleep, and took a pencil to continue his observations. They descended outside Birmingham and soon recovered. Mr. Glaisher says that "quite contrary to what they expected, instead of the earth falling off at the sides it actually appeared to rise, and appeared to be a concave surface, like the rim of a shallow inverted watch glass, to the height of the eye of the observer, how high soever he may be, the blue atmosphere above closing over it like the corresponding hemisphere reversed. As we ascended the earth beneath us seemed to recede, actually to sink away, while the horizon gradually

lifts, a diversified slope stretching away farther and farther, to a line that at the highest elevation seems to close with the sky; thus, upon a clear day, the aeronaut feels as if suspended at about an equal distance between the vast blue oceanic concave above, and the equally expanded terrestrial basin below." The law of perspective accounts for this phenomena; the human eyes are a pair of perfectly paired stereoscopic lenses, such as no optician has yet been able to approach in perfection: the line of vision is a right line, both horizontal and vertical; all objects above and below to the right and left of the centre of the eyes appear to vanish into the eye-line at a distance proportionate to the distance the object is from the centre of the eye above or below, to the right or to the left, and this gives the appearance of a vault or dome above and a corresponding basin below, or to the right and left of the eye-line. And here let me strongly impress this upon the minds of many of our Zetetic friends, as well as theoretic, that there is no such thing as a vault or dome above, as so many of them talk about. I have frequently had to put some of our own school right on this point. The firmament above is parallel to the plane earth beneath; the law of perspective entirely accounts for what appears to be a dome or vault. I am prepared at any time to prove this to demonstration, with instruments and appliances I have in my possession, to anyone who would like to take the trouble to come here. My next letter will deal with the shadow on the moon during a lunar eclipse.

Ripponden.

E. J. SHACKLETON.

To the Editor of the *District News*.

Sir,—I have now been before the public, on the platform and in the Press, upon the above subject for 40 years, and during that time have met various kinds of opponents, but very few who understood either one side or the other of the subject, or that ever made a single experiment to prove anything practically. And I take Mr. Colbran to be a fair sample of the opponents I have had to contend with; 999 out of every thousand accept the Newtonian hypothesis, therefore I shall not bother further about it but follow the crowd. But with Mr. C. the boot is on the other leg; there is not a fourth of the human race that accept the Newtonian teaching. There is no sense at all in this kind of argument. I heard the late Archbishop Manning say, in Exeter Hall, "Let me have the children of England under my tuition and I will make England a Roman Catholic nation in twenty years." Therefore it would be no use troubling further—the Roman Catholic doctrine would be right. For goodness sake if we are to get at the truth at all let us face the subject in a reasonable and practical manner. The round shadow thrown upon the moon during an eclipse (by the earth)! What an unwarrantable conclusion to come to without the slightest examination! Let us have a proof that the earth is a globe first, which has never yet been done. Mr. Colbran puts forward an eclipse, the masts of ships, the tops of towers, &c., always appearing first as we approach them. No man in his senses would expect to see the bottoms first, whatever shape the earth is. To say that this phenomena is caused by the earth being round is to ignore the laws of perspective entirely. Mr. Colbran mentions an experiment carried out on a six miles stretch of standing water, which showed the three-mile post to be six feet higher than the two ends. Evidently Mr. Colbran knows nothing whatever about it; he should give dates, names, &c., for the experiment he refers to, so that I might deal with it. I have been present and taken part in nearly every experiment that has been carried out on the canal which Mr. Colbran no doubt refers to; and with your permission, Mr. Editor, I will give your readers a brief account of some experiments. But let me first point out the absurdity of a six feet rise in three miles on a ball. It should be six feet fall; there can be no rise from where you stand on a ball—it must be a fall in

every direction. In August, 1901, Professor Yule Oldham, of King's College, Cambridge, with a party of 60 ladies and gentlemen, paid a visit to the Old Bedford level, near Downham Market, for the express purpose of testing six miles of this standing water (this canal is 20 miles long, but there are 6 miles of it without an intervening object). I was unaware of this visit or should have been present. Some time afterwards a cutting from a newspaper, containing a short notice of it, was forwarded to me by Lady Blount, asking my opinion. It set forth that the learned Professor had read a paper before the Royal Society at Glasgow, and it would be published in the society's journal the following month (it has not appeared yet); he stated in his paper what Mr. Colbran says, that the three mile signal was six feet higher than the two ends, and that he had taken a photograph of them showing it to be so. I wrote a very polite note to the learned Professor (enclosing stamped addressed envelope), asking for some particulars, and offering to pay anything he liked to charge for a copy of the photograph. He never replied. I wrote again offering £10 for a copy, and a friend of mine wrote and offered £5 for a copy. No answer yet. I wrote again, pointing out to him the absurdity of a rise of six feet midway between Bedford Bridge and Welney Bridge, six miles, because if this was so there would be the same rise of six feet midway between Welney Bridge and Welshes Dam, another six miles of the same canal, which would make the surface to be a system of switchbacks. I then threw out a challenge, and do so now to Mr. Colbran (or anyone else), that the two end signals shall be fixed twelve feet above the surface of the water, and the middle or three-mile signal shall be six feet above the surface; the tops of these three signals should then appear in a straight line when viewed through a properly adjusted telescope. Now, if twelve gentlemen, to be selected by both sides, declare that they see these three signals in a straight line, I will pay all costs of the experiment; if on the other hand they are declared not to be in a line the other side to pay the costs. I am still waiting reply. Will Mr. Colbran take it up? Now, sir, instead of Mr. (I beg pardon) Professor Oldham giving his paper to the world as he announced he would do, he and his party again visited the scene of the Old Bedford Level last August, and engaged a professional photographer, carried out a similar experiment, and this photo, like the first was promised to the world. We have tried every means to obtain a copy without avail. Why this cowardice? Truth is truth. Why should anyone pretending to be seeking it be ashamed to face it and acknowledge it, when he finds it? A large number of your readers are taking a deep interest in this subject, and with your permission I will follow it up with a letter on the law of perspective, and another on the cause of the moon's eclipse. It would be too much to ask you to illustrate these, but they would be much better understood if accompanied with diagrams.

Yours truly,  
Ripponden.

E. J. SHACKLETON.

## BABYLON REDIVIVUS.

Sent to *The Times*, April 20th, 1903.

Sir,—I have been waiting patiently for the protest which ought to have come from Christian Archæologists anent certain remarks in your article *Rhammurabi*, in your issue of the 14th inst.

The Jews, indeed, have protested against the implied insult to Moses, that he was indebted to Babylonian traditions for some of the most noted of the events and principles recorded in the Pentateuch. But, are not Christians equally dependent on the Mosaic records in many respects; and ought they not to be jealous when the vilest of all corrupters of Divine Truth are credited with the origin of much that is held for sacred amongst us?

It may seem a small matter to some, whether a code of laws, a "thousand years older than the Mosaic age," can be proved to be superior to those which we have hitherto regarded as the very foundation of just legislation all over the world; but when the chief city and the civilization of Chaldea are actually given the whole credit, in point of priority, of Commandments which are stated in Holy Writ to have come direct from God Almighty, it is quite time to wake up, and defend the very foundations of the faith which we profess.

One or two questions might, I think, be asked of your learned contributor, viz.:

1. Why does he take King Rhammurabi so much *at his own estimate*, when the boastings of Nebuchadnezzar are very properly discounted as the ravings of an ignorant heathen despot?
2. Does he think the authority of Father Schiel, O.P., sufficient to justify the white-washing of a city which is set forth in Holy Scripture as the very type and image of all that is deceitful and abominable?

I do not doubt but that much valuable information has been obtained by Eastern Researches during the last 150 years; but at the same time it cannot be altogether irrelevant to refer to the opinion of scholars at a time when Lord Bolingbroke endeavoured to establish very similar ideas, as being deducible from then available records.

In an elaborate answer, made publicly by Dr. Clayton, Bishop of Clogher, to his lordship, the following passage occurs, which I commend to the consideration of those who may be tempted to believe too much in the self-laudatory chronologies and inscriptions of ancient semi-civilized nations. The quotation is as follows:

"We have no history of the transactions in Egypt in any profane author, that can be depended on, until many years after Moses was dead,—for as Sir Isaac Newton, in his Chronology, remarks: before the use of letters the names and actions of men could scarcely be remembered above 80 or 100 years after they were dead; and as there is no certain history, either of Egypt or of any other part of the world which can in the least be depended upon before that period of time, but what is in this Book of Genesis; therefore, I take it for granted that this book is the first that ever was written in the world."

I am, Sir, your obedient servant,

EDWD. HAUGHTON, B.A.,

*And Senior Moderator in Natural Science,  
Trinity College, Dublin.*

To the

Ed. of *The Times*.

[Copy now addressed to the Ed. of *The Earth*.]

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# THE EARTH.

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## CELESTIAL PHENOMENA.

The following article will form a reply to several enquirers.

"The heavens declare the glory of God." In spite of "the fool" having "said in his heart, there is no God," the above statement, which forms the opening words of the 19th Psalm, is an admirable fact, which can be grasped and appreciated by all classes and kinds of God-fearing men and women.

"And the firmament showeth His handiwork." These words are as true now as they were when they were written by the Sweet Psalmist of Israel hundreds of years ago.

The Psalmist goes on to say: "Day unto day uttereth speech, and night unto night showeth knowledge." Let us listen to the "speech" uttered, and profit by the "knowledge" shown daily.

"There is no speech nor language where their voice is not heard," yet the heavens speak not in an unknown tongue, nor to any one nation, but the significance of what they declare may be understood by enlightened men of various nationalities; and without the gift or the cultivation of tongues.

"Their line (or rule) is gone out through all the earth, and their words to the end of the world." This shows that the heavenly bodies have influence, power or "rule" all through the earth.

"In them hath he set a tabernacle for the sun."

These statements harmonize with the statements made in the beginning of Inspired Writ, viz.: that the sun and moon are "two great lights" which were made by the Creator to give light upon the earth—and to rule over the day and over the night, and divide the light from the darkness—and also to be for signs and for seasons and for days and years."